






FACTSheet

#8, February 2016

 Indicates no change from FACTSheet #7, September 2015

 Indicates an increase from FACTSheet #7, September 2015

 Indicates a decrease from FACTSheet #7, September 2015

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Introduction

This latest FACTSheet produced by the Committee for Perth contains a snapshot of key facts relating to the current performance of Western Australia and Perth.




It draws on data from a range of sources including FACTBase reports, Committee for Perth research, government departments and media sources.

The Economy:¹


-  Western Australia's **gross state product (GSP) was \$249 billion** in 2014-15, contributing 15% of Australia's gross domestic product (GDP). GSP per capita was \$96,475, 42% higher than the national average of \$68,171.
-  Western Australia's **population in the March quarter 2015 was 2.59 million**, 11% of the national population. The 2015 Western Australia Tomorrow report forecasts that the State's population will rise to 3.27 million by 2026.
-  Western Australia's **real GSP rose 3.5%** in 2014-15, above forecast growth of 3.25%. Growth in 2014-15 was below annual average growth of 5.3% over the past ten years, and follows higher growth in 2013-14 of 5.6%.
-  Western Australia's **GSP is forecast to rise 2.0%** in 2015-16, 3.5% in 2016-17, and 2.75% in 2017-18 and 2018-19. Australia's GDP rose 2.3% in 2014-15. Australia's GDP is forecast

-  to rise by 2.75% in 2015-16, 3.25% in 2016-17 and 3.5% in 2017-18 and 2018-19.
-  **Weighted average GDP growth of Western Australia's major export markets was 5.6%** in 2013, 4.9% in 2014 and is forecast to be 4.8% in 2015.
- The **CommSec State of the States report** which compares the performance of all the state and territory economies over the final quarter of 2015 ranked Western Australia fifth. New South Wales was 1st, Victoria 2nd, the ACT and Northern Territory equal 3rd, Western Australia dropped from 4th to 5th, Queensland is 6th, ahead of South Australia 7th and Tasmania 8th. While Western Australia has the fastest growing economy, it is bottom ranked on business investment and unemployment.³³



Major components of Western Australia's GSP²

-  Western Australia's **merchandise exports rose 8.7% in volume terms** in 2014-15, while consumption rose by 1.1% and dwelling investment rose by 4.1%. Merchandise exports were the largest contributor to GSP growth in 2014-15.
-  **Business investment fell 12.3% in volume terms** in 2014-15.
-  **Merchandise exports are expected to rise by an annual average of 4.9%** in the four years to 2018-19, offsetting falling business investment over the period.


Industry sectors, value added, % change³



-  Mining made the largest industry contribution to GSP growth in 2014-15, with **real value added rising 10%**.
 - Other industry sectors contributing to GSP growth included non-market service industries including public administration and safety; health care and social assistance; and education and training, were up 4.2%, market services industries grew by 1.4%, manufacturing rose 4% and electricity, gas, water and waste services were up 4%.
-  The **agriculture, forestry and fishing industry detracted** from GSP growth in 2014-15 down 16%, construction was down 5%.

Industry sectors nominal value added³

-  The **mining industry accounted for 25.6% of GSP** in 2014-15. Market services industries comprised 29% and construction 13% of GSP.
-  The **mining industries nominal value added fell 23%** to \$63.6 billion in 2014-15. Agriculture, forestry and fishing also fell by 23% to \$4.5 billion.
-  **Nominal value added in construction rose by 1%** to \$32.9 billion, while market services industries fell 1% to \$72.3 billion in 2014-15.

Population growth⁴

-  Western Australia's **population rose 1.6%** in 2014, following 2.5% growth in 2013. This was lower than the annual average growth of 2.6% over the past ten years.

-  The **population was 2,581,250** in 2014, 40,117 more than a year earlier. Net overseas migration contributed 47% (18,901) of the growth in 2014.
-  **Population growth is forecast to have fallen from 2.6%** in 2013-14 to 1.9% in 2014-15 and then rise to 2.2% in 2017-18 and 2018-19, according to the 2015-16 State Budget.






Labour market⁵

-  **Employment in Western Australia grew 1.1%** (14,800) to 1.36 million in October 2015. Employment grew 1.1% (14,400) through the year to October 2015, lower than Australia's growth of 2.7% (315,000).
-  The **State's unemployment rate eased slightly to 6.3%** in December a fall of 0.3% points from November. Australia's unemployment rate remained steady at 5.8% cent in December, an almost two-year low.²⁹
-  The State's **annual average employment is forecast to grow by 1.75%** in 2015-16, with an average unemployment rate of 6.25%, according to the 2015-16 State Budget.


Industry sector employment, annual average⁶

-  **Market services industries accounted for 48% of Western Australia's employment** in 2014-15. The on-market services industries of public administration and safety; health care and social assistance; and education and training contributed 24.5%, construction 10.8% and mining 6.9%.
-  In 2014-15, **employment rose in market services industries up 35,250** or

5.6%, non-market services industries were up 21,650 or 6.9%, construction up 7,125 or 5.1% and agriculture, forestry and fishing up 3,600 or 12.8%, but fell in all other industries.

-  **Mining employment fell 12%** or 12,900 jobs in 2014-15, due to falls in metal ore mining which was down 15,450 or 26%, exploration and other services employment were down 1,175 or 4.5% and oil and gas extraction was down 375 or 3.4%, offsetting a rise in other mining including non-metallic minerals mining, coal mining and mining not further defined were up 2,525 or 21%.
-  **Business investment contributed 25% of Western Australia's GSP** in 2014-15.
-  The State accounted for **26% of Australia's business investment** in 2014-15.
-  In November 2015, **WA accounted for 56% of the value of Australia's resource projects** under construction or committed, according to the Office of the Chief Economist.
-  In September 2015, there was **\$171 billion worth of resource projects under construction or committed** in Western Australia and a further \$110.4 billion under consideration, according to the Western Australia Department of Mines and Petroleum.

Annual business investment⁷

-  **Business investment in Western Australia fell 12.3%** in real terms in 2014-15, compared to annual average growth of 11.7% over the past ten years.
-  The **value of business investment fell 11.4%** to \$63.1 billion in 2014-15.
-  The value of private new capital expenditure

for selected industries, excluding new capital expenditure in the areas of agriculture, forestry and fishing; public administration and safety; education and training; health care and social assistance; and superannuation funds, in Western Australia fell 1.5% to \$55.1 billion in 2014-15, 37% of the Australian total.

↑ The value of new mining capital expenditure fell 1.6% to \$46.0 billion in 2014-15; 60% of the Australian mining total.

Quarterly business investment⁸

↑ Business investment in Western Australia rose 3.1% to \$15.0 billion in the June quarter 2015.

↑ Completed engineering construction work grew 33% to \$11.4 billion in the June quarter 2015.

↓ New mining capital expenditure fell 12.2% to \$9.9 billion in the September quarter 2015, not adjusted for seasonal factors.

Iron ore, LNG and resource prices⁹

↓ The value of minerals and petroleum sales in Western Australia fell 18.5% to \$99.5 billion in 2014-15.

