

A stylized topographic map of Australia and New Zealand, rendered in white lines on a purple background. The map shows the outlines of the continents with intricate contour lines indicating elevation. Australia is on the left, and New Zealand is on the right.

August 2023

APTA Study Mission to Australia and New Zealand

Investing in world class transit: what it takes to streamline project delivery and build accessible, sustainable, and equitable service.



American
Public Transportation
Association

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APTA delegation with PTAANZ and Victoria transportation leaders

Executive Summary

With a goal of learning relevant lessons from abroad about building new infrastructure and modernizing public transit, the American Public Transportation Association (APTA) partnered with the Public Transport Association Australia New Zealand (PTAANZ) to plan an in-depth study mission to New Zealand and Australia, two nations that are addressing many of the same challenges and opportunities as the United States.

Approach and Areas of Focus

During a two-week period in August 2023, a delegation of 35 APTA-member transit agency leaders and business executives, along with a representative from the Federal Transit Administration, met with New Zealand and Australia transportation professionals and toured public transit operations in Auckland (NZ), and Melbourne, Brisbane, and Sydney (AUS).

The mission explored effective project delivery models, as well as enhanced customer service, the transition to zero-emissions, and the use of simplified, integrated networks to improve access. In each major city, discussions focused on examples of successful public transportation in the Oceania region and lessons that could be transferrable to the North American transit industry.

Key Findings

Although transportation planning, policymaking, and investment decisions are more centralized and coordinated at the local and state levels in New Zealand and Australia than they are in the United States, several findings had major relevance for American infrastructure investment projects:

1. Start Where You Want to Arrive: Broad, Long-Term Future Value

Customer and community engagement takes place even before a project is planned and environmental reviews and statutory processes are conducted.

By identifying a community's desired economic, social, and / or environmental goals, and then planning for those integrated outcomes, a more inclusive culture can be fostered.

Broad, long-term benefits are the key drivers of investment versus focusing on a "one-off" project, a numerical ridership goal, or short-term cost savings.

2. A Commitment to Engagement, Integrated Planning, and the Customer

To create a truly cohesive, world-class transit system, agencies and stakeholders must focus on:

- **Integrated planning** that includes transit, roadways, aviation, ferries and even land use, in some cases under one agency.
 - **Inclusive design and legacy infrastructure** that maintains quality, preserves local culture, and creates local pride.
 - **Community engagement** built on sharing power which leads to accelerated buy-in and greater neighborhood support and ownership.
 - **Business involvement** that educates stakeholders about the benefits of a transit project and minimizes disruption to commerce.
 - **Public-private partnerships** that help ensure integration and collaboration among teams, resulting in knowledge sharing, alignment of outcomes, and adherence to transparent standards across the industry.
 - **Customer experience** that is paramount from conception and planning to construction and delivery.
-

3. Approaches to Successful Project Delivery

Multi-year capital campaigns allow for a continuity of effort and efficiencies in program support, where the following elements are common:

- **Focus on readiness** at the outset of capital planning and adopt a systems approach;
- **Build trust** among all stakeholders;
- **Be intentional** about defining, assessing, sharing, and transferring risk;
- **Adopt a more iterative approach** to project development throughout the project life cycle, and a willingness to shift to a more place-based delivery, and;
- **Use a tender process** that places equal value on a firm's ability to collaborate and its qualifications, and that guarantees the highest quality staff.

Additionally, a strong workforce development component, with a focus on high skills and diversity in the construction sector, is essential for successful capital project delivery.

1 | Context and Purpose of Mission

With a goal of learning relevant lessons from abroad about building new infrastructure and modernizing public transit, the American Public Transportation Association (APTA) partnered with the Public Transport Association Australia New Zealand (PTAANZ) to plan an in-depth study mission to New Zealand and Australia, two nations that are addressing many of the same challenges and opportunities as the United States.

In August 2023, a 35-member delegation representing APTA members from both the public and private sector toured four key cities in New Zealand and Australia: Auckland, Melbourne, Brisbane and Sydney.

Over the course of two weeks, the delegation met with high-level officials to discuss public transportation priorities, challenges and successes, and were provided unprecedented access to major projects both under construction and those completed.

The principal focus was on project delivery models, customer service enhancements, and the transition to zero emissions. While visiting each major city, discussions centered on what is driving transit success in the Oceania region and transferrable best practices for the North American transit industry.

This is a pivotal time for public transportation in all three countries. Like the U.S., Australia and New Zealand are investing heavily in new infrastructure. From 2021-2024,

New Zealand's national government is co-investing an estimated \$3 billion USD in transit services and infrastructure with local governments.¹ Australia is planning major public projects estimated to total \$30 billion

“We witnessed robust infrastructure development that is keeping pace with what communities need.”

— APTA delegation

USD over a five-year period, with most of the infrastructure investments in the states of Victoria, Queensland and New South Wales, where Melbourne, Brisbane and Sydney are located, respectively. Together, both countries are investing more than \$129 billion USD over 5 years with most of funding targeted to transportation projects.²



Auckland

Auckland

The study mission began in Auckland, the largest urbanized region in New Zealand with a population of nearly 1.7 million people.

