Transport Asset Standards Authority

Getting the planning phase right means taking a whole of life approach

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Presentation Outline

- Introduction to Transport for NSW
- The Asset Management Framework
- The Transport challenge
- Why we need to get it right
- Understanding the problem
- Doing the right planning
- Summary
- Questions

Transport for NSW

- Undertakes activities across all phases of the asset lifecycle
- Coordination of these life cycle activities across the Transport for NSW (Asset Management) is key to realising value from assets and achieving organisational objectives
- Is developing an Asset Management Framework (aligned to ISO 55001) that supports business outcomes

Scale of TfNSW's Network

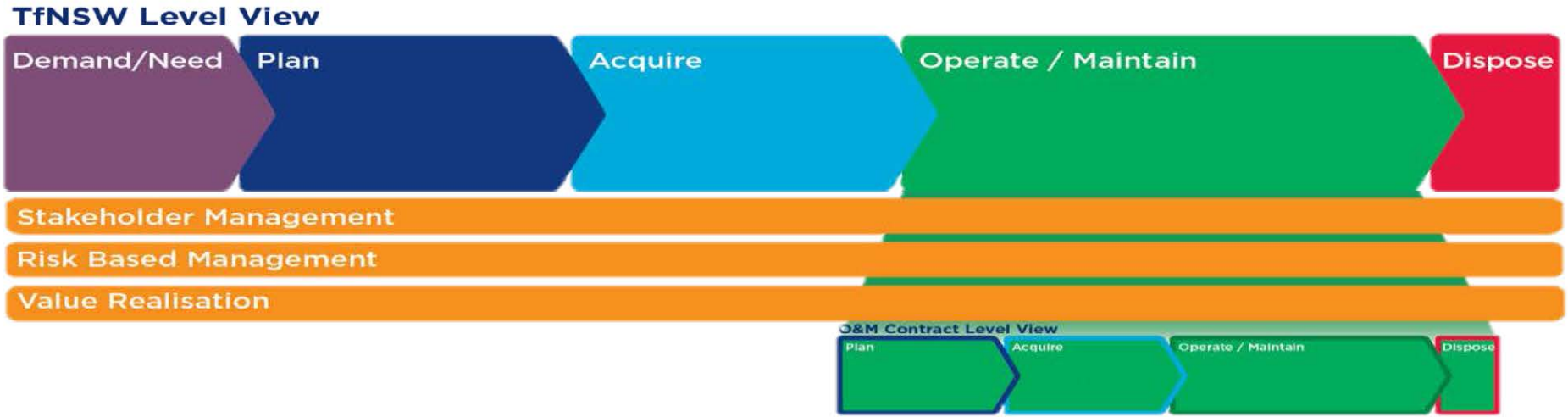
Network

- 43000 lane km of state roads
- 1505km of electrified overhead
- 1763km of mainline track
- 24 Bus Depots
- 1 Shipyard
- 10 Train Maintenance Centres
- 1 Light Rail Maintenance Centre
- 9321 Bridges
- 370 Stations, 14 Stops, 107 Wharves & Jetties
- Plus bus stops, substations, transmission lines, cctv, lifts, culverts, seawalls, passenger info