→ The Reserve Bank of Australia's non-rural commodity price index fell 21.6% in 2014-15 down 17.5% in 2014.

→ The Australian dollar exchange rate fell 9.4% to US82.9 cents in 2014-15 down 6.4% in 2014 and is forecast in the 2015-16 State Budget to average US75.9 cents in 2015-16.

↓ The monthly average price of iron ore fell 7% to US\$53 a

tonne in October 2015. The annual average price fell 42% to US\$72/t in 2014-15 - down 28% to US\$97/t in 2014 and according to the State Budget it is forecast to fall to US\$47.5/t in 2015-16.

↓ The monthly average price of LNG remained at US\$9.0 a million British thermal unit in October 2015. The annual average price fell 15% to US\$13.6/MMBtu in 2014-15, down 1% to US\$16.0/MMBtu in 2014.

↓ The monthly average price of crude oil rose 2% to US\$46.2 a barrel in October 2015. The annual average price fell 32% to US\$69/bbl in 2014-15 (down 5% to US\$93/bbl in 2014).

↓ The monthly average price of gold rose 3% to US\$1,159 an ounce in October 2015. The annual average price fell 6% to US\$1,223/oz in 2014-15, down 10% to US\$1,266/oz in 2014.

Major minerals and petroleum sales by value¹⁰

↓ Western Australia's iron ore sales fell 27% to \$53.8 billion in 2014-15 - 54% of all minerals and petroleum sales, despite sales volumes rising 15% to 719 million tonnes.

↓ LNG sales fell 4% to \$13.8 billion in 2014-15, 14% of minerals and petroleum sales, despite volumes rising 2% to 20.4 million tonnes.

↓ Crude oil sales, including condensates, fell 18% to \$8 billion - 8% of minerals and petroleum sales in 2014-15, despite volumes rising 13% to 14.6 gigalitres.

↑ Gold sales rose 2% to \$9.0 billion in 2014-15, 9% of minerals and petroleum sales, despite volumes falling 2% to 191.4 tonnes.

Iron ore and LNG sales outlook by volume¹¹

→ Western Australia's iron ore sales are forecast to rise by an annual average of 2.7% to 799 million tonnes between 2014-15 and 2018-19.

→ LNG sales are expected to grow from 20.4 million tonnes in 2014-15 to almost 50 million tonnes by 2017-18, assuming the Gorgon, Wheatstone and Prelude projects are operating at full capacity at this time and the North West Shelf maintains current levels of production.

Principal agricultural commodities produced¹²

↑ The gross value of agriculture production in Western Australia rose 0.2% to \$11.6 billion in 2014-15.

↑ The gross value of principle agricultural commodities produced, including wheat, barley, oats, grain sorghum, canola, cotton, apples, grapes, hay, lupins, nursery production, potatoes, tomatoes, cattle and calves, sheep and lambs, pigs, poultry, wool, milk and egg, rose 29% to \$8.6 billion in 2013-14.

↓ The value of the State's agri-food exports including agriculture, forestry and fishing industry products, natural and cultured pearls, and food and beverage manufacturing rose 2.1% to \$7.2 billion in 2014-15.

→ The value of wheat exports rose 6.2% to \$3.0 billion in 2014-15, while volumes rose 8% to 9.2 million tonnes.

Merchandise trade¹³

- ↓ In 2014-15, exports of goods and services accounted for 47% of GDP.
- ↓ In 2014-15, minerals and petroleum contributed 84% or \$93.5 billion of the State's merchandise exports.
- ↓ Western Australia contributed 43% of Australia's merchandise exports in 2014-15, accounting for large shares of national exports to China (68%), Japan (47%), Korea (46%) and India (19%).
- China was the largest market for the State's exports of iron ore (77%) and gold (53%) in 2014-15.
- ↓ Western Australia's merchandise exports fell by 15% to \$110.7 billion in 2014-15.
 - Merchandise exports were mainly iron ore (48%), LNG (12.2%), gold (11.8%) and crude oil and condensate (6%) in 2014-15.
- ↓ Merchandise export volumes rose 8.7% in 2014-15, above annual average growth of 5.2% over the past ten years.
- ↓ Merchandise imports fell 4% to \$35.4 billion in 2014-15.
 - Merchandise imports were mainly crude oil and condensate (13%), non-monetary gold (9%), refined petroleum oil (8%) and engineering plant and equipment (5%).

Major trading partners: 2014-15¹⁴

- ↓ China was Western Australia's largest export market in 2014-15 at \$55.0 billion or 50%, followed by Japan - \$20.9 billion or 19%.
- China overtook Japan as the State's largest export market in 2006.
- ↑ The State's exports to China

fell by 22% or \$15.6 billion in 2014-15 while exports to Japan fell 13% or \$3.0 billion.

- China was the State's largest source of imports in 2014-15 - \$4.9 billion or 14%, followed by Korea at \$3.4 billion or 9%.

Major iron ore export markets by volume¹⁵

- Western Australia accounted for 52% of global iron ore exports in 2014, up from 47% in 2013 and 42% in 2012.
- ↑ The State's iron ore exports to China rose 19% to 584 million tonnes in 2014-15, slightly below the 20% annual average growth over the past ten years.
- ↓ Iron ore exports to Japan fell 1% to 75 million tonnes in 2014-15.
- Iron ore exports to Korea remained at 51 million tonnes in 2014-15.
- China overtook Japan as Western Australia's largest iron ore export market in 2004-05.

Iron ore exports¹⁵

- ↓ The value of Western Australia's iron ore exports fell 28% to \$53.3 billion in 2014-15, a turnaround from annual average growth of 21% over the past ten years.
- ↑ The annual average price of the State's iron ore exports fell 37% in 2014-15.
- ↑ The volume of the State's iron ore exports rose 15% to 730 million tonnes in 2014-15, above annual average growth of 12% over the past ten years.

Iron ore exports by port¹⁶

- ↑ Iron ore exports from Port Hedland rose 21% to 418

million tonnes in 2014-15, accounting for 57% of the State's iron ore exports.

- ↓ Iron ore exports from Dampier fell 5% to 131 million tonnes in 2014-15, contributing 18% of the State's iron ore exports.
- ↑ Iron ore exports from Cape Lambert rose 31% to 145 million tonnes in 2014-15, contributing 20% of the State's iron ore exports.
 - By 2017-18 capacity at Port Hedland could reach 495 million tonnes. In 2014-15, Rio Tinto completed expansions at Cape Lambert and Dampier, increasing capacity to 210 million tonnes and 150 million tonnes respectively.

LNG sales¹⁷

- ↓ The value of Western Australia's LNG sales fell 4% to \$13.8 billion in 2014-15, below annual average growth of 13% over the past ten years.
- ↓ The annual average price of the State's LNG sales fell 6% in 2014-15, below annual average growth of 7% over the past ten years.
- ↓ The volume of the State's LNG sales rose 2% to 20.4 million tonnes in 2014-15, below annual average growth of 6% over the past ten years.