The delegation was hosted by both Auckland Transport, the transit authority that contracts out operations for an extensive bus, rail, and ferry network and by Waka Kotahi, New Zealand's National Transport Agency, which implements transport policy and regulates surface transportation.

Auckland is currently undergoing several transport projects, including the City Rail Link, which will significantly expand the city's underground rail network, and BRT extensions and new electric buses.

Melbourne

At its first stop in Australia, the delegation was hosted by the state of Victoria's Department of Transport and Planning, which oversees the franchise agreements for all transit services within Melbourne.

With a population of more than 5 million people and growing, Melbourne is expected to overtake Sydney as the largest city in Australia by 2031-2032. Its public transit

system consists of an extensive network of streetcars, trains, and buses. The city boasts the world's largest operational streetcar network with 155 miles of double track operating over 500 streetcars in the city center. Heavy and regional rail networks are also significant with 16 lines, 222 stations covering over 600 miles.

Melbourne has several ongoing projects, including the Metro Tunnel, a new underground rail line that will increase capacity and connectivity. There are also plans for tram network extensions, improved bus services, bus electrification and improved rolling stock on the tram network.



Melbourne

Brisbane

The delegation travelled to Brisbane on Australia's East Coast, the site of the 2032 Olympics and Australia's fastest growing city, for meetings with Brisbane City Council, which operates the urban bus and ferry network as well as Translink, the state authority responsible for coordinating rail, streetcar, bus and ferry transit across southeast Queensland.

The city has an extensive dedicated BRT infrastructure, which accounts for two-thirds of all urban trips and is complemented regionally by robust rail and light rail networks. The network is augmented by the CityCat system of ferries, and it is listed as the third most popular attraction on Trip Advisor.

Brisbane is currently investing in several substantial transit projects, including the Brisbane Metro, a fully-electric, high-frequency turn-up-and-go service akin to light rail, using the existing dedicated busway and the Cross River Rail, a new 6-mile rail line with twin tunnels under the Brisbane River and the Central Business District (CBD).

Sydney

On its final stop, the delegation was hosted by Transport for New South Wales, the state



agency managing service contracts for Sydney's transit system. The visit provided an opportunity to experience the region's fast-growing public transit network of trains, buses, ferries, and light rail.

The rail system is Sydney's backbone and carries 50 percent of the total public transport ridership. The current regional rail system features a central underground core that covers 229 miles with 170 stations on eight lines.

In addition, the city has several significant projects underway, including the Sydney Metro, a new rapid transit system that will expand the rail network. By 2030, Sydney will have a network of four metro lines, 46 stations, and 70 miles of new heavy rail.

Additional projects include the Parramatta Light Rail, bus network improvements, and continued upgrades to train infrastructure.

Brisbane



Summary

All three countries (New Zealand, Australia and the United States) currently face similar challenges:

- **post-pandemic ridership recovery** has not returned to its pre-Covid robust levels, and all are adjusting to new mobility patterns;
- **cities and regions are making up for lost time** by investing in transit infrastructure and operating in what is still, in many ways, a heavily auto-oriented culture; and
- **the needs and aspirations** for better and more transit infrastructure and services still far exceed the ability to fund programs as well as market capacity, including the workforce and skills required, i.e., bus and rail operators, maintenance and signaling experts, engineers, project managers, construction managers).

