

# Building Momentum

**State Infrastructure Strategy 2018-2038**

**Sensitive: NSW Cabinet**  
August 2018

we are **in**sw  
Infrastructure  
New South Wales

# Infrastructure NSW's four key roles

## Expert advice



- Deliver a 20-year Infrastructure Strategy, every five years
- Provide independent advice on infrastructure needs and policies

## Project assurance



- Monitor state-wide infrastructure programs via Gateway and Health Check reviews

## Projects NSW



- Deliver selected major projects

## Restart NSW



- Direct a \$30+ billion infrastructure fund to high priority projects

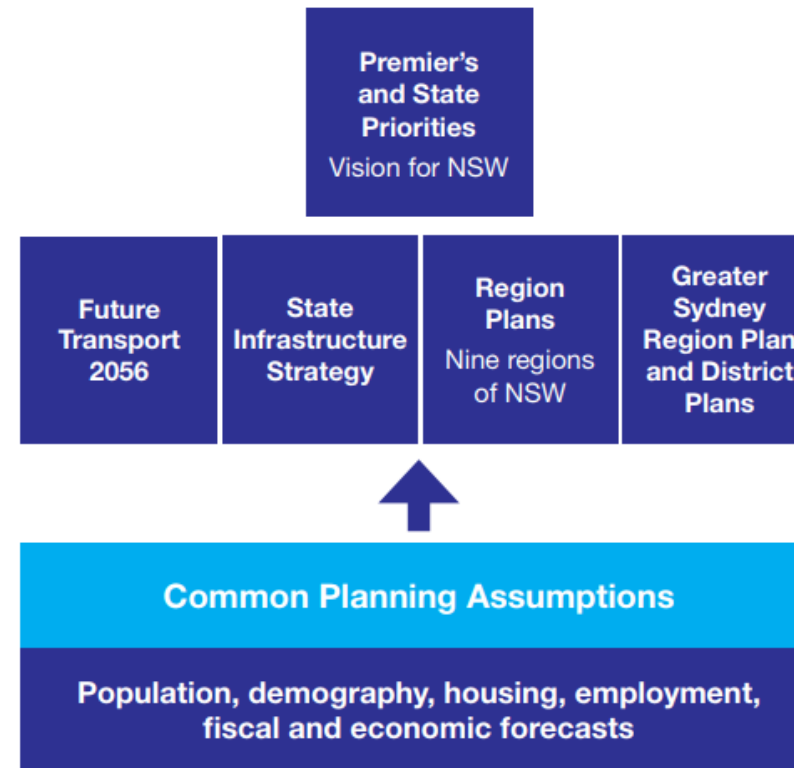
# State infrastructure strategies



# The 2018-38 SIS

## Infrastructure NSW strengthened its planning process

- Common Planning Assumptions across NSW Government
- Aligned land use plans with the Greater Sydney Commission and Future Transport Plan
- Strengthened economic modelling, including wider economic and social benefits and vulnerabilities and risks
- Expert Group consultation



# Long-term challenges

## NSW's population is growing...

- 7.7 million people today to 12.1 million by 2056 - some 4.4 million additional people, needing nearly two million new homes

## ...and ageing

- Increased demand for health and aged care, and lower workforce participation

## We face fiscal constraint

- Completion of asset recycling and falling Commonwealth contributions: “more with less”

## Patterns of employment are being disrupted...

- Automation, part-time working, personalisation

## ...and we need to harden our assets in the face of climate change

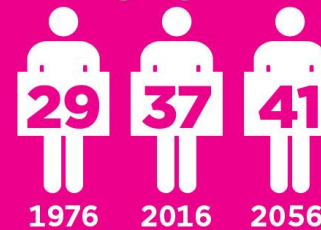
Projection of those aged 100 and over in 2056

**18,000** 

compared to 100 people in 1976 and 1,500 currently

NSW Intergenerational Report 2016, NSW Treasury

NSW ageing population



The median age will rise to 41 in 2056

NSW Intergenerational Report 2016, NSW Treasury

Skills disruption



**35%** of core skills will change between 2015 and 2020

Jobs of the Future Report 2015, World Economic Forum

# Structure

## Strategic directions

Achieving 'more with less' using the State's large asset base and infrastructure program

### 39 recommendations:

- Integrate land use and infrastructure (11)
- Plan, prioritise and deliver infrastructure better (3)
- Strengthen asset management and utilisation (2)
- Embed resilience into infrastructure decisions (6)
- Expand digital connectivity and technology (13)
- Explore innovative service delivery models (4)

## Geographic directions

Different parts of NSW face different opportunities and challenges, driving infrastructure directions