Quarterly merchandise exports¹⁸

- ↓ Western Australia's merchandise exports rose 12.3% to \$26.7 billion in the September quarter 2015.
- ↑ Western Australia's merchandise exports to China grew 15.2% to \$14.7 billion in the September quarter 2015; the first increase following six successive quarterly declines prior.

- ↓ The State's **merchandise exports to Japan rose 10.4% to \$3.9 billion** in the September quarter 2015.
- ↓ The State's merchandise exports to all other countries, excluding China and Japan, rose by 8.4% to \$8.1 billion in the September quarter 2015.

Services trade¹⁹

- Western Australia contributed **10.5% of Australia's services exports** in 2014.
- The State's services exports in 2014 were mostly personal travel at 48%, transport 17%, business travel 14%, and technical, trade and other business services 8%.
- Western Australia's **services exports rose 5% to \$6.3 billion** in 2014, mainly due to increases in personal travel to the State which was up 8% to \$3.1 billion, business travel was up 6% to \$869 million and postal and courier services which were up 21% to \$225 million.
- **Services imports rose 0.6%** to \$10.6 billion in 2014, mainly due to increases in freight services - up 15% to \$1.6 billion.

Western Australia's construction industry²⁰

- ↑ The **construction industry employs approximately 11.1%, annualised**, of the overall State workforce.
- ↑ There were **162,920 people working in the construction industry** as at August 2015, with an annualised average of 150,810 in the previous twelve month period.
- ↓ The **industry workforce increased by 7,698 people** in the last quarter. Compared to 2014, at the end of August 2015 annualised, there

was a 4% decrease in construction apprentice commencements, excluding electrical trade apprentices, and a decrease in electrical apprentice commencements of 1.8% with an overall decrease of 3.2%.

↑ There are currently **4,424 building trades apprentices 'in training'** which is the highest number since 2008. Together with electrical trade apprentices, there are 8,489 apprentices in training which is the highest ever recorded.

↑ As at August 2015, the **industry employed just over 47% of all Western Australia's apprentices** - building trades and electricians combined. The seasonally adjusted participation rate in Western Australia increased to **69.2%** in October 2015, from a rate of 68.3% in September 2015.

→ It is estimated that **approximately 20,000 construction industry employees are working on resource industry infrastructure construction projects**. This is a significant reduction from the 29,000 estimated to be employed in that sector in 2013.

↓ The **value of residential and non-residential construction work, excluding heavy engineering, in the year to June 2015 increased by 2.6%** compared to June 2014.

- The **engineering construction sector, excluding heavy engineering, decreased by 25.6%** in Western Australia, between June 2014 and June 2015.

↓ The **housing sector has in recent months pulled back**, with annual total dwelling unit approvals to September 2015 dropping

to 30,586 - 21,987 houses, compared to a previous peak of 31,738 - 24,243 houses in September 2014 .

↓ Seasonally adjusted, **building approvals for total dwelling units decreased by 8.9%** between August 2015 and September 2015. Building approvals dropped by 4.4% over the three months to September 2015.

↓ **Trend building approvals in Western Australia decreased by 3.2%** between August 2015 and September 2015 and fell by 4.2% over the year.

↓ Seasonally adjusted, **dwelling commencements decreased by 10.5%** in the quarter to June 2015; and on an annualised basis compared to June 2014 commencements increased by 6.5%.

Apprentice Commencements²⁰

- Although there was a decline in commencements for 2015 it is due to previous years using data for full calendar years while data for 2015 is for the period September 2014 to August 2015. **Given the recent significant growth in industry activity, there is a need to maintain an increase in commencements in order to sustain the Industry's future skilled workforce needs.**
- ↓ Previously, 'wet trades' were classed as trades 'at risk', however, with the assistance of increased subsidies and an upturn in the sector in 2012-2013, these trades are either stable or have increased in numbers. Some trades have seen an increase in apprentice commencements including bricklaying, which increased by 12.0%, plastering by 69.5% and wall and floor tiling by 31.8%.

Apprentices in training²⁰

- ↑ As of November 2015, there were **4,424 building and construction trade apprentices in training**, the highest number since 2008. Combined with electricians, there are 8,489 apprentices in training, the highest number ever recorded. There are now more construction apprentices than electrical apprentices in the industry.
- Although some trades experienced a decline in apprentices since 2011, there was an **overall performance increase of between 13.19%** including electricians, and 16.54% for building and construction, excluding electricians.

Apprentice training rates²⁰

- Over the past four years there has been a **decline in the training rates for a number of construction trades** but an increase in others. The significant increase in the size of the workforce has a direct impact on the training rate as the number of apprentices has to grow at the same rate as the number of tradespeople in the workforce to maintain the training rate.
- **Increases in bricklaying** correspond to a significant increase in commencements. The decline in electricians can be directly attributed to a 23.5% increase in tradespeople.

Employment of females²⁰

- ↑ There are currently **90 female apprentices in training**. Over the past 10

years, the overall proportion of female apprentices in construction has risen from 0.9% to 2.0%.

- ↑ There are currently 78 female trainees which is an increase from 3.3% to 8% of total trainees over the past 10 years, with a 200% increase in the actual numbers over the last year.
- It is believed that one factor is the increased promotion of 'women in trades' subsidies and scholarships. Another factor is the **concerted efforts by the civil construction sector to employ young women**.

Employment of Aboriginal and Torres Strait Islanders²⁰

- ↓ There are currently **184 Aboriginal and Torres Strait Islander (ATSI) apprentices in training**. Over the past 10 years the overall proportion of ATSI apprentices has risen from 2.9% to 4.2% which is indicative of the increase in the number of ATSI people in the general population.
- ↓ Currently there are **78 trainees in training with an ATSI background**, which represents approximately 8% of all building and construction trainees. This increase appears to coincide with a concerted effort to recruit ATSI people by the civil construction sector.

Traineeships in the industry²⁰

- ↑ As of August 2015, there were **1,242 trainees in training**, primarily in the civil construction sector. Including the Civil Construction Supervisor Level 4 qualification, there has been an overall 182.9% increase since the 2009 figure of 439 trainees in training.