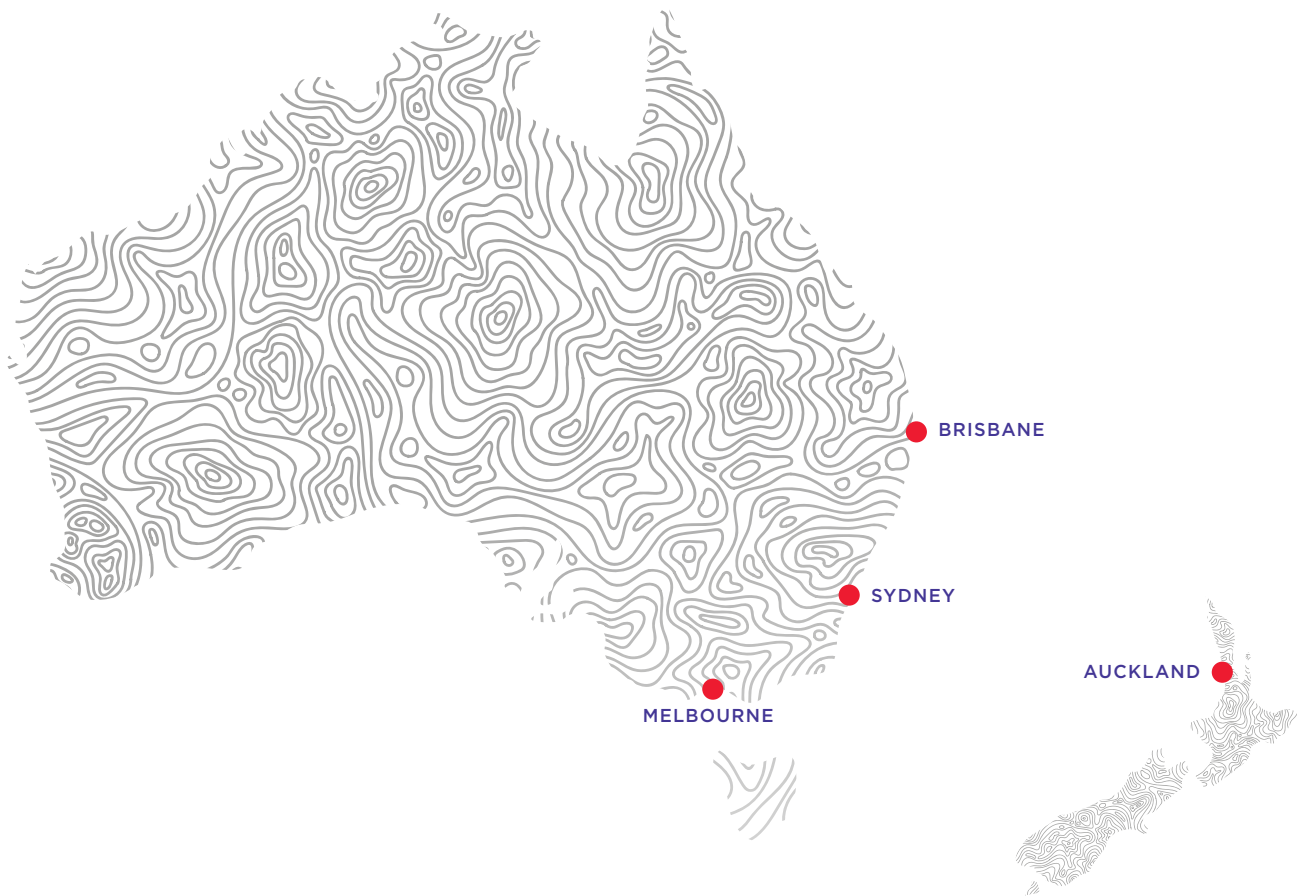
In response, transit networks are being redesigned to improve accessibility and equity and to deliver simplified and more integrated networks, with robust rail and bus networks in the urban core and a growth in microtransit options in less dense areas. Investments are being made in new trains, buses, and ferries focused on zero-emissions, high capacity signaling systems, and centralized system control and dispatch.

There are, however, some key differences between the way the United States builds transit infrastructure and operates transit services and the policies and practices witnessed in New Zealand and Australia. Both New Zealand and Australia rely heavily on contracting with the private sector for service delivery. They also benefit from a much more centralized governance structure for transportation policy and planning at the local and, in the case of Australia, the state levels with more coordinated placemaking.

They use more creative and collaborative capital program delivery tools driven to a greater extent by social and environmental outcomes (e.g. aggressive climate change goals), capacity building and customer benefits rather than one-off project completion, ridership increases and cost recovery. And they have developed a far more inclusive culture of community engagement.

Across the board, there appears to be a strong consensus that transit is critical to the life of the cities and their residents. While the focus on roads versus transit varied between the government entities visited, there is intrinsic support of public transit across the political environment that enables better long-term planning and a more integrated transportation system.

Finally, transit planners indicated that they do not see a customer preference for rail over bus, as there tends to be in the United States. Ridership is diverse and, regardless of income classes, travelers simply ask for frequent, reliable service regardless of mode.



2 | Observations By City

New Zealand National Perspective

Public transportation policy is set at the national level in New Zealand, with regional plans established by local Public Transport Authorities (PTAs) who benefit from a considerable amount of autonomy. The Ministry of Transport sets policy and Waka Kotahi implements policy, ensuring service consistency across the country, and acts as the infrastructure provider, regulator and investment partner for public transportation. PTAs plan and deliver integrated transit networks, contracting out service operations to the private sector.

The National Land Transport Fund provides dedicated funding for surface transportation from road users fees, but general funds supplement additional funds required, including for rail.

There is a national focus on attracting talent to the transit workforce, addressing a shortage of bus operators. Nationally, New Zealand is seeing a 20-25 percent wage increase to attract operators, including from overseas through immigration policy reform.

A government mandated decarbonization of buses has led to approximately 10 percent of the country's fleet being zero-emission to date and a major transition to continue to meet the target of a complete zero-emission fleet by 2035. Both rely heavily on foreign OEMs, such as from China, for delivering zero emissions technology.

A National Ticketing Solution is being piloted in 2024 with a nationwide roll out planned for 2026.



Auckland

Revolutionary transit growth

Auckland Transport (AT), created in 2010, is the only integrated public transit authority in New Zealand with a responsibility for designing, building, operating and maintaining the system and integrating other service providers. They have heavily modernized the system in the past decade, dubbing it a “revolution,” including a complete redesign of their bus network opting for less coverage but more frequent service, simpler and superior quality interchanges and connections.

Ridership levels are tracking at 80 percent of pre-pandemic levels in Auckland, but the city has seen a 20-25 percent increase in ridership more recently and is aiming for and anticipating a two-fold increase at minimum in the next 10 years. They define success in terms of rapid ridership growth, service delivery with the customer at heart, and

funding. The agency has also completed an organizational reset around the purpose of AT with a decision to focus on its core business and to do it well.

