

FY17 sustainability report



Our Sustainability Commitments





Sustainability pillar	Areas	Specific commitments
Be Good Neighbours 	Health, Safety and Environment	<ul style="list-style-type: none"> Provide a healthy and safe environment for our employees, contactors, customers and the community and minimise environmental impacts
	Diversity and inclusion	<ul style="list-style-type: none"> Maximise diversity within Transurban and encourage the same with our suppliers
	Reconciliation	<ul style="list-style-type: none"> Strive to advance reconciliation in Australia through the Reconciliation Action Planning process
	Shared value	<ul style="list-style-type: none"> Partner with not-for-profit organisations to identify and pursue opportunities that help address key social or environmental issues related to transport
	Community engagement and economic development	<ul style="list-style-type: none"> Thoroughly consult communities and other key stakeholders when planning and designing new projects and keep communities informed on their areas of interest Seek to contribute to the social and economic health of communities where we operate by favouring local recruitment and procurement strategies
	Customer experience	<ul style="list-style-type: none"> Make it easy for customers to use and understand our toll roads, offering choices to meet their individual needs Show we care about customers by listening to them, being transparent and flexible Add value for customers by creating meaningful experiences that reflect what is important to them
Use Less 	Carbon neutrality	<ul style="list-style-type: none"> Work towards becoming a carbon-neutral organisation and meet our energy needs predominantly through renewable energy
	Whole-of-life sustainability	<ul style="list-style-type: none"> Examine and challenge the way we plan, design, construct and operate assets to reduce their whole-of-life impact while maintaining or improving their economic performance including: <ul style="list-style-type: none"> Reducing energy demand and embodied energy in materials Minimising potable water use and beneficially reusing water Avoiding where possible clearing of valued natural areas and offsetting where impacts are realised Reducing the amount of materials used; favouring low impact materials Avoiding, reducing, reusing and recycling wastes
Think Long Term 	Climate change	<ul style="list-style-type: none"> Identify and respond to climate change-related risks for new assets and regularly review risks for current assets and Transurban as a whole
	Sustainable infrastructure funding	<ul style="list-style-type: none"> Advocate for fair and sustainable infrastructure funding models through thought leadership, research and public discussion
	Technology and innovation	<ul style="list-style-type: none"> Prepare our infrastructure and the community for emerging technology including automated and electric vehicles
Governance 	Sustainability performance benchmarking	<ul style="list-style-type: none"> Require all new or upgraded assets, and operating assets in the future, to achieve sustainability performance ratings that are at least one level above the minimum from preeminent infrastructure sustainability rating organisations
	Sustainable procurement	<ul style="list-style-type: none"> Advance our procurement practices to align with the International Guideline for Sustainable Procurement (ISO 20400)
	Financial and risk management	<ul style="list-style-type: none"> Ensure fiscal and risk discipline in financial and risk management practices to maximise benefits and to deliver value to government partners, our customers and other stakeholders
	Sustainability Key Performance Indicators and targets	<ul style="list-style-type: none"> Establish and report on progress towards Transurban sustainability key performance indicators and targets
	Sustainable Development Goals	<ul style="list-style-type: none"> Report on progress towards material Sustainable Development Goals in our annual sustainability report

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Transurban at a glance				
15 Operating assets	10 Development projects	\$31B Capital investment	\$9B Project pipeline	DJSI World Index
Be Good Neighbours				
Over \$2.5M Community investment	72 Community grants	\$7M Social procurement	4,290 Volunteering hours	Over 5M Retail customers
4.1 Customer satisfaction rating	6.2B_{km} Travelled on Transurban roads	\$1,570 Toll road economic benefits per person	56 Road Safety Action Plan initiatives completed	12,707 Proactive HSE observations
1,617 Employees	83 Graduates, interns and student employees	70% Employee Engagement Index	45% Female employees	64% Of employees using flexible work arrangements
Use Less				
52% GHG reduction target by 2030	123,274_{tCO2-e} Transurban GHG emissions	1,372,482_{tCO2-e} Customer GHG emissions	10% Energy reduction target by 2023	556,568_{GJ} Total energy usage
131_{MWh} Renewable energy generated	140_{kW} Total solar capacity	72,053_{kL} Potable water use	2,755_{tonnes} Solid waste to landfill	3,840_{tonnes} Recycling
Think Long Term				
1.9M Trips taken every day across our networks	10 Development projects	\$9B Project pipeline	3 Infrastructure Sustainability ratings	\$300,000 Innovation grant funding
1,635 Road Usage Study participants	60% Of study participants would prefer a user pays system	3 Motorscapes projects	6_{ha} Regeneration projects	Over 82,000 Native trees and shrubs planted

Message from the CEO

It has been more than a decade since Transurban published its first Sustainability Report. Since then, while the business has been shaped by opportunities and challenges in Australia and internationally, we have reported on the progress of our sustainability goals.

In our first sustainability report, we highlighted our commitment to understanding our impacts on the community, customers, employees, other stakeholders and the environment and 'doing something about them'. This commitment has not changed and to this day remains the foundation of our sustainability strategy.

For the last several years, we have progressed our sustainability goals by delivering projects aligned with three strategic pillars: be good neighbours; use less; and think long term.

To us, being good neighbours means listening to the community, our customers, government and business partners and investors and working to create shared value. Over the past financial year (FY17) we put this focus into action across all of these stakeholder groups.

We focused on enhancing our customers' experience of our service on and off the road by introducing new apps and disrupting ourselves by trialling a new mobile tolling product, LinktGo, that removes the need for an account or a tag. We have also focused on our customer service approach, including assisting customers who are in hardship situations and waiving fees for new customers who are not familiar with the tolling system through our first time forgiveness and account opening programs.

Across the business, we continued to progress our gender and cultural diversity efforts and were pleased to receive international recognition by [Equileap](#), as one of six companies globally that reported no significant gender pay gap. We also released our second Reconciliation Action Plan, which sets the way forward for our business to deepen cultural awareness and education, create employment opportunities and career pathways for Indigenous Australians.

Over the year, we continued to engage widely with communities as part of the major network development projects we are progressing with our government partners, including the CityLink Tulla Widening and West Gate Tunnel Project in Melbourne, the Logan Enhancement Project and Inner-City Bypass Upgrade in Brisbane, NorthConnex in Sydney and the 395 Express Lanes project in the Greater Washington Area.

This last project provides a ready example of how we work with our government partners to help achieve broader transport policy outcomes. In line with our support for transport networks that integrate road and public transport services, the 395 Express Lanes Project, which we are progressing with the Virginia Department of Transportation, will provide the first sustainable funding source for public transport in the area. A historic \$15 million has been committed annually which will be used to enhance public transport options along the I-95 and I-395 corridors, such as new bus and rail services, park-and-ride lots and transportation demand management programs.

Across our business, our highest priority is ensuring our people and customers get home safely. We are focused on providing a healthy and safe environment for our employees, contractors, customers and the community while minimising impacts to the environment. In May, we were deeply saddened by the fatality of one of our contractor's employees on the NorthConnex project. Transurban has worked closely with the Contractor, Lendlease Bouygues Joint Venture to support the family, and with Roads and Maritime Services and our NorthConnex Project team. We continue to work closely with all of our contractor partners across our road assets and projects to ensure that the highest levels of safety are achieved.

Under the use less pillar, we are proud to announce a major greenhouse gas (GHG) emissions reduction commitment to halve our GHG emissions by 2030. This ambitious target is driven by our desire to tangibly contribute to the globally-agreed target of limiting global warming to two degrees. Work to implement a comprehensive range of energy efficiency measures is underway with a focus on ventilation and lighting systems.

Thinking long term is our final sustainability pillar and underpins our approach to the design and delivery of new road and enhancement projects. In FY17, the CityLink Tulla Widening and Logan Enhancement projects achieved 'Excellent' Infrastructure Sustainability (IS) ratings from the Infrastructure Sustainability Council of Australia, for their sustainability performance at the design phase. The NorthConnex project was awarded a 'Leading' design rating and is the highest IS rated road project to date.

Through our Motorscapes program, we completed two projects that regenerated disused sites near CityLink in Melbourne and the Hills M2 Motorway in Sydney. This program demonstrates how we are rethinking the role motorway corridors can play in the community and delivering carefully planned projects that enhance local ecology and urban design through the installation of public art.

As technology continues to reshape urban mobility, we continue to work with a range of organisations to prepare for the eventual arrival of connected and automated vehicles. In FY17, we partnered with the Victorian Government in a series of trials to understand how these vehicles will interact with motorway infrastructure and the social issues associated with their safe adoption.

2017 Sustainability Report

This year we were pleased to maintain a 'World Leadership' position in Dow Jones Sustainability Index and to be recognised as the leading transport infrastructure company in the Global Real Estate Sustainability Benchmark. Sustainability is a global opportunity. Through our commitment to road safety, diversity, energy efficiency, sustainable transport and road projects, and our focus on climate change risk, we are now helping to address seven of the United Nation's (UN) Sustainable Development Goals. We will continue to track and report on our progress towards these over the years to come.



Scott Charlton

Chief Executive Officer

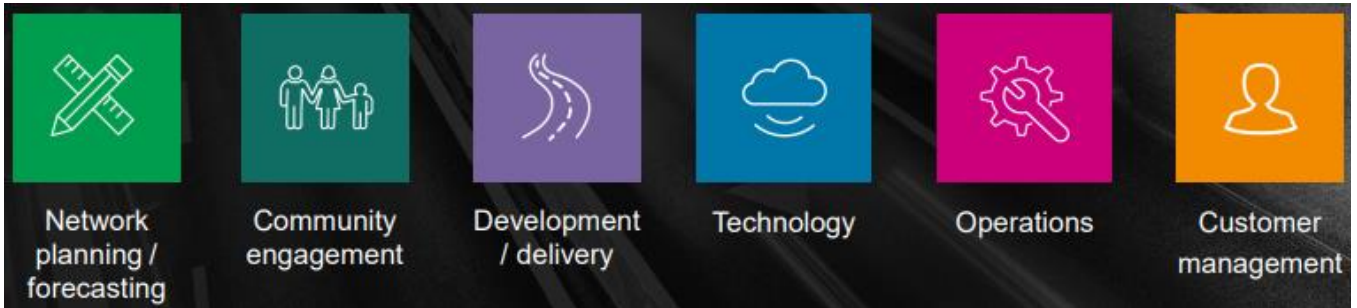
About Transurban

Transurban manages and develops urban toll road networks in Australia and the United States of America. We are a top 20 company on the Australian Securities Exchange (ASX).

15 Operating assets	10 Development projects	\$31B Capital investment	DJSI World Index
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Our capabilities

Our strategy is to be a partner of choice with governments by providing effective, innovative and sustainable road networks and services. We deliver on this strategy through our core capabilities:



Our assets and markets

Transurban has an interest in 15 operational motorways and in ten development projects. Our markets are the eastern seaboard of Australia and the Greater Washington Area in the USA.

	Victoria	New South Wales	Queensland	Greater Washington Area
Operational assets	CityLink	Hills M2 Lane Cove Tunnel Cross City Tunnel Eastern Distributor M5 South West Westlink M7	Gateway Motorway Logan Motorway Go Between Bridge Clem7 Legacy Way AirportLinkM7	495 Express Lanes 95 Express Lanes
Development projects	CityLink Tulla Widening West Gate Tunnel Project Monash Freeway Upgrade	NorthConnex	Gateway Upgrade North Logan Enhancement Project Inner City Bypass	395 Express Lanes 95 Express Lanes Southern Extension ¹ Fredericksburg Extension

¹ This project is being delivered by the Virginia Department of Transportation and has been partly funded by Transurban

Sustainability Strategy

Transurban’s vision is to strengthen communities through transport. We aim to provide effective transportation solutions to support the growth and wellbeing of our cities.

Our Sustainability Strategy is based on three pillars:

 <p>BE GOOD NEIGHBOURS</p>	 <p>USE LESS</p>	 <p>THINK LONG TERM</p>
<p>We will work with communities to create shared value with our business by anticipating, listening and responding to community needs</p>	<p>We will minimise natural resource use and create resource efficiencies in development, operations and maintenance to reduce the impacts of our business on the community and environment</p>	<p>We will look for innovative transport solutions that will create efficient, safe transport networks and liveable cities</p>

Our Sustainability Strategy is fundamental to our day-to-day business activities and to our long-term objectives. The strategy’s three pillars guide us in how we manage our operations, how we deliver new projects and how we identify and plan future initiatives. Ultimately, this strategy helps ensure we consistently deliver tangible benefits to communities, customers, employees and business partners.

United Nations Sustainable Development Goals

Sustainability is a global opportunity and our Sustainability Strategy does not exist in isolation. In 2015, as part of a new sustainable development agenda, the United Nations adopted a set of [Sustainable Development Goals](#) to end poverty, protect the planet, and ensure prosperity for all. Each goal has specific targets to be achieved within a 15-year timeframe.

The United Nations has called on governments, private and public sectors and individuals to contribute to the global effort in meeting these goals. Transurban has identified seven United Nations Sustainable Development Goals our business can best contribute to:



This Sustainability Report includes details of our progress towards meeting these goals. Refer to the Progress report – Sustainable Development Goals section of this report for more information.

External benchmarking

Transurban supports a range of sustainability frameworks. For FY17, we reported or were independently benchmarked against the following sustainability frameworks. Our performance is detailed below.

Dow Jones Sustainability Index (DJSI)	Global Real Estate Sustainability Benchmark (GRESB) - Infrastructure	FTSE4Good	Australian Council of Superannuation Investors (ACSI)	Ethibel Socially Responsible Investment Register	United Nations Global Compact (UNGC)
<p>Transurban was included in the 2017 DJSI World Index, indicating our sustainability performance is in the top 10 per cent internationally.</p> <p>We were the leading toll road operator and second-highest rated organisation in the 'Transportation and Transportation Infrastructure' sector.</p> <p>Transurban was also awarded the 2017 Industry Mover Award for the greatest annual improvement in the sector.</p>	<p>In 2017, Transurban was rated first globally for Transportation Infrastructure, first globally for Toll Road Operations and second overall (out of 160 participants).</p>	<p>Transurban has been a FTSE4Good Global Index member for 13 years, including for FY17.</p>	<p>For ten consecutive years, the ACSI has rated Transurban's sustainability governance and performance as 'Leading'.</p>	<p>In 2017, Transurban was included in the Ethibel Investment Register and provided with an 'EXCELLENCE' Label.</p>	<p>Transurban is a UNGC signatory member and reports annually on progress. Our membership represents our commitment to support and contribute towards the UN's sustainability program including the Sustainable Development Goals.</p>

Our year at a glance

8 Sep 2016	Transurban announced as a member of the DJSI World Index for its 2016 submission
9 Sep 2016	FY16 Annual Report released
7 Oct 2016	NorthConnex project received a 'Leading' Infrastructure Sustainability design rating
13 Oct 2016	FY16 Sustainability Report released at Transurban AGM
23 Nov 2016	\$512M Logan Enhancement Project Approved
30 Nov 2016	Official opening of the Power St Loop Motorscapes site, featuring <i>Habitat Filter</i>
1 Mar 2017	US\$475M 395 Express Lanes Project approved with substantial transit subsidy
21 Mar 2017	\$60M Inner City Bypass in-principle agreement reached
2 May 2017	Gateway Upgrade North project received an 'Excellent' Infrastructure Sustainability design rating
9 May 2017	CityLink Tulla Widening project received an 'Excellent' Infrastructure Sustainability design rating
12 May 2017	Official opening of the Transurban Road Safety Centre
26 May 2017	Heathwood Community Development Expression of Interest (EOI) campaign launched
7 June 2017	Official opening of the M2 Macquarie Park Motorscapes site, featuring <i>Kinetica</i>



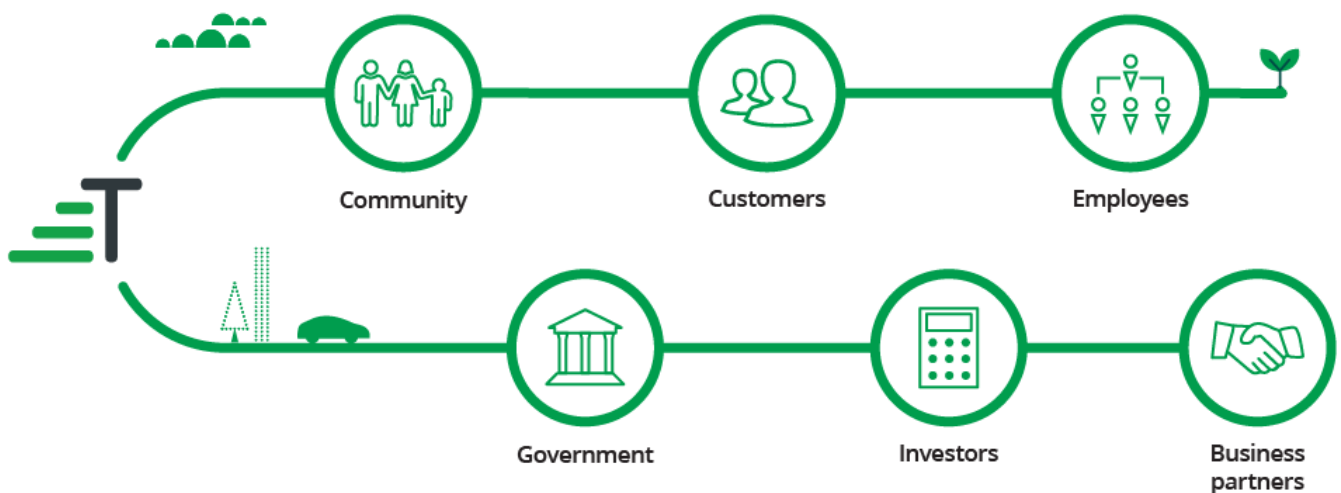
Be good neighbours

We aim to be good neighbours by working with communities to create shared value with our business by anticipating, listening and responding to community needs.

\$2.5M	4,290	70%	45%	2
Community investment	Employee volunteering hours	Employee engagement	Female employees	Recordable injuries

Stakeholder engagement

As the operator of major Australian and USA motorways, and as an ASX-listed company, we work with six key stakeholder groups that are interested in and affected by different aspects of our business.



Stakeholder engagement activity overview

Transurban key stakeholder group	How we worked together in FY17
Community	<ul style="list-style-type: none"> Conducted ongoing community consultation during the planning, design and delivery of all major projects Consulted with Community Reference or Liaison Groups on key issues such as design revisions, construction impacts and environmental management controls. This consultation led to changes in projects to accommodate community requests or concerns Invested in community development and project delivery via a range of partnerships, grants, sponsorships and donations
Employees	<ul style="list-style-type: none"> Conducted Employee Opinion Surveys to measure and improve our workplace culture Provided learning and development opportunities to develop our talent Supported wellbeing and recognition programs to look after our people
Customers	<ul style="list-style-type: none"> Provided ongoing customer service to over 5 million retail customers Launched the retail brand Linkt featuring new service options to suit changing customer trends Continued our Voice of the Customer feedback program to gain insights into customer needs Provided USA customers with additional information and payment options
Investors	<ul style="list-style-type: none"> Provided regular financial reporting and investor presentations Received a number of sustainability investment ratings that benchmark us as an international leader
Business partners	<ul style="list-style-type: none"> Achieved project milestones and sustainability benchmarks with our major contractors Continued to align our sustainable procurement strategy with the new international guidance standard (ISO 20400) Continued to support social enterprises and community employment opportunities
Government	<ul style="list-style-type: none"> Partnered with government to develop and deliver major infrastructure projects Contributed to parliamentary inquiries relating to toll road infrastructure and transport trends Reported to the Workplace Gender Equality Agency and received an Employer of Choice for Gender Equality citation

Listening and responding to our stakeholders

The support of key external stakeholders including customers, communities, government and industry partners, investors and suppliers is critical to ensuring Transurban’s ongoing success, both as business and as a corporate sustainability leader.

This year we completed a comprehensive review of the ways we acknowledge, understand and respond to stakeholder areas of interest or concern. To ensure this review would deliver an accurate assessment of our performance, we applied [AccountAbility’s AA1000 Standard](#) principles in developing and conducting this research.

The review helped to confirm our understanding of key issues and opportunities for further engagement with our stakeholders. The immediate areas of focus include:

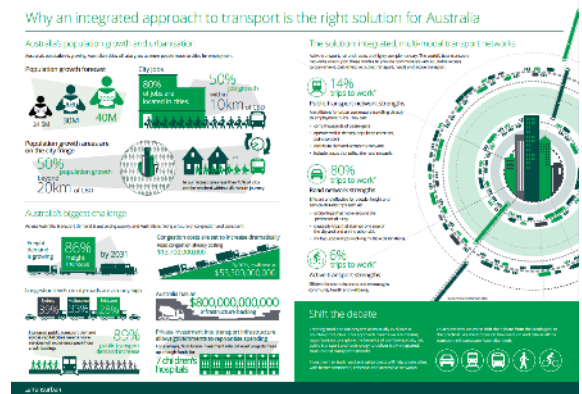
- Empowering customer choice with improved access to information on travel options and costs
- Better demonstrating the value of toll roads
- Working to reduce the impact of infringement processes on people in hardship
- Simplifying information to help customers manage accounts and payments
- Educating customers on minimizing avoidable fees
- Continuing to enhance Transurban’s approach to engaging communities around assets and projects

Transurban has introduced a range of programs to address the issues raised by our stakeholders, including initiatives that will enhance or complement existing programs. As we develop these responses, we will engage with the relevant stakeholder groups to ensure our responses are appropriate.

Contributing to government inquiries

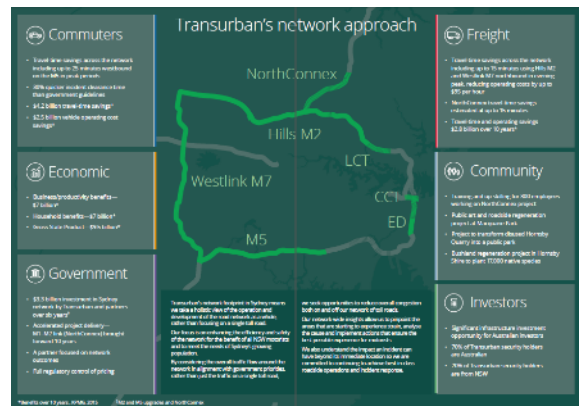
In FY17, we provided submissions to two government inquiries relating to toll road infrastructure. Responding to questions raised by the inquiries, these submissions demonstrated the value we provide to road users and local communities, and the role that toll roads play as part of broader government transport strategies addressing road, rail and active transport infrastructure.

Our submission to the Senate Economics Reference Committee's Inquiry into Toll Roads in Australia responded to the inquiry's questions with a detailed response demonstrating how private investment in toll road infrastructure enables the delivery of key infrastructure projects earlier than would otherwise be possible.



Our submission to the NSW Legislative Council Inquiry into Road Tolling described how Sydney's road network has benefited from the effective partnering of the public and private sectors. The current network represents more than \$9 billion of investment, of which the private sector has contributed 80 per cent.

The involvement of the private sector has substantially accelerated the delivery of essential infrastructure in NSW. For example, with our contributions, NorthConnex will be delivered an estimated 10 years earlier than anticipated if the government had not involved the private sector.



In the USA, we contributed to a hearing on 'The Use of Transportation Infrastructure Finance and Innovation Act (TIFIA) and Innovative Financing in Improving Infrastructure to Enhance Safety, Mobility, and Economic Opportunity' with a presentation to the United States Senate Committee on Environment and Public Works.

Investing in communities

Transurban’s vision ‘To strengthen communities through transport’ recognises the major role we play in local communities in the regions where we operate. We seek to anticipate, listen and respond to community needs about our road assets and operations.



This year we invested more than \$2.5 million in communities near our roads through partnerships, sponsorships, grants and donations.

Community partnerships



Charity challenge

In September 2016, Transurban Queensland hosted its annual Charity Challenge for Ronald McDonald House South East Queensland. This service provides a home away from home for families with a seriously ill child requiring hospital treatment.

Our charity challenge brought together more than 250 guests, business partners and transport industry stakeholders to complete in a series of fun challenges. Together with our corporate partners, we raised \$130,000 for Ronald McDonald House.



Legacy Way toll fundraising

Legacy Australia provides services to Australian families suffering financially and socially after the death of a spouse or parent in the defence force. In Queensland, Transurban operates the Legacy Way toll road, and we donate one cent from each toll collected or a minimum of \$100,000 to Legacy Australia. In FY17, we donated \$100,000 for this commitment.



Showers for homeless people

Orange Sky is an Australian mobile service that provides free hot showers and laundry facilities for homeless people. Transurban is supporting Orange Sky’s Sydney-based shower van, helping improve health standards and restore respect for people without homes. Orange Sky employs 800 volunteers who spend 1,300 hours a week providing these services to Australians in need.

Community grants

Our community grants program, has now contributed more than \$1 million in community grants since establishment in 2008 in the USA and 2014 in Australia. In FY17, the program awarded 72 grants worth more than \$200,000 to local community organisations in the USA and Australia.

Our grants are available to communities within our areas of operation and are generally awarded to groups providing services that promote inclusion and connection: for example, transport and mobility, health, sport and education services. In some cases, our employees have gone on to volunteer with the community groups we support.



Supporting charities

In FY17, Transurban supported a range of charities through internal activities and events. These included:

- A company-wide Movember competition
- A Beyond Blue Bash morning tea
- NSW Police Legacy Blue Ribbon Ball
- Nelune Foundation's Lilac Swim

Following relocations and renovations at our offices in FY17, Transurban donated excess office furniture, office equipment and white goods to the Ronald McDonald House South East Queensland and to Aid Vanuatu.

Creating employment opportunities

Transurban supports a range of organisations focused on providing employment opportunities for disadvantaged or at risk people:

- **Virginia Values Veterans (V3)** - Transurban is a certified V3 company. This program educates and trains companies on the value of recruiting, hiring, training and retaining veterans. Through the V3 program, we have made a commitment to increase career opportunities at Transurban for Virginia's veterans.
- **Indigenous traineeship program** - In partnership with Aboriginal Employment Strategy, Transurban Queensland has introduced a program to create career development opportunities and pathways for people of Aboriginal or Torres Strait Island descent in our local communities.
- **Refugee Employment Support Program** - We have pledged our support for this NSW Government internship, scholarship, training and mentoring initiative. The program will help up to 6,000 refugees and 1,000 asylum seekers find work.
- **Ability Works Australia** - We have a long-term partnership with Ability Works Australia, a Victorian organisation that supports, employs and trains people with disabilities.