Reforming and reshaping

- In late January, thousands of people attended the **official opening of the \$440 million Elizabeth Quay**. The quay, expected to attract four million visitors a year, features short-stay boat moorings, promenades, a \$10 million water park, an island destination with a nature-based playground and a carbon fibre sculpture, Spanda. As part of the waterfront transformation, the Esplanade Train Station and Busport were renamed Elizabeth Quay Station and Elizabeth Quay Bus Station. Six of the nine land parcels surrounding the quay have been sold with expressions of interest for two of the lots being assessed. Pop-up restaurants, community markets and Fringe World events were scheduled throughout the three-week celebration period, including nightly laser and light shows.²⁴
- Planning Minister John Day has suggested that **Perth's public ferry service** could one day extend to East Perth and the stadium at Burswood. The State Government's Public Transport for Perth in 2031 plan included possible additions to ferry services that could link Burswood, East Perth, Perth and Applecross. But according to the Perth Stadium website, while a ferry service was considered "the number of passengers it could carry is too small for the significant crowds expected at the new Perth Stadium".²²
- A **\$110 million 42-level Sheraton hotel could be the newest addition to Perth's skyline**. Images of the proposed hotel show

a towering building that would overlook Elizabeth Quay. The 196-room hotel would be built on land that currently houses the New Esplanade Hotel, which would be demolished. The City of Perth has recommended the development for approval. The Sheraton is one of a handful of new hotels planned or proposed for the city, including two at Elizabeth Quay. Construction of the Ritz-Carlton on the eastern side of the quay is expected to start early in 2016.²²

- In June, the Committee for Perth release its landmark **Filling the Pool report**, which focuses on the Perth-based issues around gender inequality by exploring why women are paid less than their male colleagues and their struggle to climb the corporate ladder. Western Australia has half the national average of CEO's, fewer than half the number of female directors and under one-third the national average of female chairs. As part of the two year research project, 173 Perth-based people, including 151 women were interviewed. This included chairpersons, executive recruiters, human resources professionals, female executives and senior managers, women who have opted out of the corporate sector and 22 recent female graduates. As well as finding that Perth had a blokey and masculine culture, the researchers found that the Perth business community is missing or has an erosion of the four pillars of support that help women to succeed in other states. The four pillars are family support, a lack of childcare places, flexible employers and flexible work hours and

spousal support. Filling the Pool made 31 interlocking recommendations for government, business and women.²¹

- In December, the Committee for Perth released its special **FACTBase Special Report: Fremantle as a re-connected city**. The report was the culmination of one years' research that examined Greater Fremantle's economic, social, demographic and political character, from before settlement to today. The final report includes 14 key findings that provide the platform for future action in order to make the region a vibrant place to live, work, play and invest for current and future generations.²¹
- In December, the **Committee for Perth partnered with RAC to launch Get a Move On!** – a year-long research project that will be the first comprehensive study that asks Perth commuters and the business community what kind of practical, long-term public transport system they want. The report will also define and quantify the social, economic and environmental impacts of our under-stress transport system. The Get a Move On! commuter survey will identify what transport people currently use, what would make them change their commuting habits, the cost and impact of commuting on their lives and the trade-offs they would be prepared to make to improve their transport options. Businesses will be asked to identify and quantify the impacts of congestion on productivity, the trade-offs and changes organisations would be willing to make and ask for innovative ideas and

solutions for the future.²¹

- In January, the State Government announced that it will request the **Environmental Protection Authority reassess the Roe Highway Stage 8 project**, following the Supreme Court decision which found the assessment of the project to be invalid. In December, Supreme Court Justice Wayne Martin ruled that the EPA's approval was invalid because the agency had ignored its own policy on environmental setbacks. The State Government will also appeal the Supreme Court decision, given the broader implications of the decision on future development in the State.²²
- A report by the Productivity Commission has revealed that Western Australia has the **lowest percentage of affordable housing in the country**. Of every 1,000 homes sold in WA, just 30.7 of them are affordable to people on low and moderate incomes. The national average is 45. WA also has the lowest proportion of public housing allocated to households with special needs at 54.1%, the national average is 63.7%.³⁰
- The **redevelopment of the former Shenton Park hospital** moved a step closer with the State Government releasing proposed plans for public comment. Under the plan up to 1,600 homes will be built on the 15.8 hectare site with the Multiple Sclerosis Society of WA and the Leukaemia Foundation leasing land for patient services.²⁶
- Perth's **hotel boom continues**, with national hotelier, Mantra Group announcing plans to build a third property in the CBD. The \$30 million, 126 room hotel will be located on

Walker Avenue in West Perth. This latest hotel proposal takes to 4,470 hotel rooms either under construction, approved or in the pipeline in Perth. Major players include Crown Resorts with its \$568 million, 500 room Crown Towers, BGC Development with its \$500 million, Westin Perth and Singapore's Fragrance Group, which is planning hotels on two sites that would deliver 619 rooms.²³

- In December, the State Government revealed in its **mid-year Budget review that this year's Budget deficit would reach \$3.1 billion and net debt would peak at \$39 billion by 2018-19.**²²
- To cut spending, the State Government announced in December that it was implementing a **six month hiring freeze for the public sector, not including teachers and police.**²²
- In November, **Prince Charles officially opened the newly restored State Buildings, formerly known as the Old Treasury buildings,** on St Georges Terrace. The three interconnected heritage buildings have been restored to their heritage standard and include a retail, dining and hotel complex. The \$105 million restoration of the former Old Treasury Buildings is part of the \$580 million development of the adjacent Cathedral Square, including a new City of Perth library, a 33-level Mirvac office tower and a public plaza for St George's Anglican Cathedral. Over its 140-year history, the Old Treasury Buildings have been used as public offices, a police court and cellblock, Treasury, survey department, GPO, immigration offices, office of the Premier and Cabinet, Lands Department and Titles Building – but had been empty since the government vacated the buildings nearly two decades ago.²⁴

- Released by the Committee for Perth, **FACTBase 45 examined Internal Migration Patterns and Trends within Metro Perth and Peel** and found that the younger you are and the higher your educational qualifications, the more likely you are to travel both interstate and overseas. The report also found that while Western Australia's population recorded the highest growth rate in Australia since 2006-07 and grew by 2% between 2013-14, most of those people came from overseas, not interstate.²⁵
- The latest **Residents' Perceptions of Perth survey** released by the Committee for Perth in September found that almost 90% of the people surveyed believed that an efficient public transport system was of great importance for Perth's future. On the other hand, only 17% thought it was the current perception. 77% of the people surveyed stated that in the future, Perth should be easy to move around whether you're walking or cycling. While only 55% thought it should be easy to move around by car.²¹
- Premier Colin Barnett has suggested a **redesign of Australia's tax system,** where the Federal Government would give the States a proportion of their income tax revenue, distributed on a per capita basis or place of collection, instead of tied grants controlled by Canberra.²²
- In December, the State Government named fruit and vegetable industry group **Perth Markets Limited as the preferred bidder for the sale of Market City in Canning Vale.** Its sale is expected to raise about \$120 million for the State Government. The bidding came down to

two contenders, Perth Markets Limited and Kerry Stokes, through his private company Australian Capital Equity.²²

- As part of its **assets sales program** to help reduce debt the State Government has earmarked the Fremantle Port, the Utah Point bulk handling facility in the Pilbara and the TAB for sale.²²
- The Western Australian Planning Commission is considering a **proposal by LWP Property to reduce the minimum lot size from 120sqm to 80sqm in part of Ellenbrook near the town centre and build two-storey homes on the sites.**²²
- The Committee for Perth's **FACTBase 44 report examined the gender make-up of local government.** The report found that women are severely under-represented in the level of government closest to the community. The figures are even worse when the senior positions in local government such as Mayors, CEO's, General Managers and Directors are examined. In overall terms, the proportion of women elected to local councils across WA between 1999 and 2013 was 31.6%. There was a slight increase in the proportion of women working in local government, increasing from 29.2% in 1999 to 32.5% in 2013.²⁵
- In November, **Keystart, the State Government funded home loan company, began a tender process to find a lead financial adviser to help it divest a portion of its loan book to the private sector.** The process will reduce Keystart's reliance on State Government borrowings.²³
- In December, the State Government invited **Scarborough residents,**

business owners and the broader community to comment on planning documents that will guide future development in the area. The draft documents will provide the detailed guidance for development applications within the public realm and on private development sites. The \$57.4 million redevelopment of the Scarborough foreshore is expected to commence in autumn 2016.²⁶

