

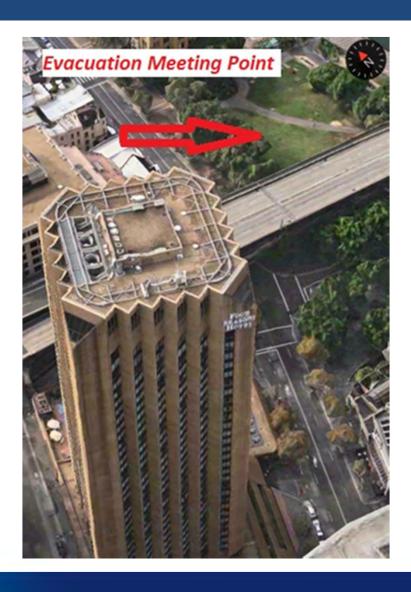
Infrastructure Pipeline of Projects Industry Briefing

6 September 2017



Welcome

Emergency procedures



Agenda

Time	Speaker
7.55am	Welcome
8.00am	The Hon Andrew Constance MP Minister for Transport and Infrastructure
8.10am	Tim Reardon, Secretary TfNSW Jim Betts, CEO iNSW
8.20am	Kate Wickett, Project Director, Future Transport
8.40am	Stephen Troughton, Deputy Secretary, Infrastructure and Services
9.10am	Anna Bradley, Manager, Integrated Planning
9.20am	Tim Poole, Program Director, Parramatta Light Rail
9.40am	Emma Reedy, Manager Operational Delivery
10am	Morning tea break
10.40am	Helen Williams, Acting Director Rail Systems Development
11.00am	Howard Collins, CE Sydney Trains & A/CE NSW TrainLink
11.20am	Mark Jones, A/Director, Sydney Trains Strategic Procurement
11.40am	Pete Allaway, COO, NSW TrainLink
12.00noon	Q&A
12.15pm	Event concludes



The Hon. Andrew Constance MP

Minister for Transport and Infrastructure



Transport and Infrastructure

Tim Reardon
Secretary
Transport for NSW

Jim Betts
CEO
Infrastructure NSW

future.transport.nsw.gov.au



Future Transport Strategy

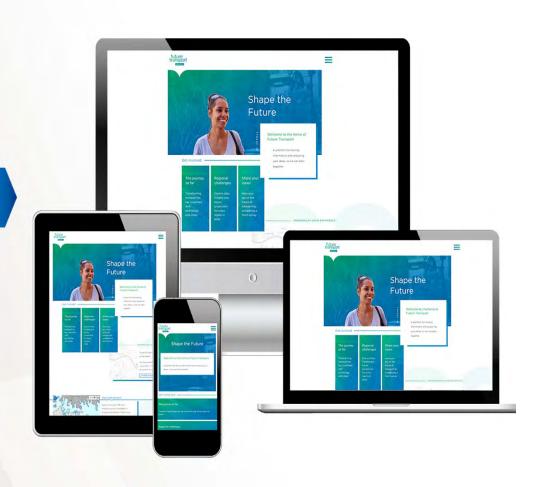
Kate Wickett

Project Director, Future Transport Transport for NSW

6 September 2017

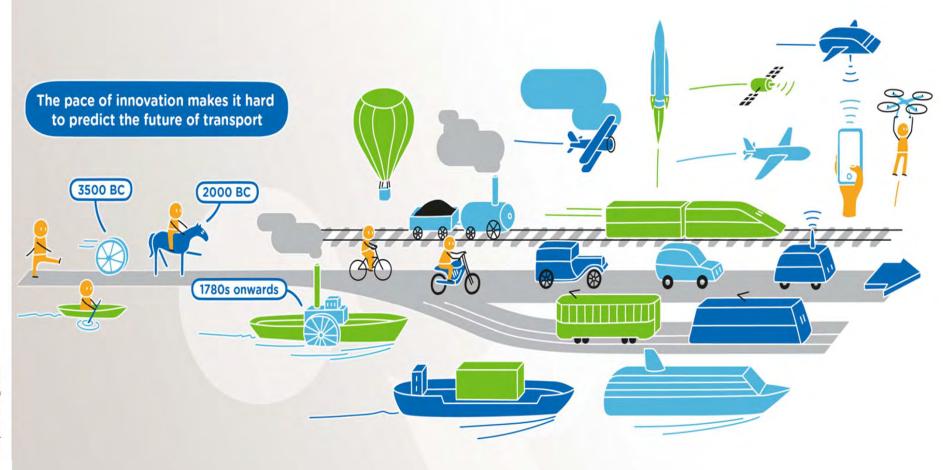






Future Transport context

An opportunity to shape rapid change for the best possible outcomes





Cross-government integration



Greater SydneyCommission

And other key agencies including:





New South Wales







Strategy

Regional Services

Metro Services

Regional Infrastructure

Metro Infrastructure

Supporting Plans

The Strategy sets the vision, directions and outcomes framework to guide investment

The Services Plans set the service outcomes for Greater Sydney and regional NSW for the movement of people and freight, to meet customer needs and deliver responsive, innovative services

The Infrastructure Plans define the network required to achieve the service outcomes, enhancements, maintenance and renewal, and future corridors for investigation and protection

The Supporting Plans are more detailed issuesbased or place-based planning documents which form part of the Future Transport suite

11

Changing customer

Service requirements

Personalised

Potential role of Government

Services of the future

Defined by outcomes

Based on efficient allocation of space and

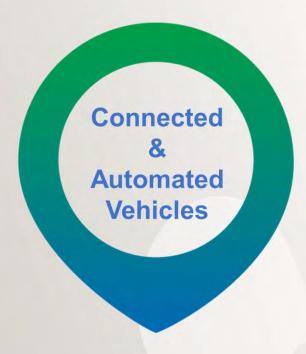
user priority

Potentially delivered by 'retail' providers

Opportunity for commercial approach to network access



The potential changing role of government



Potential consequences

- CAV leads to more road travel
- CAV congestion
- MaaS limited to those who purchase new vehicles with this technology
- Empty car parks

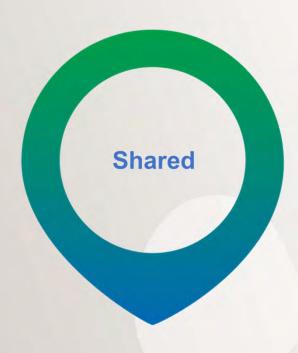


Potential policy levers

- Road use prioritisation policy
- Opal access for MaaS providers
- Adaptive re-use of car parks
- Digital connection to network allows greater efficiencies to offset higher demand



The potential changing role of government



Potential consequences

- Competition road space between mass transit and mobility service providers
- Competition for kerb space
- MaaS not accessible



Potential policy levers

- Access to clearways/bus lanes for ride-pooling vehicles
- Investment in kerbside drop-off / pick-up locations
- Regulation of MaaS vehicles tensure accessibility

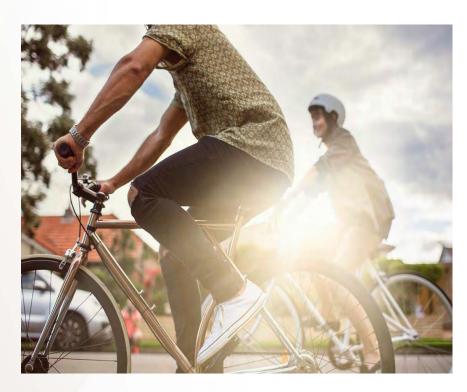


The potential changing role of government



Potential consequences

- Active mobility may continue to have limited usage due to safety concerns and the lack of end-of-trip facilities
- Piles of hired bikes discarded on footpath



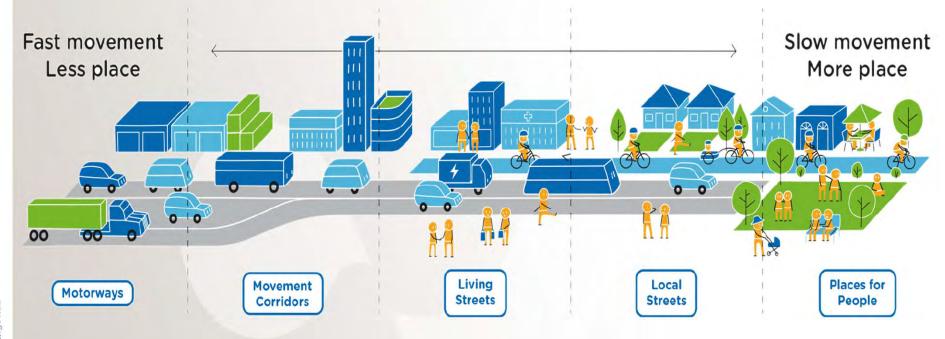
Potential policy levers

- Land use planning incorporates segregated pathways
- Seed funding in shared use assets
- Incentivises providers on key outcomes



