



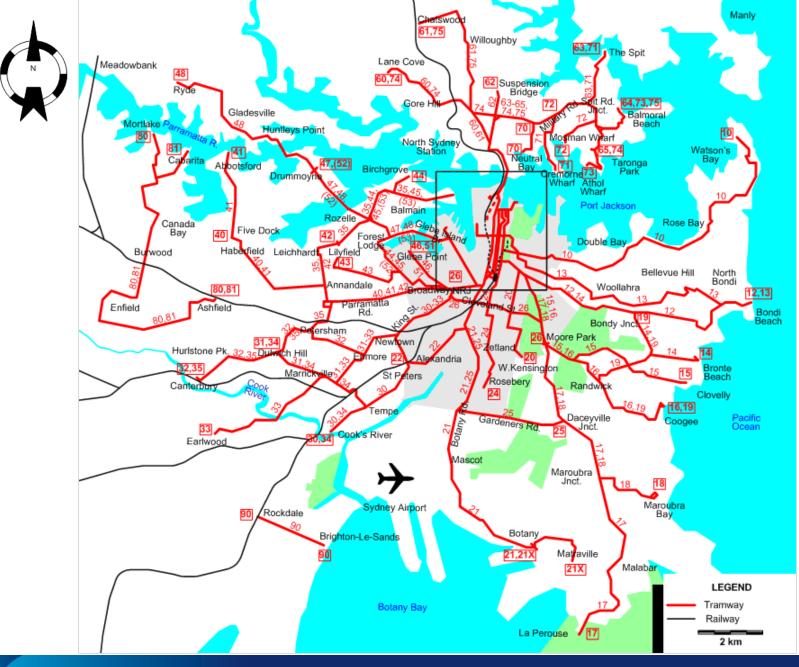
### Renaissance of Light Rail in Sydney – Key environmental challenges, opportunities and solutions



David Gainsford (MEIANZ) Technical Director, Planning & Environment Services Transport Projects 31 October 2014

### Outline

- Brief history of trams in Sydney
- Current projects
- Inner West Extension
- CBD and South East Light Rail
- Lessons learned for future projects