- The Committee for Perth's **FACTBase 43 examined the criteria used to decide liveability rankings of capital cities around the world.** The report found that liveability is in the eye of the beholder and that some of the deciding factors come down to someone's personal preferences. The Economist Intelligence Unit (EIU) Global Liveability Survey, has rated Melbourne as the most liveable city in the world. The EIU survey looks at five categories, stability, healthcare, culture and environment, education and infrastructure, each is given a score from 1 to 100 and the total score is averaged out. Where Melbourne beat Perth was in the culture and environment ranking and its weather.²⁵
- In December, the State Government announced plans to **transform Western Australia's highly regulated, taxi industry** with interim initiatives to be implemented in 2016. The proposed reforms are aimed at creating a more level playing field for WA's on-demand taxi industry with increased accountability, competition and service quality from all transport providers and safer, more reliable and affordable

services for customers. Five other companies have expressed an interest in joining Uber as part of Perth's new taxi landscape by the end of 2016. They are Shofer, ingogo, WA Cabs, GoCatch and Oiii.^{22&26}

- The State Government's **2015 Women's Report Card**, released in December, shows how far women have progressed in terms of leadership, economic independence, safety and justice, and health and wellbeing. The Report Card found:
 - In 2013-14, women's average superannuation balances were 38% less than men's, \$83,110 compared with \$134,800
 - In 2014, the gender pay gap for full time employees in WA was 25.4% compared with 18.5% nationally
 - The proportion of female members on all WA Government boards and committees was 43.6% in 2015
 - Women's labour force participation rate increased from 43% in 1978 to 61% in 2014.²⁶
- In December, a strategy designed to guide the **economic development of the Peel region to 2050** was launched by the Regional Development Minister. The Peel Regional Investment Blueprint identified industry, agriculture, tourism, strong communities and a multi-skilled and high performing workforce as pivotal to the region's future.²⁶
- The Committee for Perth released its special **FACTBase report, Perth as a spatially transforming region.** The landmark report examines one of the greatest periods of change in Perth's history, between 1991 and 2011, and found that while we're better educated and earning more money, home

ownership levels have fallen by almost 10%, while the number of people with a mortgage has increased by more than 5%. Our population growth also outstripped the rest of the nation.²⁵

- The **City of Fremantle has plans to transform land in front of Fremantle Harbour and the Swan River into one of the biggest waterfront developments in Perth.** The council wants to develop 120,000 square metres of prime waterfront land from the WA Maritime Museum down to South Quay, just past the Fremantle Traffic Bridge for housing, hotels, cafes, bars and restaurants. The majority of the land leased to the Fremantle Ports by the Barnett government is currently used for storing new cars. The council faces one major hurdle: the WA government put the port up for sale at the last state budget to pay off debt, and is expected to fetch more than \$1.5 billion.²⁷
- Stage one of the **\$7.5 million transformation of the old Sunset Heritage Precinct in Dalkeith** started with plans to open significant areas to the public by October 2016, including barbecue and picnic facilities overlooking the Swan River. Over the next 10 years, the transformation of Sunset Heritage Precinct will see buildings conserved for arts, cultural activities, one-off and short-term events and community use.²⁸
- In December, the State Government announced a new initiative to support **Western Australia's multicultural community.** Three community organisations will receive \$810,000 over three years through the Multicultural Partnerships Program to deliver initiatives that develop our culturally diverse communities through collaboration, leadership and innovation.²⁶
- The State Government launched **Connected Living**, an initiative aimed at creating

more than 500 innovative, medium to high-density apartments on seven sites near Perth train stations. The Housing Authority is offering the sites in Armadale, Butler, East Perth, Gosnells, Midland, Perth and Wellard, totalling more than 28,000 square metres of land worth about \$20 million, through an invitation for expressions of interest.²⁶

- The Committee's **FACTBase 42 report examined Perth's Human Capital Base** and found that with the mining boom slowing down there is the need for greater investment in education and health services, higher rates of workforce participation - irrespective of someone's age, and technology that encourages innovation and collaboration. The report found that Perth needs to be a more dynamic, intelligent region that turns its focus to knowledge and innovation. The flow on effect will be that it drives our economic, social, and cultural wellbeing, and increases our international competitiveness.²⁵
- The State Government and Karma Group have concluded final lease negotiations that pave the way for **redevelopment within The Lodge precinct on Rottnest Island**, with the agreement effective from June 1, 2018. As part of the redevelopment of The Lodge, the development would include 80 contemporary self-contained units, short stay accommodation, cafe, restaurant and beverage venues, kids' club, swimming pool, day spa and conference and meeting rooms. The modified lease with Karma Group will also see the return of the 'Quod' or Aboriginal prison site to the Rottnest Island Authority in May 2018, as part of a

larger project to recognise the island's varied heritage and historic significance.²⁶

- The State Government established a panel of builders to undertake design and construction work in the Perth metropolitan area for the **\$560 million Social Housing Investment Package**. By establishing the panel, the State Government hopes to reduce the cost and time for them and the industry in lodging and assessing tenders.²⁶
- **Legislation recognising the special significance of the City of Perth and acknowledging the status of Perth as the State's capital passed the Legislative Assembly**. The legislation would bring Western Australia into line with all other mainland States which recognised the status of their capitals through Acts of Parliament. Under the legislation, the boundaries of the City of Perth will encapsulate The University of Western Australia, the QEII Medical Centre and the Perth Children's Hospital, and Kings Park. The proposed boundaries for the City of Perth will take effect from July 1, 2016.²⁶
- **Perth became the first Australian city on Malindo Air's network** when the airline's inaugural flight from Kuala Lumpur landed at Perth Airport in November. The airline, is owned by the National Aerospace and Defence Industries of Malaysia and Indonesia's Lion Air. Malaysia is Western Australia's third biggest market in terms of visitor spend. Last financial year more than 75,200 Malaysians visited WA and injected around \$196 million into the State's economy.²⁶
- **Bassendean will undergo a makeover** with the proposed redevelopment of about 11 hectares of

land into a mix of new residential dwellings and community facilities.