The opening of the City Rail Link, New Zealand’s largest transport infrastructure project ever, will double the capacity of the rail and double the number of people who live within a 30-minute journey of the city center. The accompanying new stations are being viewed as a key to midtown regeneration.

When opened in 2026, the City Rail Link tunnel will have been completed in 10 years from start to finish. The Kiwis are focused on future-proofing the system and stations and ensuring the longevity of all materials and assets. They are using the project as an opportunity to upskill the local workforce and ensure greater workforce diversity at every level of project management.



Auckland ZEB visit



*Manukau Station
in Auckland*

Embracing public engagement

The level of cultural awareness and inclusion is demonstrated in all aspects of planning and service delivery: considerable value is placed on honoring cultural heritage and story-telling steeped in a sense of place and history; what the land means to the Maori, the native people of New Zealand and 12 percent of the population in Auckland. It stems from the treaty established in the creation of New Zealand which guarantees Maori rights and privileges and is based on the principles of partnership, protection and participation.

Social programs and community partnerships are not just token efforts. For Auckland Transport (AT) this means an intentional approach to meaningful engagement steeped in a strong understanding of relationships and culture. The Maori world view is integrated into all aspects of how AT operates. Employees are trained in cultural context and AT meets with 19 tribes monthly on its major projects, ensuring tribes participate fully in decision-making. AT seeks to engage the public early in the project cycle, providing many opportunities to shape the outcomes.

The commitment to zero emissions

There is a far-reaching drive to decarbonize the transportation sector using sustainable materials and advancing the electrification of the bus and ferry network.

Legislative reform in New Zealand is providing a sustainable framework for authorities to invest in zero-emissions infrastructure. The New Zealand Climate Emergency Response Fund is funding zero-emission buses with Waka Kotahi awarding competitive grants for assets and infrastructure as well as providing guidance on standards, technical assistance, and the electricity market. Waka Kotahi also offers a 51 percent investment share to fund zero-emissions buses through its routine funding decisions if the local transit authorities can provide a robust business case. The regulation governing the contracting and delivery of public transit services was recently amended to remove barriers for authorities to own the assets. Currently, depots, rolling stock as well as charging infrastructure are owned by the operators to whom services are contracted.

Beginning July 2025, all new buses in New Zealand will be required to be zero emissions to benefit from government funding.



Auckland Hydrogen Bus

Currently, 10 percent of the national bus fleet is electric and projected to grow to 13 percent by 2024 and 100 percent by 2035, guided by a national fleet decarbonization plan.

In Auckland, approximately 10 percent of the bus fleet (134 buses) is zero-emission with an extraordinarily high reliability rate. AT's low emission bus roadmap has been aligned to meet the national target of a fully zero-emission fleet by 2035. Operators are focused on methods to maintain and manage

electric bus fleets, so they are comparable with diesel buses in service delivery, particularly for shorter routes. With 90 percent of their electricity source renewable, electric buses are a viable way forward, but they are also looking at green hydrogen for the future.

By 2024, the first locally produced electric ferries will be launched, with 8 - 10 fully electric and hybrid ferries in service by 2027, and a low and zero-emissions fleet in place by 2035.



A tram in downtown Sydney

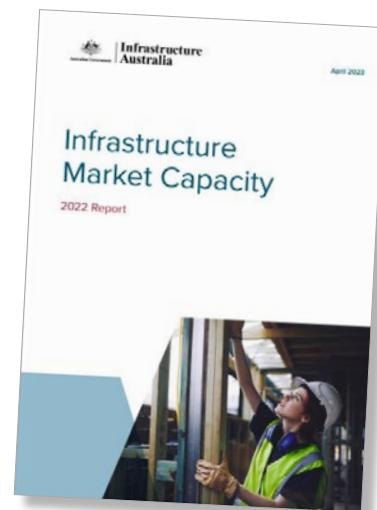
Australian National Perspective

In Australia, the policymaking and project implementation power on infrastructure and transportation lies primarily with the states. Each state creates an Integrated Transport Plan identifying its priorities and key projects and programs.

The potential for federal funding has increased in the past few years with massive population growth in urbanized regions and the realization that transit infrastructure is lagging. The federal government has now developed an interest to invest in transit infrastructure.

There is an ambitious infrastructure development pipeline of \$130 billion USD for the three most populated states alone but there are significant challenges with market capacity (skills and supply shortages), and cost increases. Australia also has a goal of having 90 percent of products manufactured domestically.

A **Market Capacity Database** has been developed by Infrastructure Australia, an independent infrastructure advisor to the Australian Government. Infrastructure Australia also assesses the business case of all infrastructure projects “of national significance” seeking over \$250 million AUD (\$165 million USD) in federal funds. Business cases are published publicly and occasionally receives an opposing viewpoint from the submitting state or regional government entity.



Australia's Infrastructure Capacity Report, 2022



Melbourne

A focus on seamless movement over modes

The state of Victoria, where Melbourne is located, describes itself as the most privately operated network in the world, contracting out all transit operations and relying on the private sector to bring its expertise to the table.