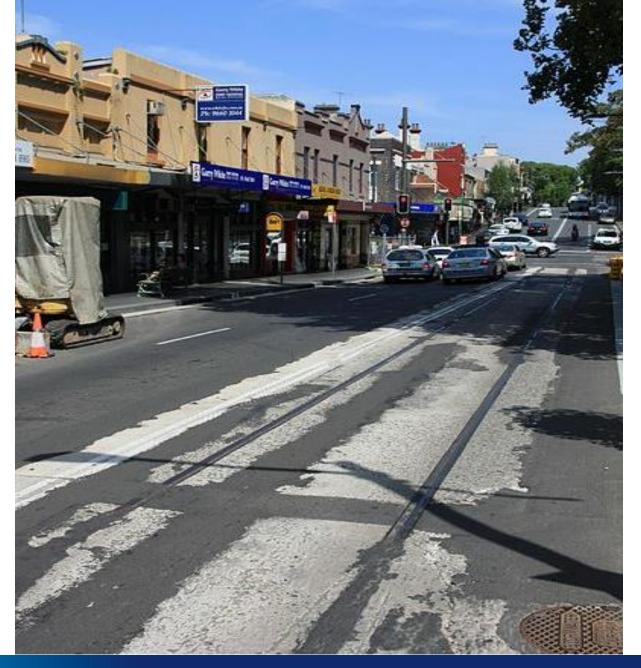


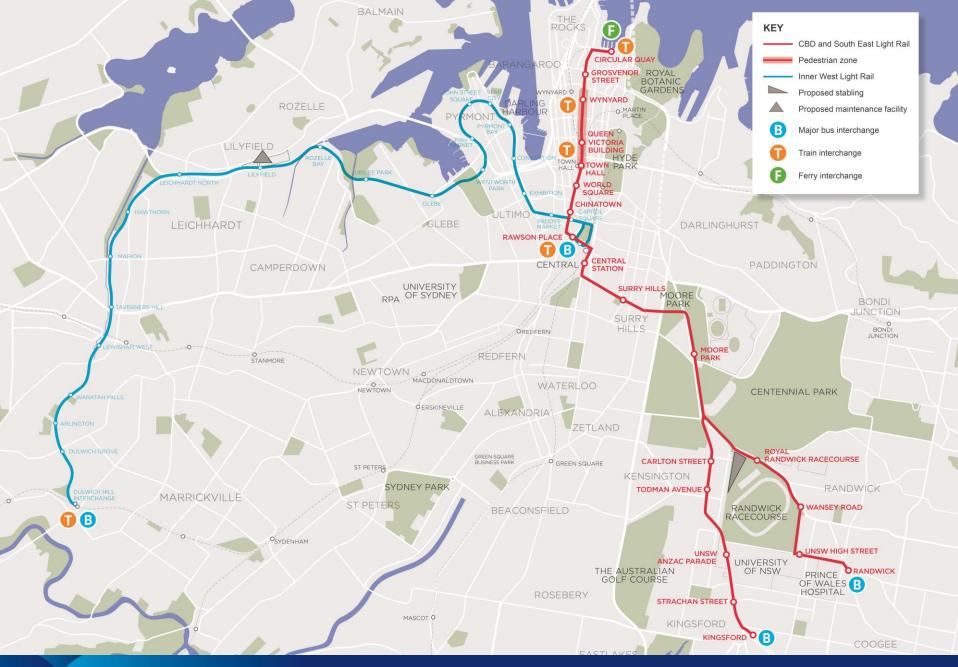


THE ROSE SERIES P. 6661

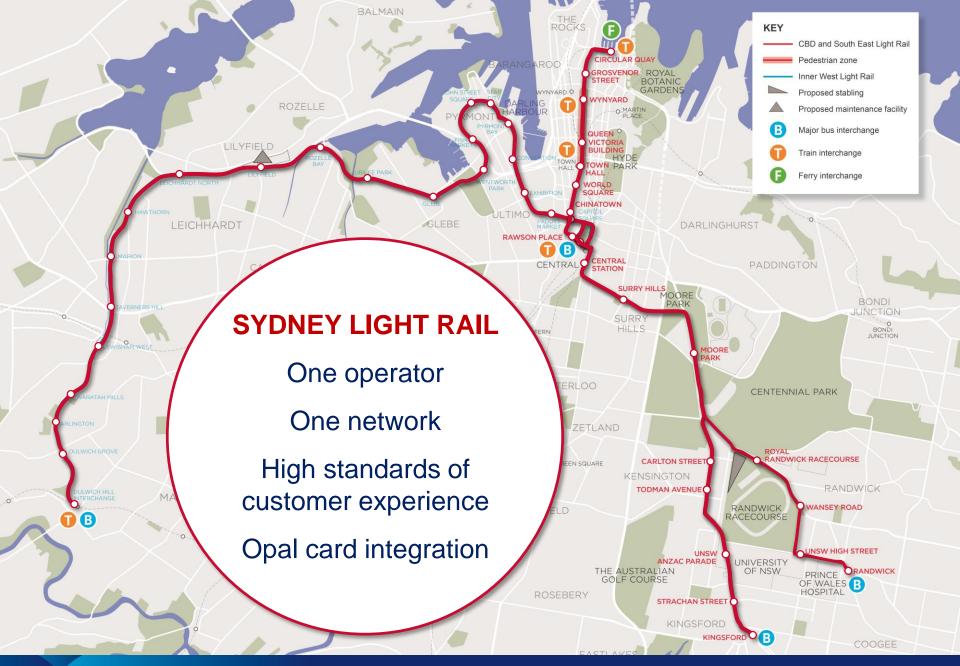
GEORGE STREET AND MARKET BUILDINGS, SYDNEY, N.S.W.