- Two key sites have been selected within the redevelopment area - the land around Bassendean Oval and a parcel of land to the north of the town centre.²⁶
- A landmark State-Federal agreement will see **renewable energy on Rottnest Island increase to 45%**. Under the \$7.3 million partnership, a solar farm will be constructed near the airport on Rottnest Island to work in conjunction with the existing wind turbine as part of a networked renewable energy system.²⁶
- Changes under the **Liquor Legislation Amendment Act 2015** allow beer and wine producers to establish a second cellar door operation or collective cellar door with other producers within the same region off-site. Another change allowed hotels to trade until midnight on Sundays, an extension of two hours, while nightclubs will be permitted to stay open until 2am of the following Monday morning. The Act also abolishes an anomaly that barred people from moving freely in licensed premises where they had to cross an unlicensed area, such as a footpath, to an alfresco area. The Act also allowed the Director of Liquor Licensing to accept applications without planning approval being provided at the time the application is lodged. Beer, wine and spirit producers also benefit from the removal of antiquated restrictions that prohibit them from taking sales via telephone or the internet from an office not located on their licensed premises.²⁶
- The **2015 Red Tape Reduction Report Card** highlights 36 out of more

than 100 significant red tape reduction successes including:²⁶

- Multifillion dollar savings from online property conveyancing
- Homeowners and builders saving up to two months on housing and renovation approvals
- Plumbers saving about \$1 million annually on drainage inspections
- Extensive licensing reforms including online business vehicle registration renewal
- Sunday and extended trading permit reforms for the liquor industry
- Work is expected to start in the middle of 2016 on the **Tonkin Grade Separations**, the first stage of the \$1.12 billion NorthLink WA initiative. The project will deliver new flyovers at the intersections of Collier Road, Morley Drive and Benara Road and an upgraded section of the Tonkin Highway north of Guildford Road. The next component of NorthLink WA is Stage 2 from Reid Highway and connecting with the Brand Highway and Great Northern Highway, providing a major route to the north-west.²⁶
- **Amendment 121 to the City of Swan's Local Planning Scheme to allow a residential development behind the Guildford Hotel has been approved.** Any future development is conditional on the restoration of the hotel being completed before construction of the new dwellings can start. The amendment includes provisions for up to five storeys, with the upper two floors to be setback.²⁶
- Apartment developer **Finbar has been given approval for a \$77 million, 194 dwelling, 10 storey apartment in Belmont.**

The project, named Chase Apartments, is on the former Comfort Inn at 239 Great Eastern Highway and will comprise one and two bedroom apartments, a gym, residents' lounge, games room and a sauna.²³

- The State Government has partnered with The University of Western Australia to **investigate innovative ways to deliver affordable housing.** Under two memorandums of understanding with UWA's Australian Urban Design Research Centre, the Housing Authority will provide \$250,000 in research and development funding over two years. Under one agreement, \$150,000 will be allocated to investigate solutions for affordable housing, infrastructure and urban design for infill developments in the Perth metropolitan area. The project will include research and development on the planning, design and delivery of higher density housing. The second \$100,000 project, will investigate solutions for affordable housing in modular building technology.²⁶
- Western Australia's first, three **bicycle boulevards** will be built in the cities of Vincent, Bayswater and Belmont. A bicycle boulevard is a low-speed street where cyclists have priority, along with local traffic.²⁶
- A **milestone in the development of a rail link from the city to the airport and Perth's eastern suburbs** was achieved when State Parliament passed enabling legislation for the \$2 billion Forrestfield-Airport Link in October. The Legislative Council passed the Railway (Forrestfield-Airport Link) Bill 2015, which establishes the State Government's authority to extend the

metropolitan rail network 8.5 kilometres to Forrestfield. The rail link will connect with the existing Midland line near Bayswater Station and will run to Forrestfield through underground tunnels, to ensure minimal impact on the existing land and road network. The first trains are expected to be on the line in 2020.²⁶

- In October, a contract was signed for **Western Australia's first schools to be built under a Public Private Partnership.** EduWest - comprised of Macquarie Capital Group Limited, Badge Constructions (WA) Pty Ltd, Perkins (WA) Pty Ltd, and Spotless Facility Services Pty Ltd - will finance, design and build eight public schools and then maintain them for up to 31 years. The four primary schools are in Landsdale East, Alkimos South West, Baldivis North and Byford South West. The four secondary schools are in Ellenbrook North, Lakelands, Hammond Park and Harrisdale.²⁶
- The State Government introduced changes to the **Retail Trading Hours Act (1987)** that allow general retail shops to open at 7am on weekdays and Saturdays, instead of the current 8am, and close an extra hour later at 6pm on Saturdays. The changes also broaden the range of products able to be sold by domestic development shops, such as hardware stores, to include decorative light fittings and all types of cooling and heating equipment. These shops currently open from 6am to 11.30pm every day. Other reforms include exempting Rottnest Island from the Act to allow shops on the island to trade at any time, to be able to better cater for the needs of tourists, and removing the redundant special holiday resort provisions for Rockingham and Wanneroo.²⁶

- The State Government will build a **\$32.1 million bus-only bridge from the James Street bus bridge behind Perth Arena** over the Graham Farmer Freeway to Charles Street, helping passengers get through the morning and afternoon peak hours faster. It's estimated the bus bridge will provide travel time savings of up to six minutes across 12 bus routes per week day to about 16,000 bus passengers.²⁶
- In October, **a Bill recognising the Noongar people as the traditional owners of Western Australia's South West was introduced to State Parliament.** the Noongar Koorah, Nitja, Boordahwan (Past, Present, Future) Recognition Bill 2015 recognised Noongar customs and culture, their unique contribution to the heritage, cultural identity and economy of the State, and represents a commitment to a shared partnership to build a stronger Western Australian community. The Bill recognises Noongar People as the first peoples and traditional owners of lands within the south west corner of Western Australia and formally acknowledges their culture, spirit, presence, heritage and identity. The symbolic Bill does not create new rights or change any laws and is part of the South West Native Title Settlement signed in June.²⁹
- The State Government has committed to spending **\$27.07 million on expanding the network of shared cycling and pedestrian paths** at the following locations: ²⁶
 - Fremantle Rail line
 - Shenton Park to Loch Street Station
 - Grant Street to Cottesloe Station
 - Cottesloe to Victoria Street Station
 - Midland Rail line
 - Guildford Bridge to Railway Parade
 - Guildford Station to East Street
 - East Street to Morrison Road
 - Mitchell Freeway
 - Civic Place to Karrinyup Road
 - Karrinyup Road to Erindale Road
 - Major Projects
 - NorthLink WA
 - Malaga Drive interchange
 - Gateway WA
 - Roe Highway
 - Roe 8
 - Mitchell Freeway extension.
- In September, **the State Government transferred the system management and operation of the wholesale electricity market in the South-West of Western Australia to the Australian Energy Market Operator (AEMO).** AEMO will be responsible for the **administration of the Gas Bulletin Board and Gas Statement of Opportunities.** It will also assume the function of the retail market operator when the State Government introduces competition in electricity services for small businesses and households within the next few years.²⁶
- The State Government is undertaking a restricted request for proposal (RFP) process to investigate the options to **move Government office accommodation to Joondalup.** The process could result in the procurement of up to 11,000 square metres of office space, with 800 public servants potentially relocating to Joondalup in late 2018. Key requirements include an A-grade building standard.²⁸
- The City of Perth has received a development

application to build **Perth's tallest apartment skyscrapers which would create a 'suburb in the sky'.** The 64-level Stirling Tower and 55-level Roe Tower are planned for the former Megamart site on Beaufort Street. The skyscrapers will contain a total of 1,066 apartments.³⁰