Victoria benefits from strong political support for public transportation. In 2010, the city passed a Transport Integration Act that requires a multi-modal, integrated and seamless network view of transportation. This has been extended to building spaces and communities around transportation nodes with less of a focus on a hub and spoke approach to transportation and land use development (i.e., getting people in and out of the CBD or a Downtown) but creating a series of distinct precincts with public transportation connecting them. This is complemented by an Integrated Data Transport Program focused on the better and more comprehensive use of customer data allowing for mode-agnostic transport access planning.

Ambitious sustainability targets with transportation at the center

State priorities are guided by the Victoria Climate Change Act of 2017 which has set a net zero emissions target date for 2050 with a commitment to bring that forward to 2045 and arrive at a 50 percent reduction by 2030. Currently, this is the most ambitious carbon reduction goal in Australia and a reduction in car ownership is a significant part of the plan.

Decarbonizing transportation operations includes a focus on zero-emission buses, with a goal of achieving 100 percent

renewable energy for all metropolitan trains by 2025 and reducing embedded emissions in transportation infrastructure. (The tram network already runs on 100 percent renewable fuels.) For the latter, the government has developed a database of barriers to reducing emissions and is working to remove those impediments inherent in transportation projects from the start.

A strong relationship between lower fares and increased ridership

Before the pandemic, the focus in the Melbourne region was to increase peak service. That has now shifted to providing more reliable service throughout the day and increasing train service on weekends starting in 2024, as well as providing larger trains.

Melbourne ridership is at 80 percent of pre-pandemic levels. However, with the introduction of fare capping, commuter rail ridership has increased by 60 percent on weekends, and long-distance transit travel has increased by 150 percent, especially during off peak, evenings, and for special events.

Additionally, a seamless ticketing system exists across the state and for approximately \$7 USD (9.5\$ USD on weekends) one can ride anywhere in Victoria.

Reinvesting in transportation infrastructure with an outcome focus: visible public benefits

Victoria is re-investing in its regional rail network after decades of non-investment with 200 separate projects, including an airport rail link, a new metro tunnel, a suburban rail



Visit to Melbourne Metro Tunnel project

link, and a radial loop by 2035. In addition, the state is upgrading every regional rail line and reactivating stations with architectural pride of place.

The political goal is to highlight incremental results quickly: Achieve 5 key wins where the benefits are clearly visible to the public. Dubbed the “Keep Melbourne Moving Program,” it includes a strong focus on keeping the city moving during construction, minimizing disruptions, and maintaining public trust. The timing and impact of disruptions is clearly communicated and then adhered to. To accomplish this, project steps are highly intensive with upwards of 1,000 people on a construction site working 24-7 to complete the work. “Disruption” buses are running to reduce travel time with Uber style data and actively changing traffic signals for bus priority.

Strong evidence-based planning, agile decision-making

A collaborative approach to delivery is used in projects that are being developed as 50 percent public and 50 percent private using timebound, performance-based procurement

models where agility is essential. Together, the public and private sectors develop target costs and program decisions. Ten-year contracts include an incentivized cost model with distinct parts rather than one big percentage and transfer the risk from the public to private sector.

“They prioritize transit investments and partner with the professional services community [to leverage those investments].”

— **Greer Johnson Gillis**, Senior Vice President and Chief Infrastructure and Development Officer, Jacksonville Transportation Authority

Projects incorporate sophisticated asset condition modelling and protracted scenario testing to stress test stages and outcomes. A benefits realization framework is set up with stage gates to report on the delivery

of agreed upon benefits and outcomes. Teams regularly come together to share best practices.

The state government is not just a contract manager; it maintains centralized decision-making control over all transportation infrastructure projects, including procurement, with a sharp focus on driving outcomes and benefits rather than projects and a schedule. There is a deliberate programmatic approach rather than project-based, which encourages an inclusive culture and helps to avoid tunnel vision.

The construction sector is driven to have a manufacturing mindset and think of standardized rather than bespoke designs

“We need to find a way to build projects in a different time frame to meet the needs of [American communities]”

— **Paul P. Skoutelas**, President and CEO, APTA

with a focus on repeatability and continual learning to combat rising project and program costs. One concrete result: the Metro Tunnel is to open a year ahead of schedule.



Melbourne tram



Brisbane



Brisbane Metro in testing

A transformative commitment to sustainable transportation modes

The 2022-2027 state budget has seen an 88 percent increase in transportation investment with a greater allocation to transit and active modes (walking and cycling) versus highways. The 2032 Olympics is seen as an additional opportunity to provide legacy transportation benefits for the greater Brisbane region. With 33 sporting venues spread widely across the region, it is estimated that 80 percent of spectators will use transit. With a goal of creating a “climate positive Olympics,” this percentage of transit ridership among spectators is stipulated in the contract with the International Olympic Committee.

Making better use of existing assets

The Brisbane Metro, led by Brisbane City Council (operator) as part of a joint collaboration between the Federal and State Government (Queensland), is a key project dedicated to upgrading the existing busway system. New, fully electric, double-articulated

vehicles will provide rail-like amenities on busway infrastructure with cashless, all door boarding and digital information systems. End of trip charging will ensure vehicles are fully charged in only 4 to 6 minutes. The objective is to make the system easy to use with a simplified network and 3-to-5-minute headways.