Employee volunteering

All Transurban employees are invited to take one day of paid volunteering leave each year to contribute to a cause of their choice. In FY17, Transurban employees participated in more than 4,290 hours of volunteering time through this program. This was a significant increase from 2,850 hours last year, reflecting our aim of encouraging every employee to take advantage of the opportunity to volunteer.

In Victoria, employees volunteered for causes including the K-mart Wishing Tree Appeal, the Salvation Army and Landcare.



In New South Wales, employees volunteered with organisations including Foodbank, Landcare and NeuRA, Glenhaven and Beecroft Carols by Candlelight, Muirfield Club Golf Legacy Day, and Wayside Chapel.



In Queensland, employee volunteering included Clean Up Australia Day, Ronald McDonald House and RSPCA Queensland.



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In the USA, employees volunteered with the Northern Virginia Family Service Head Start Center in Arlington. For our fourth annual volunteer day, employees assisted with painting, cleaning and organising food donations and housing supplies.



Supporting public events

Transurban's motorways have a significant physical presence in the cities where we operate. We aim to enhance the liveability and community aspects of these cities by supporting public events, particularly if our assets can make a direct contribution such as hosting on-site community events.

In FY17, we supported community events via financial sponsorship and event hosting, including:

- Run for the Kids, Melbourne (Good Friday Appeal)
- Moonee Valley Festival, Melbourne
- Melbourne Marathon
- Share the Path Sydney
- Blacktown Running Festival, Sydney
- Bridge to Brisbane
- Great Brisbane Bike Ride



In FY17, Run for the Kids won a Melbourne Award for 'Contribution to Community by a Corporation' in recognition of the contribution the event has made to the Royal Children's Hospital Good Friday Appeal.

Since the inaugural race in 2006, more than 330,000 people have participated in the event, raising more than \$15.7 million for the Royal Children's Hospital.

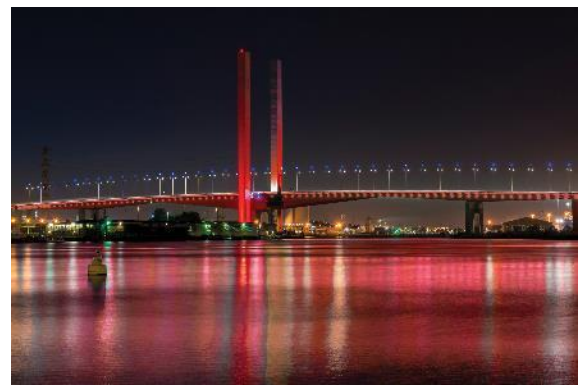
Every year we proudly open our road to the thousands of Run for the Kids runners, giving them the unique opportunity of running through the Domain Tunnel and over the Bolte Bridge.

Public awareness

Several of our assets are landmarks on their city's skylines, and we take advantage of their prominence to raise awareness for a variety of causes and significant dates. LED lighting on some of our roads and bridges allows us to project a variety of colours and show our support for events and causes.

In FY17, Transurban lit up its assets to support Australian causes including:

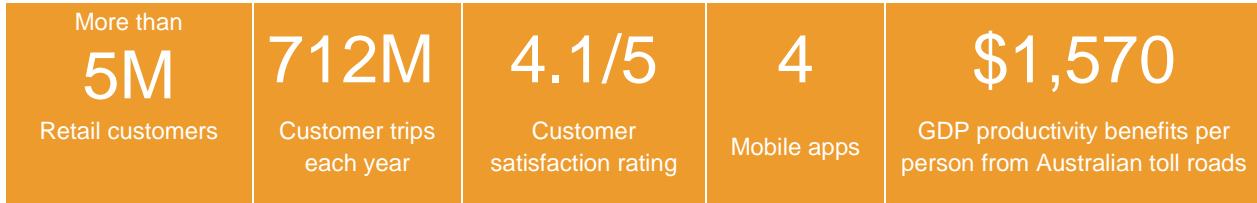
- International Women's Day
- NAIDOC week
- Yellow Ribbon Week and Shine A Light on Road Safety for Safer Australian Roads and Highways (SARAH) and Road Trauma Support Services
- Red Nose Day for SIDS and Kids
- Daffodil Day for the Australian Cancer Council
- Blue Ribbon Day for the Victoria Police
- Pink Ribbon Day for the Australian Cancer Council
- White Ribbon Day
- World Diabetes Day for Diabetes Australia
- National Carers Week
- Victoria Against Violence



Above: the Sir Leo Hielscher Bridges on the Gateway Motorway lit up in the NAIDOC colours, and the Bolte Bridge on CityLink lit red for Red Nose Day

Enhancing customer experience

More than 712 million trips are taken on Transurban toll roads each year, including trips taken by our more than five million account and pass-holding customers. With millions of customers, efficient and responsive service is essential to the successful operation of our business.



Our customers

We understand the importance of ensuring a tailored experience for commuters, casual travellers, small businesses and large corporates. With this in mind, we are continually reviewing our products and making it easier for customers to choose a product that meets their needs.

Our customers interact with us via five retail brands:

- CityLink (Victoria)
- Roam (New South Wales)
- Transurban Linkt (New South Wales)
- go via (Queensland)
- E-ZPass (Greater Washington Area²).



Customer service

Our customer service practices, strategies and initiatives are informed by three customer promises:

- Make it easy
- Show we care
- Add value



In FY17, our customer service initiatives included:

Make it easy:

- Launched Transurban Linkt in New South Wales, supported by new products to better meet the needs of both frequent and casual travellers

² E-ZPass in Greater Washington Area is administered by the Virginia Department of Transportation (VDOT), not by Transurban.

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- Streamlined the online account-opening process to make signing up quicker and easier
- Enhanced our online offerings to include toll calculators and simplified 'help me choose' product selectors

Show we care

- Continued our Voice of the Customer feedback program, as well as a range of customer research into driver preferences, product development and innovation
- Supported customers with First Time Forgiveness Programs and financial hardship options to help customers in need
- Introduced new service channels, including web chat and Facebook

Add value:

- Launched user-friendly mobile apps for CityLink and Transurban Linkt account customers

Customer service teams

Our customer service teams are located in Melbourne, Sydney, Brisbane, Virginia and Manila.

We measure our customer service performance through metrics such as Customer Satisfaction, our ability to resolve customer queries on the first call (First Call Resolution) and our ability to answer calls within 30 seconds (Grade of Service).

A summary of our Australian customer service performance in FY17 is shown below:

	Overall	CityLink	Roam	Transurban Linkt	go via
First Call Resolution (%)	97.1	97.4	97.7	96.7	96.8
Grade of Service (%) (Target 70%)	83.1	83.3	88.8	89.8	80.1
Customer Satisfaction (out of 5)	4.1	4.0	4.1	3.8	4.1

Note: In the USA, overall customer service performance scores were 95.3% for First Call Resolution, 80% for Service Level (this is broadly equivalent to the Australian Grade of Service metric) and 94.4% for Quality (a USA-specific metric that is based on performance against a customer service quality scorecard). E-ZPass is not included here as it is administered by the Virginia Department of Transportation

Mobile apps

More than half our customers access their accounts via mobile devices and so, during FY17, we introduced user-friendly smartphone apps for CityLink (Victoria) and Transurban Linkt (NSW) customers. Smartphone apps will be available to go via (QLD) customers in FY18.

In the USA, we also released a smartphone update to our Express Lanes mobile app on iOS and Android. The updated app offers new navigation features, a simplified payment process and personalised alerts.

All our apps include prominent alerts discouraging customers from using the app while driving.



LinktGO: a new way to pay for tolls

In May 2017, Transurban trialled a GPS-enabled smartphone app, LinktGO, that allows customers to use our toll roads without any ongoing commitment. Customers receive trip information in real time and can pay trip by trip via their smartphone. After a successful trial, Transurban is launching this product for its NSW customers in FY18.

Australian retail locations

Our data shows our customers are increasingly completing their toll road transactions outside traditional business hours. To support these customers, Transurban has partnered with retailers so customers can now manage their accounts at more than 3,600 retail locations, many with extended operating hours including Australian Federation of Newsagents, 7-Eleven convenience stores, Puma Energy and United petrol stations. Transurban supports its retail partners with ongoing education about point-of-sale transactions, advertising and customer communications.

Web chat

In August 2016, we launched web chat across our three Australian retail websites – CityLink, go via and Transurban Linkt. We are also piloting live chat through our CityLink app to improve the mobile customer experience. Since its introduction we have conducted more than 80,000 chats through the CityLink, go via and Transurban Linkt websites.

Customer engagement and research

Transurban reviews customer feedback on an ongoing basis via its quantitative Voice of the Customer research program. This year, we also conducted customer research into driver preferences, on-road experiences, road-charging attitudes and behaviours, product development and innovation. Our research findings prompted us to improve some of our products and services to better meet our customers’ needs. These improvements included:

- Launching a tagless account product in NSW for casual travellers
- Redesigning customer communications such as statements and reminder notices to improve comprehension
- Making it easier for key accounts to manage their fleets by piloting a CityLink real-time incident notification program

Investing in our customer team

As well as reviewing and improving our products and tools, we also invested in developing the skills of our customer service team. This year we introduced a Frontline Leaders program, developed in partnership with the Australian Institute of Management. This program enables our customer-service leaders to expand their business, leadership and people skills.

We also launched ThanksTU, a customer feedback program available to all non-customer-facing employees. This program allows a diverse range of employees to speak to our customers directly. Our employees call customers to thank them for using our service, and then ask for the customer’s feedback on their experiences using our roads and products. ThanksTU gives non-customer-facing employees an opportunity to consider their work from the customer’s perspective.

Tolling and customer account management

Transurban services more than 5 million retail and commercial customers that use our roads in different ways and have different preferences for how they manage their tolls.



Preventing and resolving missed tolls, fees and fines

More than 95 per cent of our customers pay for their travel within the required timeframe. Where tolling or payment issues arise, we proactively communicate with customers and provide multiple opportunities for the resolution of issues before they escalate to fees or infringement.

When a toll or account is not paid on time, Transurban customers may be charged additional fees and, if a toll or account remains unpaid for an extended period, may enter infringement processes. We aim to assist customers wherever possible to prevent this from happening.

Support provided

Our customer service team is available to help customers encountering problems with their tolls or account.

A First Time Forgiveness Program is now in place across all markets. This program helps account customers who unintentionally receive a toll invoice by waiving the administration fee and so avoid account suspension. Where a customer's account has been suspended for non-payment, we will contact the customer to help resolve any travel issues, update their account details and provide information on how to better manage their account.

We also work with customers who do not hold an account with us on how best to use our networks, or open an account if they choose.

We continue to assist our customers who are experiencing payment difficulties. In FY17, we received 778 financial hardship requests. In response to these requests, we provided tailored payment options and, where circumstances warranted it, we waived the debt.

In the USA, 97% of trips are paid or have a High Occupancy Vehicle (HOV) or other exemption at time of travel. We continued to operate our Customer Care and First Time Forgiveness programs to help customers avoid or resolve issues with unpaid tolls and the potential for escalation of fees and civil penalties. Since commencement in 2015, this program has helped more than 138,000 customers in the USA avoid fees and civil penalties.

<p>In Australia, less than one per cent of trips resulted in an infringement and, where this occurred, 90 per cent of infringement recoveries were retained by the state authority. Transurban does not profit, and rarely recovers costs, through this process.</p>	<p>In the USA, approximately 0.075 per cent of trips of USA tolling transactions progress to court. Transurban manages the penalty and court process but does not, and cannot by law, profit from administrative fees and civil penalties related to enforcement. Administrative fees are outlined by Virginian Law.</p>
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Customer Advocacy

In FY17, we appointed a Customer and Communities Advocate to enhance our ability to assist people with payment difficulties and proactively engage communities to address issues of vulnerability to tolling debt.

Complaint handling accreditation

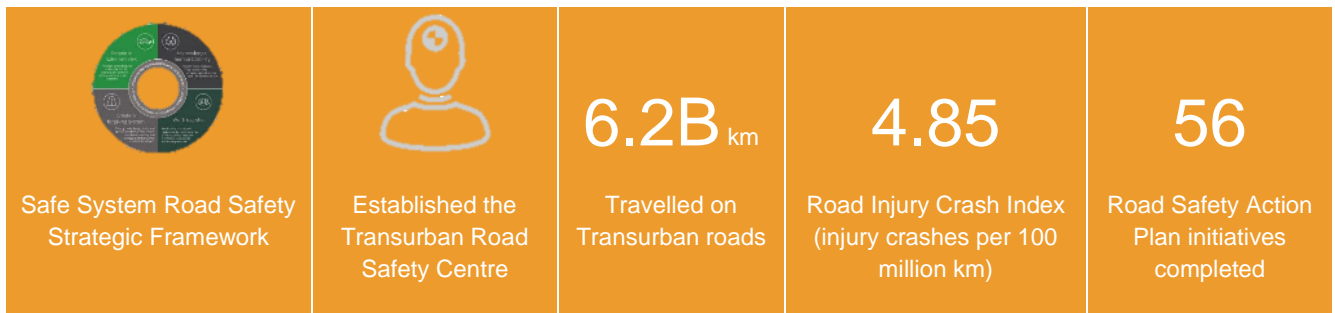
Our Customer Service team engaged the Customer Service Institute of Australia (CSIA) to certify our complaint-handling framework to Australian and international standards.

The CSIA's scoring uses a continuous improvement model that rates each element at one of three levels: Intention, Implementation or Integration. We successfully achieved CSIA certification, with 17 out of 23 areas of assessment rated at the highest level (Integration).

Road safety

During FY17, our customers travelled more than 6.2 billion km using our 260 km road network. Road safety is a shared responsibility, and we seek to play our part to achieve safer roads for all users. We continue to strive for fatality and injury-free roads and proactively engage with our customers, partners and the community to make every journey a safe one.

To this end, Transurban has invested in additional safety features and advanced technology beyond what is available across the public road network. We have done this to meet our responsibilities in minimising the risk of crashes, injuries and fatalities on our roads. We also engage in research to identify opportunities for future improvements.



Our Road Safety Strategic Framework



Transurban's *Road Safety Strategic Framework* is aligned with the [Safe System](#) approach to improving road safety. The safe system approach takes a holistic view of the road transport system and focuses on four interconnected pillars: safer roads, safer speeds, safer vehicles and safer people.

Our road safety strategy and action plans are also informed by detailed traffic and incident data from Transurban and public road networks, as well as by advice and research from the Australian Road Research Board and the Monash University Accident Research Centre.

In FY17, we implemented Road Safety Action Plans in each of our operating regions. These plans set out our goals and objectives, actions, and performance measures. Actions across all regions included:

Safer roads	Safer speeds	Safer people	Safer vehicles
<ul style="list-style-type: none"> Conducting road safety audits and implementing findings to reduce crash risk Improving signage to deter cyclists from entering tunnels 	<ul style="list-style-type: none"> Participating in dynamic speed limit trials to manage traffic and reduce incidence of crashes Installing variable speed limit signs to address congestion 	<ul style="list-style-type: none"> Supporting safer driving through key safety messages and alerting motorists to incidents using our variable message boards Sharing government-led road safety initiatives with our employees, customers and the broader community 	<ul style="list-style-type: none"> Supporting projects that will ensure readiness for connected and automated vehicles, in collaboration with state governments

Road safety performance

We measure our historical road safety performance via a Road Injury Crash Index (RICI). This index allows us to measure and compare the frequency of serious road injury crashes on our networks over time. In 2014, Transurban established a long-term target of a 15 per cent reduction in injury crashes for the five year period from 2015-2019.

A serious road injury crash is a crash where one or more people involved require medical treatment or emergency medical care beyond first aid. The RICI measures how many serious road injury crashes occur per 100 million vehicle kilometres travelled. Incidents where individuals are assessed and released from medical care at the crash scene are not classified as serious injury crashes.

Road fatalities and injuries

In FY17, the RICI across all Transurban assets was 4.85 injury crashes per 100 million vehicle kilometres travelled, or 302 injury crashes over 6.2 billion vehicle kilometres travelled. Injury crashes were higher in FY17 than they were in FY16 (see table below), and were higher than our FY17 RICI target of 4.16. This is an increase from the previous year, yet remains lower than the peak in 2015, indicating the effectiveness of our continued road safety efforts in an environment of increased travel by our customers. Historical road safety performance on Transurban assets is shown below.

Measure	FY14	FY15	FY16	FY17	FY17 target
RICI	4.56	5.52	4.58	4.85*	4.16

**Transurban began operating AirportLinkM7 in April 2016 and FY17 is the first year that data from this road has been included in Transurban's RICI calculations*

Six fatal road accidents occurred on our roads in FY17: four accidents involving vehicle crashes, and two separate incidents where a person was struck while on a road.

In line with the Safe System-based strategies across Australia and the world, we recognise that road safety is a shared responsibility. We continue to strive for fatality and injury free roads and proactively engage with our customers, partners and the community to make every journey a safe one.

Safer Transurban roads

Data is essential to informing and prioritising our road safety efforts, and ensuring we deliver highly effective road design, traffic management and messaging, rapid and effective incident response. We have engaged the Monash University Accident Research Centre to analyse our road incident data so we can understand our results in the context of the broader road network and determine the effectiveness of the additional safety features we have introduced to create safer roads.

FY17 road safety initiatives

Transurban continues to support critical research to inform our road safety strategy and develop interventions that will support the safety of customers and other users of Transurban's roads and the broader road network.

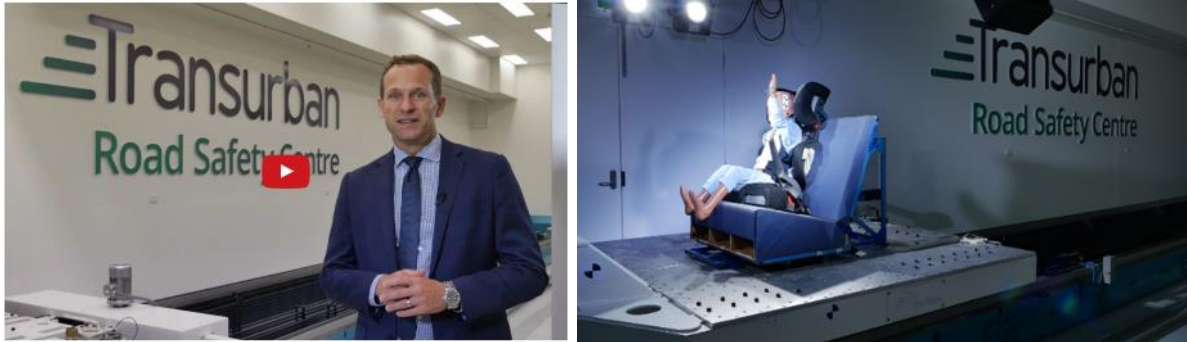
The burden of road trauma in Australia is considerable, with around 1,300 deaths and 65,000 hospitalisations each year. Road trauma costs Australia an estimated \$27 billion annually³. Of course, the human cost for families affected by road trauma is immeasurable.

In FY17, Transurban introduced three significant road safety initiatives:

³ [Australian Government Department of Infrastructure and Regional Development](#)

Transurban Road Safety Centre

Transurban, in partnership with Neuroscience Research Australia (NeuRA), established the Transurban Road Safety Centre during FY17. NeuRA is one of the world's leading centres of neuroscience research and the new Transurban Road Safety Centre has been equipped with a state-of-the-art crash sled. The sled enables test speeds of up to 64 km/h, allowing for the replication of real-world conditions.



The Transurban Road Safety Centre brings medical research, business and government into a partnership to reduce the number and severity of injuries suffered on roads nationally. Research will focus on drivers over the age of 70 and motorcyclists as both these groups are overrepresented in driver fatality and serious injury statistics.

Incident response vehicles

Transurban launched a new fleet of rapid response vehicles on CityLink during FY17. These new, purpose-built vehicles are part of an improved incident response model, and they will help us better manage incidents on our network, clear the road quickly and safely and help keep everyone moving.

The new vehicles are equipped with special safety features such as shock-absorbent truck-mounted attenuators, designed to protect incident-response crews and road users while we attend incidents. The fleet includes state-of-the-art tow trucks for safely removing vehicles from the freeway. The vehicles are marked using Transurban's new vehicle marking standards, developed using research from Monash University Accident Research Centre (MUARC) and expert advice from 3M, a provider of reflective and vehicle marking products.



A communications campaign about customer safety during road incidents was developed to support the new fleet's operations.



Traffic control room operator training

Highly experienced people are essential to the successful management of a busy motorway system. We are proud of the commitment and passion our control room operators show for their work, and of their abilities in assessing safety risks and coordinating responses when incidents, congestion and maintenance operations occur on our busy network.

During FY17, all Australian Transurban traffic control room operators commenced a Certificate IV in Traffic Operations training or enrolled in a refresher course if they already held this qualification. This training helps us ensure we are compliant with industry standards and that our people have up-to-date skills and knowledge in what are highly technical and critical safety roles.

Road safety awareness

Transurban supported a range of road safety campaigns during FY17. We regularly share key government-led safety campaign messages with our customers in both Australia and the USA via our electronic variable message signs, billboard advertising, employee programs and social media. During FY17, we also supported a range of events, including:

- **Global Road Safety Week** - part of the United Nation's Decade of Action for Road Safety. This program aims to significantly reduce road trauma across the world by 2020 via the implementation of the Safe System approach
- **Yellow Ribbon National Road Safety Week** - a Safer Australian Roads and Highways initiative. To mark this week, we lit the Bolte (Melbourne) and Sir Leo Hielscher (Brisbane) bridges in yellow and invited all employees to wear yellow ribbons in recognition of the week and its goal of improving road safety across Australia
- **Fatality Free Friday** - an Australian Road Safety Foundation event designed to focus public attention on road safety and target zero fatalities
- **Queensland Road Safety Week**
- **Re:Act** - a Swinburne University initiative to inspire young people to think about road safety
- **Phone down. Chin up** - a Queensland's Department of Transport and Main Roads initiative targeting young mobile phone users
- **bstreetmart Youth and Road Trauma Forum** - Australia's largest educational event on road safety, an initiative of Westmead Hospital Trauma Unit in New South Wales

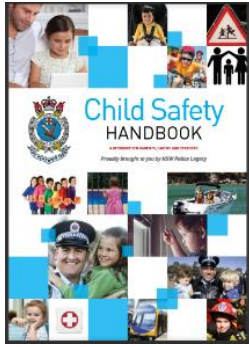


Distracted driving campaign

In FY17, Transurban USA partnered with transport officials, law enforcement officers and safety advocates in the Washington DC area to launch an anti-distracted driving safety campaign.

We recruited two local professional athletes to be the spokespeople for the Phones Down campaign, primarily targeting young drivers.

The campaign warned against the dangers of distracted driving and encouraged millions of drivers to avoid distractions while in the car.



Child Safety Handbook

Transurban NSW supported the 2016 edition of the Child Safety Handbook, produced by the NSW Police Legacy.

We are long-time sponsors of this useful resource for parents, carers and teachers. The handbook provides advice and information on many child-related health and safety issues, including road and car safety.

Health, safety and environment

At Transurban, Health, Safety and Environment (HSE) is part of our DNA. We are focused on providing a healthy and safe environment for our employees, contractors, customers and the community.



HSE policy and planning

Transurban's [HSE Policy](#) outlines our commitment to ensuring we provide a healthy and safe work environment for all employees, contractors and visitors and that we minimise impacts on the environment. Our HSE Strategic Plan includes a series of actions to strengthen our HSE performance, with a focus on the development of good HSE practices and a stronger HSE culture.



Our HSE Strategic Plan has five key elements:

- HSE leadership and capability
- Systems and processes
- Road safety
- Contractor management
- Risk management

Transurban and its operations contractors maintain our HSE management systems. These systems aim to monitor and improve the HSE performance of our motorways and eliminate or minimise hazards and risks. Where required, these systems are certified to AS/NZS 4801 (Australia) and OHSAS 18001 (North America) for safety and health, and ISO 14001 for environment.

HSE employee engagement

This year, we communicated internally that 'HSE is part of our DNA', reflecting that HSE is everyone's responsibility and is an inherent part of our work every day. One of the ways we encourage practical HSE learning for all employees is through HSE walks, providing opportunities to visit different worksites and observe the operations, risks and HSE controls. Based on key HSE risks encountered across our sites, a HSE Risks Guide for senior leaders was developed. This tool provides a series of prompts for senior leaders to better understand the key risks and their controls so leaders can better engage with employees on HSE issues. The guide covers commonly-encountered risks such as:

- Working near live traffic
- Working around mobile plant
- Working at heights
- Lifting operations
- Confined spaces
- Driving a vehicle

Employee HSE performance

Further emphasising that HSE is part of our DNA, HSE Key Performance Indicators (KPIs) are factored into employees performance planning and reviews, including all employees' short-term incentive (STI) remuneration component.

2017 Sustainability Report

Employees have individual HSE KPIs based on leading indicators of HSE culture and behavioural change, including the requirement to record HSE observations throughout the year and attend cross-functional HSE meetings to maintain awareness.

All employees also share a common set of HSE performance KPIs, a set of leading and lagging indicators measuring performance against the following four metrics:

- Recordable injury frequency rates for employees and contractors
- Road injury crash index ratings
- Road safety action planning
- Incident close-out rates

0.95

Employee injuries
per 100 million hours

Our target is to achieve zero employee injuries. In FY17, we did not meet this target, with two recordable employee injuries, equating to an Employee Recordable Injury Frequency Rate (RIFR) of 0.95 injuries per million work hours. We continue to take proactive measures to identify hazards, near misses and high-potential incidents, helping ensure HSE risks are identified and mitigated before injuries occur.

4.79

Contractor injuries
per 100 million hours

In May 2017, we were deeply saddened by the fatality of one of our contractor's employees on the NorthConnex project. Since then, Transurban has been working closely with the Contractor, Lendlease Bouygues Joint Venture to support the family, and with Roads and Maritime Services and our NorthConnex Project team. We continue to work closely with all of our contractor partners across our road assets and projects to ensure that the highest levels of safety are achieved. Including this incident, there were 48 recordable contractor injuries in FY17 equating to a Contractor RIFR of 4.79 injuries per million work hours against a target of 6.38 for the year. The target was based on improvement against previous years' performance and industry benchmarks.