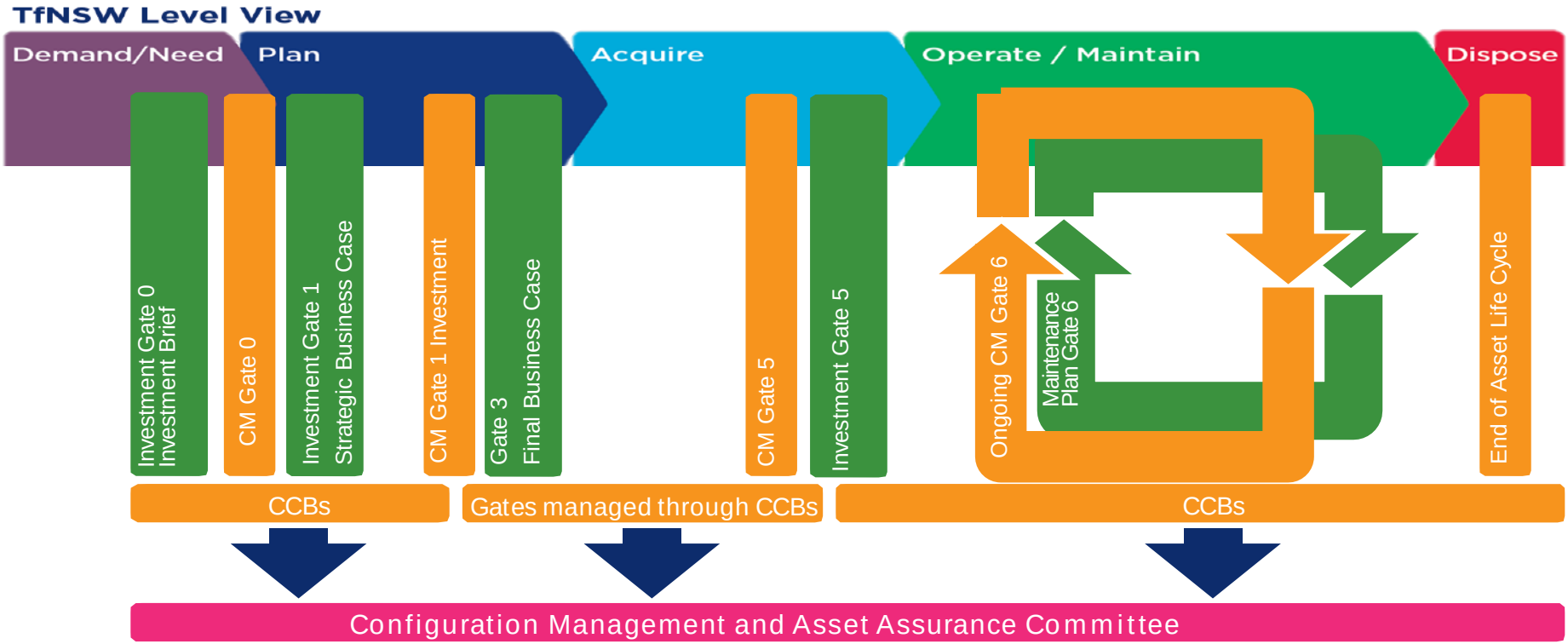
Fleet

- 2124 buses
- 1947 train carriages (144 diesel and 1803 electric)
- 13 light rail vehicles (65 carriages)
- 30 ferries
- Plus vessels/watercraft, road vehicles, trailers, locomotives, wagons, track machines and plant
- **$104bn in assets**