2056 Integrated land use and transport planning

Balancing movement with place



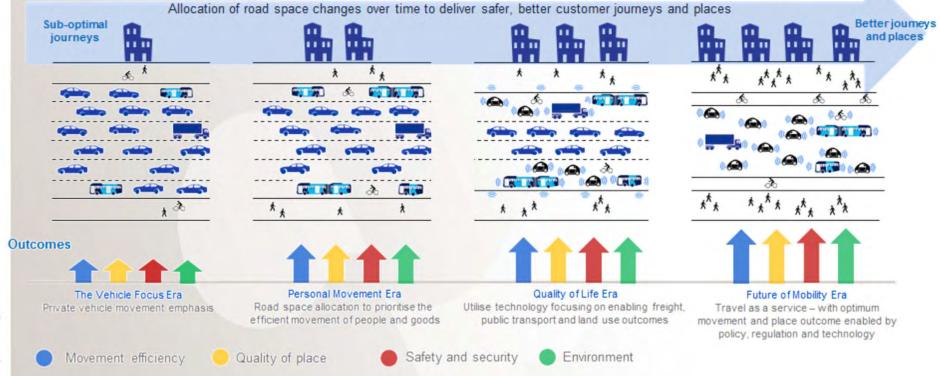
Close alignment with the Greater Sydney Commission

Sharing data and co-development

Potential evolution of road use

A transport system that is safer, more efficient and creates better places

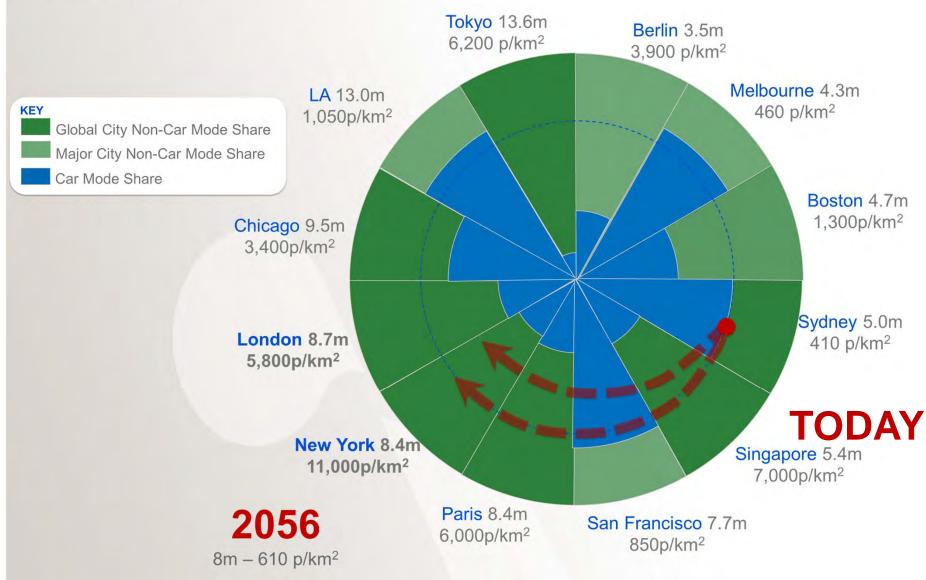
Future Sydney - the road transport system - safer, more efficient and reliable movement and place making outcomes











Another 'Adelaide in Sydney'

- Western Sydney Airport
- Growth and densification





2056 Regional NSW – diverse & dynamic communities

- 3.1 million people live in Regional NSW - 40% of population
- By 2056 population will be 3.6 million
- 9 regions in Regional NSW
- Each has one or more cities or centres and many towns and villages
- Some areas of Regional NSW are heavily influenced by or relate to other states and capital cities





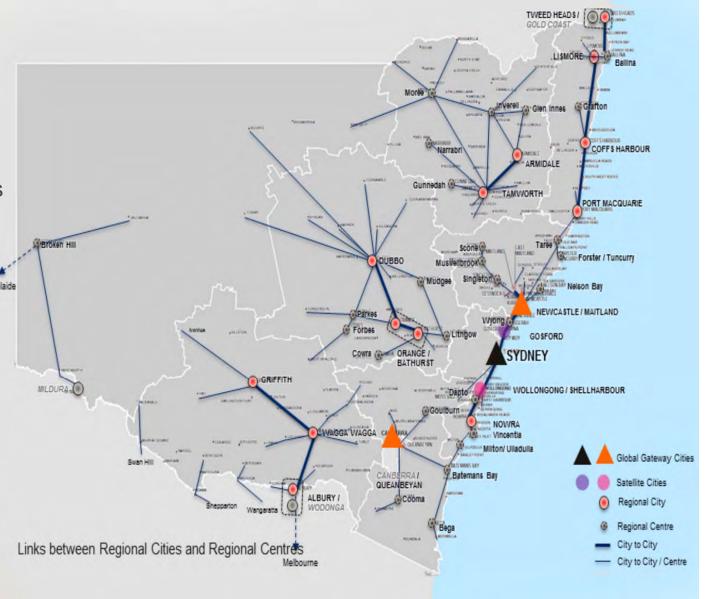
future transport 2056 Regional centres hierarchy to guide service delivery

• By 2056 Regional NSW will have 19 Regional Cities and 27 Regional Centres

 A renewed focus on access to Regional Cities and

 Building on the existing backbone and facilitating dayreturn travel

 Introduce more flexible transport service models





Timeline and engagement

FUTURE TRANSPORT TIMELINE

Community and stakeholder engagement

Release of draft Future Transport Strategy

Invite feedback from community and stakeholders on draft Future Transport Strategy

Finalise Future
Transport Strategy

MAY - JUNE 2017 **LATE 2017**

EARLY 2018







2056 Engagement and feedback – next phase



Community

- Regional + Metro Community Roadshow
- Coordinating events locally with partners
- General public activity
- Social engagement with target groups e.g. Universities, TAFE NSW, RMS Liaison officers



Industry + Partners

- Peak bodies
- Industry representative groups
- Partners
- Key Stakeholders / Groups
- Business Chambers of Commerce
- Academics



Government

- Cross Government + inter/intra Department collaboration
- Key Stakeholders internally and externally
- Ministers / MPs
- Local Government and Council



Digital

- Owned/Paid/Earned
- Future.Transport.and FfNSW + cluster websites
- On-service advertising
- 18-35 Campaign
- Social channels (Facebook, Twitter, LinkedIn – Future & TfNSW)
- Newsletters
- Editorial / local media





future.transport.nsw.gov.au



FutureTransport@transport.nsw.gov.au

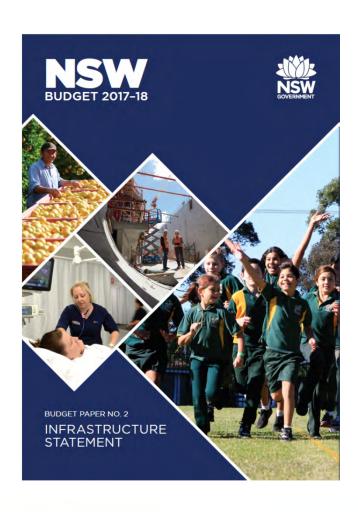


Infrastructure and Services

Stephen Troughton

Deputy Secretary Infrastructure & Services (I&S)

Infrastructure spend forecast

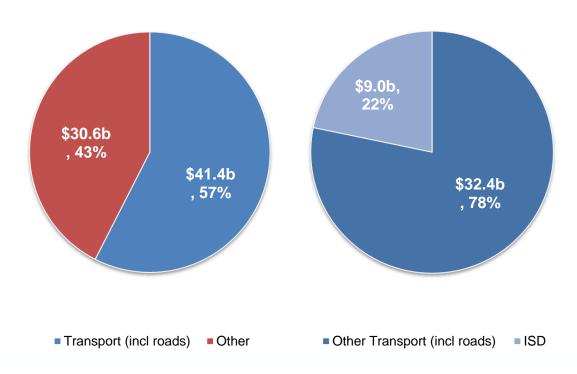


NSW Budget 2017-18 Infrastructure Investment

2017-18 to 2021-22

ISD Share of NSW Transport Investment

2017-18 to 2021-22



Projects in flight - Fleet



More trains, more services





Pipeline initiatives – Funding TBD, subject to final business case

Fleet – design & build replacement of:

- 60 XPT passenger cars,
- 23 XPLORER
- 28 Endeavour passenger cars

Maintenance facility

Regional Rail Project

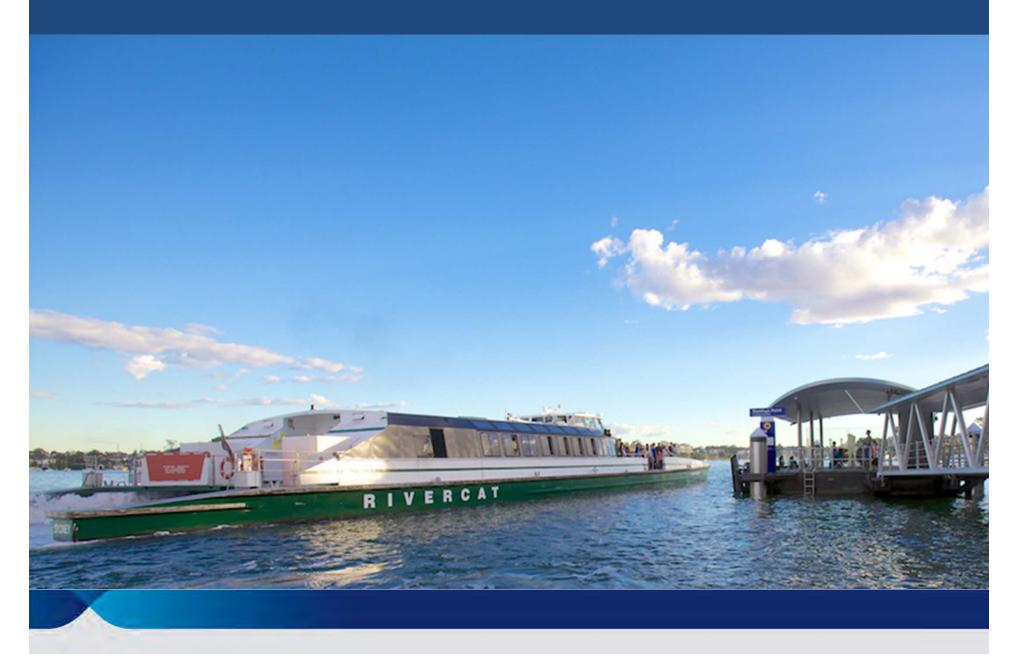
Preferred maintenance facility location

Boosting regional jobs with train maintenance in Dubbo

Circular Quay



Parramatta River Ferries

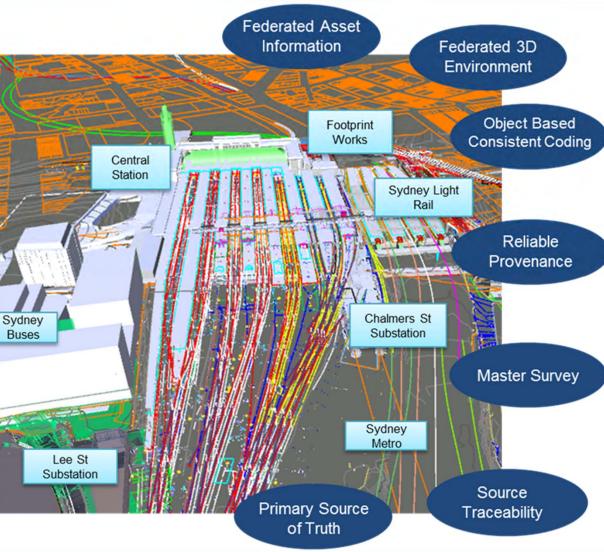


Future Transport: On-Demand & automated



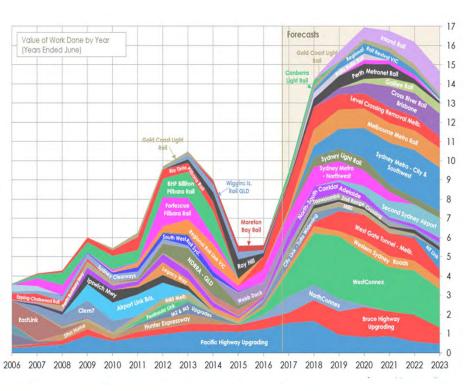
Innovation - Digital Engineering



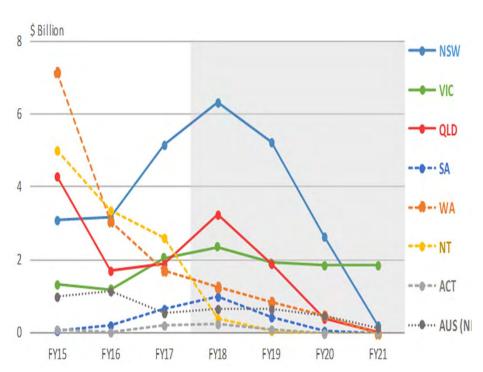


Demand on sector

Major Australian transport infrastructure



Engineering construction by state / territory



Sources: Macromonitor March 2017, BIS Oxford Economics 2017

Safer Together







Partnering with Industry



How to work with us





Panels

- Whole-of-Government prequalification panels
- Prequalified suppliers may be invited to tender by any Government agency, however it is not a guarantee of work but determines a contractor's eligibility to tender for work.

Monitor

 The list of awarded contracts to seek out opportunities with our delivery partners

Tenders

Sign up for alerts at NSW eTenders

Contact us



Planning for services and delivery

Anna Bradley Senior Manager Planning Integrated Planning

Integrated Planning – what we do

Integrated service and precinct solutions

Services, assets & systems



Rail, bus, ferry, light rail, active transport



Precincts, corridors, growth centres



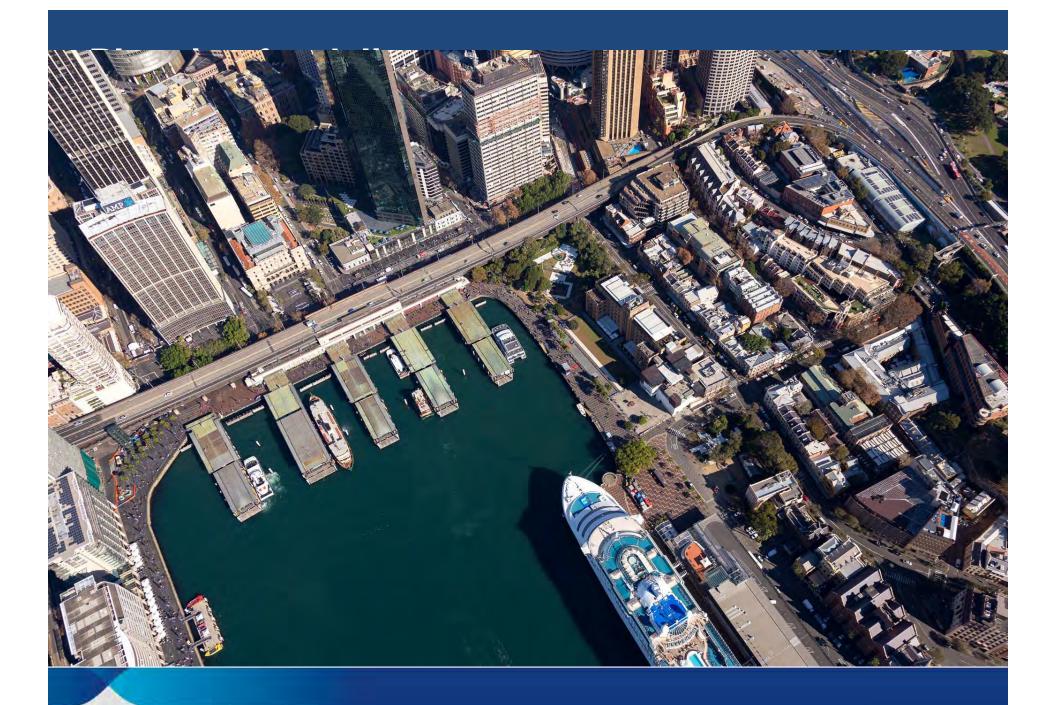
Metro, outer metro, rural & regional

CHEMINE SHIPSING



Integrated Planning – new angles





Precincts & place-making



Rural & regional focus







Transit





Last Mile

First Mile

Technology & Innovation

Transport as a technology business:

- Data-driven capabilities
- Predictability
- Mobility
- Personalisation
- First & last mile
- Efficiency through innovation





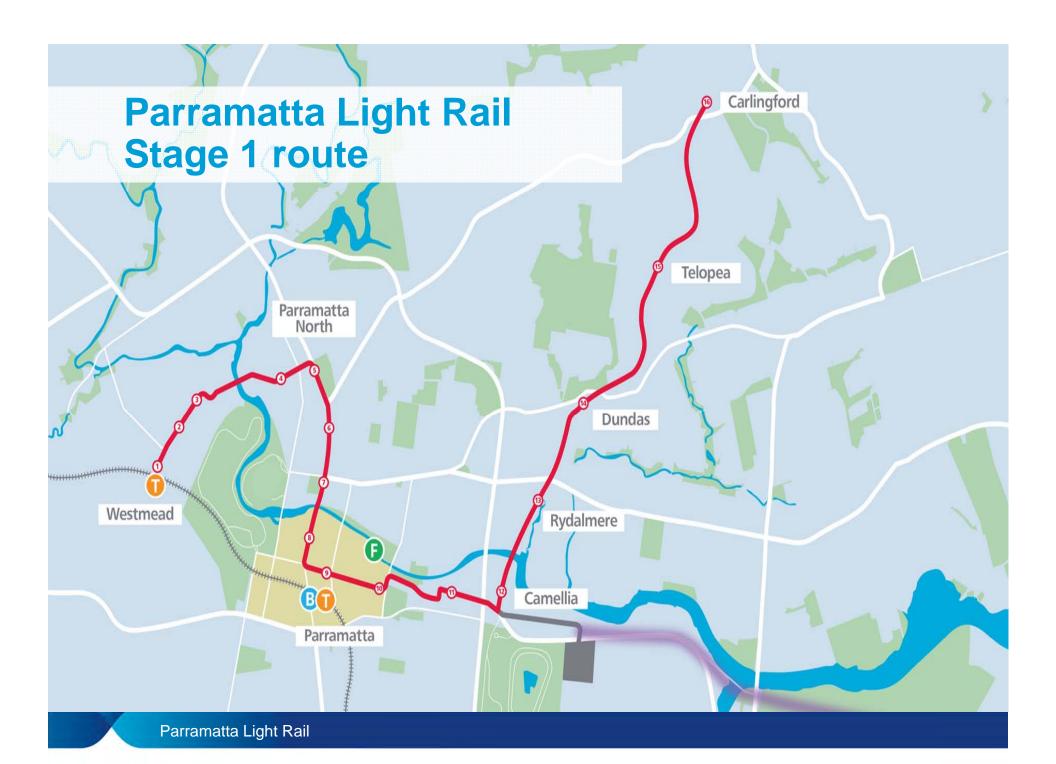
Sustainability





Parramatta Light Rail Stage 1 - Westmead to Carlingford

Tim Poole
Program Director
Parramatta Light Rail



Connecting great places









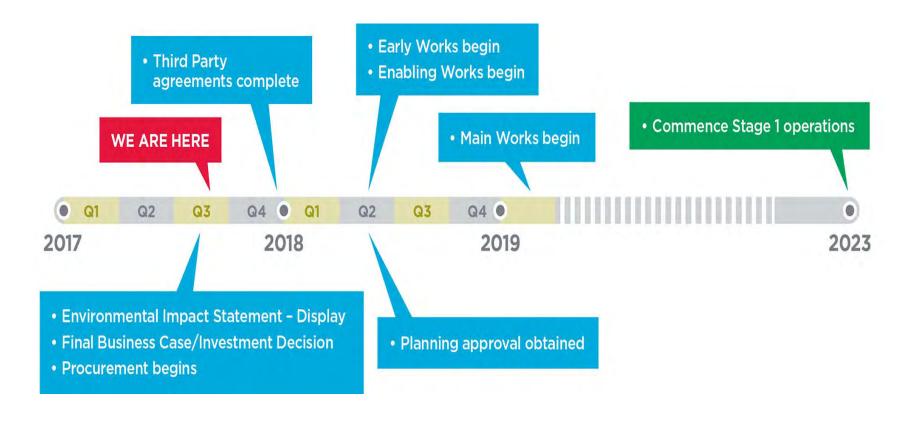




Customer proposition



Key milestones

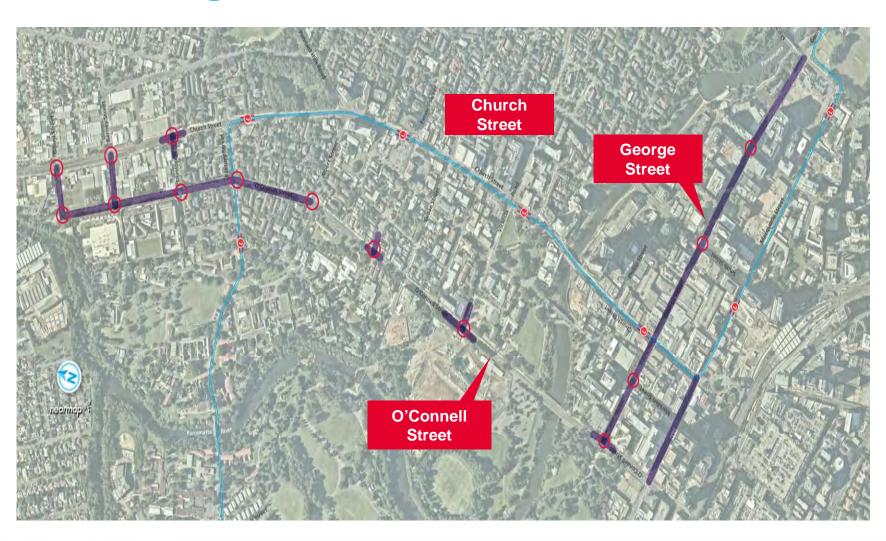


Parramatta Light Rail Stage 1 Delivery Model

Early Works



Enabling Works



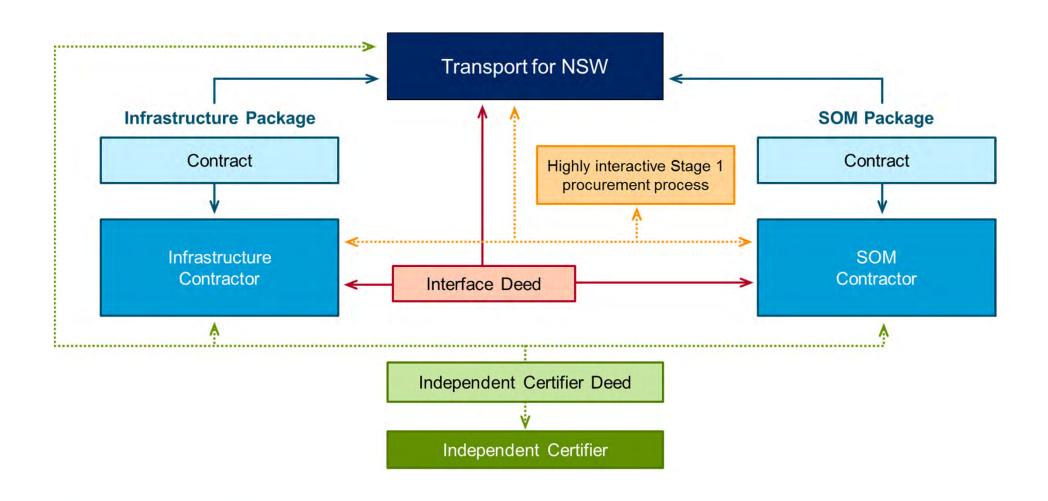
Main Works



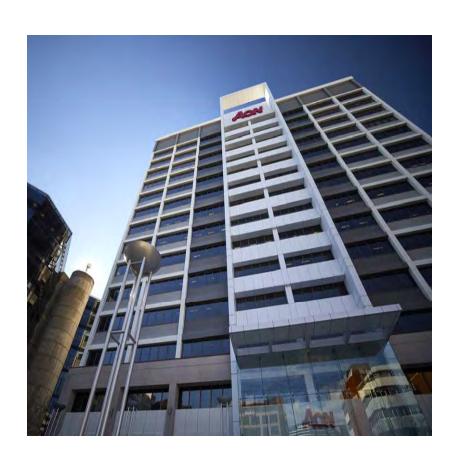
Main Works – Summary Package Scope Split



Main Works governance



Highly Interactive Procurement Process





Parramatta Light Rail Stage 1 Works Packages

Works Package	EOI released (target)	RFP released (target)	Contract award (target)
Early Works	Aug 2017	Oct 2017	April 2018
Enabling Works	Sep/ Oct 2017	Nov/ Dec 2017	May/ June 2018
SOM Package Works	Sep 2017	Jan 2018	Sep/ Oct 2018
Infrastructure Package Works	Sep 2017	Feb 2018	Q4 2018

Partnering requirements



More information at www.parramattalightrail.nsw.gov.au





On Demand Transport & Future Mobility Contracts

Emma Reedy

Manager, Operational Delivery Service Delivery & Asset Management



On Demand Transport & Future Mobility Contracts



- On Demand Transport
 - The procurement process
 - What we've learnt so far
 - What it means for the future
 - How is it changing the way we conduct procurements and engage with industry?
 - What does it mean for the customer?
- Electric Buses



The On Demand Transport Journey

RFEOI Overview



An acceleration in new transport technologies, and the emergence of a range of new transport business models suggests that future mobility contracts could look quite different to the current contracts.