Lifestyle

- Figures compiled by the website Numbeo, which collates direct prices of goods from more than 500 major cities, show that **despite a slowing economy, Perth residents are paying mining boom prices for many goods but without the boom time wages.** Across a range of goods, Perth is the most expensive city in Australia and New Zealand, while it ranks alongside Tokyo, New York and Paris in overall prices. Of 518 major cities, Perth is the sixth most expensive in the world for a domestic beer. At an average price of \$25, Perth's inexpensive restaurant meals are \$9 higher than the average for Sydney diners. Cappuccino buyers face the second most expensive coffee in the region and one of the priciest in the world. Perth is also home to the highest-priced bananas in the country and in the top 30 in the world.²²
- An NAB survey found that **West Australians would need a windfall of \$828,000 to make their lives forever better.** This figure made West Australians the second hardest people to financially satisfy. NSW and ACT residents were the highest at \$851,000, Tasmanians were the lowest at \$171,000.²²
- **Perth's Fringe Festival,** the third largest in the world, was launched in January.

The Festival featured more than 700 cabaret, comedy, circus, theatre, music and other events. About 660,000 people attended last year's Fringe Festival which injected an estimated \$71 million into the WA economy.²²

- The **proportion of Perth homes sold at a loss hit a three-year high in the September quarter**. The Pain and Gain report found that 11.4% of resold homes across Perth in the September quarter were sold for less than the previous purchase price, the highest proportion since June 2012. The councils with the proportion of highest loss-making sales were Perth (37.1%), Mandurah (23.6%) and Nedlands (20%).²³
- Thirty-five emerging and established arts organisations will share in more than **\$29 million over three years to deliver arts and cultural experiences for the Western Australian community**. The 35 organisations include PICA, Country Arts WA, Yirra Yaakin Theatre Company, Artrage, The Last Great Hunt, a company of seven local theatre makers; and Co3, a contemporary dance company.²⁴
- **Sandalford Wines, won the top award at the 2015 Western Australian Tourism Awards, the Sir David Brand Award for Tourism**. It was the second time Sandalford Wines has won the award. The National Anzac Centre in Albany was named best new tourism business.²⁴
- Tourism research released to coincide with the **third anniversary of Perth Arena's opening** shows 278,000 people have visited Perth to attend an event at the venue. The findings show that out-of-town visitors to Perth Arena

have injected \$151 million into the local community.²⁶

- **Fremantle has been named a 'must see' destination for 2016** by one of the world's most respected international travel publishers, Lonely Planet. With more than \$1.3 billion of private and public investment in the development pipeline, Fremantle is undergoing its biggest transformation since the America's Cup defence in 1987.²⁶
- In October, the State Government released the **Swan Canning River Protection Strategy**, a master plan to guide investment, keep the rivers healthy and ensure they were accessible for the community to enjoy in the long term.²⁶
- **More Western Australians are holidaying at home** than ever before according to the latest quarterly National Visitor Survey figures released in September by Tourism Research Australia. Domestic or intrastate visitors spent half a billion dollars more in 2014-15 than in the previous year, supporting local tourism, retail and hospitality businesses. Research shows an 18% rise in the number of overnight stays by West Australians within WA and an increase in their day trip spending of 13%.²⁶
- **BHP Billiton has committed \$5 million towards developing a boardwalk and amphitheatre in the Perth Stadium Sports Precinct**. The boardwalk, which will be more than 200 metres long, will link the amphitheatre in the south of the sports precinct to the community oval in the north. It will feature a series of interpretive story boards recognising the role and importance of Indigenous culture on the stadium

site and within Western Australia. The amphitheatre will provide tiered seating for about 1,000 people and host a range of events - including outdoor movies, children's plays and concerts.²⁸

- **Cruise ships visiting Western Australia generated \$275.3 million** towards the State's economy in 2014-15 according to figures released by Cruise Down Under, Australia's peak cruise industry association. The figures showed WA had 101 cruise ships visits in 2014-15, a 48.5% increase on the previous year.²⁶
- The latest international visitor survey data, released in September showed **international visitor spending in WA had increased by only 1.2%** over the year to June, compared to national average growth of 11.5%. The figures also reveal a significant decline in the number of international business travellers to WA, with a decline of 9,000 visitors, or 8.4%. This is offset by strong growth in leisure tourism of 8.3%.²²
- Figures revealed that **visitor numbers to Rottnest Island in the last six months of last year were the highest on record**, rising 21% in a year from 145,825 to 177,020. The 2015-16 New Year's Eve fireworks attracted more than 10,000 people to the island.²²
- After more than 12 years of planning, the first of three restaurants opened in January as part of **City Beach's \$18 million beachfront redevelopment**. Odyssey Beach Cafe is part of the development which is centred around a new surf lifesaving club and amphitheatre. The City Beach development is expected to be the first of three major Perth beachfront redevelopments to be completed, with

Scarborough Beach's \$57 million food and retail precinct and Cottesloe Beach's \$15 million revitalisation still in the planning stages.²⁷

- In a major commitment to WA tourism, **Emirates will launch its second daily, 519 seat A380 service from August.** The A380 replaces the 360 seat Boeing 777-300ER, adding almost 100,000 extra seats, each way a year.²²