TfNSW Asset Management Framework



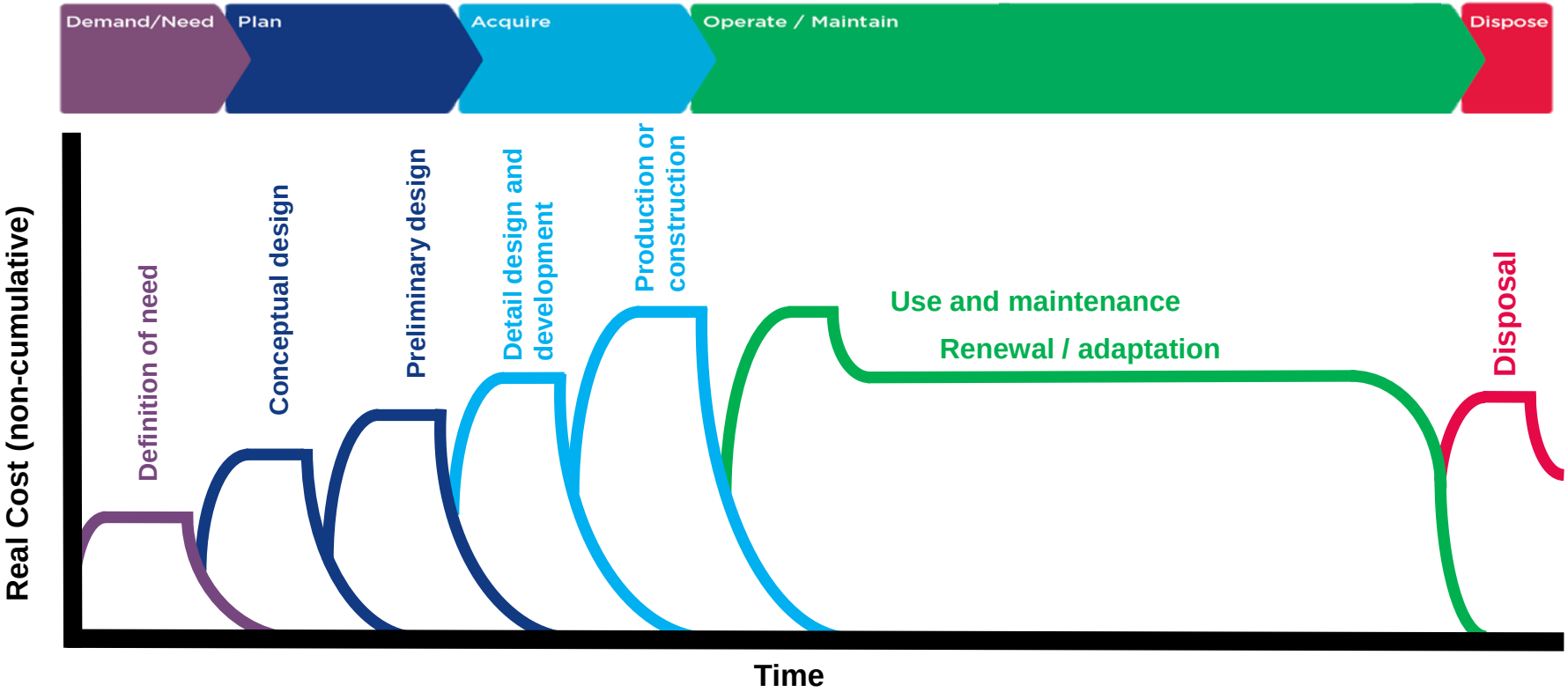
Assurance Framework



Transport for NSW challenge

- Transport for NSW is a maturing organisation
- Significant alignment required to meet the objectives of the TfNSW Asset Management Framework
- Common platform and language
- Implementation of processes and tools such as System Engineering
- Decisions supported by sound evidence and costing across the life cycle

Asset life cycle cost profile



Why we need to get it right

- Whole of life consideration key for Transport for NSW investment decision making