77%

Incidents closed out
on time

Our incident close-out target for completion of timely investigation of incidents of moderate or higher risk and near misses was 75 per cent. We closed out 77 per cent of incidents on time. We also achieved our HSE Leadership objectives by ensuring all employees completed regular HSE observations, meetings, training and awareness programs.

Our safety performance

Measures	FY13	FY14	FY15	FY16	FY17	FY17 target
RIFR	3.49	3.88	0.00	1.14	0.95	0.00
Contractor RIFR	Data not available			7.09	4.79	6.38

Recordable Injury: total Lost Time Injuries and Medical Treatment Injuries

Lost Time Injury: work-related injury or illness resulting in a person losing one or more full shifts from work after the date of injury

Medical Treatment Injury: work-related incident requiring medical treatment other than first aid

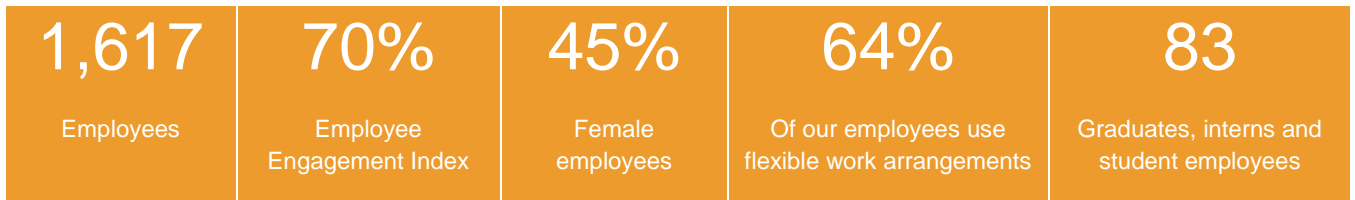
Major project HSE

Transurban works with all major project construction partners to improve on-site HSE performance. In FY17, we worked with our partners on HSE initiatives including:

- **Three Steps to Home (NorthConnex)** - The Three Steps to Home safety campaign highlighted three steps workers can take to get home safely every day. The campaign extended to include photos of workers' loved ones on induction cards and on posters and bunting around the site.
- **Safety Improvement Plan (CityLink Tulla Widening)** - This plan included 40 initiatives to drive HSE awareness and ownership within work crews. The implementation of the plan increased worker engagement and drove a reduction of incidents across the project. Our principal contractor, CPB, also developed a Safety Leadership Program focused on safe behaviour, effective communication and people management. This program has been extended and rolled out across other CPB sites.
- **Traffic safety trials (Gateway Upgrade North)** - Trials testing the effectiveness of traffic control devices such as speed humps, speed limit signs, slow-speed night shift zones and portable boom gates were run on the project, with the view of improving worker safety. The trials led to an average speed reduction from previous nights of six kilometres per hour, and removed the need for traffic controllers to enter traffic lanes.

Our people

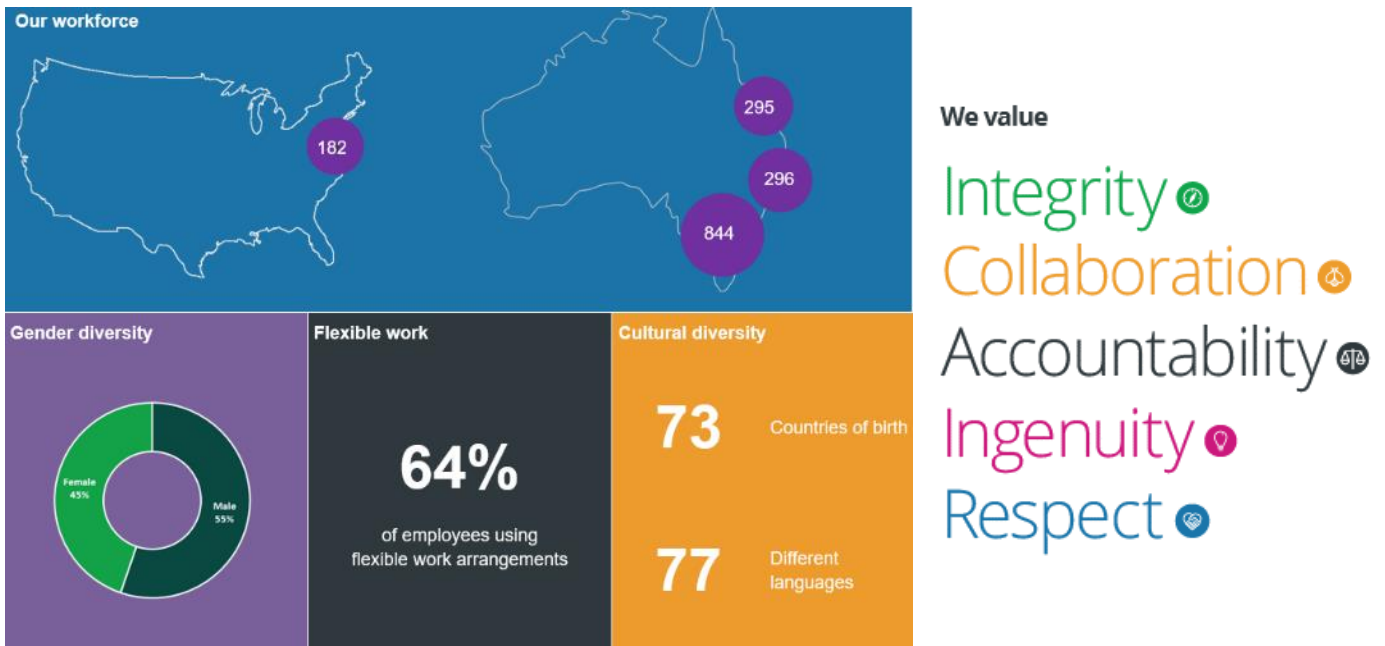
We are committed to providing a safe, supportive and stimulating working environment where employees are encouraged to perform at their best and to contribute to our success.



Our people and values

Transurban employs 1,617 people across Australia and the USA, and our major construction projects provide employment to over 4,000 contractors.

Our values of integrity, collaboration, accountability, ingenuity and respect drive our culture and provide a framework for every decision we make. We seek to foster an engaged, diverse and high performing workplace.



Employee engagement

Our annual Employee Opinion Survey gathers feedback from employees across the business to understand how we are tracking on a range of topics.

This year, our overall Employee Engagement Index was 70 per cent, a two per cent increase on last year. This index is based on a collection of questions about the degree of pride, advocacy, satisfaction and commitment our people hold for Transurban. This result has continued to improve and is in line with the Global norm, which is monitored by independent survey provider, IBM.

The majority of employees (80 per cent) say they are proud to work for Transurban, up three per cent on FY17. Our values are also supported by the majority (85 per cent) of our employees.

Transurban uses data from the survey to identify opportunities for improvement in the management of our people, including ongoing action plans for every team to ensure we are continuing to act on feedback and meeting employee needs.

Employee wellbeing

We are committed to keeping our employees safe and healthy at work and at home. Our wellbeing program helps us to achieve this by providing resources across four focus areas:

- **Mind:** Helping employees develop awareness, build mental health resilience, providing early intervention and supporting recovery during difficult times
- **Body:** Offering programs for exercise, nutrition and healthcare
- **Connected:** Supporting community events and offering paid volunteer leave for employees wanting to make a significant contribution in their community
- **Recognition:** Acknowledging the outstanding contributions made by employees through quarterly and annual awards, and in everyday work through employee recognition programs

This year our Chief Financial Officer, Adam Watson, took up Transurban's Wellbeing Ambassador role. Our Wellbeing Ambassador advocates for the development of and participation in wellbeing initiatives and programs and encourages employees to balance their work and life in healthy ways.

Mental health

To help raise awareness, remove stigma and support our people, Transurban conducted a wide range of mental-health-related programs and activities during FY17. These included:

- Supporting both World Mental Health Day and RUOK? Day - For RUOK? Day, employees were encouraged talk about their overall wellbeing or mental health with their colleagues, using cue cards as conversation starters
- Training 78 mental health first aiders across Australia - These employees now have the skills to recognise signs of mental health problems and to provide support to employees when needed
- Conducting domestic violence support training for Transurban's people leaders and other interested employees
- Offering training in mental health resilience to all Australian employees
- Offering external support services to employees, contractors and their families through the Employee Assistance Program (EAP). This service has also been extended to members of the community and customers on several occasions
- Providing targeted support such as critical incident response support to traffic control room operators who are often exposed to serious road incidents during their duties
- Offering support such as flexible working options to employees who voluntarily disclose a mental health condition

Mates in Construction

The rate of mental health distress and suicide among construction industry workers is disproportionately high. Transurban recognises that, without action, stereotypes and stigma surrounding mental health on construction sites may prevent people from seeking help and advice.



This year more than 400 NorthConnex employees received Mates In Construction training in recognising signs of distress that lead to suicide. Support was also provided to employees including case management and on-site visits by field officers.

Diversity

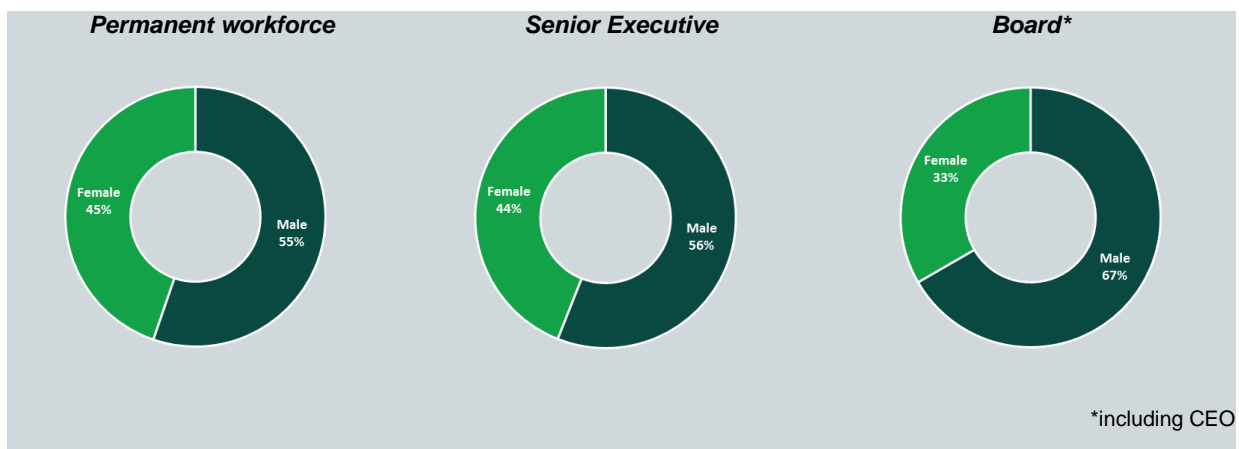
A diverse workforce ensures a more effective, higher-performing workplace. Diversity of thought, experience, education, age, gender, cultural background and personal opinion all contribute to the creation of a diverse and successful workplace. Transurban is committed to providing an environment where all employees are treated with fairness and respect, and where everyone has equal access to opportunities at work.

Transurban’s ongoing focus on Diversity and Inclusion includes the priority areas of:

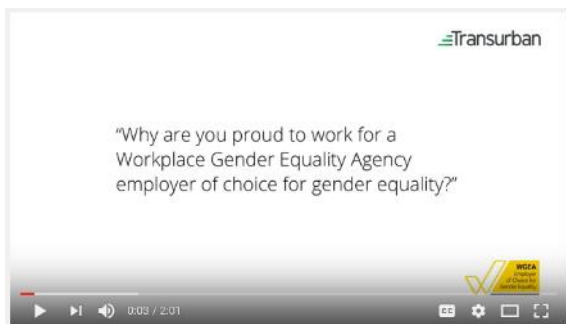
- Gender diversity
- Cultural diversity
- Workplace flexibility

Gender diversity

Transurban is committed to promoting and improving gender equality at all levels across the business. The proportions of women and men across the organisation, senior executives and board members as at 30 June 2017 are shown below:



Transurban sets specific targets and takes action to increase gender diversity at all levels, including Executive and Senior Management, Middle Management, and when recruiting new employees. These objectives are monitored by the Board and publicly reported each year in our [Corporate Governance Statement](#).



The Workplace Gender Equality Agency recognised Transurban’s leadership in gender diversity, awarding us an [Employer of Choice for Gender Equality](#) citation for a third consecutive year.

Transurban was one of 106 Australian organisations to meet the agency’s rigorous criteria, and only one of two transport-sector organisations.

When we asked our employees why they value diversity in the workplace, highlights included being able to work flexibly to support their role as a parent, the accessibility of parental leave, the prominence of women in leadership positions, and the ability to support up-and-coming female engineers.

Gender diversity highlights

- Our annual pay equity review for FY17 indicated no significant differences between male and female pay. This result reflects our efforts to foster a workplace where people are recognised and rewarded on their merits
- Equileap, an international gender-equality advocacy agency listed Transurban as one of the world’s top 20 organisations on gender equality performance. We were one of only six companies reporting no significant gender pay gap
- We received the Engineers Australia’s award for the Most Ambitious Company in Gender Diversity

2017 Sustainability Report

- We received the 2016 Award for Best Action for supporting Diversity in the ITS Workforce, presented at the ITS World Conference
- We extended our 16-week, fully paid parental leave scheme to our employees in North America. Our parental leave program applies equally to male and female employees taking on the primary carer role. According to the Society for Human Resource Management, only around 21 per cent of USA companies offer maternity leave and only 17 per cent offer paid paternity leave
- We hosted International Women's Day events across all regions with presentations from a range of influential female business leaders

Cultural diversity

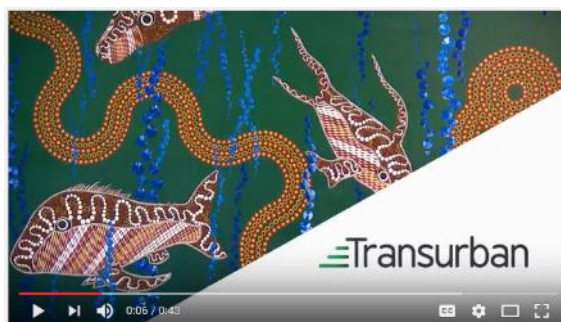
Our workforce needs to reflect our customers and the communities where we work, and we are committed to creating a culturally diverse and inclusive workforce.

Transurban employees come from 72 different countries of birth and speak 77 different languages. We recognise and support our diverse workforce by encouraging culturally inclusive work practices, celebrating festivals of cultural significance together and creating opportunities to promote better understanding of different cultural groups.

Reconciliation

Transurban acknowledges the Traditional Owners of Country throughout Australia and recognises the continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures, and to Elders both past and present.

This year we entered the second stage of our Reconciliation Action Plan, our '[Innovate' RAP](#). RAPs are practical plans built on relationships, respect and opportunities to create social change for Aboriginal and Torres Strait Islander Australians. We launched our Innovate RAP nationally at Transurban hosted events during National Reconciliation Week 2017. We used this time to celebrate the contributions and achievements of Aboriginal and Torres Strait Islander peoples, and focus on what remains to be done to achieve reconciliation.



Our vision for reconciliation is the acknowledgement, respect and proud celebration of Aboriginal and Torres Strait Islander cultures by our employees and business partners and achieving equitable standards of living and social mobility for Aboriginal and Torres Strait Islander peoples. The [Innovate RAP](#) is our second plan and will deepen cultural awareness and education for our employees and create employment opportunities and career pathways for Indigenous Australians.

Our Innovate RAP has four key focus areas: Cultural Awareness, Education, Employment and Strong Local Relationships. These areas focus on connecting with and empowering Aboriginal and Torres Strait Islander communities and organisations in the regions where Transurban operates.

Key commitments within our Innovate RAP include:

- Investigate transport and mobility challenges faced by local Aboriginal and Torres Strait Islander communities and identify opportunities where Transurban can make a difference
- Increase our interaction with local Indigenous communities through our community grants, employee volunteering, and other programs supporting Aboriginal and Torres Strait Islander causes
- Develop cultural awareness training programs for employees in all areas of our business
- Increase the number of commercial relationships and procurement opportunities with Aboriginal and Torres Strait Islander businesses

In partnership with Aboriginal Employment Strategy (AES), Transurban Queensland launched a new Indigenous traineeship program in FY17. The traineeship program is designed to create career development opportunities and pathways for people of Aboriginal or Torres Strait Island descent in our local communities. Transurban is seeking to recruit two trainees as part of the 12-month traineeship program.



Workplace flexibility

Transurban aims to support employees to balance professional and personal commitments by encouraging flexible work options. We are committed to ensuring that Transurban and employees make the most of flexible working options, which can include: working from home or remotely; flexible leave including additional 'lifestyle leave'; flexible working hours, days and part-time arrangements; compressed working weeks, job sharing and phased retirement.

Transurban challenges the perception that flexible working options only suit specific employees groups, or that some roles cannot benefit from flexible working. We encourage all employees to consider flexible working options. For example, in FY17, we ran a Flexibility Insights series of articles and videos to share stories from diverse employees benefiting from working flexibly. We also ran a 'Tell us how you flex' competition where employees shared stories of the positive outcomes of flexible working, such as:

- Maintaining community volunteering commitments
- Adjusting to changes in family life
- Reducing the pressure of long-distance commuting
- Successfully managing unexpected health issues

Transurban conducted a flexible working survey in FY17 to understand why people use flexible work arrangements and to identify any barriers to their use. The survey found:

- 64 per cent of respondents have used some form of flexible work arrangements
- 70 per cent indicated that they would like to access flexible work arrangements in the near future
- 80 per cent of respondents said they have the flexibility they need to accommodate their work, home and other commitments

Learning and development

Opportunities to learn at Transurban include on-the-job training, mentoring, coaching, secondments and a range of formal learning and development programs.

This year, each employee received an average 20.6 hours training, in line with previous years. Our learning and development programs are aligned with our capability requirements at different business levels, from graduates to emerging leaders through to managers and executives. This includes specific development for our senior leader group with an annual program of activities with our executive education partner – INSEAD.

All employees have regular conversations with their managers to receive feedback and discuss career and development goals. Each employee has an agreed Personal Development Plan, which identifies specific development activities for the year, and employee progress is monitored through regular one-on-one meetings with managers, and through half-year and annual performance reviews.

Communities of practice

One collaborative activity that we have identified to help foster skills and career development are our Communities of Practice (CoP). These are self-nominated groups of employees from across Business Units and regions who have a common expertise, interest or passion about a topic, and want to share and expand their knowledge.

CoPs focus on sharing best practices and creating new knowledge in the group, which can be applied back in the workplace and in each person's respective career. These are employee-led knowledge sharing forums that are tailored to meet the needs of specialised disciplines.

This initiative arose following our 2015 Employee Opinion Survey where employees identified they wanted more opportunities to connect with others, and to further their training and career development. Transurban established frameworks to guide each group, but allow them to have a self-defined purpose and objectives led by employee needs and interests. We currently have 13 active Communities of Practice across the business.

Human Resources Director magazine recognised this program with an Innovative HR Teams 2017 award.

Building future talent

In FY17, we continued to build our pipeline of future talent with a particular focus on promoting diversity and equal opportunity in the infrastructure sector by providing opportunities for female graduates and students.

This year 83 graduates, interns and work experience students joined Transurban, and we hosted hundreds more for site visits, industry events and mentoring programs.



The Transurban Graduate Program hired eight graduates during FY17. This two-year program rotates graduates through different business units across our Australian offices, where they gain hands-on experience on key projects.

Our first group of graduates, who commenced in 2016, have successfully applied their academic knowledge in real-world situations such as launching a new retail brand, supporting major delivery and development projects, and contributing to the operations and maintenance of our road assets. They continue to bring innovative ideas and diversity of thought to our organisation.

Transurban sponsored several engineering scholarships to support students completing their studies and bring new talent into our business.



Transurban's Women in Engineering Scholarship at the University of New South Wales supports a female student to undertake a degree in Engineering. In 2017, Brittney Monk, now in her first year of a double degree in Engineering and Science received this award. The scholarship covers the cost of her degree, and Brittney will join us for work experience during her studies.



The Cameron Roberts Memorial Scholarship was established in memory of Cameron Roberts, a highly valued member of the Transurban Finance team who sadly passed away in 2015.

This year we awarded this scholarship to Kubra Taher. Kubra is a third-year civil engineering student, and is the first in her family to attend university. Kubra will receive financial support to complete her degree and work experience and mentoring from Transurban.



Two third-year female engineering students in the Monash University Engineering Leadership program were awarded scholarships. These students will undertake work experience with CityLink during university holiday periods.

We provided industry experience and mentoring for undergraduate students that may be considering joining our industry.



Transurban's Females Excelling in Engineering and Technology (FEET) mentoring program continued in FY17, with 49 students participating across Australia. Participants received mentoring in technology, engineering, traffic analysis, project delivery and operational excellence, health safety and environment and state businesses.



As part of the Monash Industry Team Initiative (MITI) program, 16 undergraduates completed projects on road usage optimisation, improving travel speeds through tunnels, mobile tolling apps to improve customer experience, and innovative technologies for future Transurban offices.



The second year of our Undergraduate Engineering Program in Queensland provided an opportunity for three fourth-year engineering students to join the Project Delivery and Operational Excellence team during the summer holidays, gaining valuable industry experience that also contributes to their tertiary qualifications.



Through our partnership in Western Sydney University's Women in Science and Engineering (WiSE) program, we offered women studying science, technology, engineering and mathematics (STEM) the chance to meet senior engineering and science professionals, and gain skills and experience to prepare them for their transition to the workforce.

Transurban also hosted a site visit to our NorthConnex project for the WiSE program's launch event.

We also reached out to high school students to encourage them to consider studies and possible career paths in business, engineering and infrastructure.



Transurban ran an industry experience session on Transport Planning for Sydney with around 130 female high school students at the University of NSW's [Power of Engineering](#) day in September 2016. We also hosted a Power of Engineering event at our Cross City Tunnel asset, with Year 10 students from Loretta Kirribilli.



NorthConnex hosted more than 20 Aboriginal high school students as part of the Engineering Aid Australia Summer School program. The students had an opportunity to inspect the 40-metre deep tunnel shaft and watch the excavation of spoil from the tunnel. [Engineering Aid Australia](#) supports young Indigenous people to pursue an engineering career.



The CityLink Tulla Widening project hosted seven students from Strathmore Secondary College for a week of work experience.



Our head office in Melbourne office hosted a group of eight indigenous year nine and ten students and their teachers from the Ganbina Indigenous Youth Program.



Four students from a range of degrees joined us for a 12-week intern program in Transurban's first summer internship program with Virginia Tech in the USA. The students were placed in the Procurement, Finance, Operations and Technology areas of the USA business.

Supply chain

Transurban manages major infrastructure and is a growing organisation with significant supply chain impact. We engage thousands of suppliers through our day-to-day operations, and our major construction projects drive significant economic development in the community, regions and in Australia and the USA.

1,700 Suppliers	\$1.2B Supply chain spend	\$7M Social procurement spend	ISO 20400 Working group participation
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Our supply chain

Transurban directly engages more than 1,700 suppliers across our Australian and USA operations. This includes buying of goods and services required for our business and the procurement of major, contractor-managed infrastructure development projects.

Our total supply chain spend in FY17 was more than \$1.2 billion, with:

- Around 60 per cent of spending with our top 10 suppliers by spend
- Close to 70 per cent of the total annual spend related to capital expenditure (for example, major infrastructure projects)

Sustainable procurement

Transurban's [Supplier Sustainability Code of Practice](#) sets governance, community, environmental management, social responsibility and supply chain criteria for all suppliers working with Transurban. Our tender and contract management processes include environmental, sustainability and safety expectations specific to each contract.

In FY17, we contributed to the working group for the development of a new International Guidance Standard (ISO 20400) - Sustainable Procurement. Since its release in April 2017, we have reviewed our procurement practices against the Guidance Standard, and we are taking action to align our practices with the new standard.

Major project supply chain

When working with contractors on major road development projects, Transurban uses independent infrastructure sustainability benchmarks to ensure that we are designing, building and operating high-quality assets.

Infrastructure Sustainability Ratings

In Australia, Transurban uses the Infrastructure Sustainability Rating Tool developed by the Infrastructure Sustainability Council of Australia (ISCA) to evaluate sustainability across a project's lifecycle.

This tool rates infrastructure projects against industry environmental, social, economic and governance benchmarks. The IS rating scheme provides independently verified assessments of each project's overall quality and sustainability, and ensures that project activities that go beyond business-as-usual are identified and implemented.

Transurban is an ISCA member, and we contributed to the development of the original IS rating tool. We aim to achieve an Excellent IS rating (or higher) for all of our major Australian development projects. Projects using the IS rating scheme at June 2017 are:

- NorthConnex (Leading IS Design Rating awarded)
- Gateway Upgrade North (Excellent IS Design Rating awarded)
- CityLink Tulla Widening Project (Excellent IS Design Rating awarded)
- Logan Enhancement Project (Excellent rating required in project contract)
- West Gate Tunnel Project (Excellent rating required in project contract)

Envision

In the USA, we are similarly committed to using independent sustainability ratings for new assets, and have identified the Envision Sustainability Rating Tool for use in future USA projects. There are currently no Envision ratings underway.

Social procurement

Transurban has long-term partnerships with a range of social enterprises that support local employers and small businesses and/or provide training and career opportunities to disadvantaged people.

In Australia, Transurban has partnered with Ability Works Australia since 2011. Ability Works Australia employs, trains and supports people with disabilities. To date, Ability Works mailroom employees have processed more than one million Transurban items. Employees have also tested more than 500,000 e-TAGs for reuse, refurbishment or recycling.



In the USA, we support the Small, Women-owned and Minority-owned Business (SWaM) Procurement Initiative and the Disadvantaged Business Enterprise (DBE) Program. This year, Transurban and its partners awarded more than US\$5.2 million (AUD \$6.8 million) in contracts to SWaM and DBE entities working as suppliers to the 495 Express Lanes, 95 Express Lanes and 395 Express Lanes. During the lifetime of the assets to date through construction and operation, Transurban USA, our partners and contractors have collectively awarded over US\$777 million in contracts to SWaM and DBE entities.