### No recommendations

#### NSW:

Leverage comparative advantages in industry key sectors, protect livability in the context of growth

#### Regional NSW

Support the hub and spoke model

#### Greater Sydney

Support the three cities:

- Eastern Harbour City
- Central River City
- Western Parklands City

## Infrastructure directions

Planning for the next wave of investment, on the basis that good projects come from good long term strategic plans

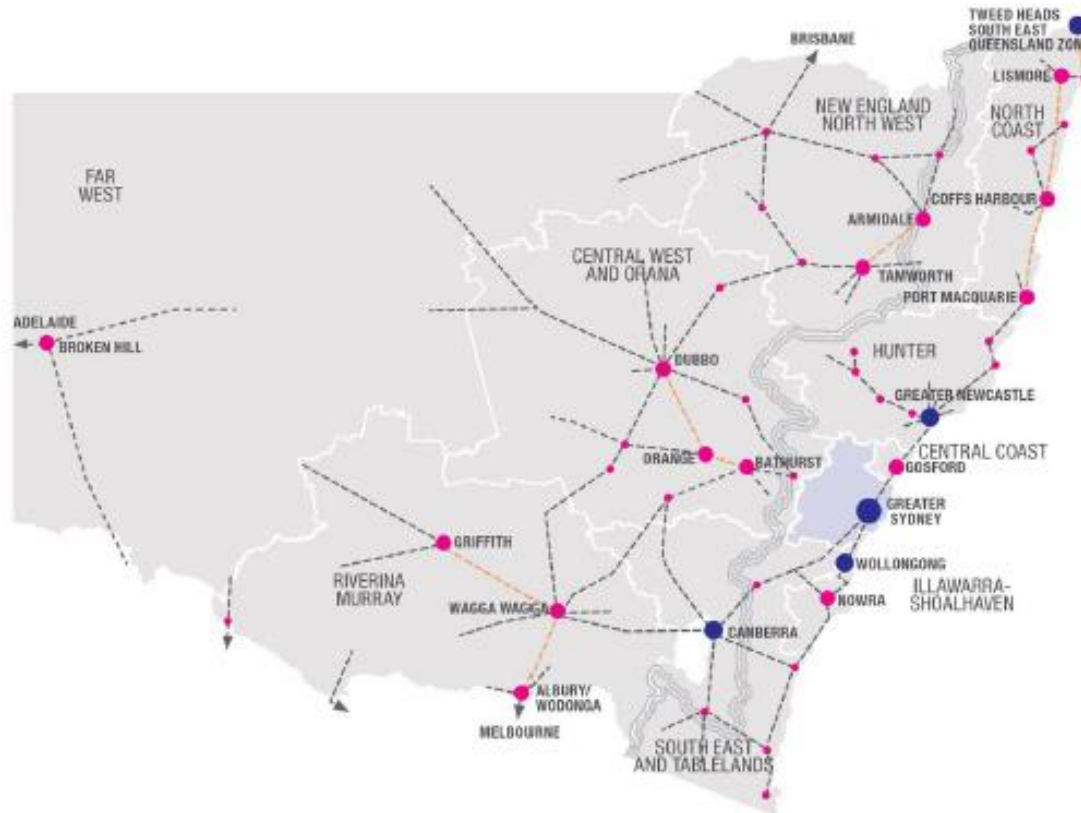
### 83 recommendations:

- Transport (32)
- Energy (10)
- Water (13)
- Health (5)
- Education (12)
- Justice (4)
- Culture, Sport and Tourism (7)

# A metropolis of three cities



# Regional hub and spoke model



Source: Transport for NSW, adapted by Infrastructure NSW, 2017





# Strategic directions

- 1. Integrate land use and infrastructure planning**
- 2. Plan, prioritise and deliver infrastructure better**
- 3. Strengthen asset management and utilisation**
- 4. Embed resilience into infrastructure decisions**
- 5. Expand digital connectivity and technology**
- 6. Explore innovative service delivery models**

# 1. Integrate land use and infrastructure planning



## Challenges

- NSW is forecast to grow by 1.1 million people every ten years
- Population growth has external impacts, such as pollution and congestion – these can reduce community support for greater housing density
- Infrastructure needs to be well planned to meet housing and jobs growth to help mitigate these externalities



## Directions

- Prepare a rapid Strategic Business Case for the GPOP Growth Infrastructure Compact pilot by end of 2018
- Incorporate Growth Infrastructure Compact and Priority Growth Areas and Precinct locations into:
  - agency asset management plans
  - the NSW Government's capital prioritisation process
- Identify and protect priority corridors, and support with appropriate funding
- Establish a housing and employment supply pipeline by 2020, aligned to District Plans and Region Plans