- Shellharbour Station
  - Station assets & maintenance

- South West Rail Link
  - Retaining wall maintenance

Shellharbour Junction Railway Station

Time lapse construction video - https://vimeo.com/127181351

Shellharbour Junction Railway Station

Shellharbour Junction Railway Station

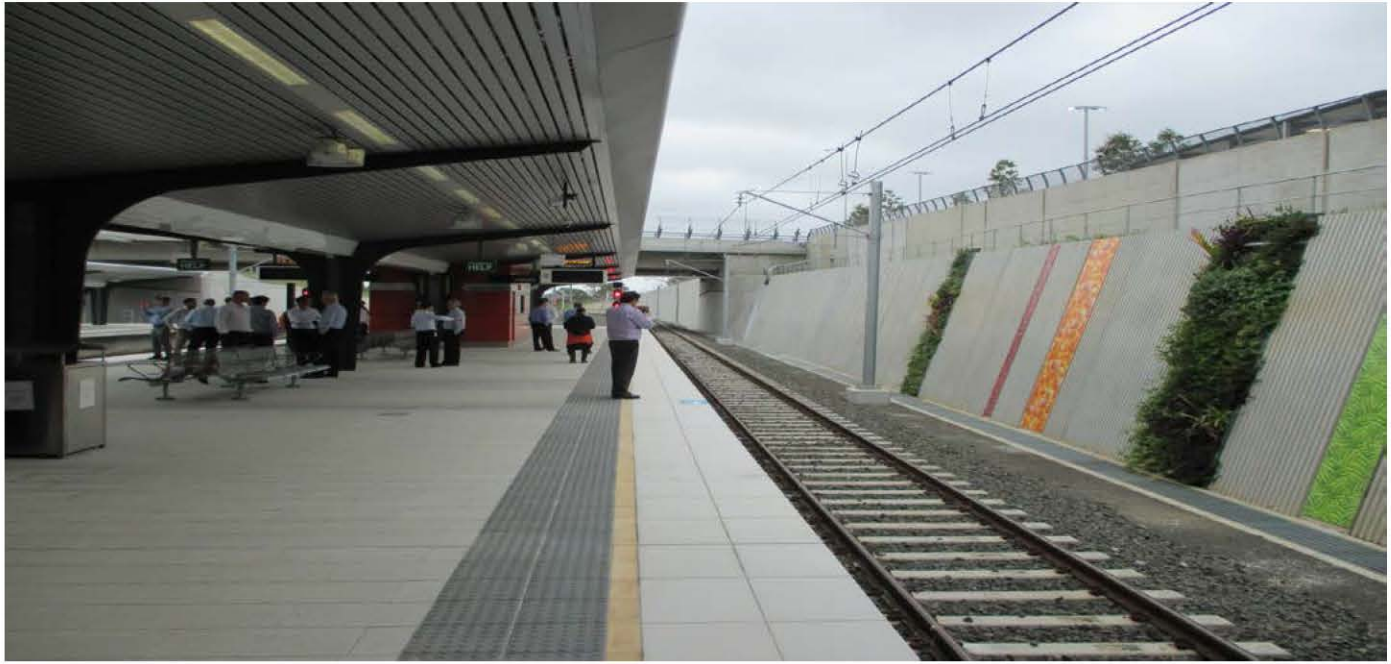
Shellharbour Junction Railway Station

Platform 2

South West Rail Link

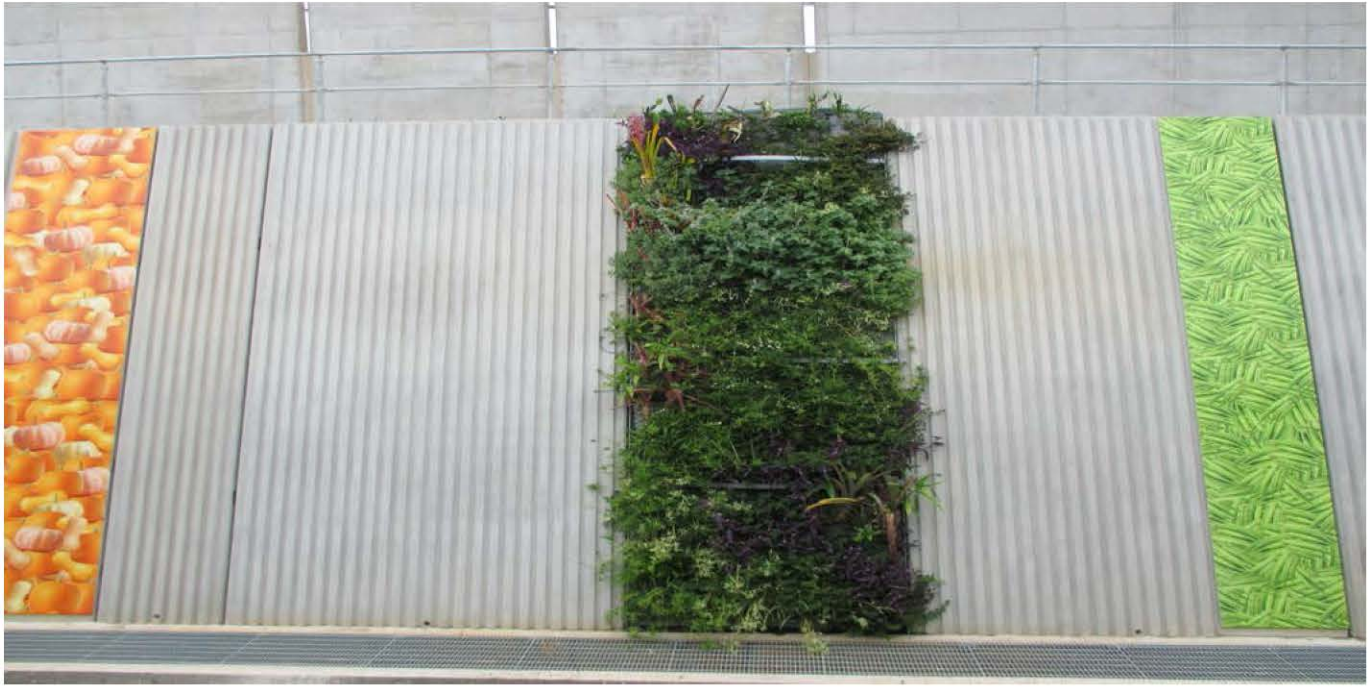
Leppington Station entry

South West Rail Link