Use less

Transurban is focused on minimising the social and environmental impacts of operating our roads, tunnels, offices and construction projects. In simple terms, that means we challenge ourselves to ‘use less’.

<p>52%</p> <p>GHG emission reduction target by 2030</p>	<p>123,274 tCO₂-e</p> <p>Transurban GHG emissions</p>	<p>556,568 GJ</p> <p>Energy usage</p>	<p>179 MWh</p> <p>Renewable energy</p>
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Greenhouse gas emissions

Transurban measures and sets targets for our greenhouse gas (GHG) emissions and performs risk assessments on our assets to mitigate the potential impact of climate change through planning, design, delivery and operations.

<p>52%</p> <p>GHG emission reduction target by 2030</p>	<p>123,274 tCO₂-e</p> <p>Transurban GHG</p>	<p>10,525 tCO₂-e</p> <p>GHG offsets</p>	<p>1,372,482 tCO₂-e</p> <p>Customer GHG</p>
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FY17 Greenhouse gas emissions

In FY17, Scope 1 and 2 emissions⁴ associated with Transurban managed assets were 123,274 tCO₂-e⁵.

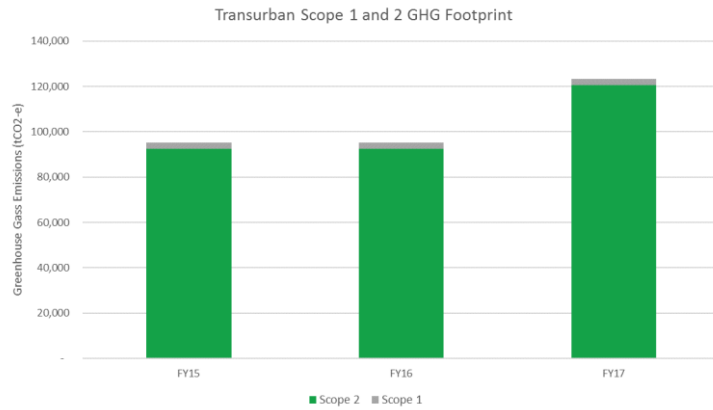
Transurban’s GHG emissions arise from fuel and electricity usage, with Scope 1 emissions accounting for two per cent of emissions and Scope 2 emissions from purchased electricity accounting for 98 per cent of emissions.

FY17 emissions were higher than FY16 GHG emissions of 95,348 tCO₂-e with the increase attributed to the acquisition of AirportLinkM7 in April 2016 and subsequent inclusion in our reporting from FY17 onwards.

We also monitor our corporate Scope 3 emissions from upstream energy supply, corporate air travel and emissions from waste to landfill.

⁴ Scope 1 GHG emissions are from the direct use of fuel. Scope 2 GHG emissions are from the consumption of purchased electricity, heat or steam.

⁵ GHG figures exclude non-Transurban managed assets (M5 South West and Westlink M7).



Detailed GHG data are available in the [Environmental Data](#) appendix.

Greenhouse gas reduction target

Until recently, our GHG emissions reduction efforts have focused primarily on energy-reduction initiatives to meet our [10-in-10 energy target](#). In FY17, we took the significant step of establishing a separate science-based greenhouse gas emissions reduction target aligned with global efforts to mitigate climate change.

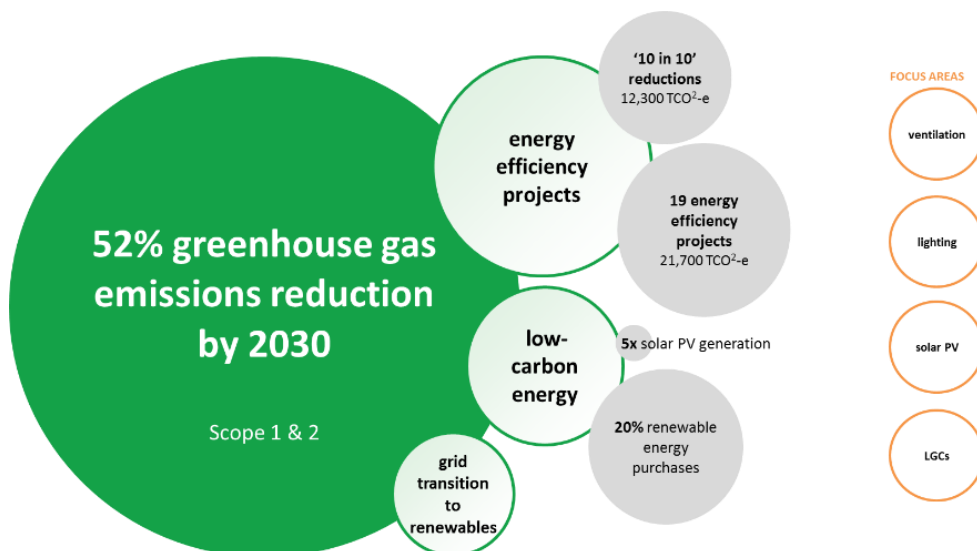
Transurban has set a target to achieve a 52 per cent reduction in Scope 1 and 2 emissions by 2030, compared to 2016 levels. This is a significant extension of the scale of our GHG emissions objectives, moving beyond energy reduction opportunities towards the introduction of low-carbon energy sources.

Our target has been set using the Sectoral Decarbonisation Approach (SDA) that sets corporate emission reduction targets in line with climate science with the goal of limiting human-induced global warming to 2°C. The SDA method considers the nature of our operations, our historical and projected emissions and aligns our target with global sector-specific decarbonisation profiles. Transurban is among more than 200 corporate leaders now establishing similar science-based GHG emission reduction targets.

Achieving the target will drive business efficiency opportunities while mitigating our risk exposure to electricity and carbon markets. Transurban aims to achieve its emissions target through:

- Expanding the scope of energy efficiency projects beyond the current 10-in-10 target
- Sourcing low-carbon energy with the expansion of on-site renewable energy generation and the direct purchasing of renewable energy and Large-scale Generation Certificates (LGCs) from generators
- The gradual decarbonisation of the national electricity market in line with the Australian Renewable Energy Target (RET)

Greenhouse gas emissions reduction pathway:



We will review the target at appropriate intervals to take into account updated climate data and any significant changes in our operational structure such as new assets. We continue to analyse Scope 3⁶ emissions arising from our supply chain and are investigating ways to mitigate emissions impacts from procured goods, services and materials.

CLEM7 energy and greenhouse gas saving initiative

CLEM7's airflow requirements and subsequent ventilation operating regime are resulting in avoidable GHG emissions and high energy costs. Transurban Queensland and Brisbane City Council are investigating the possibility of a two-year trial of new ventilation operating regimes with the goal of optimising overall sustainability outcomes across tunnel ventilation, and reducing energy demand and GHG emissions.

Customer vehicle emissions

Using our roadside systems and traffic data, Transurban can estimate the greenhouse gas emissions produced by customer vehicles travelling on our roads. In FY17 we estimate customer vehicles emitted 1,372,482 tCO₂-e on assets under our management⁷. This figure is around 11 times greater than all of Transurban's Scope 1 and 2 corporate emissions combined.

We have less influence over reducing customer vehicle emissions than our own operations, as these emissions are controlled by road users and are not attributed to Transurban.

Transurban influences customer emissions by providing high-quality infrastructure and traffic management with the goal of improving travel times and vehicle efficiency. Vehicles travelling in free-flow traffic conditions operate more efficiently and produce less greenhouse gas emissions compared to stop-start traffic situations.

Transurban's roads are designed and operated to keep traffic flowing, and this helps reduce congestion and improve travel times when compared to alternative routes. Transurban collects and analyses travel-time data from our toll roads as well as adjacent alternative routes. Our analysis of travel time and fuel efficiency data confirm that using Transurban's routes in free-flow traffic situations produces less GHG emissions per kilometre than using an alternative route along arterial roads.

⁶ Scope 3 GHG emissions are indirect emissions from the purchase of goods and services in our supply chain.

⁷ Customer emission figures exclude non-Transurban managed assets (M5 South West and Westlink M7).

Energy

Operating our road lighting, tunnel ventilation, vehicles and offices uses significant amounts of energy. To reduce our operational impacts and support achieving our greenhouse gas emissions reduction target, we have committed to a 10-in-10 energy reduction target. This means we are working to reduce our total energy usage by 10 per cent in 10 years, from a FY13 baseline.

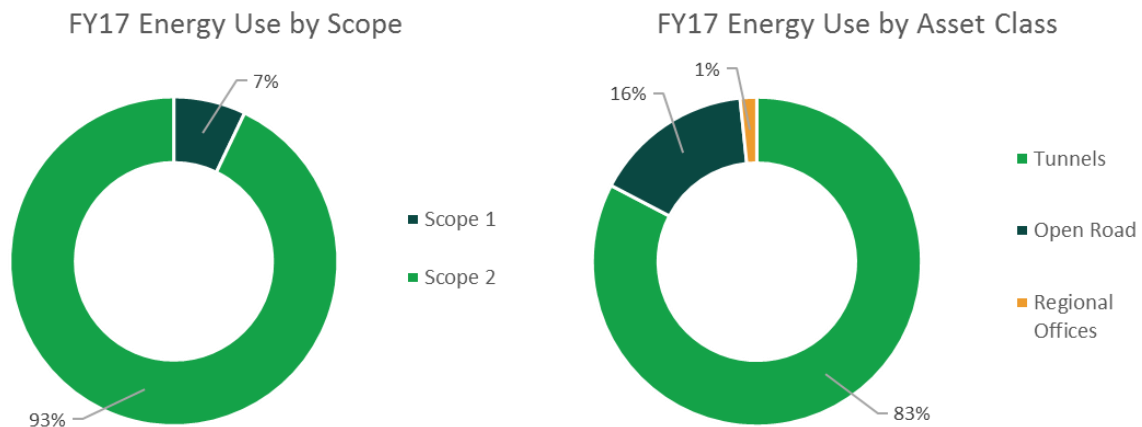


FY17 energy usage

In FY17 total energy consumption by Transurban-managed assets was 556,568 GJ⁸.

The substantial increase on FY16 energy consumption of 415,829 GJ is mainly due to the acquisition of AirportLinkM7 in April 2016 and subsequent inclusion in FY17 reporting. In FY17, a new method was also adopted to estimate non-reported contractor fuel usage, providing greater data coverage, reporting confidence and transparency.

Electricity used for tunnel ventilation and road lighting makes up the majority of our energy demand, followed by operations, maintenance vehicle fuel and energy used in construction. Tunnel assets are particularly energy-intensive because they must be continually ventilated and lit.



Detailed energy data is available in this report's [Environmental Data](#) appendix.

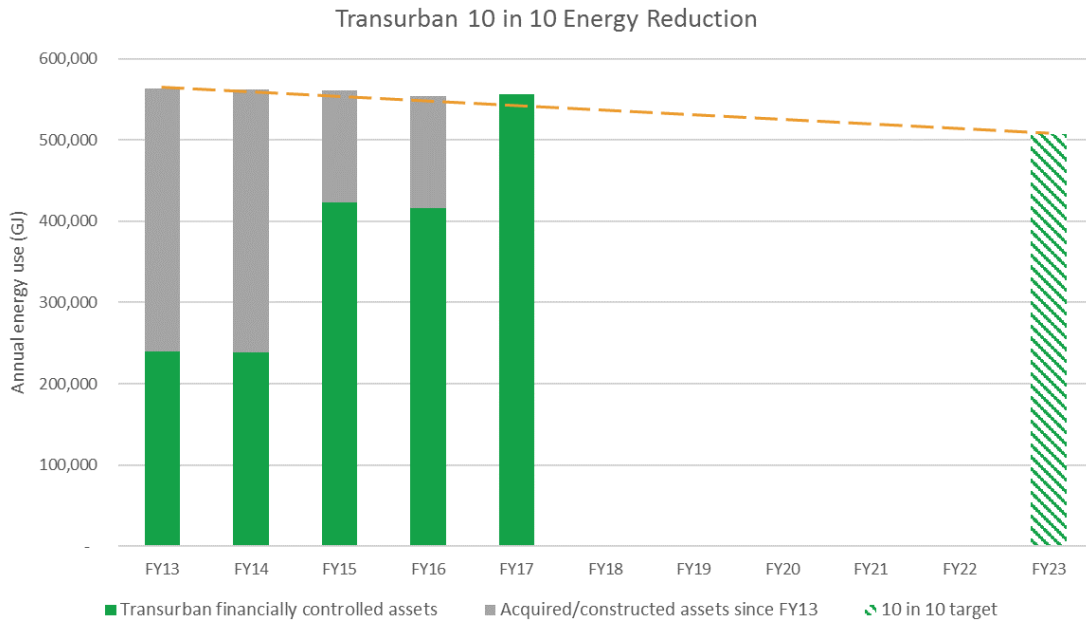
10-in-10 energy reduction target

Transurban has a 10-in-10 energy reduction target. This means we have committed to reducing our energy use by 10 per cent within 10 years (from FY13 to FY23).

As we have acquired or built additional assets during this 10-year period, we have expanded our target accordingly. This means energy reduction is a priority for all assets, including new assets. This year we added AirportLinkM7 to the scope of our target for the first time.

Our FY17 energy usage of 556,568 GJ means we have achieved a 1.3 per cent reduction in energy use to date since the FY13 baseline.

⁸ Energy figures exclude non-Transurban managed assets (M5 South West and Westlink M7).



Major focus areas in the delivery of the 10-in-10 energy reduction target include:

- Optimising existing tunnel-ventilation control systems in response to updated emissions profiles, vehicle volumes and in-tunnel air quality conditions
- Investigating whether powered ventilation systems can be fully or partially switched off – while ensuring emission levels comply with stringent air quality requirements
- Upgrading road lighting to LED or more efficient fluorescent luminaires

We are confident that realising these opportunities will allow us to meet, or exceed, our 10 per cent reduction target by the FY23 target year.

Green buildings

The design and fit-out of our head office in Melbourne prioritised energy efficiency. In 2016 the office originally received a 5-star NABERS Energy rating, representing ‘excellent’ energy efficiency.

Following lighting and electrical audits, further adjustments to the offices’ electrical wiring, automatic timer systems and sensor controls were made and in FY17 we were awarded a 5.5-star NABERS Energy rating. Compared to last year, our head office now uses almost 10 per cent less energy, despite employee numbers increasing by 12 per cent.

Renewable energy

To further reduce our grid energy use, we have installed renewable energy technology at some of our assets. This year we installed 23.4 kW of renewable capacity via solar panels at our Brandl St office (Brisbane) and at two Motorscapes sites (Melbourne and Sydney).

In total, we have installed 140 kW capacity across our network, including existing solar panels on the Eastern Distributor and Cross City Tunnel control centres. These renewable sources generated a combined 131 MWh of electricity on Transurban-managed assets during FY17.

The M5 Southwest, in which Transurban has a 50% equity interest and does not include in its energy performance targets, has an additional 30 kW of solar capacity and generated 48 MWh of solar electricity in FY17.

Water, materials and waste

Water and waste management are closely regulated on all our assets, and Transurban follows operational environment management plans to ensure handling and disposal is conducted in accordance with these requirements. We look for opportunities to minimise water consumption and waste generation and to minimise our use of materials in the construction of assets.



Our water and waste data are available in the [Environmental Data](#) appendix of this report.

Water

We use potable water in our offices, irrigation operations, cleaning and fire safety systems; and during construction (generally for dust control and processing activities). In our tunnel assets, we treat and discharge the groundwater that naturally drains into tunnels via the tunnels’ porous underground aquifers. In our CityLink tunnels in Victoria, to maintain appropriate aquifer and ground stability conditions, we recharge this treated water back into the aquifer.

This year, Transurban used more than 70,000 kL of potable water across our operational assets and offices. We also processed more than 500,000 kL of tunnel groundwater.



Case study Wastewater treatment

The CityLink maintenance team helped transform a dry and sparsely vegetated mound into a native landscape by converting a waste stream into an irrigation supply.

The maintenance team at the CityLink Incident Response compound off Footscray Road introduced a new bio-septic treatment system to treat wastewater for reuse. The new system uses anaerobic and aerobic bacteria to break down solids and remove contaminants from compound wastewater. The treated water is pumped through drip lines onto the ground on the Footscray Road off-ramp mound.

This system will divert around 2,000L of sewer discharge per week, and saves the time and cost previously required to pump out the previous septic system.

With access to water and nutrients, the resulting landscape adds value to the local ecosystem, and enhances visual amenity for motorists and the local community.

Materials and waste

Most of the materials used in road construction and maintenance – such as asphalt, crushed rock, concrete and steel – are non-renewable resources. However, these materials are highly reusable and are recyclable at the end of their lives. Transurban looks for opportunities to recycle and reuse such materials wherever possible. Across our operational roads and offices, we recycled more than 3,840 tonnes of solid waste (58% of total ‘waste’ material) and sent around 2,755 tonnes (42%) to landfill.

Our largest and most varied sources of waste generation are road development projects and major maintenance activities such as asphalt re-sheeting.

When our development projects are included - which have significant recycling of rock, soil and construction materials - we recycled more than 2,379,000 tonnes of material (99.7%), significantly greater than the 6,766 tonnes (0.03%) sent to landfill.

Hornsby Quarry

Regeneration of the Hornsby Quarry began in FY17. Spoil from NorthConnex tunneling will be re-used in the rehabilitation of the 35 hectare quarry – with plans for a community recreational facility to be built on the site by Hornsby Council. More than one million cubic metres of spoil are expected to be delivered to the site from NorthConnex, In FY17, approximately 100,000 cubic metres of spoil had been deposited into the quarry,



EME2 asphalt

The Gateway Upgrade North project successfully completed the first large-scale demonstration of a new type of asphalt in Australia. EME2, a high-modulus (stiff) asphalt designed for use on heavy-traffic roads, has been used in France for more than 25 years. EME2 allows for up to a 20 per cent reduction in the depth of pavements – so less asphalt is needed.



For the Gateway Upgrade North project, we designed, manufactured and placed around 10,000 tonnes of EME2 asphalt along the new southbound lanes of the Deagon Deviation. Using EME2, instead of traditional asphalt, reduced our use of non-renewable resources and lessened fuel use and emissions from avoided truck haulage. The Queensland Government’s Department of Transport and Main Roads will monitor the performance of the EME2 demonstration area over the course of its design life, to assess the potential for using EME2 or combination EME2/recycled asphalt in other projects.



Crushed recycled glass on the M2 Macquarie Park Motorscapes projects

The M2 Macquarie Park Motorscapes project in NSW included significant site preparation to clear and revegetate the area, including earthworks and backfilling of stormwater pipe channels. Sand, a non-renewable resource, is frequently used as backfill in projects such as this – but Transurban opted to trial the use of a recycled resource instead: recycled crushed glass (RCG). The 125 tonnes of RCG we used would equal around 66,000 glass soft drink bottles.

RCG is a safe, Environmental Protection Agency-approved backfill material which reduces the demand for virgin materials sourced from non-renewable sources. The RCG used for the M2 Macquarie Park Motorscapes project site was processed locally in Sydney.

Air quality

2017 Sustainability Report

Air quality is an important environmental measure for our tunnel assets. Specific air quality regulations apply to road tunnels, and vehicle exhaust must be appropriately diverted via tunnel ventilation systems. Transurban monitors, controls and reports on air quality to ensure conditions both on and near our road tunnels are maintained to the high quality standards of our regulatory requirements.

Air quality and emissions data for Transurban tunnels are included in the [Environmental Data](#) appendix.



Think Long Term

As an infrastructure company that manages roads over the course of decades, long-term thinking is crucial to everything we do. We believe our long-term focus aligns with the needs of the cities where we operate, our government clients, communities and customers.

\$300,000 Innovation Grant funding this year	3 Motorscapes projects	3 Infrastructure Sustainability ratings	1,635 Road Usage Study participants
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Road funding reform

Our transport system, and how we use roads, is changing. How we fund infrastructure needs to be an integral component of any discussion around our transport future. As vehicle fleets are changing, fuel use and associated excises are falling – and our current system is becoming increasingly fiscally unsustainable. Transurban is contributing to the public conversation on road policy reform through research, practical trials and public advocacy.

88% of Australians have little or no knowledge about the current road-related funding sources	1,635 Road Usage Study participants	60% Of study participants would prefer a user-pays system
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The transport revolution



Electric, connected and automated vehicles are among the many transport innovations poised to enter the mainstream in the coming decade, all of which will fundamentally change the way we travel. This new wave of transport technology promises opportunities for more efficient, greener and safer mobility. It also provides a necessary tipping point for changing how we fund transport.

In FY17, Transurban worked to advance the discussion of the future of transport in Australia and the USA, with a particular focus on integrated planning and road-funding reform.

Transurban's CEO Scott Charlton delivered the opening keynote presentation at the 2016 ITS World Congress opening ceremony. His presentation outlined the challenges and opportunities technology presents for the transport sector.

For more information on the opportunities and challenges for the transport industry that are affecting our cities, see our [Insights Blog](#).

Road usage study

In late 2016, Transurban completed the first real-world test of user-pays road charging in Australia. Conducted over 17 months, 1,635 motorists drove 12 million kilometres under a range of charging options. The study tested user-pays options as an alternative to the current funding model and also trialled two demand-management charging approaches.

Transurban commissioned this study as response to the transport challenges Australia is now facing. Australian roads are already struggling to meet the demands of a growing and increasingly urbanised population – and our population is expected to grow rapidly for decades to come. At the same time our major road-funding source, fuel excise, is diminishing as we move to more fuel-efficient and electric vehicles. Declines in public road funding sources place additional stress on government infrastructure investment, maintenance and the development of new transport technologies.

Further, the economic cost of road congestion has been estimated at \$13.7 billion and is projected to grow to \$53 billion by the 2030s⁹. Traffic congestion and the performance of the wider road network affect our ability to deliver on our value proposition for our customers, government partners, investors and the broader community. For this reason, Transurban advocates for innovative transport solutions that will improve the efficiency of our networks and increase the liveability of our cities.

Study findings

Our road usage study showed that moving to a user-pays system would likely generate a sustainable funding source that could meet our future infrastructure needs. Under a user-pays road funding model, motorists who use the roads more, benefit more – as any fees paid to use the roads are reinvested into improving infrastructure and, ultimately, travel times.

The study also found a flexible user-pays model could enable demand management via charging signals. Specific charging signals can vary driving behaviours in congested geographies and at peak travel times.

The study also found a significant change in participants' preference – with preferences shifting away from the current system and towards a user-pays model. Through experiencing different mechanisms to pay for their road use, participants recognised the benefits of a direct and transparent user-pays model versus the current system of opaque fees and charges.

The results of the Road Usage Study provided a number of insights into motorists preferences including:

- 88 per cent of Australians had little or no knowledge about the current road-related funding sources such as fuel excise and vehicle registration fees
- 85 per cent of participants were comfortable with the current funding system but after experiencing alternative ways of paying for their road use, 60 per cent said they preferred a user-pays system

Of the usage-based options tested in the trial:

- 60 per cent of participants said they would prefer a charge per kilometre option as it was the easiest to understand

Of the demand-management options tested in the trial:

- 63 per cent of participants who trialled cordon charging said they would be comfortable with this option – weekly cordon travel reduced by 10-15 per cent during the trial
- 51 per cent of participants who trialled time-of-day charging said they would be comfortable with this option – the level of road use under this charging option was largely consistent with road-use levels during normal driving periods

At a fundamental level, our road usage study results show participants were open to trying a fairer and more transparent way of paying for their road use. The study showed that moving to a user-pays system would likely generate a sustainable and fair funding source that could meet our future infrastructure needs.

For more information on our Road Usage Study, see our [Changed Conditions Ahead](#) website.

⁹ Infrastructure Australia, Australian Infrastructure Audit, 2015, p.32

USA Roads and Rail Regulatory Reform

Transurban attended the Roads and Rail Regulatory Reform Event with President Donald J. Trump and Secretary Elaine L. Chao in June 2017.

President Trump launched Infrastructure Week, dedicated to focus on how we need to change our thinking to address the nation's ageing infrastructure, promote job creation and grow the USA economy.

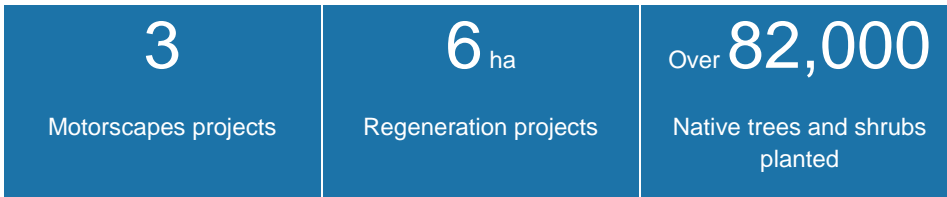
To highlight the importance of the Federal, State and Local partnership in addressing these needs, Secretary Chao hosted a listening session designed to increase understanding of how the USA can address a number of issues, including rural infrastructure, permitting reform, transformative projects, drinking and wastewater, transportation, and energy.

The purpose of the event was to ensure that government policies on infrastructure are aligned with the actual owners of the infrastructure. The Roads and Rail Regulatory Reform Event allowed for discussion on the Federal Government's goals in permitting reform including:

- Improve the transparency and efficiency of the current review process
- Provide accountability to agencies responsible for reviews so reviews are done in a timely manner
- Avoid redundant procedures and have one federal decision

Regenerating our roads

Our focus on sustainability drives us to consider innovative ways in which disused sites near our roads can be regenerated. Through our Motorscapes projects, we aim to combine native bush regeneration with iconic public art or other social sustainability initiatives to benefit local communities and the environment.



Landcare Australia national partnership

Since 2014, Transurban has partnered with Landcare Australia to regenerate native vegetation along our assets. This year we worked with Landcare Australia on three key projects:

- CityLink Tulla Widening Project
- Motorscapes Power Street Loop, Melbourne
- Motorscapes M2 Macquarie Park, Sydney

These projects have created valuable new greenscapes for local communities. They also enhance ecological value by attracting and providing habitat for local wildlife.

These projects further help Transurban connect with local communities and create volunteering opportunities for our employees.