RFEOI Overview



- The On Demand Transport program was launched in November
- The Request for Expression of Innovation (RFEOI)
 process was released on 5 December 2016 to come up
 with ideas
- The RFEOI closed on 27 February 2017
- We received 66 proposals from 43 proponents

Industry Engagement





- Industry Briefing on 14
 December 2017
- 36 interactive feedback
 sessions have been held with
 respondents since 18 January
 2017
- Industry Collaboration Event held on 8 February 2017

The First Tranche of Pilots



- Transport Minister Andrew Constance announced the first tranche of pilots for the trial of On Demand public transport on Wednesday 16 August 2017.
- Eight pilots of On Demand Transport services in the North West,
 South West, West, Eastern Suburbs, Northern Beaches,
 Sutherland Shire and Central Coast will start to roll out from
 October and there are more to come
- Pilot providers include Transdev, Transit Systems Australia,
 Punchbowl Bus Company, Interline Bus Company, Keolis Downer.



What is On Demand Transport







On Demand Transport comes to you. It's a quick, easy and direct way to







connect you with your destination or nearest public transport hub. Book a service online.



...through an app.....or over the phone at a time.....



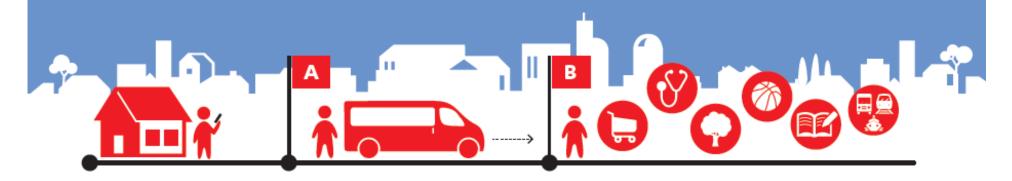
...and place that suits you and travel with a NSW Government partner......





....when you need it, without a timetable. On Demand Transport, Ready when you are.

Get around your neighbourhood in Sutherland Shire with TransdevLink



Plan your trip.

Book and pay by phone app, online or over the phone. You can also pay in cash to our driver.

Jump aboard.

Our driver will pick you up from your doorstep or agreed location.

Arrive safely at your chosen neighbourhood destination.

Or connect to an onward transport service. Don't forget to plan your trip back.





Key Emerging Themes

While some solutions only address part of a customers journey, most ideas attempt to improve the journey by delivering transport that in some way aims to achieve all 3 key goals.

- "Home" to "home" and "everything in between"
- "5 minute" interchange (or none at all)
- Minimise unnecessary travel

The technology



Software Solution

- Routematch
- PT Flex
- TransportMe
- Niftie
- Bridj

System Capability

- End to end booking and payment
- Locally & Internationally designed
- Route optimisation
- Real time monitoring & reporting
- Machine learning
- Aggregation of demand
- Software to integrate services and minimise interchange time

What is different about our pilots



- We let the market develop the solutions
- The services are subsidised
- Fares are comparable to existing PT fares
- We are trialling multiple types of transport and technology solutions at the same time



What does this mean for the here and now?



What does this mean for the future?



Electric buses



Morning tea

Time	Speaker
10am	Morning tea break
10.40am	Helen Williams, Acting Director Rail Systems Development
11.00am	Howard Collins, CE Sydney Trains & A/CE NSW TrainLink
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Operational Systems

Helen Williams

A/Director

Operational Systems



Operational Systems – Key Projects

Automatic Train Protection (ATP)

A safety overlay deployed over the electrified network to prevent over-speeding and signalling rules enforcement.





Automated Systems

An upgrade to rail signalling system to improve safety, increase capacity, simplify maintenance and reduce costs over the electrified network.



Transport Management Centre (TMC) Systems

Systems that manage road traffic and incidents. It will help transform the state's TMC into a multi modal, all of transport network that is proactively managed.



Bus, Ferry and Light Rail Systems

Systems to support the planning, procurement and delivery of bus, ferry and light rail services:

- Real time bus location and prediction for Customer Apps
- Data Analytics and Contracts Management tools (Metro, Outer-Metro, Rural & Regional)



Intelligent Congestion Management Program (ICMP)

Enhanced systems and capability to improve coordination across all modes and enable a whole of transport approach to reduce congestion.



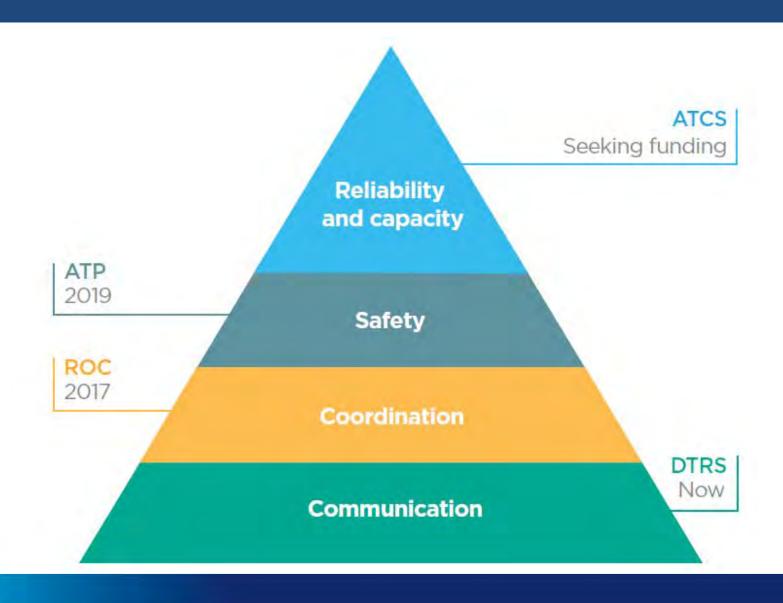
System Operations

Implements, manages and maintains operational technology for the 24x7 operations of the Transport Management Centre, Bus and Ferry systems, Traffic

management, Public information and CBD Emergency warning systems.



Key steps to transform our railway



In deployment: Automatic Train Protection (ATP)

ATP, using ETCS Level 1 (Limited Supervision), provides:



Rapid improvement in safety



Commence ETCS fitment of rolling stock fleets



Enabler of future ETCS Level 2 deployment

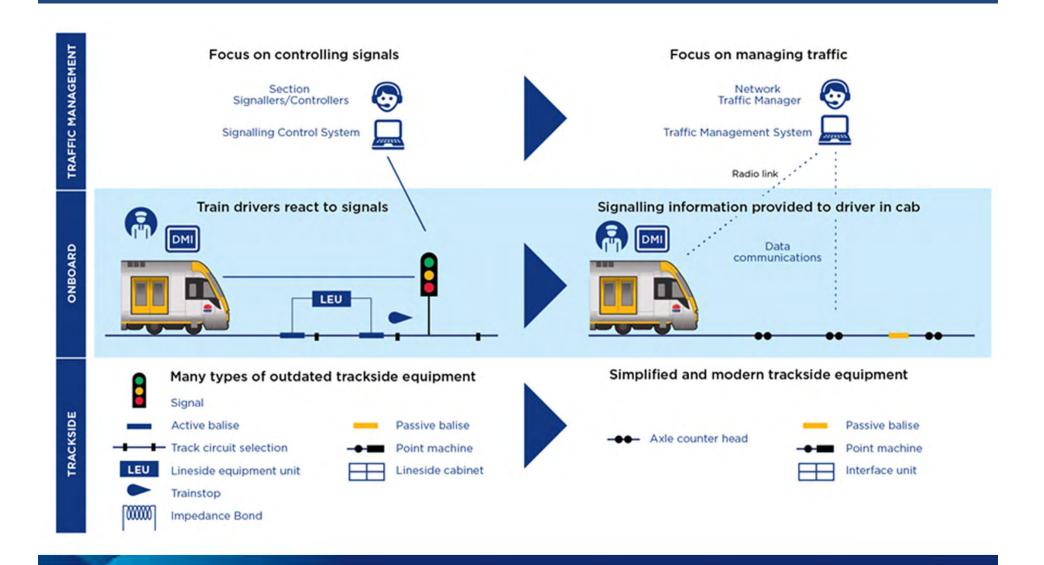
Pipeline: Automated Systems program

Automated Systems is a generational change to how the railway will operate

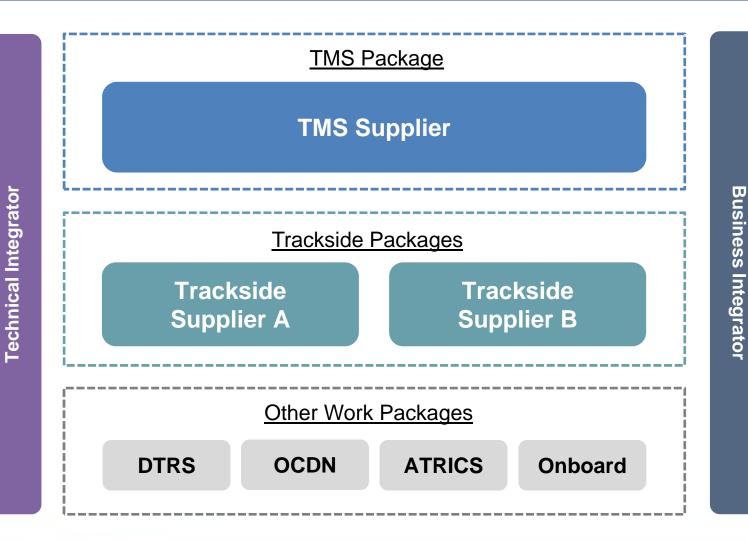
- Shift in ways of thinking and doing
- Use of standardised equipment rather than bespoke development
- Configured not customised
- Develop Operating Rules from international standard
- Leverage international expertise



Automated Systems project



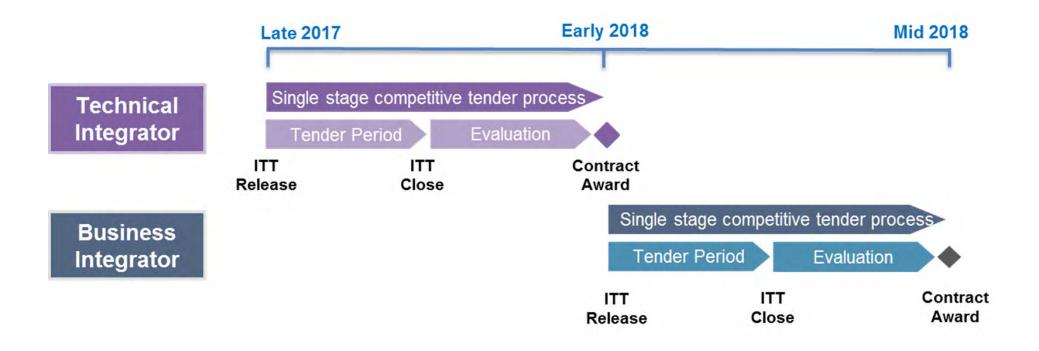
Packaging Strategy



Business Integration Package

Procurement Strategy

Technical Integrator and Business Integrator



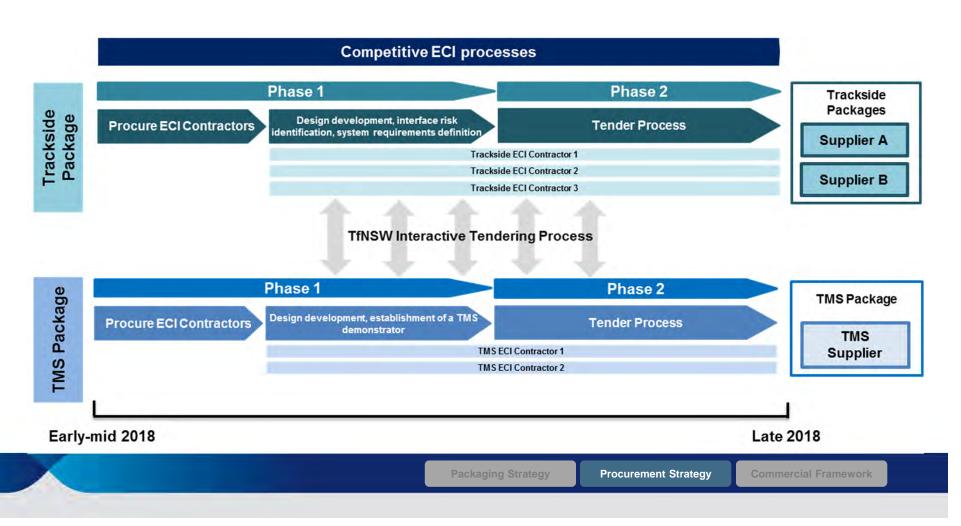
ckaging Strategy

Procurement Strategy

Commercial Framework

Procurement Strategy: TMS and Trackside

 TfNSW acknowledges that there are significant interfaces between the TMS and Trackside packages and is considering aligning the two procurement activities via a highly interactive tendering approach.



Operational Systems – Key Projects

Automatic Train Protection (ATP)

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System Operations

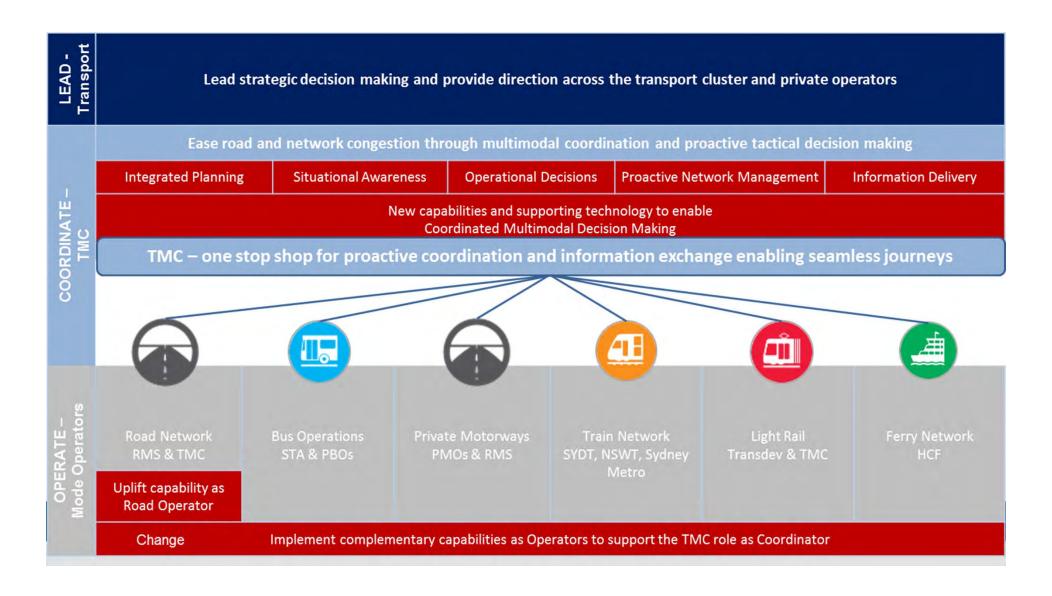
Implements, manages and maintains operational technology for the 24x7 operations of the Transport Management Centre, Bus and Ferry systems, Traffic

management, Public information and CBD Emergency warning systems.