Leppington Station vertical gardens

South West Rail Link

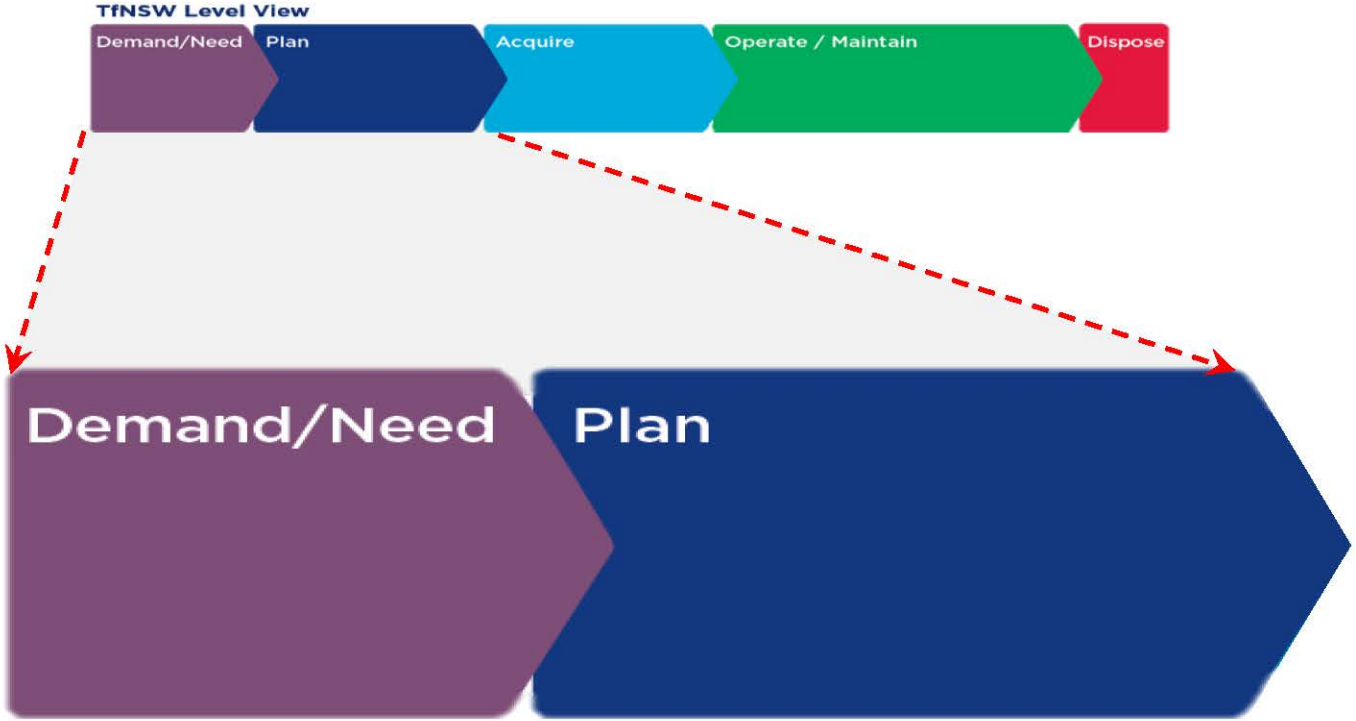


Leppington Station vertical gardens

South West Rail Link

Leppington Station concourse

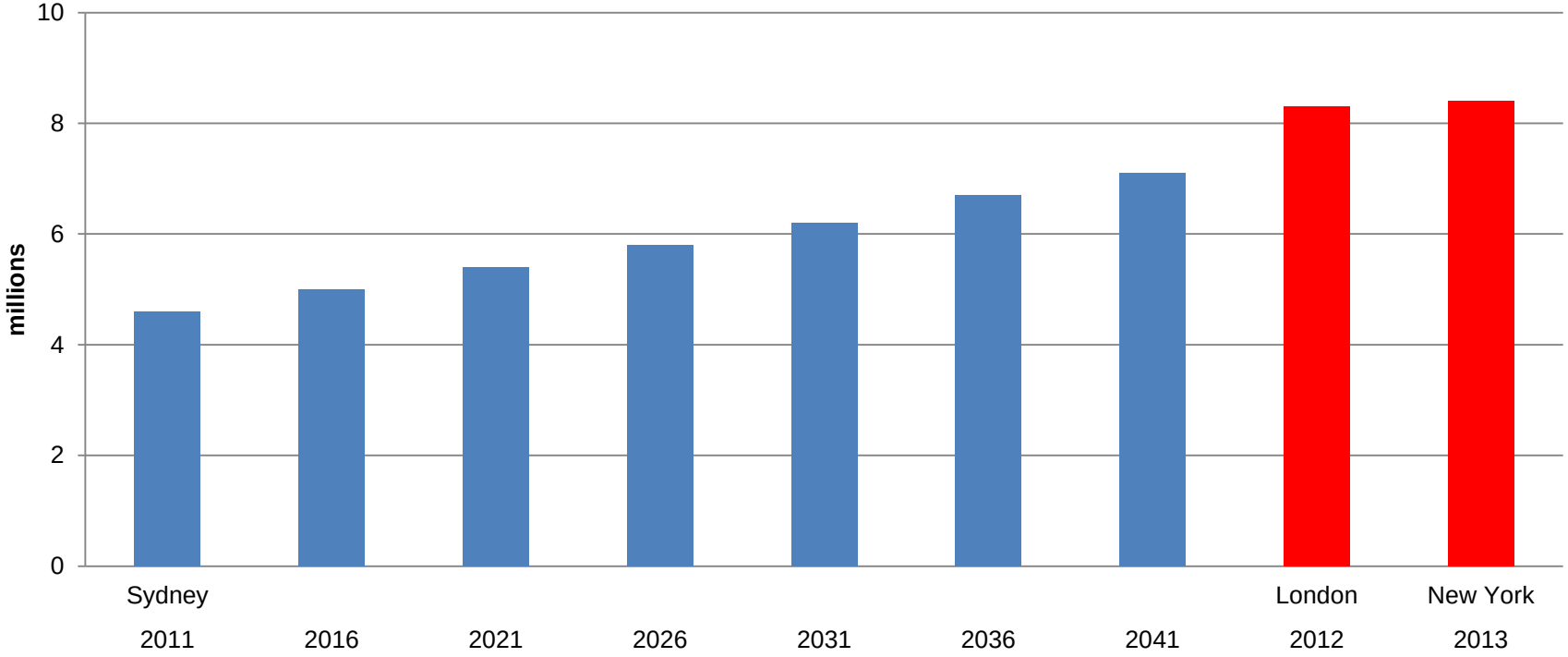
Focus on getting it right!