Motorscapes

Power Street Loop, Melbourne

Combining striking public artwork, sustainable construction practices, renewable energy and native ecosystem restoration, the regeneration of this one-hectare site has created a sustainable and vibrant urban space.

The regeneration of the Power Street Loop site, adjacent to CityLink, was focussed on creating community and environmental value. The project began in 2015 with a public art competition, continued with the fabrication, construction and installation of large-scale sculptural elements and ended with a public opening in 2016.

Habitat Filter, the winner of our public art competition, comprises a series of pods, the largest more than 25m-high, featuring a range of sustainability elements such as bird and bat nesting boxes and solar panels to reduce lighting energy needs. Recycled materials were used in the construction of the pods.

Transurban partnered with Landcare Australia to revegetate the site, and more than 40 Transurban employees, along with students from the nearby Victorian College of the Arts Secondary School, volunteered to help plant more than 18,000 seedlings and shrubs within the site. These plantings provide important biodiversity benefits to the urban landscape.



2017 Sustainability Report

The Power Street Loop was developed using sustainable materials including:

- Timber from reclaimed sources (100 per cent)
- Recycled content in steel reinforcement (73 per cent)
- Cement replacement in concrete mixes (34 per cent)
- Recycled aluminium content (30 per cent)

The project also used energy-efficient LEDs for architectural lighting and a 10kW solar PV system for night lighting. A focus on local project sourcing ensured 80 per cent of suppliers and contractors were located within 30km of the site.

Kinetica, M2 Macquarie Park, Sydney

The M2 Macquarie Park Motorscapes project combined public art with native plants and habitats to transform a previously unused, five hectare site next to the Hills M2 Motorway. The completed project now adds interest and colour to the journeys of more than 100,000 motorists each day.

The project was launched in 2015 via a public art competition. Sydney-based designers Justin Sayarath and Sarah Rodriguez won the competition for their 11-metre high artwork, *Kinetica*, representing native flora such as a waratah, banksias, wattles and eucalypts. Sustainability was a key criteria in selecting the winning design.

Alongside this, Transurban partnered with Landcare Australia to turn the site into an ecological buffer between the urban development of Macquarie Park and the neighbouring Lane Cove National Park. Dense, invasive weeds were removed from the site and 64,000 native seedlings planted. Local waterways were also rehabilitated as part of this project.



The project piloted a range of sustainability initiatives including using:

- An off-grid solar power plant to generate and store electrical power for *Kinetica*'s lighting and motor
- Recycled crushed glass for pipeline bedding and backfill, saving 36 tonnes of virgin sand
- Concrete containing fly ash, steel slag and recycled sand, saving 30 tonnes of virgin materials
- Structural steel containing at least 25 per cent recycled content

Other sustainability features include the project's flexible design, and the use of durable, long-lasting finishes and movement mechanisms requiring very little maintenance or materials. Overall, this project's sustainability initiatives saw:

- 705 tonnes recycled materials used
- 64,000 native seedlings planted
- 66 tonnes GHG emissions avoided
- 50 tonnes of carbon sequestered annually once plants reach maturity

The M2 Macquarie Park Motorscapes project was officially completed in June 2017.

Heathwood Community Centre, Brisbane

The Heathwood Community Development will redevelop a 0.65 ha site on Brisbane's Logan Highway, at the Staplyton Road interchange. The project will create social infrastructure for residents in the local community, and is being delivered in conjunction with the Logan Enhancement Project.

In May 2017 we invited the community to submit their Expressions of Interest for the site, and expect construction to begin in mid-2018. The new public space is expected to open for public use in FY19.

For more information, refer to the [Heathwood Community Development](#) website.

Climate change risk

Climate change has the potential to affect our business through physical, financial and regulatory changes.

Climate change risk

Transurban's [Corporate Governance Statement](#) recognises climate change as a risk to our business.

Transurban's Enterprise Risk Management Framework covers corporate-wide risks and risks associated with both the operation of individual road assets and our project delivery activities. Climate change risk categories and procedures ensure these risks are addressed from physical, environmental and regulatory perspectives.

Physical impacts are mitigated through the design, construction and maintenance of climate-resilient assets. During the design phase of our major projects, we work with our construction partners to assess climate change risks. Detailed climate change risk assessments for major projects ensure the asset design, long-term operations and maintenance plans are sufficient to operate under future conditions.

In addition to the identification of climate change related risks, the business also undertakes specific studies and activities to assess the implications of climate change, these include:

- Assessing the foundations, pavement, drainage and other infrastructure design specifications to ensure they can accommodate extreme weather events, both historical and projected for the future
- Identifying the expected lifetime and maintenance cycles of asset components including asphalt pavement, concrete, painted surfaces and assessing how these may be affected by increased temperatures, heatwaves, rainfall and storm surges
- Considering operational risks such as equipment reliability, employee and customer welfare, and the potential impact of changing environmental conditions on travel patterns
- Identifying indirect risks in the supply chain and broader region, such as the possibility of power supply interruptions in the event of more frequent heatwaves

With controls for these risks in place, we expect climate change risks are unlikely to materially affect the operation of Transurban assets or increase road maintenance costs within the current concession deed periods.

Enhancing our networks

Transurban has ownership interests in 15 toll road assets across Australia and the USA. Our assets incorporate leading technology and safety features, including automatic incident detection, electronic speed and lane-control signage and specialist tunnel-safety systems. We aim to improve the liveability of the cities where we operate through new road infrastructure projects, and through creating additional capacity and efficiency via asset enhancements.

1.9M	10	\$9B	3
Trips taken every day across our networks	Development projects	Project pipeline	Infrastructure Sustainability ratings awarded

NorthConnex

 'Leading' Sustainability Design Rating awarded	\$3B Project	9 km Tunnel	5,000 Trucks off Pennant Hills Rd	1 million Cubic metres of spoil to be re-used for Hornsby Quarry
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Sustainable design

NorthConnex was awarded a Leading Infrastructure Sustainability Design Rating, the highest rating available in this independent rating scheme and the highest score for any road project in Australia to date. NorthConnex's high sustainability rating reflects our efforts to use less and think long-term, including:

- Using improved construction procedures leading to a 26 per cent reduction in emissions
- Reducing water use throughout the life of the project – we are on track to achieve a 42 per cent (about 1,700 ML) reduction
- Reducing the lifecycle impact of materials by sourcing materials locally and increasing our use of reclaimed and recycled content



Hornsby Quarry regeneration

Our Hornsby Quarry Construction Environmental Management Plan was approved this year and regeneration of the Quarry is well underway. Spoil from NorthConnex tunneling will be used in the rehabilitation of the 35 hectare Hornsby Quarry – with plans for a community recreational facility to be built on the site by Hornsby Council. More than one million cubic metres of spoil are expected to be delivered to the site from NorthConnex, spoil that would otherwise have had to travel an additional 3.7 million truck kilometres for disposal.



This year we also updated our motorway design to create another 1.3 hectares of native vegetation for the local area. We also worked with the Hornsby Men’s Shed on completing the installation of 72 wildlife nest boxes.


Connecting with the community

NorthConnex’s two [Community Involvement Groups](#) comprise local representatives and senior project experts. These groups met quarterly to discuss project progress, planning and construction activities. The NorthConnex project team also provides learning opportunities for primary, secondary and tertiary students, and this year we launched a Tiny Tunnellers school holiday activities program. About 20 children participated, visiting our West Pennant Hills information centre to learn about safety, the environment and tunneling.



For more information, refer to the [NorthConnex](#) website. NorthConnex also produced its own [Sustainability Report](#) for calendar year 2016.

CityLink Tulla Widening

 <p>'Excellent' Sustainability Design Rating awarded</p>	<p>\$1.3B Project</p>	<p>24 km Project length</p>	<p>150,000 Trees and shrubs to be planted</p>
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Sustainable construction

The CityLink Tulla Widening project was awarded an Excellent Infrastructure Sustainability Design Rating. This rating reflects the project’s sustainable construction approach, including:

- Sourcing 32.5 per cent of water from non-potable sources such as water tanks, treated process water and dewatering during digging
- Changing the design to reduce the overall quantities of materials such as concrete, steel and asphalt. These changes reduced the lifecycle impact of materials used on the project by 25 per cent compared to the base case footprint
- Reusing around 20,700m³ of cleared topsoil in newly planted areas of the landscape design

Revegetation

Around 150,000 trees and shrubs will be planted along Transurban's Bulla Road to Power Street section of the CityLink Tulla Widening project corridor. These plantings will replenish and enhance Melbourne's green spaces.

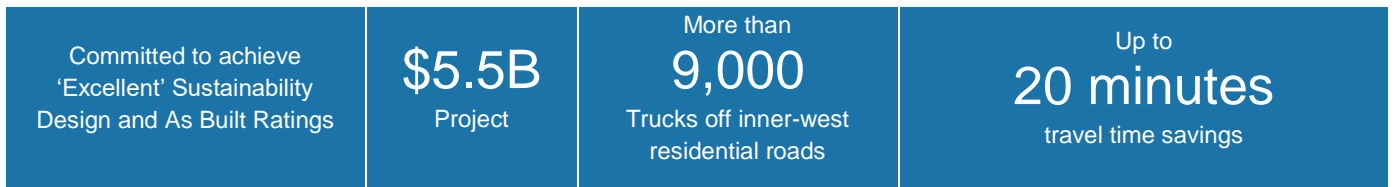
We also completed an urban landcare project in partnership with Landcare Australia and local communities to transform local CityLink Tulla Widening project sites into healthy, vibrant spaces.

Connecting with the community

The project's sustainability grants program awarded three grants of \$5,000 each to local community groups with an initiative that will improve the quality of life for locals and the environment along CityLink, between Power Street and Bulla Road.

For more information, go to the [CityLink Tulla Widening](#) Project website.

West Gate Tunnel Project



Transurban is committed to achieving an Excellent Infrastructure Sustainability Design and As Built Ratings for the West Gate Tunnel Project.

Learning and sharing with the community

Community feedback is essential to the development of the West Gate Tunnel Project. Transurban has created a wide range of opportunities for local communities, councils and industry to view information about the project and to share their suggestions and views. We have participated in community and stakeholder meetings, produced online tools and hosted community consultation sessions to present information and hear from the community.

The engagement program for the West Gate Tunnel Project follows five phases over more than two years, aligned with key milestones in the planning, design and construction stages of the project. Key principles of responsiveness, transparency, openness, inclusivity and accountability were adopted and underpinned the engagement approach.

This community engagement strategy won a Gold Quill Excellence Award from the International Association of Business Communicators.

Immersive community engagement

The project has continued to offer innovative ways to inform and receive feedback from the community. A 12-metre long pop-up 'spacecube' is one example. Visitors walking through the spacecube could see the project from end-to-end, giving them a clear understanding of how the project will work in practice. Large-scale and interactive maps, artist impressions, a mock tunnel, videos and brochures provided detailed information about the design. More than 1,500 people visited the spacecube and positive feedback was received about both the design and the level of community engagement.



Environment Effects Statement

In FY17, the Victorian Government released the West Gate Tunnel Project’s Environment Effects Statement (EES). The EES includes details on the environmental effects of the design, how the tunnel will be built and operated, and proposed plans for managing effects. For more information, refer to the [West Gate Tunnel Project](#) website.

Monash Freeway Upgrade

<p>\$400M Project</p>	<p>Upgrade 44 km Of the freeway from Warrigal Road to Koo Wee Rup Road</p>	<p>30 km Of new lanes</p>	<p>Over 26,000 Tonnes of asphalt and concrete recycled</p>
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The Monash Freeway Upgrade is part of the broader West Gate Tunnel Project. The project involves adding smart technology to the Monash Freeway from Chadstone to Pakenham to ease congestion for around 200,000 motorists daily. The project will also add 30 km of extra traffic lanes in each direction from EastLink to Clyde Road. Works started in September 2016 with completion expected in 2018.

Community engagement

We have connected with local communities, councils and the general public to hear their suggestions and views and provide information about the project. This included hosting community ‘pop up’ stands at local shopping malls and at the project office.

Cultural heritage

A comprehensive Cultural Heritage Management Plan has been prepared to identify and protect areas of significance along the M1 corridor. During Reconciliation Week, a Welcome to Country smoking ceremony was held to recognise the traditional landowners of the region where the project works are occurring.




Supporting the next generation of engineers

The project has been very active with the education sector, hosting Monash University civil engineering students, mentoring final year students through their projects, taking on two undergraduate engineers and participating in VicRoads' graduate program with two rotations.

For more information, refer to the [Monash Freeway Upgrade](#) website.

Gateway Upgrade North

 <p>'Excellent' Sustainability Design Rating awarded</p>	<p>\$1.143B Project</p>	<p>Upgrade 11.3 km Of the motorway from Nudgee to Bracken Ridge</p>	<p>Up to 15% recycled material Used in the new EME2 asphalt</p>
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The Gateway Upgrade North was awarded an Excellent Infrastructure Sustainability Design Rating, the first major road project in Queensland to achieve an IS rating. The rating reflects our sustainable approach to project management, including the sustainable management of construction materials, pollution controls, ecological protection, community benefit creation and innovative solutions.



Community information sharing

We have provided regular construction notifications to the community and to Gateway Motorway users via email and the Gateway Upgrade North website. We have also shared information with the community about the project's environmental management, traffic management, noise management, and piling activities.

Work experience opportunities

In late FY17, the Gateway Upgrade North project launched a work experience program for high school students. We hosted nine students from Sandgate District State High School – a local school located directly across the road from the project's site office. Students were exposed to a range of different roles on the project, including construction, engineering, environment, traffic, commercial and community relations.

The future of asphalt

Gateway Upgrade North has become the first Australian motorway to use EME2 asphalt, a product that contains up to 15 per cent recycled materials. EME2, a high-modulus (stiff) asphalt designed for use on heavy-traffic roads, has been used in France for more than 25 years. EME2 allows for an up to 20 per cent reduction in the depth of pavements – so less asphalt is needed.

For more information, refer to the [Gateway Upgrade North](#) website.

Logan Enhancement Project

Committed to achieve 'Excellent' Sustainability Design and As Built Ratings	\$512M Project	160,000 Motorists use the Logan Motorway daily	Road Ecology Award Recognising fauna movement solutions across the Logan and Gateway Motorways
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Transurban has committed to achieving Excellent Infrastructure Sustainability (IS) Design and As Built Ratings for the Logan Enhancement Project.

Coffee consultation

In the planning stages of the project, we invited the community to join us for coffee events. These events have allowed community members and stakeholders to share their thoughts with us. We used the information shared to shape the final alignment and design to better meet the community's needs.



Cultural heritage investigations

Before progressing this project to major construction, Transurban conducted cultural heritage investigations along the Logan Enhancement Project project corridor. These investigations involved identifying any culturally significant artefacts and relocating them. We have 24 investigation areas within the project corridor and about 40 items of significance have been found to date.

Helping fauna get home safely

The Logan Enhancement project received a Road Ecology Award from the Bulimba Creek Catchment Coordinating Committee. This award recognised Transurban's contribution to providing improved options for fauna movement (such as new crossings, fencing, and refuge poles) across the Logan and Gateway Extension motorways.

For more information, refer to the [Logan Enhancement Project](#) website.

Inner City Bypass Upgrade

\$60M Project	108,000 Vehicles per day	Currently operating at up to 90% capacity
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The \$60 million Inner City Bypass Upgrade will increase capacity for existing and future traffic demands. Carrying around 108,000 vehicles every workday, the Inner City Bypass is currently operating at up to 90 per cent capacity. This upgrade will reduce congestion, improve travel times and safety for all road users, and improve connectivity to the wider road network. The upgrade will include:

- Widening the ICB from three to four lanes in each direction between Legacy Way and the RNA tunnel
- Constructing a new westbound ramp to the ICB from Bowen Bridge Road
- Providing operations and incident response for the length of Legacy Way concession deed (until 2065)
- Providing routine maintenance services on a 10+10-year contract (at Brisbane City Council's discretion)
- Providing enhanced intelligent transport systems

Transurban has reached an in-principle agreement with the Brisbane City Council to deliver this project. Under the agreement, Transurban Queensland will finance and project manage the delivery of the design and construction phases, and provide operations, routine maintenance and incident response services once the upgrade is completed.

395 Express Lanes

<h1 style="margin: 0;">US\$475M</h1> <p style="margin: 0; color: white;">Construction project</p>	<h1 style="margin: 0;">11km</h1> <p style="margin: 0; color: white;">Extension from 95 Express Lanes to Washington DC</p>	<h1 style="margin: 0;">US\$15M</h1> <p style="margin: 0; color: white;">Annual Investment in sustainable transit options over the concession period</p>	<h1 style="margin: 0;">21</h1> <p style="margin: 0; color: white;">395 Express Lanes community grants in FY17</p>
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The 395 Express Lanes is a US \$475 million project to extend the northern end of the 95 Express Lanes for 11 km to the Washington DC border. The project will add capacity and reduce congestion in the I-395 corridor. It will also offer new travel choices, improve travel in the regular lane and enhance access to the Pentagon.

The Project will deliver US \$15M annually in transit investment payments to the Commonwealth of Virginia over the concession period to facilitate increased investment in sustainable transit options along the Interstate 95 and 395 corridors. Projects funded with this transit investment will increase mobility and throughput, and could include new bus and rail services, park-and-ride lots and Transportation Demand Management program enhancements.

Allocation of transit funds will be determined by the Department in collaboration with Arlington, Fairfax, Prince William and Stafford Counties; the City of Alexandria; the Northern Virginia Transportation Commission; and the Potomac and Rappahannock Transportation Commission.

Before construction commenced, we conducted thorough outreach within direct-impact neighbourhoods to educate stakeholders on the proposed project scope and how the project differed from the original proposal. Construction started in August 2017, and we will work closely with our partners at Virginia Department of Transportation (VDOT) and construction partner Lane to ensure successful project delivery. Tolling is expected to commence in late 2019.

Community grants

As a part of the Northern Virginia community, Transurban’s 395 Express Lanes Community Grant Program is designed to support organisations that sustain, enhance or protect the local environment and neighbourhoods in the I-395 corridor.



For more information, refer to the [395 Express Lanes](#) website.

95 Express Lanes Southern extension



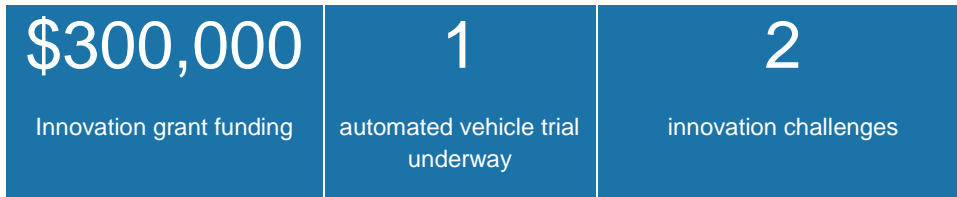
The 95 Express Lanes Southern Extension is an estimated US \$25 million project to extend the 95 Express Lanes for approximately 3km south beyond the current end of the Express Lanes.

A single reversible lane will carry traffic beyond the bottleneck point where the 95 Express Lanes currently begin/end and Route 610 traffic exits/enters I-95, requiring customers and motorists to weave through traffic to their desired lane choice.

The project aims to increase capacity on the I-95 corridor, reduce delays during both morning and evening peak traffic, and improve safety by reducing the current weaving. Works are expected to be completed in late 2017.

Technology and innovation

Transurban looks to the future and is preparing for changes in technology within our own business, the broader transport sector and economy. Advances in technology present many opportunities for road operators including how we interact with vehicles, roadside systems and road users.



Connected and automated vehicles

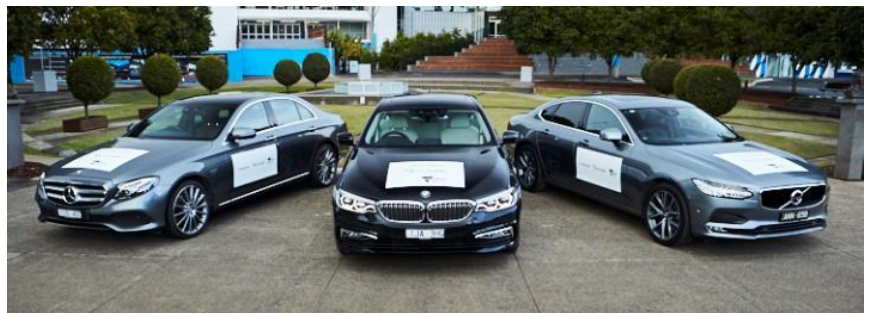
Automated vehicles have enormous potential to make road journeys safer and more efficient, and to help the community travel with greater ease, including people with limited mobility. As human error contributes to more than 90 per cent of crashes, self-driving vehicles are an important step towards reducing road trauma.

Automated vehicle research

- In the USA, Transurban has partnered with the Virginia Tech Transportation Institute for an initiative designed to inform practices and policies related to connected and automated vehicles. Through this program, the Virginia Automated Corridors Initiative pilot program, we are exploring the practical application of emerging technologies and gaining a better understanding of how these vehicles can improve safety and customer experiences on our roads. The program has already conducted real-world trials on Transurban Express Lanes.
- In FY17 Transurban joined the Australian and New Zealand Driverless Vehicle Initiative (ADVI) as a core partner alongside organisations including Volvo, Telstra, Suncorp and the Australian Road Research Board. Our involvement with ADVI will enhance our understanding of the latest international connected and automated vehicle developments. This initiative is also a forum through which we can share our experiences from the Virginia Automated Corridors Initiative.

Victorian automated vehicle trials

We are conducting an automated vehicle trial along the Monash-CityLink-Tullamarine corridor in Victoria. This trial will help prepare Victorian roads and the community for the future of driverless vehicles. The Victorian Government is partnering with Transurban, supported by the RACV, to trial connected and automated vehicles from manufacturers BMW, Mercedes, Tesla and Volvo.



This trial will test vehicles with partial automation such as lane keep assist, adaptive cruise control and traffic sign recognition. The first phase of the program will collect insights into how these vehicles respond and interact with the road environment including tunnels, road works, congestion, electronic speed signs and line markings. The findings will enable Transurban and our project partners to better understand how to prepare road infrastructure, regulations and the community for the integration of this new technology into our transport system. Phase one of the trial will be completed in late 2017.

Innovation grants

Introduced in 2015, the Transurban Innovation Grants Program has created unique opportunities for Transurban to work with leading researchers and organisations on the development of ideas to advance the transport industry and to improve safety for motorists. The new materials and technologies our grants program supports could eventually benefit the transport sector and community as a whole, with potential applications far broader than Transurban-managed networks.

New grants awarded in FY17

In FY17, we awarded three \$100,000 innovation grants:

- **University of Melbourne**

This grant will support research into a speed sensor with LED lights. When attached to the road surface, this sensor could potentially provide real-time customised signals encouraging speeding drivers to slow down. This technology could also help improve the way vehicles enter and exit ramps.

University of Melbourne researcher Dr Ranjith Unnithan said, "Speeding continues to be one of the leading causes of traffic crashes in Australia resulting in fatality or serious injury. The industry needs new, cost-effective technologies to reduce accidents on our roads, to increase spacing between travelling vehicles and to guide motorists to reduce speeds ahead of congested areas. With Transurban's grant, we'll be trialling a sensor-based system that gives real-time feedback to drivers to improve safety and customise their driving experience on the motorway."

- **Imagine Intelligent Materials**

This grant will support the trial of a graphene pressure sensor that, when integrated into the motorway surface, could potentially enable a 'smarter' road capable of reporting on traffic density, weight, volume and road surface condition.

Imagine Intelligent Materials Head of R&D Dr Phil Aitchison said, "We're excited to work with Transurban on this ground-breaking 'smart road' project. When applied to roads the smart sensing technology we're developing will enable motorway operators to gain greater knowledge of traffic flows, communicate with smart vehicles and improve the user experience."

- **The Institute for Frontier Materials at Deakin University**

This grant will support the development of a high-energy absorbing overlay made from recycled plastic and textile fibres which can be used to cover roadside wire rope barriers and could potentially reduce injury severity in crashes involving motorcyclists.

Deakin University researcher Dr Jin Zhang said, "With Transurban's support we're trialling the development of a low-cost, low environmental-impact solution that could be retrofitted over existing roadside barriers at critical locations. The overlay we are developing provides a smooth flat surface, designed to spread impact forces and significantly improve safety outcomes for motorcyclists. Statistically motorcyclists have a far greater risk of life-threatening injuries in crashes compared to vehicle occupants, so we're hoping our research could lead to a solution that one day reduces serious injuries and saves lives."

Previous grant projects

Two previous Innovation Grant recipients reached major project milestones in FY17.

- **RMIT in partnership with the University of Technology Sydney**

This grant supported research into the management of motorway noise through acoustic treatment using noise cancellation and transformation technologies. The project, which has now conducted 12 months of research, brought world-leading experts together to conduct unique experiments into the potential shaping of noise to [create new and different listening environments](#). Community response to demonstration sites established along CityLink and Hills M2 and the research findings reveal potential for such technologies to play a role in noise management along motorways. The full research report is [available here](#).

- **University of Newcastle**

This grant supported research into a potential new material for energy-absorbing modules in road safety barriers. The material is based on a highly energy-absorbent metallic foam, known as perlite metallic syntactic foam. At the end of FY17, the research group completed the project with successful initial impact tests of the material. Transurban and the University are currently determining the next steps to progress this work.

Innovation challenges

This year, we broadened our search for transport and technology solutions by introducing crowdsourcing challenges to generate ideas.

1776 Smart Highways Startup Challenge



Through our partnership with global start-up incubator 1776, we have asked the start-up community to help provide innovative solutions to improve Transurban's networks and bring benefits to drivers with convenient, safe highways and toll roads. The Transurban Smart Highways Challenge includes the areas of vehicle monitoring, smart transportation and road safety.

We are identifying start-ups to join us in the Transurban Innovation Lab between August and October 2017 to test and grow solutions to real-life transportation challenges and improve our customers' experiences.

For more information, read about the [Transurban Smart Highways Challenge](#).

Brisbane CityHack 2017



Transurban participated in the 2017 Brisbane CityHack, an innovative competition-style hack-a-thon that challenges participants to develop solutions that will have a positive impact on the future of Brisbane.

Transurban, AECOM, Brisbane City Council, Queensland Department of Transport and Main Roads, and Queensland Urban Utilities each posed a challenge related to the theme, Get Moving, to more than 100 participants.