Sydney Light Rail | 7



### **Strategic context**

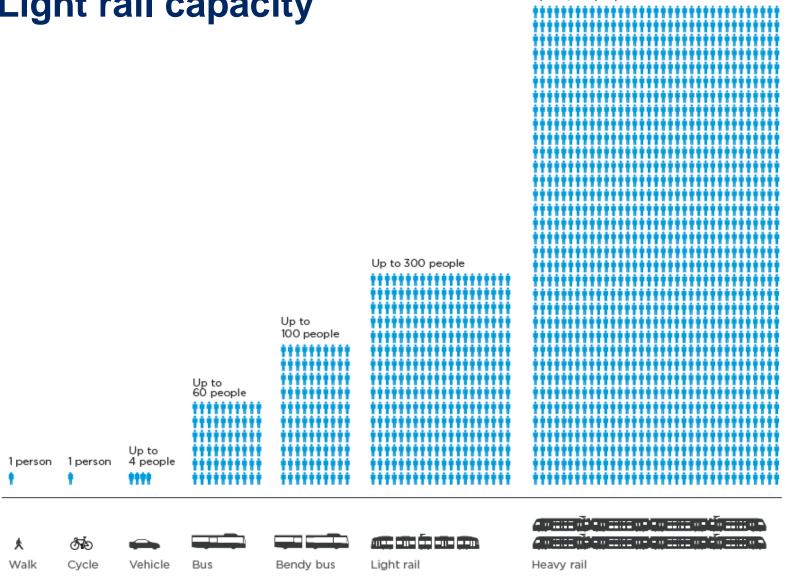


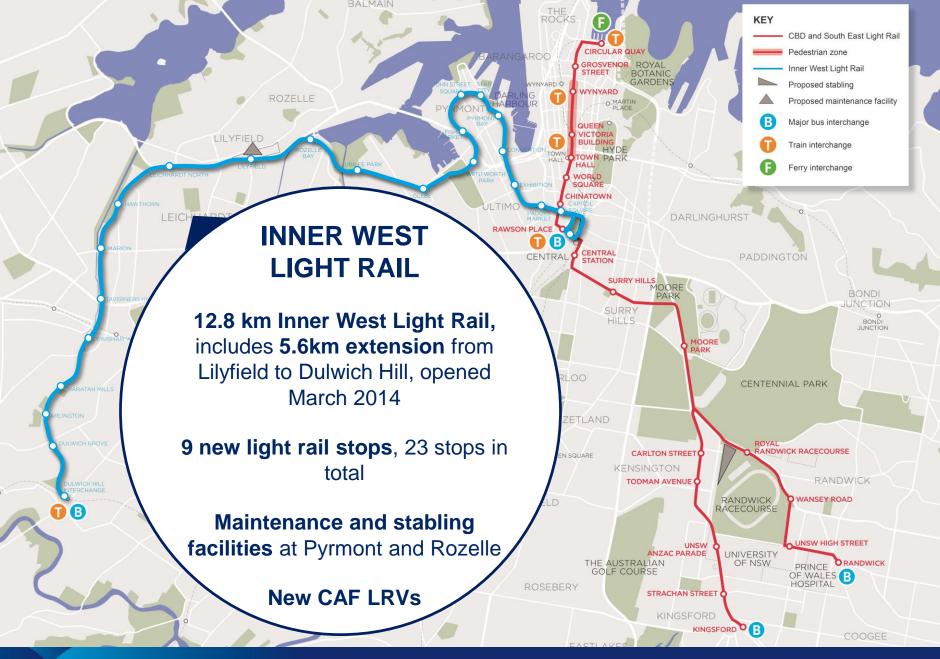
## Why light rail?