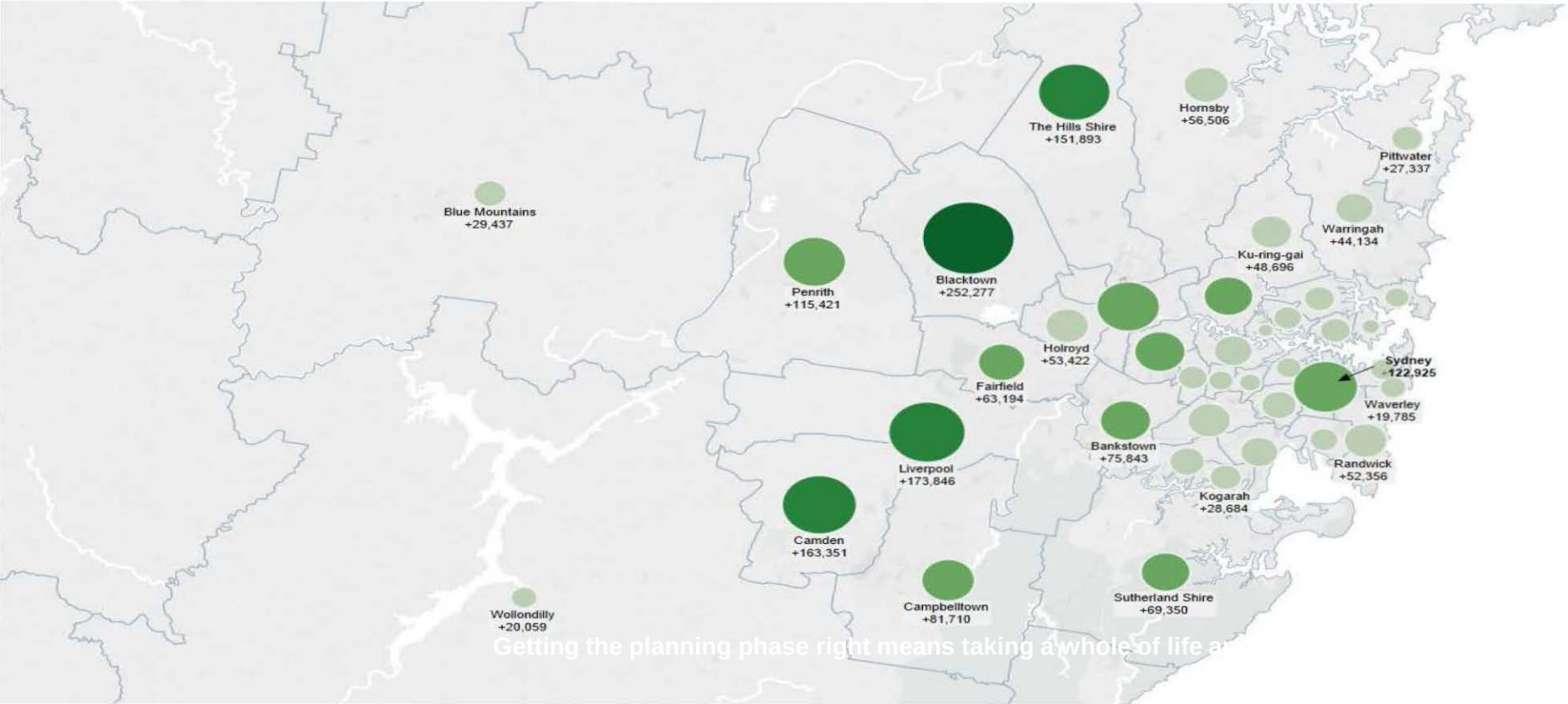
Understanding the problem

- Greater understanding of the demand
  - Demographic and Freight Growth
  - Quality of service / service outcome
  - Asset dependence - asset vs. non-asset solution
- Alignment to Community Expectations
  - Customer Experience e.g. wayfinding, communications and customer security
  - Legislative requirements e.g. accessibility (DSAPT)
- Integrated Transport Solution
  - Fit for purpose and sustainable assets deployed by Rail, Buses, Ferries and/or Roads to meet the service outcomes