The Brisbane City Council is also attracting drivers / operators with its health and wellness focus — providing access to gyms, wellness programs, and other amenities.



Cross River Rail Station under construction

A new underground for Brisbane.

Cross River Rail is a new 10.2 kilometre rail line from Dutton Park to Bowen Hills, which includes 5.9 kilometres of tunnel under the Brisbane River and CBD. By unlocking the bottleneck at the core of the transport network, Cross River Rail will allow more trains to run more often and will enable a turn-up and go transport system for the whole of South East Queensland.

5.9 km of twin tunnels



There will be 16 cross passages linking the twin tunnels every 240 metres.



Cross River Rail Experience Centre

An amazing customer experience from the start of a project

With the Cross River Rail project providing 6.3 miles of new rail lines through twin tunnels with 12 new stations, every origin and destination will change on the Queensland rail network. It is a massive investment in network integration, and it has been widely socialized to the public from the beginning. This socialization strategy influences how the population will use the system.

A Rail and Transit Legibility Review has been set up to bring together diverse voices to ensure network information is readable / usable / easy to understand with standard designs.

The Cross River Rail Experience Centre, located at the heart of the city's CBD, is a community engagement and education hub providing detailed project information, digital engagement experiences and learning opportunities for the public. Behind the Experience Centre is the creation of an operable digital twin that offers a different way to develop, track, and manage assets as the infrastructure is being built. It will also help operate the system effectively and efficiently once the project is up and running. The digital twin provides technical assurance, simulating the behavior of the system under varying circumstances, thereby reducing time for approvals from emergency services on design features, for example, as well as providing virtual training for operators.



Sydney

A government commitment to a healthy project delivery eco-system

In June 2018, the New South Wales (NSW) Government, through its Construction Leadership Group, established an action plan to ensure the successful delivery of a vast pipeline of infrastructure investment. The **ten-point commitment** aims to bolster the health of the construction sector, setting out a collaborative approach to project delivery with quality, innovation, process efficiency, and cost-effectiveness. It allows for a clearer understanding of what the market can do and a singular focus on not undermining its performance.

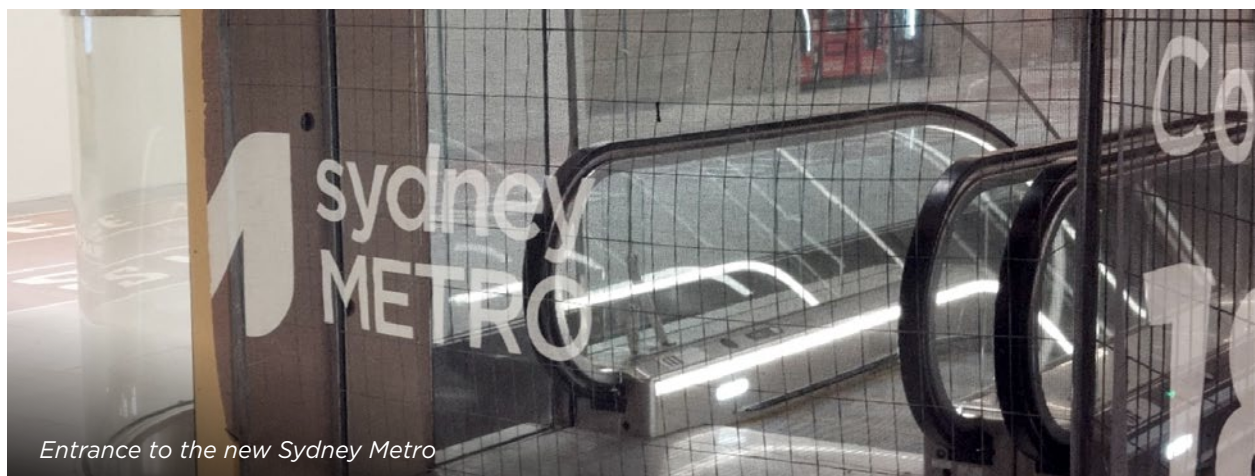
“Private contractors are incentivized to make decisions that align with outcomes and what is best for the project.”

— **Diane Cowin**, SVP, Global Transit Director – ESG, AECOM

Building out the system to serve multiple urban centers

Transit planners, particularly in Australia, seem to approach new projects based on a “build it and they will come” basis. This was particularly visible in New South Wales where, to achieve the goal of livability, the state is building an entirely new airport some 27 miles outside of the city center and a new LRT line to serve the airport, all with the goal of reducing the amount of time people must travel. In a sense, the government is pushing people away from the downtown by creating several new business centers well outside the city, where housing is more affordable. Planners told the study mission participants that it is ok if it takes time for ridership to grow and that achieving specific ridership projections is not critical, as they know the demand will eventually come.

Sydney Metro is Australia’s largest public transportation infrastructure investment to date estimated at over \$40 billion USD. The fully automated, driverless rail system, opened in stages starting in 2019, aims to



Entrance to the new Sydney Metro

provide high frequency service (every 4 minutes) to 2 million passengers per month through the heart of Sydney's CBD, and connecting multiple urban centers, totaling 40 miles with 31 new or refurbished stations. Platform barriers allow for a quick turnaround, significantly reducing trip times and increasing throughput.