Five teams pitched a solution to Transurban. The winner, team Get'N'There, proposed a way to change driver behaviour, engage customers and the community through gamification and incentives using real-time traffic information.

Governance

Transurban is committed to best-practice corporate governance, transparency and accountability. This is essential for the long-term performance and sustainability of the business, and to protect and enhance the interests of our stakeholders.

Transurban's current [Board](#), [Executive Committee](#) and [Corporate Governance policies](#) are available on Transurban's corporate website.

Detailed information about our performance in these areas in FY17 can be found within Transurban's [2017 Corporate Governance Statement](#) and throughout the [2017 Annual Report](#).

Effective leadership

All Transurban employees – executives, managers and team members – share the same set of expectations and performance indicators relating to Transurban's business, safety, values and workplace culture. Our annual Employee Opinion Survey provides information on employees and leadership. The survey allows us to gather anonymous employee feedback on how well Transurban's leaders are performing in areas such as:

- Listening and responding to ideas and concerns
- Treating others with respect
- Keeping commitments
- Maintaining trust
- Giving regular feedback that helps improve performance
- Acting as models for Transurban's core values

This year, our survey resulted in a Leadership Effectiveness Index of 82 per cent, a rating significantly higher than the global norm and in line with the best-in-class norm (top 25 per cent of organisations). This result demonstrates the effectiveness of Transurban's leadership and leadership development and our success at building a positive workplace culture.

Customer privacy

Transurban's Privacy Policy explains how we collect, use and disclose customers' personal information. We also introduced a credit reporting policy that sets out how we manage our customers' credit information.

Transurban employs a Privacy Officer, who is responsible for monitoring Transurban's compliance with privacy obligations. The Privacy Officer responds to and investigates privacy matters and incidents and, where relevant, reports to Transurban's Audit and Risk Board Committee. More information on Transurban's privacy policy is available [here](#).

In FY17, we achieved Payment Card Industry Data Security Standard (PCI DSS) compliance for our Australian operations. The comprehensive compliance process is mandated by the PCI DSS Council and has included validation by a professional independent assessor. We also have a structure and accompanying processes in place to ensure we continue to be compliant.

All employees complete annual mandatory training on our Privacy and Information Security policy and procedures to ensure we remain compliant with our obligations.

Code of Conduct

Transurban's [Code of Conduct](#) guides all employees in making decisions consistent with our values and our overall business approach. Our Code of Conduct is supported by a suite of policies addressing governance, equal opportunity, ethical conduct, anti-corruption, workplace health and safety, and privacy. We also provide Code of Conduct training for our employees.

Our Ethical Business Practices and Whistleblower policies outline our zero-tolerance position on fraud, corruption, bribery and other unethical business practices. Employees also have access to an external whistleblower service, providing a safe and anonymous option for employees wishing to report any unethical practices.

All employees complete mandatory training on our Code of Conduct and Ethical Business Practices – as well as regular refresher courses – to ensure Transurban employees understand these policies and their responsibilities.

Political function attendance

Transurban participates in public policy debate on issues relevant to our business. Accordingly, group policies permit payment for attending political functions to engage in such debate and discussion.

In FY17, we paid \$62,850 to attend political functions in Australia, and US \$97,000 to attend political functions in the USA.

Each year, Transurban voluntarily discloses these payments through this Sustainability Report and in accordance with political disclosure obligations, we report annually to the relevant state and federal electoral commissions.

Corporate tax profile

As an infrastructure business, we invest heavily in building new roads, upgrading our existing roads and buying other roads when it makes sense to do so. Since 1999, approximately \$31 billion¹⁰ has been invested to develop Transurban's roads.

The significant investment associated with new projects can, for a period of time, offset the profits derived from more mature projects. Transurban bears these up-front costs with the view to generating a return on investments in the future. The size of these up-front investments mean Transurban can wait many years before a road matures enough to deliver positive returns.

Transurban is structured as a stapled group comprising corporate and trust entities. Our corporate structure enables the payment of distributions to investors in the early years of the investment while accounting and tax losses are being generated. The distributions are subject to tax in the hands of investors.

The Australian Tax Office has categorised our main corporate entity, Transurban Holdings Limited, as a lower consequence taxpayer. We adopted the Australian Government's voluntary Tax Transparency Code in 2016. In April 2017, Transurban published its Tax Transparency Report in line with the Tax Transparency Code.

More information about Transurban's [corporate tax profile](#) is available on our website.

Memberships

Transurban is a member of a range of business, industry and sustainability groups, including:

Australia

- Committee for Economic Development of Australia
- Infrastructure Partnerships Australia
- Infrastructure Sustainability Council of Australia
- Intelligent Transport Systems Australia
- Roads Australia
- Business Council of Australia
- Diversity Council of Australia
- Chief Executive Women
- Chief Customer Officer Forum Australia
- Corporate Executive Board – Customer Contact Leadership Council
- Customer Service Institute of Australia

USA

- The Association for the Improvement of American Infrastructure
- American Highway Users Alliance
- American Road and Transportation Builders Association
- The Brookings Institution
- The Eno Center for Transportation
- International Bridge, Tunnel and Turnpike Association

¹⁰ Total construction costs since inception. Includes projects on which we have reached financial close but have not reached practical completion.

2017 Sustainability Report

- Intelligent Transportation Society of America
- Intelligent Transportation Society of Virginia
- National Association of Counties
- National Council of State Legislatures
- Northern Virginia Transportation Alliance
- Reason Foundation
- Women's Transportation Seminar - DC
- Women's Transportation Seminar – International

In all areas of operation in both Australia and the USA, we are also members of a range of local and state chambers of commerce, trade and transportation associations.

Awards

Transurban's achievements in corporate sustainability, infrastructure delivery, workforce diversity and community contribution were recognised with the following awards for FY17:

Corporate sustainability

- **Australian Centre for Corporate Social Responsibility** - State of CSR Australian Top 10, 2017
- **Dow Jones Sustainability Index** - DJSI World Index member, reflecting our top 10 per cent sustainability rating among international listed organisations. Rated second highest in the Transport and Transportation Infrastructure sector.
- **Global Real Estate Sustainability Benchmark Infrastructure (GRESB)** - Highest rated transportation company globally and second highest rated infrastructure company globally

Sustainable infrastructure delivery

- **Infrastructure Sustainability Council of Australia** - Leading Infrastructure Sustainability Design rating for the NorthConnex project in NSW
- **Infrastructure Sustainability Council of Australia** - Excellent Infrastructure Sustainability Design rating for the CityLink Tullamarine Widening project in Victoria
- **Infrastructure Sustainability Council of Australia** - Excellent Infrastructure Sustainability Design rating for the Gateway Upgrade North
- **Bulimba Creek Catchment Coordinating Committee** - Road Ecology award for the Logan Enhancement project in QLD. This award recognised Transurban's contribution to providing improved options for fauna movement (such as new crossings, fencing, and refuge poles) across the Logan and Gateway Extension motorways
- **National Association for Industrial and Office Parks (NAIOP) Northern Virginia** - Award of Excellence for Best Interiors for our new office space in Tysons, Virginia

Employees

- **Workplace Gender Equality Agency** - Named an Employer of Choice for Gender Equality for the third year running
- **Engineers Australia** - Most Ambitious Company in Gender Diversity award, recognising excellence in encouraging engineering gender diversity
- **Intelligent Transport Systems World Congress** - Best Action for supporting Diversity in the ITS Workforce award
- **Equileap Gender Equality Global Ranking** - Earned a top-20 global ranking for gender equality. Further, Transurban was recognised as one of only six top-200 companies for gender equality with no significant gender pay gap
- **Human Resources Director magazine** - Innovative HR Teams 2017 award, highlighting the development of our Communities of Practice employee collaboration model

Community

- **Melbourne Awards** - Contribution to Community by a Corporation award in recognition of the contribution the Run for the Kids event has made to the Royal Children's Hospital Good Friday Appeal for over a decade
- **International Association of Business Communicators** - Gold Quill Excellence award for community engagement for West Gate Tunnel Project

Our Report

Our Report

This Sustainability Report was developed in accordance with the Global Reporting Initiative (GRI) G4 'Core' Reporting Guidelines.



This Report covers the period from 1 July 2016 to 30 June 2017 (Financial Year 2017, or FY17). This is our twelfth consecutive Sustainability Report, and our previous [FY16 Sustainability Report](#) and [earlier reports](#) may help provide background.

This report is distributed to both internal and external stakeholders. They include employees, customers, industry groups, investors, governments, media and communities.

Changes in scope

The FY17 report includes data from AirportLinkM7 for the first time, which was acquired by Transurban in April 2016 and therefore not included in our FY16 Sustainability Report.

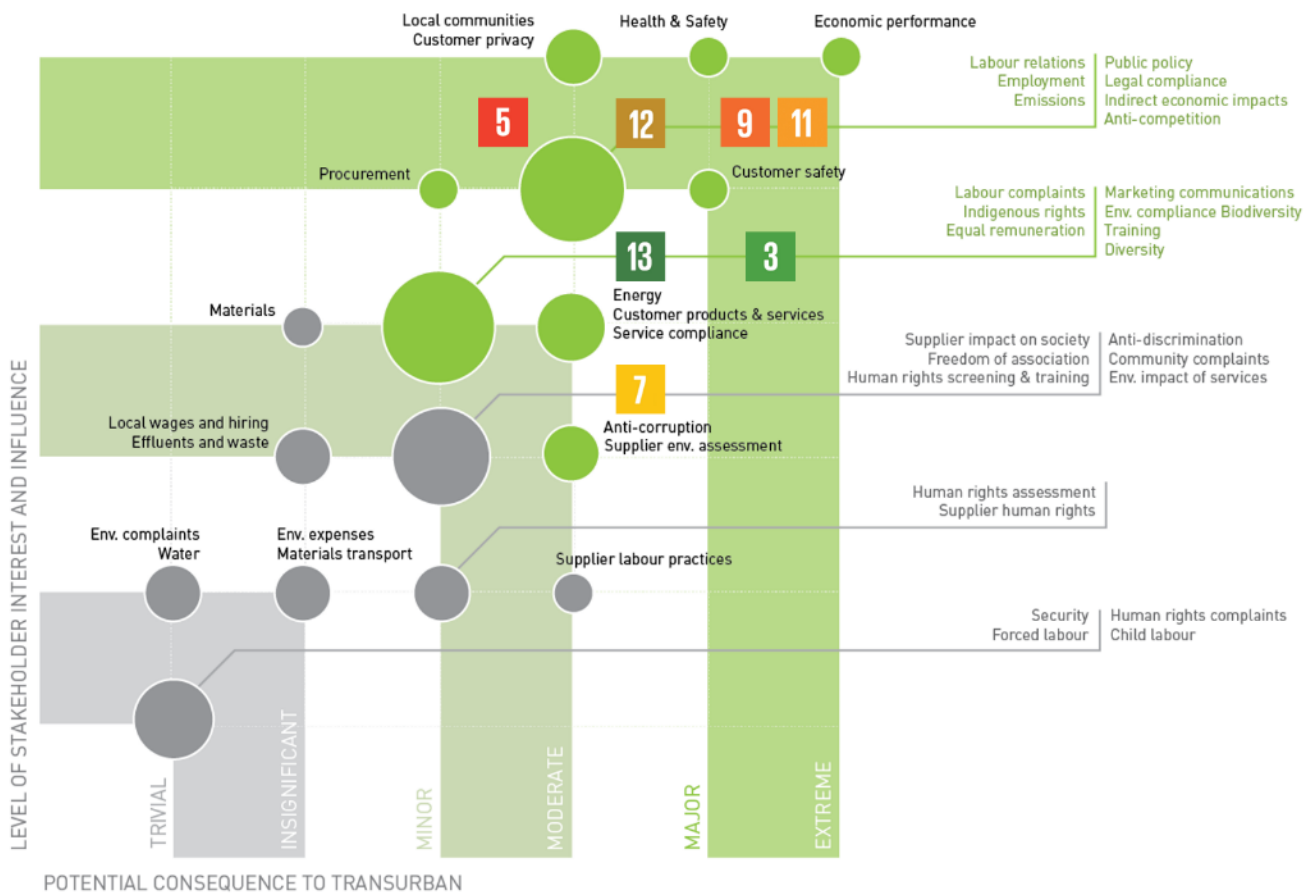
Materiality

The topics included in this report are guided by materiality assessments to determine the most relevant and appropriate issues for Transurban to report on for FY17. We have used several processes to identify material issues for reporting.

Material sustainability issues

The GRI G4 framework for sustainability reporting was used to determine the broad economic, environmental and social topics most relevant for our report. As in previous years, this process identified the consistently high priority issues for our business, including economic performance, health and safety, local communities, ethical business practices and workplace policies.

Transurban’s material sustainability issues were grouped into the GRI G4 Aspects and UN Sustainability Development Goals, and mapped based on ‘Level of stakeholder interest’ and ‘potential consequence to Transurban’ in FY17.



Legend: ● Not material for reporting ● Material for reporting 3 Material SDG

Transurban’s most material UN Sustainable Development Goals:



United Nations Sustainable Development Goals

This year we expanded our materiality assessment to include the United Nations Sustainable Development Goals. A summary of the material goals for Transurban and our progress towards them has been included [here](#) in the Report.

Assurance

Transurban engaged EY to provide limited assurance over selected disclosures within the FY17 Sustainability Report.

The scope of the assurance included verification of the following metrics:

- Road Injury Crash Index
- Recordable Injury Frequency Rate
- Scope 1 greenhouse gas emissions (tCO₂-e)
- Scope 2 greenhouse gas emissions (tCO₂-e)
- Nitrogen oxides (NOx) emissions (tonnes)
- Greenhouse gas emissions from customer travel (tCO₂-e)


The limited assurance process included interviews with key Transurban personnel and verification of the above data within the report.

The EY limited assurance statement is attached [here](#).




Progress report – Sustainable Development Goals



Transurban has identified the sustainable development goals that are material to our business. While our core business strategy clearly aligns with the Industry, Innovation and Infrastructure (SDG 9) and Sustainable Cities and Communities (SDG 11) goals, we are also contributing, in some cases significantly, to five other goals.


Our key FY17 achievements for each of the seven material goals and associated targets are summarised below.

Material Sustainable Development Goals	Relevance and potential contribution	Key FY17 Transurban achievements by goal and target ¹¹
	<p>This goal is highly relevant to Transurban as it covers road safety and employee health. We are in a strong position to enhance road safety – not only in our area of operations but also in sharing our knowledge nationally and internationally, including with developing countries. In addition, we have opportunities to enhance employee health through our wellbeing program</p>	<p>SDG target 3.4: “By 2030, reduce by one-third pre-mature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing”</p> <ul style="list-style-type: none"> Continued to develop our network of mental health first aiders across Australia. We now have 78 employees with the skills to recognise signs of mental health problems and provide support to employees in times of need Trained more than 400 employees on the NorthConnex project, through Mates in Construction to raise awareness of mental health issues and combat the high suicide rates prevalent in the construction industry Continued to make progress with our Wellbeing Program which aims to keep our employees safe and healthy at home as well as work. The Program provides resources and support across four focus areas: Mind (e.g. building mental health resilience), Body (e.g. programs covering exercise, nutrition and healthcare), Connected (e.g. offering paid volunteer leave for community causes) and Recognition (e.g. our employee awards program) <p>SDG target 3.6: “By 2020, halve global deaths and injuries from road traffic accidents”</p> <ul style="list-style-type: none"> Implemented Road Safety Action Plans in each region and completed 56/65 strategic road safety actions Established the Transurban Road Safety Centre in partnership with Neuroscience Research Australia (NeuRA) with a focus on reducing injuries suffered on roads nationally and conducting research into older drivers and motorcyclists (two road user groups that suffer a disproportionate number of injuries and fatalities) Awarded two road-safety related innovation grants – one is focussing on investigating improvements to wire rope barriers to enhance motorcyclist safety while the other is exploring smart LED sensor lights embedded into road surfaces to detect and communicate vehicle speed and road safety signals to road users Supported or led ten important road safety awareness events and initiatives in Australia and the USA including Global and Australian Road Safety Weeks, Queensland Road Safety Week, ‘phones down’ campaigns in the USA and the release of the 2016 Child Safety Handbook

¹¹ Only SDG targets that have been identified as most directly relevant to Transurban and with demonstrable progress in FY17 are listed here

 <p>5 GENDER EQUALITY</p>	<p>This goal is relevant to our Diversity Objectives and intent to provide equal opportunities in leadership. With the current disproportionate male representation in our industry sector, we have a clear opportunity to make a tangible impact by promoting and sharing the lessons and results of our efforts</p>	<p>SDG Target 5.5: “Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life”</p> <ul style="list-style-type: none"> Continued our efforts to enhance gender equality as a key part of our commitment to diversity and inclusion across the business Recognised by the Workplace Gender Equality Agency as an Employer of Choice for Gender Equality and by Equileap as one of the top 20 organisations globally for gender equality and one of six companies reporting no significant gender pay gap Continued our Females Excelling in Engineering and Technology program in Australia with 49 female students participating in FY17 <p>SDG Target 5.c: “Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels”</p> <ul style="list-style-type: none"> Extended our Australian 16 week fully paid parental leave scheme to our USA employees (minimum legal requirement is to provide 12 weeks of unpaid maternity leave) Maintained and enhanced flexible work practices that permit working from home, flexible leave and working hours, days and part-time work arrangements. All of these elements help to attract and retain women at Transurban
 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>With a focus on energy efficiency, this goal aligns with business priorities to deliver and operate efficient assets over the long term. This goal also seeks to encourage investment and uptake of renewable energy. Transurban has a significant opportunity to make meaningful and important changes to how we operate. We can reduce energy consumption over time and increase our proportional use of renewable energy</p>	<p>SDG Target 7.2: “By 2030, increase substantially the share of renewable energy in the global energy mix”</p> <ul style="list-style-type: none"> Installed 23.4 kW of renewable energy in FY17 across Australian assets taking the total installed capacity to 140 kW <p>SDG Target 7.3: “By 2030, double the global rate of improvement in energy efficiency”</p> <ul style="list-style-type: none"> Progressed energy efficiency plans under our ‘10-in-10’ energy efficiency target for Australian road assets identifying the major energy efficiency measures to be implemented over the next ten years Achieved a 5 ½ star NABERS energy rating for the Melbourne Head Office with a 10% reduction in energy use despite a 12% increase in occupants
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>This goal aligns with Transurban’s core business and is about developing and operating quality, reliable, sustainable and resilient infrastructure that supports economic development and human wellbeing. This goal also aims to enhance resource-use efficiency, increase adoption of clean and environmentally sound technologies. Transurban is well placed to make a strong contribution to society and the transportation sector in these areas</p>	<p>SDG Target 9.5: “Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending”</p> <ul style="list-style-type: none"> Awarded three \$100,000 innovation grants – two focused on road safety and the third involves trialling a new sensor material that will be integrated into road pavement and capable of reporting on traffic density, weight, volume and road surface condition

		<ul style="list-style-type: none"> Completed two grants previously awarded - noise cancellation and transformation and new a new material for road safety barriers
	<p>This goal relates strongly to Transurban's core business and covers opportunities such as safe and sustainable transport, improved road safety, enhancing public transport, and provision of transport solutions for disadvantaged members of communities. The goal also covers air quality and protection of cultural and natural heritage, which are relevant to the construction and management of roads and tunnels</p> <p>Transurban and our network partners have the ability to deliver better safety outcomes on our roads. Our work in preparing for the arrival of connected and automated vehicles and other transport technologies will also contribute to meeting this goal. Through business-as-usual we work to ensure heritage and air quality are protected and there are additional opportunities to pursue in waste management</p>	<p>SDG Target 11.2: “By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons”</p> <ul style="list-style-type: none"> Transurban's core business is to provide access to road transport infrastructure. In FY17, we continued to strive to optimise and expand our road networks to enhance the effectiveness of cities where we operate Refer to SDG 3 for key FY17 road safety achievements <p>SDG Target 11.6: “By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management”</p> <ul style="list-style-type: none"> Ensured design of new road assets – for example West Gate Tunnel Project – have grades that minimise engine labouring and hence air emissions Achieved an overall waste to landfill diversion rate of 97%
	<p>This goal is relevant as large quantities of materials are consumed in road construction and maintenance. Transurban applies sustainability principles across the lifecycle of assets and in our business generally and reports annually on our sustainability performance. By championing and using more sustainable materials, we can reduce our impacts and encourage our sector to do likewise</p>	<p>SDG Target 12.2: “By 2030, achieve the sustainable management and efficient use of natural resources”</p> <ul style="list-style-type: none"> Trialed the use of EME2 asphalt on our Gateway Upgrade North project which allows for a reduction in pavements of up to 20% Committed to examining and challenging the way we plan, design, construct and operate assets to reduce their whole-of-life impact while maintaining or improving their economic performance. This includes reducing the amount of materials used and favouring lower environmental impact materials <p>SDG Target 12.5: “By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse”</p> <ul style="list-style-type: none"> Achieved significant waste reduction on major projects in FY17 with an overall waste to landfill diversion rate of 97% Piloted the use of recycled materials such as recycled crushed glass Established a Pavements Community of Practice (COP). One of the COP's objectives is to reduce virgin material use and maximise the durability of pavements

		<p>SDG Target 12.6: “Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle”</p> <ul style="list-style-type: none"> Delivered a significant range of sustainability initiatives in accordance with our three pillar sustainability strategy and sustainability commitments. The strategy and commitments address the SDGs identified in this progress report Prepared this FY17 Sustainability Report outlining Transurban’s sustainability performance and continued efforts towards becoming a more sustainable organisation
	<p>This goal relates strongly to Transurban’s operations and planning for future assets through climate change risk assessment. We are currently taking action in these areas across our networks and are also in a position to influence others through these efforts. Additional opportunities for us include increasing renewable energy procurement and working with governments, industry and others to accelerate uptake of electric vehicles</p>	<p>SDG Target 13.1: “Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries”</p> <ul style="list-style-type: none"> Established a commitment requiring existing assets to regularly review climate change risks and new assets to identify and respond to these risks in the design phase Established a target to reduce our greenhouse gas emissions (scope 1 and 2) by 52% by 2030 <p>SDG Target 13.3: “Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”</p> <ul style="list-style-type: none"> Established contractual requirements and supported contractors in developing and implementing climate change risk assessments for major projects Transurban seeks to design and operate our road networks to maintain ‘free-flow’ traffic conditions wherever possible (limiting stop-start movements) thus reducing greenhouse gas emissions. We also aim to limit road grades to avoid unnecessary engine labouring with associated increased fuel consumption and greenhouse gas emissions

GRI Index

We report in accordance to the GRI G4 ‘Core’ Reporting Guidelines. The GRI Index lists the most material aspects that we are reporting on this year. The Sustainability Report should be read with Transurban’s [2017 Annual Report](#) for a more comprehensive view of the Group’s overall financial performance and corporate governance.

Contact Us

Your feedback on this report is valuable, and helps us improve our reporting. For questions or comments please contact Matthew Brennan, Head of Sustainability.

Phone: +61 3 8656 8900

Email: sustainability@transurban.com

Performance data

Data Methodology

Currency and conversion

All financial amounts are reported in Australian dollars unless otherwise stated. Figures in USD may have been converted to AUD using the exchange rate at 30 June 2017 (1 AUD: 0.7692 USD).

GHG emissions

Transurban uses The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) to draw boundaries around emission sources when quantifying our Scope 1, Scope 2 and Scope 3 GHG emissions. Emission factors and calculation methodologies outlined in the Australian Government Department of Climate Change - National Greenhouse Accounts (NGA) Factors August 2016 are then applied to each data source.

The Environmental Protection Agency's eGRID2014 v2 (released February 2017) is used to calculate Scope 2 and 3 GHG emissions from electricity in the USA.

Transurban applies the GHG Protocol's air travel method and emission factors to individual flight details to generate our Scope 3 emissions associated with corporate air travel.

Australian Government NGA Factors August 2016 have been used to calculate Transurban's Scope 3 emissions from waste, fuel use (for incident response and operations and maintenance vehicles), fuel refining and transport and electricity transmission and distribution losses.

Customer travel

GHG emissions from customer vehicles on our assets were calculated based on total distances travelled, vehicle type and speed.

Transurban's traffic and tolling systems record information such as vehicle class and entry and exit points of vehicles. Supplementary information on some assets includes vehicle origin-destination studies, independent travel time studies, and assumptions based on the physical dimensions of assets. These data are used to calculate the total Vehicle Kilometres Travelled (VKT) on each asset for the year.

Transurban calculates resulting emissions using vehicle GHG emission factors that are sensitive to vehicle type, fuel and travel speed, sourced from the University of South Australia. Vehicle type is from Transurban tolling data. Travel speeds are based on GPS data from external provider TomTom to determine average travel speeds on Transurban assets. Fuel type is estimated based on the Australian Bureau of Statistics (ABS) Motor Vehicle Census 2017.

Employee data sheet

See attached data tables.

Environmental data sheet

See attached data tables.

TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER

	FY15						FY16						FY17					
	Male		Female		Total		Male		Female		Total		Male		Female		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Casual	10	1.0%	13	1.3%	23	2.3%	6	0.4%	11	0.8%	17	1.3%	9	26.5%	25	73.5%	34	2.1%
Fixed full-time	29	2.9%	30	3.0%	59	5.9%	26	1.9%	22	1.6%	48	3.5%	25	39.7%	38	60.3%	63	3.9%
Fixed part-time	2	0.2%	4	0.4%	6	0.6%	1	0.1%	5	0.4%	6	0.4%	0	0.0%	2	100.0%	2	0.1%
Permanent full-time	439	44.1%	284	28.5%	723	72.7%	584	43.0%	380	28.0%	964	70.9%	664	61.9%	408	38.1%	1,072	66.3%
Permanent part-time	2	0.2%	94	9.4%	96	9.6%	4	0.3%	103	7.6%	107	7.9%	9	7.3%	115	92.7%	124	7.7%
Supervised Workers	56	5.6%	32	3.2%	88	8.8%	130	9.6%	87	6.4%	217	16.0%	183	56.8%	139	43.2%	322	19.9%
Grand Total	538	54.1%	457	45.9%	995	100.0%	751	55.3%	608	44.7%	1,359	100.0%	890	55.0%	727	45.0%	1,617	100.0%

Transurban's headcount definition includes direct Transurban employees (permanent full time/part time, fixed term full time/part time, casuals) & individual/independent contractors ('Supervised workers' in this definition), but excludes non-executive directors & employees on maternity leave, salary continuance & master service agreement (MSA) contractors. Individual/Independent contractors mainly work in Technology and on projects. Number of males, females per employment type is a percentage of the Grand Total. Figures are as at 30 June at the end of each financial year. During FY17, Transurban also engaged 589 MSA contractors and 27 vocational workers. In total, we had an extended workforce of 2,233 individuals.