## 2. Plan, prioritise and deliver infrastructure better



### Challenges

- Infrastructure needs to be procured, delivered and managed more efficiently
- Current NSW infrastructure pipeline is placing pressure on the capacity and capability of the construction sector



### Directions

- Pursue further major project planning approval administrative reforms
- Pursue further asset recycling initiatives
- Partner with industry to:
  - identify and implement major procurement reforms
  - prepare a workforce development plan

### 3. Strengthen asset management and utilisation



#### Challenges

- The State has a significant physical asset portfolio, valued at over \$300 billion
- The State's infrastructure needs to be effectively managed and its performance optimised to meet growth and productivity challenges
- Infrastructure demand cannot be met purely by building new infrastructure



#### Directions

- Improve asset management across the NSW public sector
- Establish a new asset management assurance framework, led by Infrastructure NSW

## 4. Embed resilience into infrastructure decisions



### Challenges

- The State's infrastructure needs to be resilient to withstand the risks posed by natural disasters and cyber attacks
- Existing risks are likely to increase due to factors like climate variability, a growing population and interdependencies between infrastructure systems



### Directions

- Nominate an agency to assume central accountability for the collection and coordination of statewide natural hazard information
- Develop a Natural Hazard Policy to embed resilience into land use planning
- Develop risk assessment tools and guidance to support vulnerability assessments
- Embed resilience considerations into project business cases, capital asset planning and assurance processes

## 5. Expand digital connectivity and technology



### Challenges

- Variable levels of connectivity across NSW – poor connectivity in some areas
- Business development in growth sectors impeded
- Government service delivery impaired
- Opportunity to maximise the value of government-owned data for infrastructure planning
- Risk to information security and cyber security



### Directions

- Through Connecting Country Communities program set connectivity targets to ensure baseline service levels
- State wide stocktake of digital connectivity assets the Government owns or licenses
- Leverage State's assets and purchasing power to secure better connectivity access
- Develop a Smart Cities Strategy and business case to embrace the benefits of technology for infrastructure and public services
- By mid-2020, implement a policy for NSW smart infrastructure (sensors and IoT) and an infrastructure data management framework
- Embed risk-based cyber security standards for critical infrastructure

## 6. Explore innovative service delivery models



### Challenges

- The emerging fiscal gap means that unless it acts now, the NSW Government will be increasingly unable to afford the public services the community wants and expects
- Consumers have greater expectations for high quality services, and are less concerned with who is delivering them
- Government needs to move away from a 'one size fits all' service delivery approach



### Directions

- Support adaptive and risk-based regulation aligned to the forthcoming Government's response to the Independent Review of the NSW Regulatory Policy Framework
- Increase access to open data to support market innovation (e.g. TfNSW Open Data Hub)
- Expand the provision of market-based service delivery models (e.g. mobility as a service)
- Continue innovative procurement of public services from the private and not-for-profit sectors
- Apply Commissioning and Contestability Policy to the development of sector strategies

# Transport



## Challenges

- Negative impacts of congestion and emissions are impacting economic growth, productivity and liveability
- Constrained access to dense, growing Eastern and Central Cities
- Increasingly limited space for, and high cost of, further road construction in Sydney
- Poor public transport access and connectivity in outer metropolitan Sydney and regional
- Large distances, dispersed populations and assets in poor condition in regional NSW



## Directions

- Use existing transport infrastructure better (e.g. demand management, Smart Rail and Smart Motorways)
- Help shape the three cities model through new cross-town transport connections – shift investment progressively to the Central City and ultimately the Western City
- Plan for transport connections to support the new Western City, leveraging Western Sydney Airport
- Improve regional transport through ‘hub and spoke’ model
- Encourage new technology-led service delivery models
- Improve the resilience and safety of the transport system



# Freight and International Gateways



## Challenges

- Sydney freight access is congested
- Freight corridors are under threat from urban encroachment
- Passenger train services are given priority over freight
- Restrictions on access for heavy and longer vehicles and different state vehicle standards



## Directions

- Address constraints and pinch points on routes to major export gateways
- Protect existing and future metropolitan freight road and rail corridors
- Improve regional road freight productivity and pinch points on the local regional road network
- Prepare for Western Sydney Airport and Inland Rail
- Maximise the use of digital technology to improve statewide and interstate freight movements

# 10-point commitment to the construction sector

## The Action Plan aims to:

- encourage an increase in the “supply side” capacity of the sector to meet future demand
- reduce industry’s costs and “down-time” by making procurement processes more efficient
- develop the skills, capability and capacity of the construction industry’s workforce
- encourage culture change and greater diversity in the construction sector and its suppliers