A second major infrastructure project is the building of the Parramatta light rail to provide further connections within what is being viewed as the second CBD for the Sydney region. The rail system is being built in a six-year period from start to finish estimated at \$1.9 billion USD for 7.5 miles of track including the cost of design, building the infrastructure, procuring the rolling stock and operating the system. The light rail system will operate off catenary for just under a mile and recharge at the end point.

Service on the first phase is to start in 2024, with a second phase to connect to the future Sydney Metro West line. This project is being delivered not as a PPP but via a more disaggregated contract with greater risk-sharing and a solid understanding of key handover points.

Integrated approach to train operations; improved customer information

In 2018, Transport for New South Wales (the state transportation authority) opened a world class Rail Operations Center (ROC) bringing together the planning, operations control and customer service for Sydney's extensive rail system into one state of the art facility. The \$296 million (AUD), nearly 22,000 square foot center allows for a whole systems approach to minimizing disruptions, enhancing safety and ensuring customers receive better, more timely information.

Sydney



Parramatta Light Rail



The ROC also works collaboratively with the Transport Management Center (which oversees the bus system), especially for major events.

Part of the philosophy of the ROC is that the customer experience is more important than adhering to the timetable. Customer punctuality, for example, is measured by when riders should have reached their destination rather than train delays.

“Our government is very, very focused on passenger and community communications and is uplifting the level of transparency and access to information.”

— **Trudi Mares**, Deputy Secretary Greater Sydney, Transport for New South Wales

Maximizing international and domestic suppliers and content

The State Government owns all transit buses but contracts out operations. A fleet procurement program is in place and a new bus procurement panel has been created to engage with the industry on the best delivery strategy. Bus specifications are set by the state with a list of approved suppliers that can meet those specifications. Seven zero-emission bus providers are currently in the market, with 64 percent of buses built locally on either imported chassis or as a unibody, adhering to Buy Australia guidelines.



Gold Coast
Light Rail,
Queensland

3 | Key Findings

Interacting with key public transportation stakeholders in Australia and New Zealand underscored the amount of political engagement, funding and commitment to social inclusion it requires to propel people and community-centric projects forward and build world-class transit systems. They start with a concept of how to deliver 20-30-minute access to jobs and services, then look at what needs to be put into place to provide that and the funding it will require.

“We live in a continuous improvement mindset.”

— **Dr. Deborah Hume**, National Manager Multimodal Integration, Waka Kotahi NZ Transport Agency

Although transportation planning, policymaking, and investment decisions are more centralized and coordinated at the local and state levels in New Zealand and Australia than they are in the United States, several findings had major relevance for the APTA delegation:

1. Start Where You Want to Arrive: Broad, Long-Term Future Value

Customer and community engagement takes place even before a project is planned and environmental reviews and statutory processes are conducted. All parties are empowered to help set priorities and be part of the decision-making process. The investment strategy and order of projects is agreed on with the community first, rather than developing an investment strategy and then consulting with stakeholders on individual projects.

“Solicit what the community thinks on the front end, not the back end.”

— **APTA delegation**

By identifying a community’s desired economic, social, and / or environmental goals, and then planning for those integrated outcomes, a more inclusive culture can be fostered. In turn, this leads to greater public engagement and consensus, community partnerships, cultural awareness, and political support. Transit agencies and stakeholders then ask what needs to be put in place (including funding) to achieve the goal(s).

Broad, long-term benefits are the key drivers of investment versus focusing on a “one-off” project, a numerical ridership goal, or short-term cost savings. Hence, infrastructure is planned to maximize capacity rather than meet existing demand. The goal is to future-proof all elements, such as the capacity of stations to accommodate the largest rolling stock possible in years ahead, by understanding the need to incorporate expansion possibilities and ensure the government is prepared for a build out in 10 to 20 years.

“They are creating systems that are more accessible and accommodating to the needs of communities and have made an extraordinary commitment to community engagement.”

— **Dorval R. Carter Jr.**, APTA Chair 2022-2023, and President, Chicago Transit Authority

2. A Commitment to Engagement, Integrated Planning, and the Customer

To create a truly cohesive, world-class transit system, public transportation stakeholders in New Zealand and Australia focus on:

- **Integrated planning** that includes transit, roadways, aviation, ferries and even land use, in some cases under one agency.
- **Inclusive design and legacy infrastructure** that maintains quality, preserves local culture, and creates local pride.
- **Community engagement** built on sharing power — to shape decisions, design of stations, integration with other transport modes, and other elements — which leads to accelerated buy-in and greater neighborhood support and ownership.
- **Business involvement** that uses timely communications, liaison groups, and the media to educate stakeholders about the benefits of a transit project, help build support, ensure safety, and minimize the impact of construction on residents, schools, and other businesses.

Business involvement examples:

With five large schools located less than a mile from the Melbourne Metro Tunnel project, officials work with each school to ensure timely information is shared with teachers, students and parents to minimize disruptions and ensure safety.