TOTAL WORKFORCE BY REGION AND GENDER

	FY15						FY16						FY17					
	Male		Female		Total		Male		Female		Total		Male		Female		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
VIC	283	28.4%	205	20.6%	488	49.0%	388	28.6%	297	21.9%	685	50.4%	482	57.1%	362	42.9%	844	52.2%
NSW	115	11.6%	117	11.8%	232	23.3%	150	11.0%	129	9.5%	279	20.5%	149	50.3%	147	49.7%	296	18.3%
QLD	96	9.6%	115	11.6%	211	21.2%	105	7.7%	130	9.6%	235	17.3%	142	48.1%	153	51.9%	295	18.2%
USA	44	4.4%	20	2.0%	64	6.4%	108	7.9%	52	3.8%	160	11.8%	117	64.3%	65	35.7%	182	11.3%
Total	538	54.1%	457	45.9%	995	100.0%	751	55.3%	608	44.7%	1,359	100.0%	890	55.0%	727	45.0%	1,617	100.0%

Figures are as at 30 June at the end of each financial year.



Employee Data

SUSTAINABILITY REPORT FY17

TOTAL WORKFORCE BY EMPLOYEE CATEGORY AND GENDER

	FY15						FY16						FY17					
	Male		Female		Total		Male		Female		Total		Male		Female		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
CEO	1	0.1%	0	0.0%	1	0.1%	1	0.1%	0	0.0%	1	0.1%	1	100.0%	0	0.0%	1	0.1%
Senior executive	5	0.6%	4	0.4%	9	1.0%	5	0.4%	4	0.4%	9	0.8%	5	55.6%	4	44.4%	9	0.7%
Senior management	21	2.3%	6	0.7%	27	3.0%	22	1.9%	8	0.7%	30	2.6%	22	62.9%	13	37.1%	35	2.7%
Middle Management	62	6.8%	20	2.2%	82	9.1%	67	5.9%	33	2.9%	100	8.8%	79	69.3%	35	30.7%	114	8.8%
Manager	37	4.1%	23	2.5%	60	6.6%	43	3.8%	29	2.5%	72	6.3%	62	63.9%	35	36.1%	97	7.5%
Professional / technical	289	31.9%	146	16.1%	435	48.0%	415	36.3%	206	18.0%	621	54.4%	16	42.1%	22	57.9%	38	2.9%
Supervisor / team leader	16	1.8%	14	1.5%	30	3.3%	14	1.2%	22	1.9%	36	3.2%	472	65.6%	248	34.4%	720	55.6%
Customer service	26	2.9%	126	13.9%	152	16.8%	34	3.0%	135	11.8%	169	14.8%	26	16.3%	134	83.8%	160	12.4%
Administration / support	24	2.6%	86	9.5%	110	12.1%	20	1.8%	84	7.4%	104	9.1%	24	19.8%	97	80.2%	121	9.3%
TOTAL	481	53.1%	425	46.9%	906	100.0%	621	54.4%	521	45.6%	1,142	100.0%	707	54.6%	588	45.4%	1,295	100.0%

Totals in this table excludes supervised workers.

PERCENTAGE OF TOTAL WORKFORCE BY EMPLOYEE CATEGORY AND AGE GROUP

	FY15				FY16				FY17			
	Under 30	30-50	Over 50	Total	Under 30	30-50	Over 50	Total	Under 30	30-50	Over 50	Total
CEO	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%
Senior executive	0.0%	1.1%	0.3%	1.5%	0.0%	0.8%	0.2%	1.0%	0.0%	0.5%	0.2%	0.7%
Senior management	0.0%	2.6%	1.0%	3.6%	0.0%	2.3%	0.7%	3.0%	0.0%	1.5%	1.2%	2.7%
Middle Management	0.0%	7.1%	1.3%	8.4%	0.0%	7.8%	1.2%	9.1%	0.1%	7.0%	1.7%	8.8%
Manager	0.2%	6.7%	1.3%	8.2%	0.2%	5.7%	0.7%	6.6%	0.2%	6.3%	1.1%	7.5%
Professional / technical	5.7%	32.3%	5.3%	43.3%	6.5%	34.4%	7.1%	48.0%	0.3%	2.0%	0.6%	2.9%
Supervisor / team leader	0.7%	2.6%	0.7%	3.9%	0.4%	2.2%	0.7%	3.3%	9.8%	38.4%	7.4%	55.6%
Customer service	3.3%	12.5%	5.6%	21.3%	2.9%	9.5%	4.4%	16.8%	2.3%	6.3%	3.7%	12.4%
Administration / support	2.5%	5.9%	1.1%	9.5%	2.5%	7.6%	2.0%	12.1%	2.0%	5.7%	1.6%	9.3%
TOTAL	12.3%	71.1%	16.6%	100%	12.6%	70.4%	17.0%	100%	14.7%	67.7%	17.6%	100.0%

Totals in this table excludes supervised workers.



COMPOSITION OF GOVERNANCE BODIES BY GENDER AND AGE GROUP

	FY15						FY16						FY17					
	Male		Female		Total		Male		Female		Total		Male		Female		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Under 30	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
30-50	0	0%	1	13%	1	13%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Over 50	6	75%	1	13%	7	88%	6	75%	2	25%	8	100%	6	67%	3	33%	9	100%
TOTAL	6	75%	2	25%	8	100%	6	75%	2	25%	8	100%	6	67%	3	33%	9	100%

Figures represent CEO and Transurban Board.

TOTAL NUMBER AND RATE OF NEW EMPLOYEE HIRES BY AGE GROUP, GENDER AND REGION

		FY15						FY16						FY17					
		Male		Female		Total		Male		Female		Total		Male		Female		Total	
		No.	%	No.	No.	%	No.	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
VIC	Under 30	71	9.1%	45	5.7%	116	14.8%	25	2.4%	27	2.6%	52	5.0%	23	1.8%	23	1.8%	46	3.7%
	30-50	17	2.2%	13	1.7%	30	3.8%	81	7.7%	53	5.0%	134	12.8%	65	5.2%	47	3.8%	112	9.0%
	Over 50	51	6.5%	27	3.4%	78	9.9%	10	1.0%	5	0.5%	15	1.4%	6	0.5%	12	1.0%	18	1.4%
	TOTAL	3	0.4%	5	0.6%	8	1.0%	116	11.0%	85	8.1%	201	19.1%	94	7.5%	82	6.6%	176	14.1%
NSW	Under 30	25	3.2%	13	1.7%	38	4.8%	3	0.3%	14	1.3%	17	1.6%	4	0.3%	7	0.6%	11	0.9%
	30-50	4	0.5%	5	0.6%	9	1.1%	43	4.1%	20	1.9%	63	6.0%	17	1.4%	18	1.4%	35	2.8%
	Over 50	19	2.4%	8	1.0%	27	3.4%	5	0.5%	1	0.1%	6	0.6%	5	0.4%	2	0.2%	7	0.6%
	TOTAL	2	0.3%	0	0.0%	2	0.3%	51	4.9%	35	3.3%	86	8.2%	26	2.1%	27	2.2%	53	4.2%
QLD	Under 30	11	1.4%	21	2.7%	32	4.1%	5	0.5%	9	0.9%	14	1.3%	4	0.3%	11	0.9%	15	1.2%
	30-50	1	0.1%	3	0.4%	4	0.5%	23	2.2%	23	2.2%	46	4.4%	25	2.0%	15	1.2%	40	3.2%
	Over 50	9	1.1%	16	2.0%	25	3.2%	4	0.4%	4	0.4%	8	0.8%	4	0.3%	4	0.3%	8	0.6%
	TOTAL	1	0.1%	2	0.3%	3	0.4%	32	3.0%	36	3.4%	68	6.5%	33	2.6%	30	2.4%	63	5.0%
USA	Under 30	15	1.9%	6	0.8%	21	2.7%	5	0.5%	6	0.6%	11	1.0%	5	0.4%	2	0.2%	7	0.6%
	30-50	1	0.1%	2	0.3%	3	0.4%	15	1.4%	8	0.8%	23	2.2%	15	1.2%	8	0.6%	23	1.8%
	Over 50	12	1.5%	4	0.5%	16	2.0%	1	0.1%	1	0.1%	2	0.2%	6	0.5%	0	0.0%	6	0.5%
	TOTAL	2	0.3%	0	0.0%	2	0.3%	21	2.0%	15	1.4%	36	3.4%	26	2.1%	10	0.8%	36	2.9%
GRAND TOTAL		122	15.6%	85	10.8%	207	26.4%	220	21.0%	171	16.3%	391	37.2%	179	14.3%	149	11.9%	328	26.3%



Employee Data

SUSTAINABILITY REPORT FY17

New Transurban employees only including casuals, permanent, fixed term. Excludes any individual/independent/MSA contractors. Number of males, females per age group is a percentage of the Average Employee Headcount during the corresponding period.

	FY15	FY16	FY17
Average Employee Headcount	784.5	1,050	1,248

TOTAL NUMBER AND RATE OF EMPLOYEE TURNOVER BY AGE GROUP, GENDER AND REGION

		FY15						FY16						FY17					
		Male		Female		Total		Male		Female		Total		Male		Female		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
VIC	Under 30	0	0.0%	3	0.4%	3	0.4%	2	0.2%	3	0.3%	5	0.5%	2	0%	9	1%	11	1%
	30-50	30	4.3%	19	2.7%	49	7.1%	26	2.7%	13	1.3%	39	4.0%	28	2%	18	2%	46	4%
	Over 50	6	0.9%	8	1.2%	14	2.0%	3	0.3%	5	0.5%	8	0.8%	6	1%	3	0%	9	1%
	TOTAL	36	5.2%	30	4.3%	66	9.5%	31	3.2%	21	2.2%	52	5.4%	36	3%	30	3%	66	6%
NSW	Under 30	1	0.1%	1	0.1%	2	0.3%	0	0.0%	3	0.3%	3	0.3%	1	0%	6	1%	7	1%
	30-50	8	1.2%	4	0.6%	12	1.7%	20	2.1%	10	1.0%	30	3.1%	23	2%	9	1%	32	3%
	Over 50	2	0.3%	3	0.4%	5	0.7%	2	0.2%	1	0.1%	3	0.3%	4	0%	5	0%	9	1%
	TOTAL	11	1.6%	8	1.2%	19	2.7%	22	2.3%	14	1.4%	36	3.7%	28	2%	20	2%	48	4%
QLD	Under 30	14	2.0%	39	5.6%	53	7.6%	1	0.1%	3	0.3%	4	0.4%	0	0%	1	0%	1	0%
	30-50	43	6.2%	64	9.2%	107	15.4%	13	1.3%	12	1.2%	25	2.6%	8	1%	7	1%	15	1%
	Over 50	19	2.7%	25	3.6%	44	6.3%	2	0.2%	6	0.6%	8	0.8%	0	0%	4	0%	4	0%
	TOTAL	76	10.9%	128	18.4%	204	29.4%	16	1.6%	21	2.2%	37	3.8%	8	1%	12	1%	20	2%
USA	Under 30	1	0.1%	0	0.0%	1	0.1%	0	0.0%	3	0.3%	3	0.3%	2	0%	1	0%	3	0%
	30-50	1	0.1%	4	0.6%	5	0.7%	7	0.7%	4	0.4%	11	1.1%	6	1%	3	0%	9	1%
	Over 50	3	0.4%	0	0.0%	3	0.4%	1	0.1%	0	0.0%	1	0.1%	1	0%	1	0%	2	0%
	TOTAL	5	0.7%	4	0.6%	9	1.3%	8	0.8%	7	0.7%	15	1.5%	9	1%	5	0%	14	1%
GRAND TOTAL		128	18.4%	170	24.5%	298	42.9%	77	7.9%	63	6.5%	140	14.4%	81	7%	67	6%	148	12.7%

Involuntary and Voluntary turnover included for permanent employees only, percentage based on the Average Permanent Employee Headcount.

	FY15	FY16	FY17
Average Permanent Employee Headcount	694.5	970	1,162



RETURN TO WORK AND RETENTION RATES AFTER PARENTAL LEAVE BY GENDER

	FY15		FY16		FY17	
	Male	Female	Male	Female	Male	Female
Number of employees entitled to parental leave	352	357	405	378	528	469
Number of employees that took parental leave	32	34	25	29	28	28
Number of employees who returned to work after parental leave	32	21	25	20	27	28
Number of employees who returned to work after parental leave and were still employed 12 months after their return to work	16	11	27	14	4	2
Return to work rate	100%	78%	100%	83%	96%	100%
Retention rate	97%	71%	84%	78%	16%	10%

AVERAGE HOURS OF TRAINING BY EMPLOYEE CATEGORY AND GENDER

	FY15			FY16			FY17		
	Male	Female	Average	Male	Female	Average	Male	Female	Average
CEO	31	0	31	41	0	41	25	0	25
Senior executive	34	35	34	47	41	44	23	32	27
Senior management	31	33	31	27	37	34	25	23	24
Middle management	40	39	40	29	32	31	21	25	22
Manager	34	27	31	34	36	35	25	26	25
Professional / technical	17	19	17	33	26	30	35	27	30
Supervisor / team leader	44	55	49	19	14	16	12	16	13
Customer service	85	31	42	16	19	16	20	16	16
Administration / support	26	18	20	17	18	17	16	13	13

All training hours exclude any independent/individual/MSA contractors and casuals as not all are required to complete training.

HUMAN RIGHTS TRAINING

	FY15	FY16	FY17
Hours of training	3,359	5,035	3,018
Percentage of employees	122%	108%	92%
Number of employees completing	934	1,111	1,120
Average Headcount	766	1,029.5	1,221.5



Employee Data

Training is provided every 18 months hence the cyclical numbers. All training hours and completion rates exclude any independent/individual/MSA contractors. Company induction for new employees is mandatory and is included in the data. The percentage of employees is calculated based on an average headcount rather than the headcount over the reporting period (and so may be calculated as greater than 100% in some years).

RATIO OF THE BASIC SALARY AND REMUNERATION OF WOMEN TO MEN FOR EACH EMPLOYEE CATEGORY, BY SIGNIFICANT LOCATIONS OF OPERATION

BASIC SALARY	FY15				FY16				FY17			
	VIC	NSW	QLD	USA	VIC	NSW	QLD	USA	VIC	NSW	QLD	USA
CEO	0:100	0:0	0:0	0:0	0:100	0:0	0:0	0:0	0:100	0:0	0:0	0:0
Senior executive	46:54	45:55	0:100	100:0	46:54	45:55	0:100	100:0	46:54	46:54	0:100	100:0
Senior management	49:51	0:100	0:100	55:45	49:51	51:49	48:52	52:48	47:53	41:59	48:52	45:55
Middle management	48:52	47:53	43:57	40:60	49:51	47:53	46:54	47:53	50:50	38:62	46:54	50:50
Manager	47:53	47:53	48:52	49:51	49:51	51:49	46:54	49:51	49:51	45:55	43:57	41:59
Professional / technical	48:52	48:52	49:51	45:55	50:50	47:53	51:49	100:0	48:52	47:53	50:50	34:66
Supervisor / team leader	49:51	46:54	47:53	100:0	48:52	48:52	50:50	37:63	50:50	51:49	50:50	40:60
Customer service	50:50	48:52	49:51	0:0	49:51	50:50	49:51	100:0	49:51	49:51	49:51	0:0
Administration / support	53:47	54:46	47:53	44:56	52:48	100:0	51:49	46:54	52:48	48:52	52:48	45:55

REMUNERATION	FY15				FY16				FY17			
	VIC	NSW	QLD	USA	VIC	NSW	QLD	USA	VIC	NSW	QLD	USA
CEO	0:100	0:0	0:0	0:0	0:100	0:0	0:0	0:0	0:100	0:0	0:0	0:0
Senior executive	46:54	45:55	0:100	100:0	46:54	45:55	0:100	100:0	46:54	46:54	0:100	100:0
Senior management	49:51	0:100	0:100	57:43	49:51	51:49	42:58	57:43	47:53	38:62	42:58	49:51
Middle management	48:52	46:54	43:57	39:61	49:51	46:54	46:54	47:53	50:50	38:62	47:53	51:49
Manager	47:53	46:54	47:53	49:51	48:52	51:49	46:54	49:51	48:52	45:55	42:58	41:59
Professional / technical	48:52	47:53	49:51	45:55	50:50	47:53	50:50	100:0	48:52	46:54	50:50	32:68
Supervisor / team leader	50:50	45:55	47:53	100:0	48:52	48:52	50:50	36:64	50:50	51:49	49:51	39:61
Customer service	49:51	48:52	49:51	0:0	48:52	50:50	50:50	100:0	49:51	49:51	49:51	0:0
Administration / support	53:47	55:45	48:52	45:55	52:48	100:0	51:49	47:53	52:48	49:51	53:47	45:55



The calculation for remuneration follows WGEA reporting methodology. Exchange Rates used for basic salary and remuneration comparisons across USA and Australia:

- 30-Jun-15 Where dollar figures are supplied, USD has been converted to AUD using the exchange rate at 30 June 2015 (1 USD: 1.232 AUD)
- 30-Jun-16 Where dollar figures are supplied, USD has been converted to AUD using the exchange rate at 30 June 2016 (1 USD: 1.347 AUD)
- 30-Jun-17 Where dollar figures are supplied, USD has been converted to AUD using the exchange rate at 30 June 2017 (1 USD: 1.300 AUD)

OCCUPATIONAL HEALTH AND SAFETY

UNPLANNED ABSENTEEISM	FY15		FY16		FY17	
	Male	Female	Male	Female	Male	Female
VIC	1.9%	2.5%	1.8%	2.1%	1.8%	2.1%
NSW	1.3%	2.9%	1.6%	2.4%	1.7%	2.7%
QLD	4.2%	4.4%	2.7%	3.0%	3.2%	3.2%
USA	1.2%	1.4%	1.3%	2.0%	1.3%	2.2%

Based on unplanned hours/hours worked or scheduled to work. Excludes casual hours from 'total scheduled' hours as they are not entitled to personal leave. Unplanned absenteeism includes sick leave (paid and unpaid), carer's leave (paid and unpaid) and bereavement/compassionate leave.

PERCENTAGE OF EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS

	FY15	FY16	FY17
Percentage of employees covered by collective bargaining agreements	27.04%	21.78%	17.90%

COVERAGE OF TRANSURBAN'S DEFINED BENEFIT PLAN OBLIGATIONS

FY17: Superannuation liabilities are met by the Group's general resources. The total payment for Australian employees was approximately AUD\$12.3 M and payment to US employees participating was AUD\$5.78 M for FY17.

Transurban contributed the statutory minimum of 9.5% for Australian employees and 4% for USA employees. Maximum contributions apply. 100% of employees participate in the mandatory Australian plans. Approximately 82% of the US employees participate in the voluntary 401(k) retirement and profit sharing plan. The employer provided profit sharing contribution is discretionary and has historically paid 4% of its employee's eligible base earnings on an annual basis.



BENEFITS PROVIDED TO FULL-TIME EMPLOYEES AND NOT TEMPORARY OR PART-TIME EMPLOYEES

Performance Incentive – permanent full time and part time employees (with at least six months service), fixed term employees only as specified in contract or tenure of 24 months and greater.

Public transport offer – permanent full time and part time employees only who have completed their probation period.

Group Life Insurance – All employees of Transurban under the age of 65 are eligible for cover. This includes a person who works full time, part time, or on a fixed-term contract with a tenure of 12 months or longer, provided the person works at least 15 hours per week. This does not include persons employed on a casual basis.

Group Salary Continuance – Cover is compulsory upon employment with Transurban and available only while employed by the Transurban on a permanent basis for at least 15 hours per week. Employees must be in Active employment on the commencement date to be entitled to cover up to the Automatic Acceptance Level (AAL). If employees are not in active employment, then limited cover applies.

ShareLink Tax Exempt Offer – Australian Permanent full time or part time employees who have completed probation by the end of offer period (16 June 2017). Employees on maternity leave or salary continuance less than 12 months are eligible.

SENIORITY LEVEL DEFINITIONS

CEO: Chief Executive Officer

Senior Executive: Direct reports to the CEO. These employees are referred to as the key management personnel in the Group's Annual Report.

Senior Management: General Manager or equivalent. Typically manage a business unit or major project. In conjunction with Senior Executives, they either set or heavily contribute to the strategic directions/goals of the Group.

Middle Manager: Typically report to a Senior Executive or a Senior Manager with employees reporting into them. Typically manage a business unit and are responsible for setting policies and procedures for their area.

Manager: Typically report to a Middle Manager and manage a functional area within a business unit, with employees reporting into them.

Professional/Technical: Employees apply technical and/or professional knowledge to their role and may have specialty degree/training. They may or may not have staff reporting to them e.g. Engineer.

Supervisor/Team Leader: Employees typically report to a 'Manager' and typically manage a functional team e.g. Customer Service Team Leader.

Customer Service: Employees are typically operationally based e.g. Customer Service Officer.

Administration/Support: Employees are typically in administration, coordination and business support roles.



ASSET SCOPE

Transurban includes information in its Sustainability Report about all assets and projects in which it holds an interest (Table 1).

For the purpose of some environmental metrics and targets in the body of the report, we limit the scope of reporting to operational assets under Transurban financial control (Table 2). This excludes construction projects, and assets in which Transurban has an equity interest but not direct management control (M5 and M7).

Separate to the Sustainability Report but provided for transparency, Transurban reports under the Australian National Greenhouse and Energy Reporting (NGER) Act which sets obligations limited to Australian assets over which Transurban has day-to-day 'operational control' (Table 3). This excludes our US assets and some Australian assets over which contractors have day-to-day asset management.

The tables below show an outline of different ownership, operational and reporting considerations for different assets.

Table 1. Transurban has interests in 15 toll roads and a number of development projects. Roads and construction projects active during FY17 are shown below by location. Other projects were in development but not construction in FY17.

Asset (region)	Roads in FY17														Construction projects							
	CL (VIC)	M2 (NSW)	LCT (NSW)	ED (NSW)	CCT (NSW)	M5 (NSW)	M7 (NSW)	GM (QLD)	LM (QLD)	GBB (QLD)	C7 (QLD)	LW (QLD)	APL (QLD)	495 (US)	95 (US)	CTW (VIC)	WGT (VIC)	NCX (NSW)	GUN (QLD)	LEP (QLD)	ICB (QLD)	395 (US)

Table 2. In the FY17 Sustainability Report, many key environmental metrics and targets are focused on assets over which Transurban has financial control (>50% ownership) and the greatest ability to drive improvement.

Asset (%)	Transurban financial control (>50% ownership) in FY17														Investment		Construction projects					
	CL (100%)	M2 (100%)	LCT (100%)	ED (75.1%)	CCT (100%)	GM (62.5%)	LM (62.5%)	GBB (62.5%)	C7 (62.5%)	LW (62.5%)	APL (62.5%)	495 (100%)	95 (100%)	M5 (50%)	M7 (50%)	CTW	WGT	NCX	GUN	LEP	ICB	395

Table 3. Separate to the Sustainability Report, Transurban reports energy and greenhouse gas emissions data under the Australian National Greenhouse and Energy Reporting (NGER) Act at the end of October each year.

Asset	Reported under NGER regulations for FY17									Not reported under NGER regulations for FY17													
	CL	M2	LCT	ED	CCT	GM	LM	GBB		C7	LW	APL	495	95	M5	M7	CTW	WGT	NCX	GUN	LEP	ICB	395

Abbreviations CL: CityLink, M2: Hills M2, LCT: Lane Cove Tunnel, ED: Eastern Distributor, CCT: Cross City Tunnel, M5: M5 Southwest, M7: Westlink M7, GM: Gateway Motorway, LM: Logan Motorway, GBB: Go Between Bridge, C7: CLEM7, LW: Legacy Way, APL: AirportLink, 495: 495 Express Lanes, 95: 95 Express Lanes, CTW: CityLink Tulla Widening, NCX: NorthConnex, GUN: Gateway Upgrade North, LEP: Logan Enhancement Project, ICB: Inner City Bypass, 395: 395 Express Lanes, 95S: 95 Express Lanes Southern Extension.



Environment Data

GHG EMISSIONS

		FY14	FY15	FY16*	FY17	FY17*
Total direct and indirect GHG emissions	tonnes CO₂-e	121,463	115,815	113,264	159,237	151,260
Total Scope 1 & 2	tonnes CO₂-e	57,202	96,110	95,348	129,258	123,274
Scope 1	tonnes CO ₂ -e	149	1,944	2,020	3,190	2,746
Scope 2	tonnes CO ₂ -e	57,053	94,166	93,328	126,068	120,528
Scope 3 [#]	tonnes CO ₂ -e	64,261	19,705	17,916	29,979	27,986
Customer travel emissions	tonnes CO₂-e	703,149	1,685,752	1,231,750	1,964,705	1,372,482

* M5 and M7 excluded from Transurban's '10-in-10' targets and totals for energy and emissions

Scope 3 emissions include upstream impacts of fuel and electricity supply, fugitive emissions from landfill waste, and Transurban corporate air travel. Due to large variations each year in waste quantities depending on major works (and also potential for incompleteness of waste data), calculated Scope 3 emissions may fluctuate significantly year-on-year. Scope 1 and 2 emissions are considered a better representation of Transurban's corporate emissions profile.