Intelligent Congestion Management Program (ICMP)

ICMP will deliver key business capabilities to achieve the transformational uplift within the TMC



ICMP Benefits

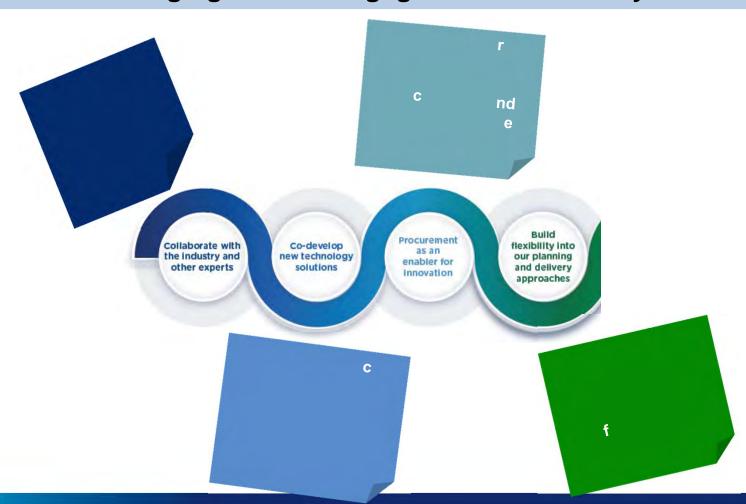
ICMP will help deliver the TMC of the Future – Proactive Network Management delivering more efficient operations and allowing customers to make informed journey decisions



- Proactive network management reducing congestion through a better coordinated agency approach, aiming for strategic capabilities such as demand management
- Customers can make better journey choices through improved real time information. Real time network view shared across all modes, up to the minute customer info and guidance
- Reduction in disruption clearance times through more integrated and automatic processes.
 Clear traffic incidents, line up multimodal, customer-centric clearance solutions
- More efficient transport operators due to the help of emerging technologies. Improved technology base in TMC and improved integration with agency environments

Collaboration with the market

Changing how we engage with the industry







2,191 electric & line diesel cars



Sydney Trains transports more than 1 million customer journeys per day













New rolling stock



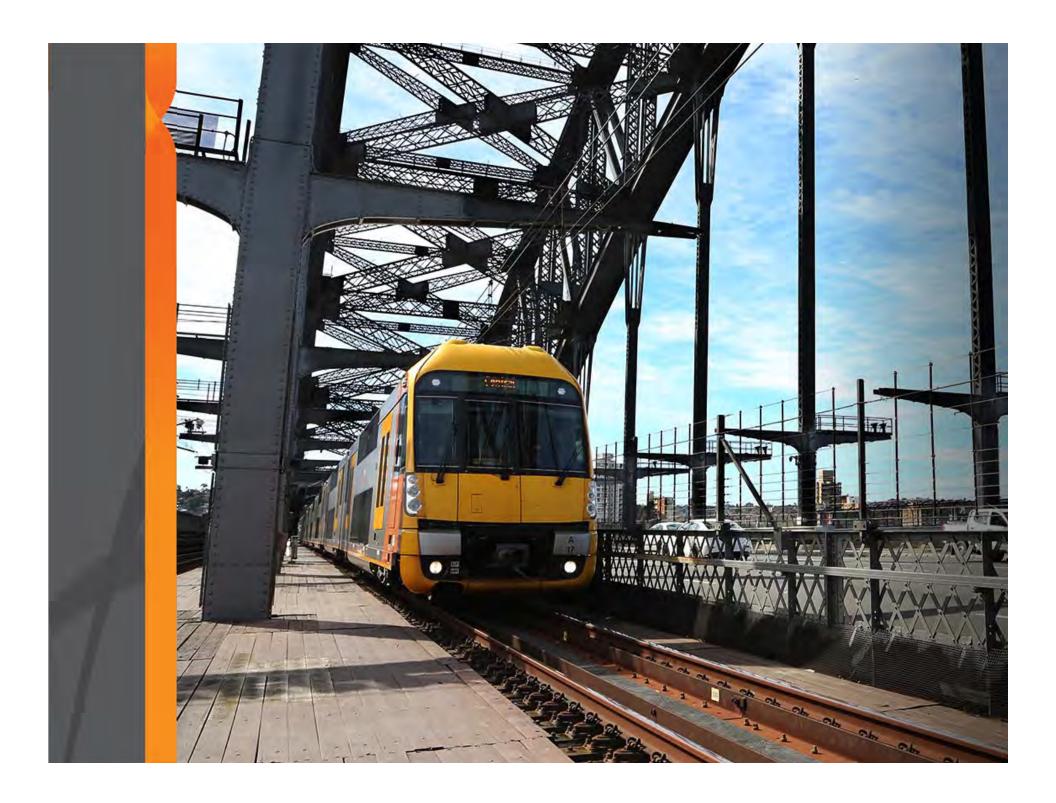




Rail Operations Centre

Preparing our workforce to accommodate change





Industry Briefing

Mark Jones, A/Director Strategic Procurement





Operator and Maintainer



Delivering a world class modern railway







Award winning committed team





- Transport for NSW wide ERP implementation
- Covering Finance, Human Resources, Procurement, Portfolio Planning and Management activities
- Implementation over a 2 year period, with Sydney Trains the last to go live in July 2017
- Sydney Trains have also implemented EAM functionality

- Documents include:
 - Invitation to Tender
 - Contract Templates
 - Contract Administration Manual
 - All associated forms

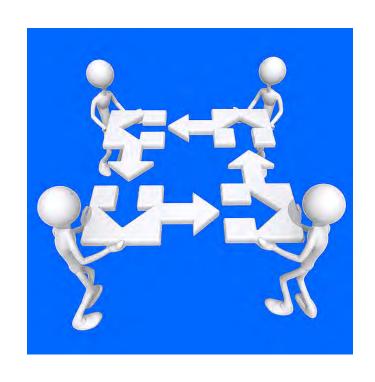


- Halved the number of standard templates
- Market tested prior to full implementation
- Available on the Transport for NSW website
- Under review by other agencies to move towards a standard suite across the cluster.

The new Contract Templates

Previous Templates	New Templates	
CT3 - General Conditions of Contract (GC21)	Sydney Trains Template Construction Works Contract	
CT4 - Minor Works Contract		
CT6 - Professional Services Agreement	Sydney Trains Template Professional Services Contract	
CT 2 - Agreement for Supply, Installation and Commissioning of Equipment (with Maintenance Option)		
CT8 - Agreement for Supply of Goods	Sydney Trains Template Goods and/or Services Contract	
CT10 - Agreement for Supply of Goods and Services		
CT12 - Agreement for Supply of Services		
NA	Sydney Trains Template Maintenance Contract	
NA	Sydney Trains Template Project Contract	
CT5 - Standing Offer Deed for Minor Works	Sydney Trains Template Standing Offer Deed	
CT 7 - Standing Offer Deed for Professional Services		
CT9 - Standing Offer Deed of Supply of Goods		
CT11 - Standing Offer Deed for Supply of Goods and Services		
CT 13 - Standing Offer Deed for Supply of Services		
Sydney Trains Standard Terms & Conditions for Minor Procurement	Sydney Trains Short-Form Purchase Order Contract	

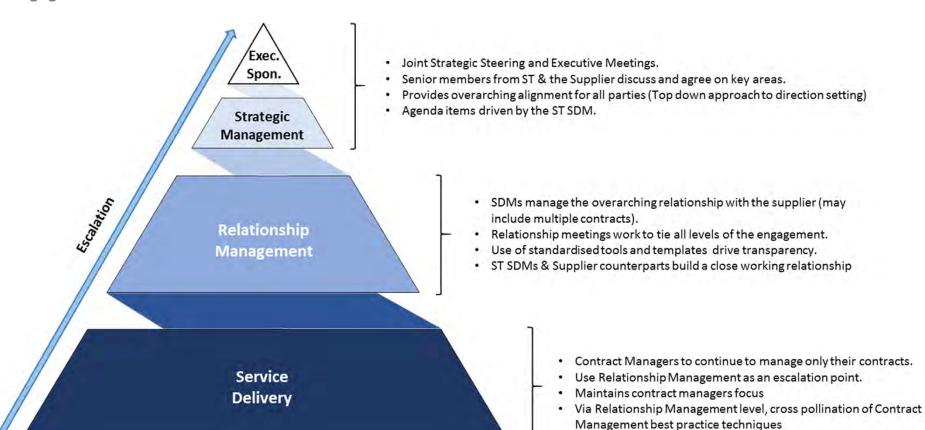
Supplier Performance Management Program



- All suppliers fall under our Contract Management Framework
- Suppliers are segmented based on a set criteria
- Strategic Suppliers also enter into our Strategic Supplier Relationship Program
- We are in the process of developing a Supplier Development Program for our key non strategic suppliers