With the light rail construction in Parramatta in greater Sydney, business advisory services are established to minimize the construction impacts and enhance engagement and outcomes. Local support for this project has been overwhelmingly positive as the residents and businesses understand how the rail project (and the projected 28,000 daily customers of the Paramatta Light Rail) will benefit the community and the economy.

- **Public-private partnerships** that ensure integration and collaboration among teams including owner / client and agency staff, which results in regular communication and knowledge sharing, better alignment of “key performance indicators” and outcomes, and adherence to transparent standards across the industry to track costs.

Public-private partnership examples:

In Australia, there are key standards across the industry to track costs. Contracts and subcontracts are a fully open book, checked and independently audited, so it is clear where the money goes. There is a fee to cover profit and overruns whereas in a traditional contract, there is a motive to spend more. A joint governance team arbitrates any changes in scope which stem solely from a change of risks.

There is incentivized knowledge sharing with KPIs on innovation which leads to the private sector competing on performance, not IPs. Contractors can pitch alternative ideas to the contracting authority, outlining feasibility, price and outcomes, and will be rewarded if the idea is applied, leveraging competition among project teams to drive innovation.

“It is about how you use and partner with [the private sector] and the market. If you have a problem, we [the authority] don’t profess to solve and design it ourselves but we put it out to the market and we do this throughout the life cycle of the project. This is when the true benefits of alliancing models come to light.”

— **Trudi Mares**, Deputy Secretary
Greater Sydney, Transport for
New South Wales

- **Customer experience** that is paramount from conception and planning to construction and delivery, with a high-level of respect and visibility on safety, security, and communication.

Customer experience example:

In Sydney, a geolocated text message system has been created where customers receive alerts on any issues or delays on the system in the local vicinity. This was coupled with a significant and highly visible safety and security presence. As one APTA delegate remarked, “This is a reminder that people want high tech but also high touch.”

“[We saw] from two weeks [in Australia and New Zealand] that there is a way to [build more presence and a sense of security] and to enhance the rider experience.”

— **Michael Jones**, Deputy General
Manager, Bay Area Rapid Transit,
San Francisco, California

3. Approaches to Successful Project Delivery

Multi-year capital campaigns allow for a continuity of effort and efficiencies in program support, where acquired knowledge and insights can be applied in real time. Even across a variety of project delivery structures, including the use of collaborative contract models such as **alliancing**,³ the following elements are common:

- **Focus on readiness** at the outset of capital planning and adopt a systems approach;
- **Build trust** among all stakeholders;
- **Be intentional** about defining, assessing, sharing, and transferring risk,
- **Adopt a more interactive approach** to project development throughout the project life cycle, as well as a willingness to shift to a more place-based delivery, which can speed up approvals and lead times, and;
- **Use a tender process** that places equal value on a firm's ability to collaborate and its qualifications. Also, prior to bidding, gain assurances that the firm's best individual team members are available for the duration of a project.

“The Alliancing Contract Model seems to create a win-win rather than what seems to be a lose-lose model in the U.S., where the underlying commercial framework does not incentivize collaboration and the building of a true public-private partnership with shared risk.”

— **APTA delegation**

“It is not project structure, but rather a good project culture, which dictates outcomes and performance.”

— **Camilla Drover**, Deputy Secretary, Infrastructure and Place, Transport for NSW

Recruiting, training, continually investing in, and retaining a world-class, knowledge-based workforce is another essential element of successful project delivery. An effective workforce development component is critical to capital delivery, with a focus on high skills and diversity in the construction sector.

Capital projects often commit hours to training and apprenticeships, including among subcontractors. Public transit leaders are intentional about building skill sets locally, destigmatizing work in the trades, and ensuring gender pay equality.

“We came away with a call to action. It will take dedication from us — all elected officials, transit authorities and the professional services community — to deliver on time and on budget, and to ensure communities get the full benefits from investment.”

— **APTA delegation**

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* this individual was a member of the APTA Board of Directors at the time of the study mission

** this individual was a member of both the APTA Board of Directors and Executive Committee at the time of the study mission

Notes

¹ Source: Background briefing by Waka Kotahi NZTA:

https://ptaanz.sharepoint.com/:b:/s/PTAANZShared/EQJTOqu69O5EmjIKahIT_msB3mhBDebPrR63pSdWaY-P_A?e=gnwqPn

² Source: Presentation by Adam Copp, CEO of Infrastructure Australia:

<https://ptaanz.sharepoint.com/:b:/s/PTAANZShared/EQKpitCAwcFhkD6pBgvyGbkBZ70J1UNwM3ebp7dcglu7-g?e=wQN4QV>

³ Alliance contracting is delivering major capital assets, where a public sector agency (the Owner) works collaboratively with private sector parties (Non-Owner Participants or NOPs). All Participants are required to work together in good faith, acting with integrity and making best-for-project decisions. Working as an integrated, collaborative team, they make unanimous decisions on all key project delivery issues. The alliance structure capitalizes on the relationships between the Participants, removes organizational barriers and encourages effective integration with the Owner:

https://www.infrastructure.gov.au/sites/default/files/migrated/infrastructure/ngpd/files/National_Guide_to_Alliance_Contracting.pdf



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