Problem	Objectives	$\left. \right\rangle$	Benefits
Unreliable journey times	Improve journey reliability Improve access to major destinations	Customer	Faster and more reliable public transport Reduced congestion
Congestion Lack of capacity to support growth	Increase sustainable transport		Pedestrian amenity
	Improve amenity of public spaces Satisfy long term travel	Operations	Reduced public transport costs
	Facilitate urban development and economic activity	Community	Environmental and health benefits
		Economic	Increased productivity



Up to 1,200 people





### Arlington 2010



## Arlington 2014



### **Compensation site inclusions and funding**

	Ongoing
Handover	Maintenance
to council	payment to councils
	to

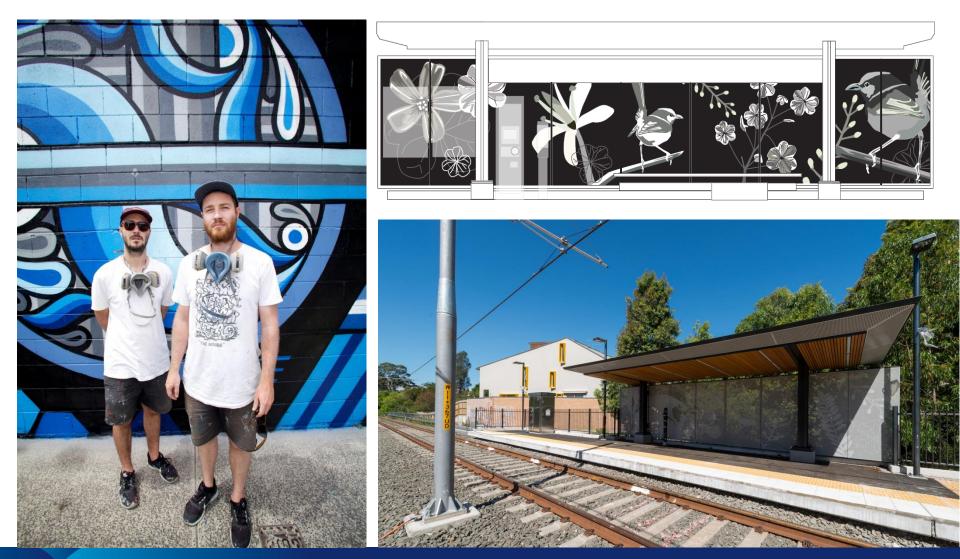
### **Taverners Hill 2011**



### **Taverners Hill 2014**









### **Findings – public art**

Issue	Findings/Action
Implementation of public art	
<ul> <li>Part of Urban Design and Stop Access Plan</li> </ul>	<ul> <li>✓ Incorporated heritage interpretation</li> <li>✓ Integrating into infrastructure e.g. platform screens, footbridge, paths</li> <li>✓ Ensure local artists are engaged</li> </ul>





#### OWN PARK WORLD QUARE INATOWN RAWSON PLACE **D** B CENTRAL CENTRAL **CBD AND SOUTH** STATION SURRY HILLS **EAST LIGHT RAIL** 12 km route from Circular Quay to IOORE ARK Randwick and Kingsford 20 stops and major rail, bus and ferry interchanges **CARLTON STREET** UARE A 1km wire free Pedestrian Zone **KENSINGTON** TODMAN AVENUE High capacity special events