Strategic Supplier Performance Programme

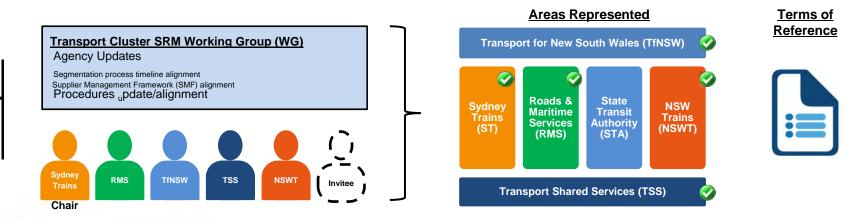
In order to provide the required operational rigor and deliver the associated benefits, Sydney Trains operate a cohesive, 4-tier governance and engagement model to manage and work with Strategic Suppliers at all levels of engagement:



Cluster Supplier Relationship Management

The Transport Cluster Supplier Relationship Management Working Group has been established to assist the Cluster manage Strategic Suppliers through

- Segmentation
 - Identification and segmentation of Strategic Suppliers
 - Development of Supplier League table
- Supplier Management Framework
 - Identify clear lines of agency management (and support) for each Strategic Supplier
 - Drive a consistent approach to supplier interactions
- Implementation of 'Best Practice' Supplier Relationship Management methodologies



Transport

Supplier Enabled Innovation



Industry Briefing

Pete Allaway, Chief Operating Officer, NSW TrainLink





Who is NSW TrainLink

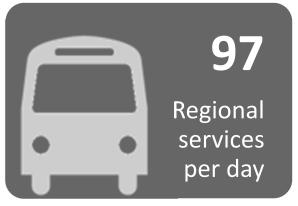
Intercity rail and regional coach and rail operator



Our purpose: To connect people and communities throughout NSW

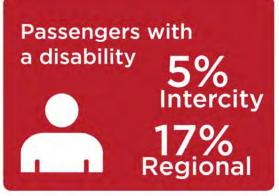
Key facts and figures







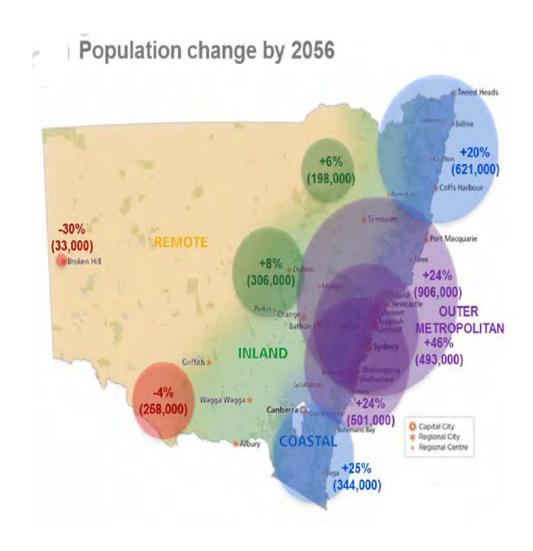






Game changer: Demographics

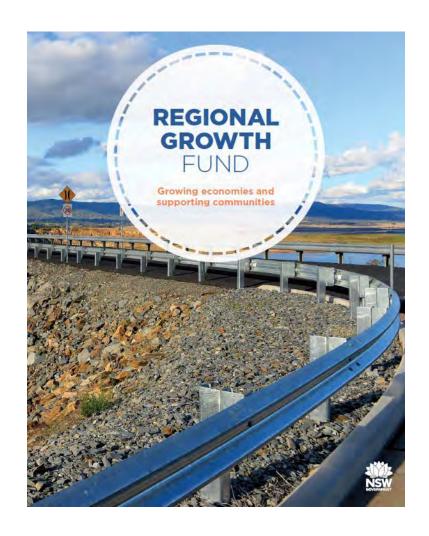
- Population growth will be concentrated in Greater Sydney and in the coastal regions
- Ageing population will be most pronounced in regional NSW
- Declining population in remote communities



Game changer: Regional investment

NSW Government investment aimed at:

- Providing quality services and infrastructure in regional NSW
- Aligning efforts to support growing regional centres
- Identifying and activating economic potential in local communities



Game changer: Unprecedented level of investment in transport

- Sydney Metro
- New Intercity Fleet
- New regional fleet & services
- New transport hub in Newcastle
- Digital customer information services
- Customer information & security on remote stations
- New timetables More Trains More Services
- New rail systems and technologies

All are catalysts for change and opportunity...



What do our customers want?

- More public transport options to connect to their nearest regional city
- Value for money relative to other transport modes
- Scheduling that is convenient and at the times required by communities
- Total journey duration relative to other modes
- Comfortable, safe, secure and clean services



NSW TrainLink's response: Our priorities



Getting ready for two new fleets

New Intercity Fleet



- V Set trains to be retired (2021-22) and Oscar trains that travel to South Coast, Central Coast and Newcastle redeployed to suburban network
- Supplier responsible for maintenance and repair for 15 years, plus through-life support
- New purpose-built maintenance facility at Kangy Angy subject to planning approval
- Latest on-board technology and fit out to provide a more reliable and comfortable journey.
- Progressively introduced from 2019 with new ways of working

New diesel fleet



- Expression of Interest has been issued for design, construction and maintenance of new regional trains
- · New maintenance facility earmarked for Dubbo
- New fleet will replace 60 XPT, 23 XPLORER and 28 Endeavour passenger cars
- Contract for the new XPT fleet will target 100% completion works in NSW, with a preference for regional NSW, to boost jobs and skills
- New trains expected in early 2020s
- NSW TrainLink will operate the fleet & services

With a new customer service model

- Increased presence & reliability
- 24 X 7 response and supervision
- Remote customer support
- New cross functional geographic leadership structure





On Station



- Increased hours of attendance matching customer demand & service patterns
- DDA solution at all accessible stations and vulnerable areas
- Cleaning and customer response from 24 x 7 hub stations
- Capable & more visible mobile teams enabled by mobile tools

On Train



- New Intercity Fleet proposal to make driver only responsible for safe operation & service
- Automated customer information, CCTV & help points
- Mobile customer service staff
- Remote support control centre with customer support
- Increased PTC and Transport Officer presence

Remote



- New Network Services Control Centre
- Regional Customer Support Centres providing live customer support and monitoring
- Roving customer service & response capabilities
- Remote support through CCTV, Customer Help Points, Passenger Information Display Systems, apps & OPAL



Outlook: The next five years

NSW TrainLink continues to invest in rail and coach services to ensure we deliver a safe and reliable operation while catering for growth and maintaining high levels of customer satisfaction

Key investments over the next 5 years

- More Trains, More Services (Timetable growth)
- New fleets
- Renewed focus on integrated regional NSW transport
- Smart Stations Program (including CCTV)
- Staff empowerment through technology e.g. mobile devices, TellUs fault reporting
- Station Refresh and Access Programs

With our partners, we will deliver

- More modern and reliable integrated transport services
- Cost efficiency
- Innovative and technologically based service enhancements
- Sustainable growth for our communities

Outcomes: Measures of success

SAFE AND SECURE



TARGET

20% reduction in safety incidents

DRIVERS

- Customer Injuries
- Staff Lost Time Injuries
- Technical Rail Incidents

BUILD CONNECTIONS



TARGET

Staff engagement at 65%

CUSTOMER SATISFACTION



TARGET

Average of 91%

SPEND SMARTER



TARGET

Our services are 20% cheaper to run

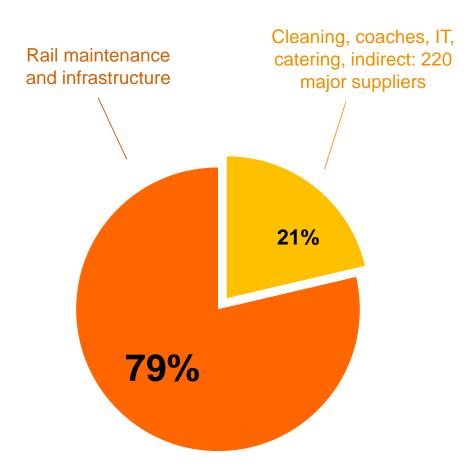
DRIVERS

- On time running
- Service Provision
- Cleanliness
- Announcement Quality
- Security
- Complaints



Supplier partnerships

- Mutual strategic and operational goals and targets that are critical to our business objectives
- Measures and progress agreed to KPIs and benchmarks
- Annual supplier forum to receive feedback and stimulate growth in regional NSW



Thank you





Questions



Thank you