FY17 ONLY		CL	M2	LCT	ED	CCT	M5*	M7*	GM	LM	GBB	C7	LW	APL	495	95	Off.	Total	Total*
Total direct and indirect GHG emissions	tonnes CO₂-e	30,854	4,249	20,829	6,987	12,601	1,893	6,084	5,115	2,114	114	12,796	12,660	34,252	1,428	755	6,506	159,237	151,260
Total Scope 1 & 2	tonnes CO₂-e	25,763	3,702	18,228	6,078	10,660	1,213	4,771	4,224	1,135	96	10,576	10,438	28,430	1,314	672	1,959	129,258	123,274
Scope 1	tonnes CO ₂ -e	254	496	118	101	67	117	327	259	539	5	176	136	192	156	228	20	3,190	2,746
Scope 2	tonnes CO ₂ -e	25,509	3,207	18,109	5,977	10,594	1,096	4,444	3,964	596	91	10,400	10,302	28,238	1,158	444	1,939	126,068	120,528
Scope 3	tonnes CO ₂ -e	5,091	546	2,601	909	1,941	680	1,313	892	979	19	2,220	2,222	5,821	114	83	4,547	29,979	27,986
Customer travel emissions	tonnes CO₂-e	277,113	207,751	26,138	50,885	9,416	236,566	355,656	325,210	292,596	723	15,713	8,450	26,893	40,410	91,181	NA	1,964,705	1,372,482

* M5 and M7 excluded from Transurban's '10-in-10' targets and totals for energy and emissions



ENERGY CONSUMPTION

		FY14	FY15	FY16*	FY17	FY17*
Total energy consumption	GJ	221,849	403,516	415,829	586,839	556,568
Direct- Fuel	GJ	2,371	28,180	29,251	45,838	39,483
Natural gas	GJ	821	599	558	780	780
Petrol	GJ	1,029	15,523	4,375	9,359	7,957
Diesel	GJ	509	11,813	22,271	35,695	30,742
LPG	GJ	12	245	2,047	4	4
Indirect- Electricity	GJ	219,478	375,336	386,577	541,002	517,085
Grid electricity	GJ	210,619	363,222	374,313	528,594	504,850
Solar and GreenPower	GJ	8,859	12,114	12,264	12,407	12,235

* M5 and M7 excluded from Transurban's '10-in-10' targets and totals for energy and emissions

FY17 ONLY		CL	M2	LCT	ED	CCT	M5*	M7*	GM	LM	GBB	C7	LW	APL	495	95	Off.	Total	Total*
Total energy consumption	GJ	88,063	20,791	79,301	27,222	46,641	6,577	23,694	21,985	10,394	487	50,498	49,476	133,099	12,957	7,457	8,197	586,839	556,568
Direct- Fuel	GJ	3,813	7,048	1,690	1,431	946	1,707	4,648	3,688	7,641	68	2,498	1,926	2,772	2,309	3,372	279	45,838	39,483
Natural gas	GJ	780	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	780	780
Petrol	GJ	77	463	261	16	0	1,251	151	214	0	0	191	8	1,028	2,309	3,372	17	9,359	7,957
Diesel	GJ	2,953	6,585	1,429	1,415	946	456	4,497	3,474	7,641	68	2,307	1,918	1,744	0	0	262	35,695	30,742
LPG	GJ	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Indirect- Electricity	GJ	84,250	13,743	77,611	25,791	45,694	4,870	19,046	18,297	2,753	419	48,000	47,550	130,328	10,648	4,084	7,918	541,002	517,085
Grid	GJ	84,250	13,743	68,298	25,615	42,953	4,698	19,046	18,297	2,753	419	48,000	47,550	130,328	10,648	4,084	7,913	528,594	504,850
Solar and GreenPower	GJ	0	0	9,313	176	2,742	172	0	0	0	0	0	0	0	0	0	4	12,407	12,235

* M5 and M7 excluded from Transurban's '10-in-10' targets and totals for energy and emissions

Fuel usage is primarily by operations and maintenance contractors on each asset. Transurban collects fuel data from its largest contractors and extrapolates this data to account for any smaller or short term contractors where fuel data collection is impractical. In FY17 this extrapolated data accounted for approximately 13% of Transurban's total fuel use.



SIGNIFICANT AIR EMISSIONS

Air emissions data reflects customer vehicle emissions extracted by tunnel ventilation systems.

CityLink	UNIT	FY14	FY15	FY16	FY17
NOx (oxides of nitrogen)	tonnes	105	106	111	110
CO (carbon monoxide)	tonnes	223	214	224	136
PM10 (fine particles <-10 microns)	tonnes	6	6	6	6
VOC (volatile organic compounds)	tonnes	4	4	4	4

Lane Cove Tunnel	UNIT	FY14	FY15	FY16	FY17
NOx (oxides of nitrogen)	tonnes	46	52	111	43
CO (carbon monoxide)	tonnes	91	98	224	71
PM10 (fine particles <-10 microns)	tonnes	2	2	6	2
VOC (volatile organic compounds)	tonnes	44	47	4	42

Cross City Tunnel	UNIT	FY14	FY15	FY16	FY17
NOx (oxides of nitrogen)	tonnes	NA	2.15	111	9.1
CO (carbon monoxide)	tonnes	NA	8.28	224	25.0
PM10 (fine particles <-10 microns)	tonnes	NA	0.31	6	0.4
VOC (volatile organic compounds)	tonnes	NA	0.43	4	2.2

The three tunnels above have regulatory requirements for total air emissions load (total tonnes emitted) as well as in-tunnel air quality. Total air emissions load for these three tunnels for FY17 was 162 tonnes NOx, 231 tonnes CO, 8 tonnes PM10 and 48 tonnes PM2.5. For FY17 there were no exceedances of air quality limits for these assets.

Queensland tunnel assets CLEM7, Legacy Way and AirportLinkM7 also have exhaust ventilation systems and regulatory requirements on ambient air quality. In-tunnel air quality as well as ambient air quality monitoring at nearby locations is undertaken and reported on the go via network website: <http://govianetwork.com.au/sustainability/air-quality-reports-2/>. It has not been reported in the same tables above since it is concentration-based air quality data (e.g. ppm) rather than total air emissions load (e.g. tonnes). In FY17 there were three exceedances of ambient air quality goals on Legacy Way and three exceedances on AirportLink. Each of these were related to particulate matter concentrations in the ambient air. In circumstances where an exceedance of the ambient air quality goals occurs, Transurban reports to the regulator about the performance of tunnel ventilation systems at the time and investigates whether tunnel ventilation or other unrelated outdoor sources have impacted ambient air quality.

Hills M2 and Eastern Distributor assets also feature shorter tunnel or partially enclosed sections that do not require the same extent of air quality management as longer tunnels. In-tunnel air quality is monitored against air quality goals but not required by regulations to be publicly reported.



Environment Data

WATER CONSUMPTION

Potable water use	UNIT	FY14*	FY15*	FY16	FY17
CityLink	m ³	10,100	13,651	15,004	55,161
Hills M2	m ³	3,690*	422	423	446
Lane Cove Tunnel	m ³	596	451	592	592
Eastern Distributor	m ³	691	724	724	929
Cross City Tunnel	m ³	n/a	1,857	2,706	2,706
M5 Southwest	m ³	4,676*	2,076	2,076	2,076
Westlink M7	m ³	n/a	n/a	n/a	2,436
Gateway	m ³	n/a	n/a	130	160
Logan	m ³	n/a	n/a	n/a	0
GBB	m ³	n/a	n/a	n/a	0
CLEM7	m ³	n/a	1,070	1,070	1,070
Legacy	m ³	n/a	n/a	8,165	8,165
AirportLink	m ³	n/a	n/a	n/a	98
495 Express Lanes	m ³	776	530	530	530
95 Express Lanes	m ³	n/a	204	204	204
Corporate offices	m ³	546	1,675	1,675	1,993
TOTAL	m³	21,075	22,660	33,298	76,565

* Includes water usage on upgrade projects that were reported in previous Sustainability Reports

Estimates used for water usage on some assets based on historical figures.

FY17 ONLY	UNIT	CL	M2	LCT	ED	CCT	M5*	M7*	GM & LM	GBB	C7	LW	APL	495	95	Off.	Total	Total*
Potable water	m ³	55,161	446	592	929	2,706	2,076	2,436	160	0	1,070	8,165	98	530	204	1,993	76,565	72,053
Recycled	m ³	172,585	-	-	-	-	-	-	120	-	-	-	-	-	-	-	172,705	172,705
Total water consumption	m³	227,746	446	592	929	2,706	2,076	2,436	280	0	1,070	8,165	98	530	204	1,993	249,270	244,758



GROUNDWATER

Groundwater totals are natural drainage into road tunnels. Most of this water is treated by water treatment plants and either returned to aquifers or discharged to waterways.

CityLink	UNIT	FY15	FY16	FY17
Total water withdrawal, of which	m³	229,392	190,324	254,623
Groundwater from tunnels	m ³	215,741	175,320	199,462
Total potable water use, of which	m³	13,651	15,004	55,161
Deluge testing in tunnels	m ³	1,144	1,144	554
Groundwater recharge*	m ³	6,569	6,606	5,028
Shallow recharge	m ³	n/a	n/a	42,260
Irrigation	m ³	5,938	7,254	7,319
Volume of water recycled/reused	m³	188,755	175,320	172,585
Percentage of water recycled/reused	m³	82%	92%	87%
Water discharge by destination	UNIT	FY15	FY16	FY17
Total water discharge	m³	226,061	181,926	205,614
Groundwater recharge	m ³	195,324	178,735	174,935
Groundwater discharge to Yarra River	m ³	26,986	0	26,877
Discharge to sewer	m ³	3,751	3,191	3,802

* This figure comprises potable water used to clean the filters at the water treatment plant and additional recharge to the aquifers as required.

Lane Cove Tunnel	UNIT	FY15	FY16	FY17
Total water withdrawal, of which	m³	51,151	51,210	55,742
Groundwater from tunnels	m ³	50,700	50,618	55,150
Total potable water use	m ³	451	592	592
Water discharge by destination	UNIT	FY15	FY16	FY17
Total water discharge	m³	50,700	50,618	55,150
Groundwater discharge to rivers/waterways	m ³	50,700	50,618	55,150



Environment Data

Cross City Tunnel	UNIT	FY15	FY16	FY17
Total water withdrawal, of which	m³	110,724	115,498	135,013
Groundwater from tunnels	m ³	108,867	112,792	132,307
Total potable water use	m ³	1,857	2,706	2,706
Water discharge by destination	UNIT	FY15	FY16	FY17
Total water discharge	m³	108,867	112,792	132,307
Groundwater discharge to rivers/waterways	m ³	103,607	111,150	131,285
Discharge to sewer	m ³	5,260	1,642	1,022

CLEM7	UNIT	FY15	FY16	FY17
Total water withdrawal, of which	m³	51,280	47,081	42,181
Groundwater from tunnels	m ³	50,210	46,011	41,111
Total potable water use	m ³	1,070	1,070	1,070
Water discharge by destination	UNIT	FY15	FY16	FY17
Total water discharge	m³	50,210	46,011	41,111
Groundwater discharge to rivers/waterways	m ³	50,210	46,011	41,111

Legacy Way	UNIT	FY15	FY16	FY17
Total water withdrawal, of which	m³	n/a	109,080	86,593
Groundwater from tunnels	m ³	n/a	100,915	84,556
Total potable water use	m ³	n/a	8,165	2,037
Water discharge by destination	UNIT	n/a	FY16	FY17
Total water discharge	m ³	n/a	100,915	84,556
Groundwater discharge to rivers/waterways	m ³	n/a	100,915	84,556



WASTE AND RECYCLING

	UNIT	FY14	FY15	FY16	FY17	FY17*
Total waste by disposal method:	tonnes	40,583	3,389	2,326	6,595	4,715
Landscaping	tonnes	719	171	n/a	n/a	n/a
Landfill	tonnes	1,700	2,298	2,167	2,755	2,222
Recycled	tonnes	38,165	920	160	3,840	2,493

FY17 ONLY	UNIT	CL	M2	LCT	ED	CCT	M5*	M7*	GM	LM	GBB	C7	LW	APL	495	95	Off.^	Total	Total*
Total waste by disposal method:	tonnes	1,244	60	6	91	318	244	1,637	2,036	381	0	89	64	11	83	331	331	6,595	4,715
Landfill Tonnes	tonnes	1,244	29	4	20	188	233	301	30	377	0	35	46	9	44	197	197	2,755	2,222
Recycled Tonnes	tonnes	0	32	2	71	130	11	1,336	2,006	4	0	53	18	2	39	135	135	3,840	2,493

^ Office waste totals include some actual data and some estimation based on waste audits. Recycled waste for corporate offices include recycled paper, organic waste and commingled recyclables.

E-TAG DISPOSAL MANAGEMENT	FY14	FY15	FY16	FY17
e-TAGs issued - CityLink, Roam and Roam Express	290,931	604,680	752,719	837,281
e-TAGs recycled - CityLink, Roam and Roam Express	109,892	179,746	190,574	215,174

e-TAGs that are returned by customers and found to not be working are returned to our supplier for proper disposal. The tags are dismantled into their separate components and are recycled or disposed of as appropriate.

NOTES

Transurban is reporting environmental data on all operational assets above. Construction projects CityLink Tulla Widening, West Gate Tunnel, NorthConnex, Gateway Upgrade North, Logan Enhancement Project, Inner City Bypass, 395 Express Lanes and 95 Express Lanes Southern Extension are under contractor control during Design and Construct contracts. Transurban collects data on these assets but has not included this in the data tables above in order to better show steady-state operational trends. AirportLinkM7 was acquired by Transurban in April 2016 and has been included for the first time in our FY17 data.

Discrepancies in totals may be due to rounding.



Transurban GRI Index 2017

SUSTAINABILITY REPORT FY17

Reported in accordance with the GRI G4 'Core' Reporting Guidelines

GENERAL STANDARD DISCLOSURES	LOCATION/RESPONSE
STRATEGY AND ANALYSIS	
G4-1	Message from the CEO
G4-2	About Transurban Sustainability Strategy
ORGANISATIONAL PROFILE	
G4-3	About Transurban
G4-4	About Transurban
G4-5	About Transurban > Our assets and markets
G4-6	About Transurban > Our assets and markets
G4-7	About Transurban
G4-8	About Transurban > Our assets and markets
G4-9	About Transurban Think Long Term Be Good Neighbours > Our People
G4-10	Be Good Neighbours > Our People Employee data sheet
G4-11	Employee data sheet
G4-12	Be Good Neighbours > Supply chain
G4-13	Our Report
G4-14	Think Long Term > Governance Transurban Annual Report, Financial Statements and Investor Presentations 2017
G4-15	Sustainability Strategy Be Good Neighbours > Stakeholder engagement Think Long Term > Governance > Memberships Our Report
G4-16	Be Good Neighbours > Stakeholder engagement Think Long Term > Governance > Memberships
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES	
G4-17	Our Report Transurban Annual Report, Financial Statements and Investor Presentations 2017
G4-18	Our Report > Materiality
G4-19	Our Report > Materiality
G4-20	Our Report > Materiality
G4-21	Our Report > Materiality
G4-22	Performance data Employee data sheet Environment data sheet
G4-23	Our Report
STAKEHOLDER ENGAGEMENT	
G4-24	Be Good Neighbours > Stakeholder engagement
G4-25	Be Good Neighbours > Stakeholder engagement
G4-26	Be Good Neighbours > Stakeholder engagement
G4-27	Be Good Neighbours > Stakeholder engagement
REPORT PROFILE	
G4-28	Our Report
G4-29	Our Report
G4-30	Our Report
G4-31	Our Report > Contact us
G4-32	Our Report
G4-33	Our Report > Assurance



GENERAL STANDARD DISCLOSURES

LOCATION/RESPONSE

GOVERNANCE

G4-34 [Transurban Annual Report, Financial Statements and Investor Presentations 2017](#)

ETHICS AND INTEGRITY

G4-56 Strategy
Think Long Term > Governance
Be Good Neighbours > Our people > Our values

ASPECT DMA AND INDICATORS

LOCATION/RESPONSE

CATEGORY: ECONOMIC

ECONOMIC PERFORMANCE

G4-DMA	Generic Disclosures on Management Approach	Think Long Term
G4-EC1	Direct economic value generated and distributed	Strategy Think Long Term Be Good Neighbours > Investing in communities Transurban Annual Report, Financial Statements and Investor Presentations 2017
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Think Long Term > Climate change
G4-EC3	Coverage of the organization's defined benefit plan obligations	Employee data sheet
G4-EC4	Financial assistance received from government	We do not receive any financial assistance from government. However, we partner with governments to deliver major infrastructure projects which may include government contributions. Ownership of these assets is returned to the government at the end of the toll concession deed.

MARKET PRESENCE

G4-DMA	Generic Disclosures on Management Approach	Not material. We operate in Australia and the USA and have a strong presence in each of these countries where we have significant investments in the development, operation and management of toll roads. Transurban seeks to attract and retain the highest quality candidates and currently pays above minimum wage, and while we do not have a local hiring policy, it is common practice to employ locally wherever practicable.
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INDIRECT ECONOMIC IMPACTS

G4-DMA	Generic Disclosures on Management Approach	Strategy Think Long Term Be Good Neighbours > Investing in communities Transurban Annual Report, Financial Statements and Investor Presentations 2017
G4-EC7	Development and impact of infrastructure investments and services supported	Strategy Think Long Term Be Good Neighbours > Investing in communities Transurban Annual Report, Financial Statements and Investor Presentations 2017
G4-EC8	Significant indirect economic impacts, including the extent of impacts	Strategy Think Long Term Be Good Neighbours > Investing in communities Transurban Annual Report, Financial Statements and Investor Presentations 2017

PROCUREMENT PRACTICES

G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Supply chain
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	Be Good Neighbours > Supply chain > Social procurement We maintain a number of long-term partnerships with social enterprises to support local employers and small businesses.

CATEGORY: ENVIRONMENTAL

MATERIALS

G4-DMA	Generic Disclosures on Management Approach	Use less Our Report > Materiality
G4-EN1	Materials used by weight or volume	Environment data sheet

ENERGY

G4-DMA	Generic Disclosures on Management Approach	Use less > Energy
G4-EN3	Energy consumption within the organization	Environment data sheet
G4-EN4	Energy consumption outside of the organization	Environment data sheet
G4-EN6	Reduction of energy consumption	Use less > Energy
G4-EN7	Reductions in energy requirements of products and services	Use less > Energy



ASPECT	DMA AND INDICATORS	LOCATION/RESPONSE
WATER		
G4-DMA	Generic Disclosures on Management Approach	Use less > Water, materials and waste Our Report > Materiality
G4-EN8	Total water withdrawal by source	Use less > Water, materials and waste Environment data sheet
G4-EN9	Water sources significantly affected by withdrawal of water	Use less > Water, materials and waste Environment data sheet
G4-EN10	Percentage and total volume of water recycled and reused	Use less > Water, materials and waste Environment data sheet
BIODIVERSITY		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Regenerating our roads
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Think Long Term > Regenerating our roads
G4-EN13	Habitats protected or restored	Think Long Term > Regenerating our roads
EMISSIONS		
G4-DMA	Generic Disclosures on Management Approach	Use Less > Greenhouse gas emissions
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Use Less > Greenhouse gas emissions
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	Use Less > Greenhouse gas emissions
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	Use Less > Greenhouse gas emissions
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Use Less > Greenhouse gas emissions
G4-EN21	NO _x , SO _x , and other significant air emissions	Environment data sheet
EFFLUENTS AND WASTE		
G4-DMA	Generic Disclosures on Management Approach	Use Less > Water, materials and waste
G4-EN22	Total water discharge by quality and destination	Use Less > Water, materials and waste Environment data sheet
G4-EN23	Total weight of waste by type and disposal method	Use Less > Water, materials and waste Environment data sheet
G4-EN24	Total number and volume of significant spills	Environment data sheet
PRODUCTS AND SERVICES		
G4-DMA	Generic Disclosures on Management Approach	Use Less
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Use Less Think Long Term > Regenerating our roads
COMPLIANCE		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Governance Be Good Neighbours > Health, Safety & Environment
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	None
TRANSPORT		
G4-DMA	Generic Disclosures on Management Approach	Use Less > Greenhouse gas emissions Be Good Neighbours > Supply chain > Major project supply chain
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	Be Good Neighbours > Supply chain > Major project supply chain Environment data sheet
OVERALL		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Health, safety and environment
G4-EN31	Total environmental protection expenditures and investments by type	We undertake regular environmental management activities and compliance audits to comply with environmental regulations and other requirements set out in our concession deeds. The cost of these activities is part of everyday operation of our assets and is difficult to report separately.
SUPPLIER ENVIRONMENTAL ASSESSMENT		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Supply chain
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	Be Good Neighbours > Supply chain All suppliers are subject to Transurban's Supplier Sustainability Code of Practice, which includes environmental criteria. All major contractors for infrastructure projects must address our sustainability objectives for the project in their tender.



ASPECT	DMA AND INDICATORS	LOCATION/RESPONSE
ENVIRONMENTAL GRIEVANCE MECHANISMS		
G4-DMA	Generic Disclosures on Management Approach	Not material. Transurban may receive environmental complaints from members of the public regarding potential issues such as noise, air quality or the impact of major works. Complaints are investigated to ensure that we comply with environmental regulations.
CATEGORY: SOCIAL		
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK		
EMPLOYMENT		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	Employee data sheet
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Employee data sheet
G4-LA3	Return to work and retention rates after parental leave, by gender	Employee data sheet
LABOR/MANAGEMENT RELATIONS		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	Employee data sheet
OCCUPATIONAL HEALTH AND SAFETY		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Health, Safety & Environment
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Be Good Neighbours > Health, Safety & Environment > Employee HSE performance
TRAINING AND EDUCATION		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people > Learning and development
G4-LA9	Average hours of training per year per employee by gender, and by employee category	Employee data sheet
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Be Good Neighbours > Our people > Learning and development
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Performance and development reviews occur twice per year for all Transurban employees
DIVERSITY AND EQUAL OPPORTUNITY		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people > Diversity
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Be Good Neighbours > Our people > Diversity Employee data sheet
EQUAL REMUNERATION FOR WOMEN AND MEN		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people > Diversity
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	Employee data sheet
SUPPLIER ASSESSMENT FOR LABOR PRACTICES		
G4-DMA	Generic Disclosures on Management Approach	Not material. Our business and suppliers are governed by the laws and labour practices of the two markets where we operate – USA and Australia. Labour practices in these markets are thoroughly regulated.
LABOR PRACTICES GRIEVANCE MECHANISMS		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	Be Good Neighbours > Our people
SUB-CATEGORY: HUMAN RIGHTS		
INVESTMENT		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people



ASPECT	DMA AND INDICATORS	LOCATION/RESPONSE
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Employee data sheet
NON-DISCRIMINATION		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people
G4-HR3	Total number of incidents of discrimination and corrective actions taken	None
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING		
G4-DMA	Generic Disclosures on Management Approach	Not material. Our business and suppliers are governed by the laws and labour practices of the two markets where we operate - USA and Australia. Labour practices in these markets are thoroughly regulated.
CHILD LABOR		
G4-DMA	Generic Disclosures on Management Approach	Not material. Our business and suppliers are governed by the laws and labour practices of the two markets where we operate - USA and Australia. Labour practices in these markets are thoroughly regulated.
FORCED OR COMPULSORY LABOR		
G4-DMA	Generic Disclosures on Management Approach	Not material. Our business and suppliers are governed by the laws and labour practices of the two markets where we operate - USA and Australia. Labour practices in these markets are thoroughly regulated.
SECURITY PRACTICES		
G4-DMA	Generic Disclosures on Management Approach	Not material. Transurban does not ordinarily hire security personnel
INDIGENOUS RIGHTS		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Our people > Diversity > Cultural diversity
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	None
ASSESSMENT		
G4-DMA	Generic Disclosures on Management Approach	Not material. Our business and suppliers are governed by the laws and labour practices of the two markets where we operate - USA and Australia. Labour practices in these markets are thoroughly regulated.
SUPPLIER HUMAN RIGHTS ASSESSMENT		
G4-DMA	Generic Disclosures on Management Approach	Not material. Our business and suppliers are governed by the laws and labour practices of the two markets where we operate - USA and Australia. Labour practices in these markets are thoroughly regulated.
HUMAN RIGHTS GRIEVANCE MECHANISMS		
G4-DMA	Generic Disclosures on Management Approach	Not material. Our business and suppliers are governed by the laws and labour practices of the two markets where we operate - USA and Australia. Labour practices in these markets are thoroughly regulated.
SUB-CATEGORY: SOCIETY		
LOCAL COMMUNITIES		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Investing in communities
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Extensive community consultation and impact assessment is undertaken as part of any major project. Be Good Neighbours > Stakeholder engagement Think Long Term > Improving our networks
G4-SO2	Operations with significant actual and potential negative impacts on local communities	Use Less > Climate change, Greenhouse gas and air emissions > Air quality
ANTI-CORRUPTION		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Governance
G4-SO4	Communication and training on anti-corruption policies and procedures	Think Long Term > Governance
PUBLIC POLICY		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Governance > Code of Conduct
G4-SO6	Total value of political contributions by country and recipient/beneficiary	Think Long Term > Governance > Code of Conduct
ANTI-COMPETITIVE BEHAVIOR		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Governance
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	None



ASPECT	DMA AND INDICATORS	LOCATION/RESPONSE
COMPLIANCE		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Governance
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	None
SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY		
G4-DMA	Generic Disclosures on Management Approach	Not material. We work closely with our major suppliers for large infrastructure projects such as NorthConnex and the CityLink-Tulla widening to address impacts on local communities and wider society.
GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY		
G4-DMA	Generic Disclosures on Management Approach	Not material. Transurban may receive complaints from members of the public regarding potential issues such as account management, noise, traffic or the impact of major works. These complaints are not generally reflective of a widespread impact on society. Complaints are investigated as required to ensure that we comply with appropriate standards, such as for our asset management and customer service.
SUB-CATEGORY: PRODUCT RESPONSIBILITY		
CUSTOMER HEALTH AND SAFETY		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Road safety
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	Be Good Neighbours > Road safety
PRODUCT AND SERVICE LABELING		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Enhancing customer experience
G4-PR5	Results of surveys measuring customer satisfaction	Be Good Neighbours > Enhancing customer experience
MARKETING COMMUNICATIONS		
G4-DMA	Generic Disclosures on Management Approach	Be Good Neighbours > Enhancing customer experience
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	None
CUSTOMER PRIVACY		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Governance > Customer Privacy
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Think Long Term > Governance > Customer Privacy
COMPLIANCE		
G4-DMA	Generic Disclosures on Management Approach	Think Long Term > Governance
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	None