BALMAIN

THE

VYNYARD O

OSVENOR ROYAL

O MARTIN

HY

BOTANIC

TREET

WYNYARD

RANGAROO

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F

CENTENNIAL PARK

RANDWICK RACECOURSE

ROYAL

RANDWICK

RACECOURSE

UNIVERSITY

OF NSW

STRACHAN STREET C

THE AUSTRALIAN GOLF COURSE CBD and South East Light Rail

Proposed maintenance facility

BONDI

BONDI

Pedestrian zone

Proposed stabling

Ferry interchange

Inner West Light Rail

Major bus interchange Train interchange

services Maintenance facility at Rozelle

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0 B

and stabling at Randwick

RANDWICK

WANSEY ROAD

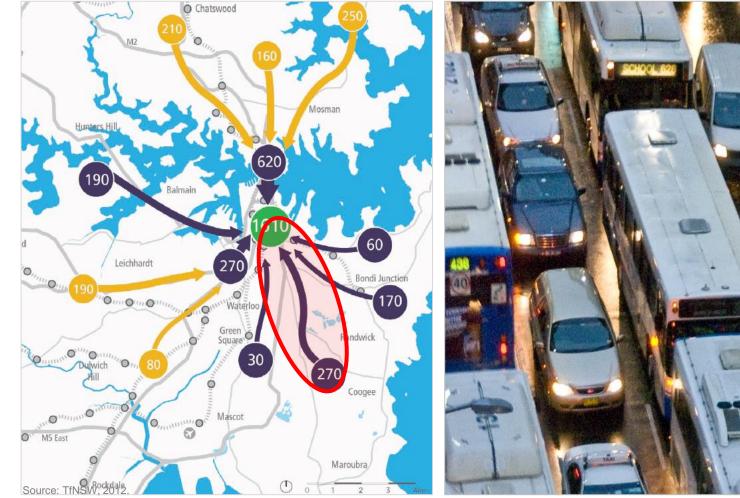
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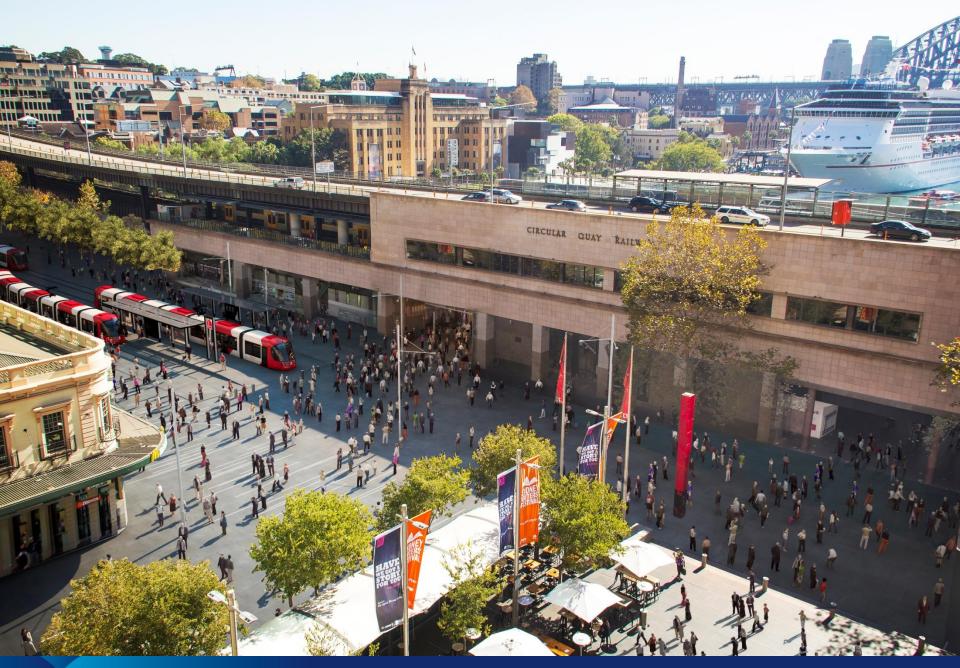
UNSW HIGH STREET