Sydney population – 2011 to 2041



Population Growth by LGA 2011 to 2041



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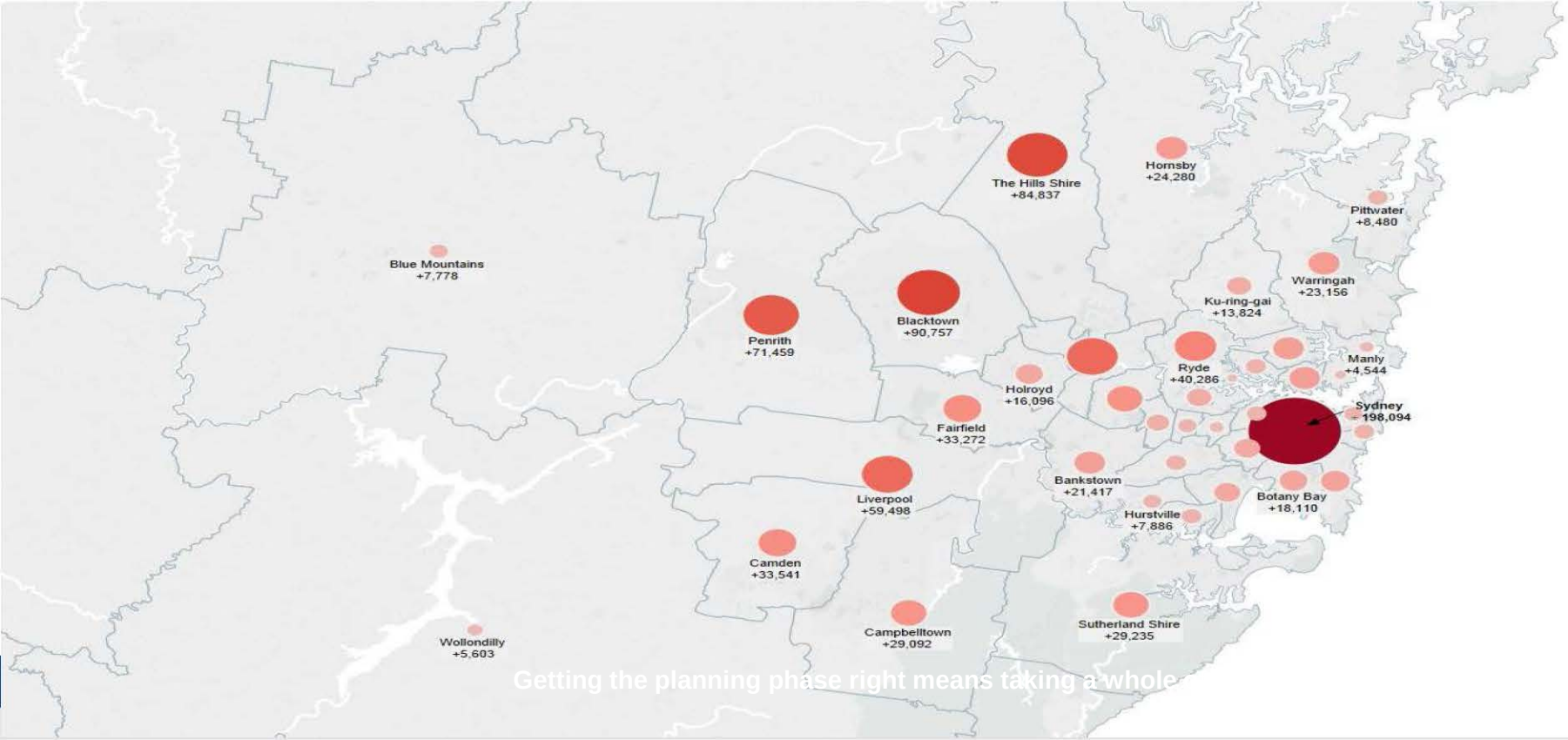
Employment Growth by LGA 2011 to 2041



Getting the planning phase right means taking a whole

Doing the Right Planning

- Converting Service Plan to an Operational & Maintenance Concept Plans
- Requirements Management i.e. BRS
- Defining System Performance and targets i.e. RAMSS
- Exploring Options i.e. concept designs
- Whole of Life costs analysis for options
- Business Case development and benefits

Summary

- Transport asset base in excess of $100 billion
- Asset Management Journey has commenced
- Greater understanding of demand
- Doing the Right Planning i.e. Operational and Maintenance concepts
- Whole of life analysis to support investment
- Fit for purpose and sustainable assets to meet the service outcomes for Transport

Transport Asset Standards Authority

Questions?