ORANDWICK

### Congestion

### AM (2hr) peak bus volumes to Sydney CBD

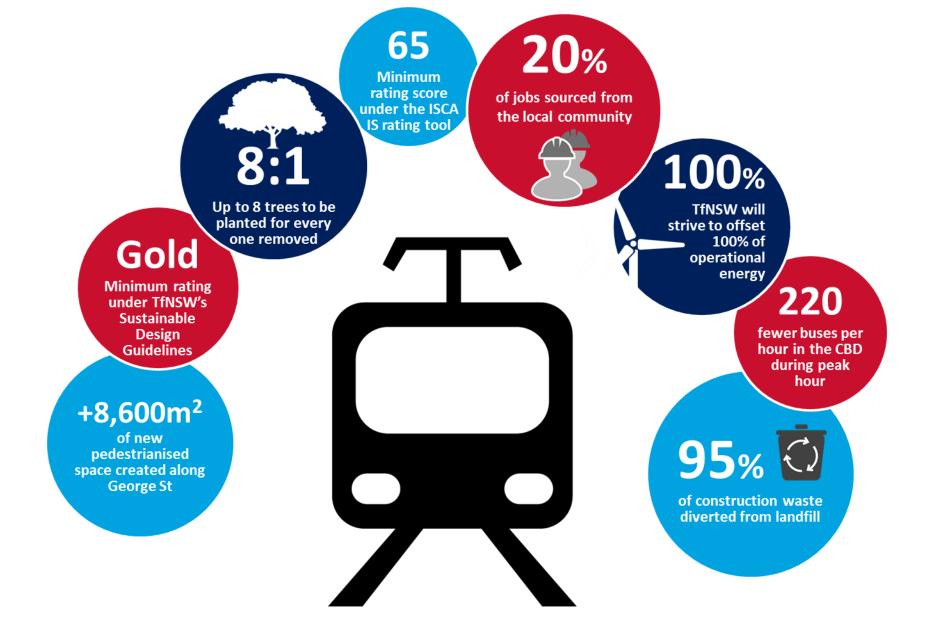




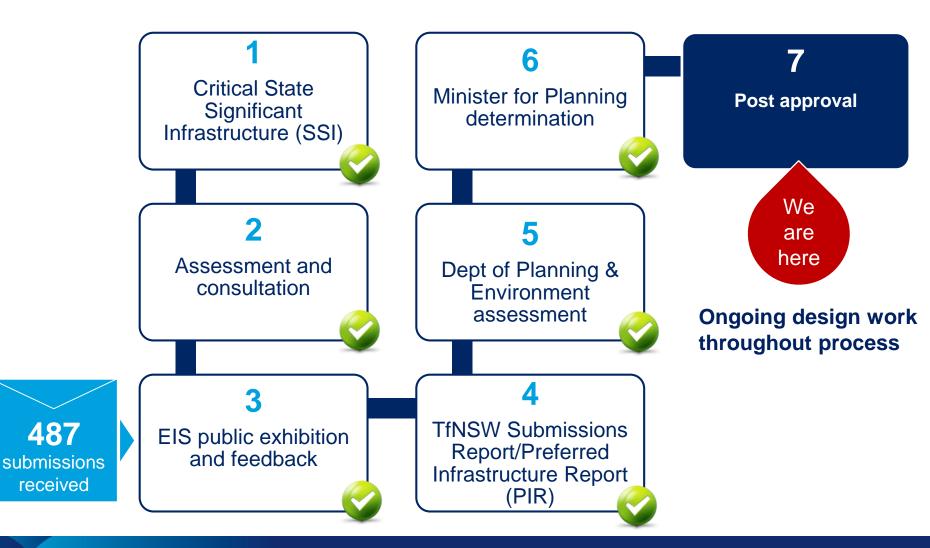








### **Planning approval**



### **Key environmental issues**

- Significant trees and open space
- Parking/traffic
- Noise impacts

**Key project partners** 

City of Sydney Council

Australian Turf Club Centennial Park and Moore Park Trust

University of NSW

Randwick City Council



### Australian Turf Club









### **Keeping Sydney open for business**

- Design maintain local access including pedestrians
- Road rental regime to incentivise PPP to stay on schedule
- Get in. Get it done. Get out.

### **Lessons learned for future projects**

- Ensure early partnerships are formed with key stakeholders
- Engage early with the community and look at opportunities for creating positive legacies
- Take a precinct approach to assessment for long linear projects
- Embed urban domain and public art opportunities into the project early to encourage greater accessibility and safety





# **Questions?**