Knowledge and Innovation

- **Two industrial batteries capable of delivering up to two megawatts of power** will be trialled in Carnarvon under a new partnership between regional energy provider Horizon Power and China's Lishen Power. The trial will explore ways of meeting energy demand quickly at a lower cost with the use of battery storage.²⁶
- 20 small to medium businesses shared \$350,000 from the State Government's **Innovation Vouchers Program.** The businesses can use the funding for research and product development, technology transfer, securing intellectual property, or commercialisation of support services.²⁶
- **Battery storage and electric vehicle systems** were able to export excess electricity into the network as of December 2015, after a historic agreement between Synergy and Western Power, which would allow storage systems to export unused electricity onto the South West Interconnected System.²⁶
- The **Western Australian Biodiversity Science Institute** was launched by the Premier in October. The Institute will protect, conserve and ensure the sustainable management of Western Australia's unique flora and fauna. WABSI will also facilitate the development and uptake of scientific knowledge to protect the State's terrestrial biodiversity and will support the development of a database for use as a public resource.²⁸
- In September, Giles Nunis was appointed as Western Australia's first **Government Chief Information Office.** Part of Mr Nunis' role is to help stabilise the State Government's ICT costs, develop a whole-of-government ICT strategy and build the capacity of WA's growing ICT sector.²⁸
- Track'em Pty Ltd was awarded **WA Innovator of the Year.** The company created a cloud-based asset tracking and management software, using a unique combination of barcode, global positioning system and radio frequency identification technologies to track and manage the location of assets, equipment and construction materials.³¹
- **Virgin Australia became first airline in the world to use SITA's 'future check-in' technology at Perth Airport.** SITA's check-in is the world's first single hardware common-use hybrid desks that can quickly switch from self-service bag drop mode to full-service traditional counters. SITA's new solution enables the airline to provide varying levels of self-service based on airline and passenger preferences, all from the one common-use platform.³²
- **Two Perth surfers have invented Seabin, a floating 'bin' that automatically sucks rubbish floating in the water into it.** Peter Ceglinski and Andrew Turton spent four years developing the Seabin to reduce the amount of pollution in the seas. Built from recycled materials, the Seabin is fixed to a dock, with the pump creating a flow of water that sucks all floating rubbish and debris into a natural fibre bag, before pumping the water back out.³³
- **Rostrata Primary School teacher Richard Johnson has been named among the top 50 teachers in the world.** Mr Johnson was named a finalist in the Global Teacher Prize for creating a dedicated science, technology, engineering and maths laboratory at school. Mr Johnson was short-listed from thousands of nominees across 148 countries for the Varkey Foundation-run award, dubbed the Nobel Prize of teaching.²⁹
- Over the past two years, **WA digital start-ups have exploded by 235%,** and will take just ten years for the industry to match the same economic output as the local mining industry does today. The Startup Ecosystem Preliminary Report has revealed that more than 300 local start-ups are part of a digital revolution that, within a decade, could be worth \$76 billion, and account for about 25% of the state's economic output - roughly the contribution the WA mining industry currently makes.³⁴
- **Perth Airport has introduced a new cloud-based technology** that would allow staff to check in passengers for multiple airlines on handheld devices anywhere in the airport, or potentially even in popular offsite locations like the city's convention centre. The technology is expected to cut passenger processing costs by more than 25% for its airline partners while improving the experience.³⁵

- Sentient Computing was named **KPMG Australia's Energise Accelerator** winner and won \$100,000 to assist with developing its technology. The Balcatta-based software company has a new venture, MVX that uses data to create interactive three-dimensional environments for its mining and energy clients. Skrydata received the Energise Innovation award.²⁹
- An **Edith Cowan University School of Computer and Security Science PhD candidate has developed a computer program that can identify plant species, using a digital photograph of a single leaf.** The technology allows users to identify up to 30 different plant species using image recognition software. Hezekiah Babatunde, created the program using mathematical algorithms and artificial intelligence technology, tests had shown the program was 93% accurate.³³
- **Perth engineer and Entecho director, Kim Schlunke has invented a flying car.** YouFly is capable of vertical take-off and landing (VTOL), is operated with just two joysticks—one for height, the other for direction and runs on electricity. YouFly uses GPS to steer and uses collision avoidance radar to avoid things you can't predict, like seagulls and other craft.³⁶
- In September, Perth-based renewable energy company **Bombora Wave Power Australia launched its first round of capital raising**, to help fund the next phase of development of its award winning wave energy technology. The company, run by WA brothers Shawn and Glen Ryan, is hoping to raise \$4 million towards the next two years of development of its home-grown Wave Energy Converter technology, which has so far been tank tested and cleared for technology readiness.³⁷
- Perth, has been named as the **top urban location** when it comes to Australia's burgeoning 'digital economy', according to Google. The Google eTown Awards is a new initiative designed to recognise the communities of small businesses that are using the internet to grow, acquire and connect with customers.³⁸
- Data published by Curtin University in Australia has revealed that the sheer volume of rooftop solar capacity installed in the state of Western Australia is such that, collectively, **solar power comprises the state's de-facto largest power station.** In 2015, 1,750 new residential solar installations were added to the SWIS each month, with rooftop solar now installed on 20% of all homes in WA.³⁷
- A new report claims that **Western Australian start-ups in areas of "disruptive technology" could be directly worth up to \$25 billion per year in 2025.** The report, produced through a partnership between StartupWA, the Western Australian Department of Commerce, and the City of Perth, predicts that the overall impact of disruptive technology on the Western Australian economy could be as much as 33% of the Gross State Product – \$101 billion per year by 2025 – with a mid-range estimate of 25% (\$76 billion AUD). The report defines disruptive technology as start-ups working on products and solutions in mobile internet, automation of knowledge, the internet of things, cloud technology, advanced robotics, autonomous vehicles and 3D printing.³⁹
- In January, the State Government launched a campaign to inform parents and potential students of the diverse study and career opportunities offered by Western Australian TAFE courses. The **'Make A Name'** campaign uses former and current students as well as training lecturers to highlight courses offered in industries including aviation, engineering, agriculture, health, children services, tourism and fashion.²⁶
- **Two Western Australian innovations were honoured in the 2015 Australian Innovation Challenge in November.** Biomedical engineer Robert McLaughlin won the Health category and was the overall winner of the competition for the Microscope-in-a-needle innovation. Named as the most innovative piece of science in Australia, the world's smallest handheld microscope can fit in a needle to guide surgeons while they are operating and has the potential to radically improve the safety and effectiveness of cancer surgery. Michael Ottavio from Carnegie Wave Energy was the winner in the Minerals and Energy category for the Perth Wave Energy Project, which uses patented wave-power technology to feed electricity into the grid.⁴⁰

References:

- ¹ Australian Bureau of Statistics (ABS) 5220.0 State Accounts and 5204.0 National Accounts; Western Australia 2015-16 State Budget; and Australian Government 2015-16 Budget.
- ² ABS 5220.0 State Accounts, 5206.0 National Accounts and 6302.0 Balance of Payments; and Western Australia 2015-16 State Budget.
- ³ ABS 5220.0 State Accounts
- ⁴ ABS 3101.0 Australian Demographic Statistics
- ⁵ ABS 6202.0 Monthly Labour Force.
- ⁶ ABS 6291.0.55.003 Quarterly Labour Force
- ⁷ ABS 5206.0 National Accounts, 5220.0 State Accounts and 5625.0 Private New Capital Expenditure
- ⁸ ABS 5206.0 National Accounts, 8762.0 Engineering Construction and 5625.0 Private New Capital Expenditure.
- ⁹ World Bank, Commodity Price Data (monthly prices in nominal US dollars).
- ¹⁰ Western Australia Department of Mines and Petroleum, Minerals and Petroleum Summary Tables.
- ¹¹ Western Australia Department of Mines and Petroleum, Minerals and Petroleum Summary Tables; Western Australia 2015-16 State Budget; and Western Australia Department of State Development
- ¹² ABS 5220.0 State Accounts, 5368.0 International Trade in Goods and Services, 7501.0 Value of Principal Agricultural Commodities Produced, 7111.0 Principal Agricultural Commodities and WA Department of Agriculture and Food
- ¹³ ABS 5368.0 International Trade in Goods and Services, 5206.0 National Accounts and 5220.0 State Accounts
- ¹⁴ ABS 5368.0 International Trade in Goods and Services
- ¹⁵ ABS 5368.0 International Trade in Goods and Services; and Western Australia Department of Mines and Petroleum, Resource Data Files
- ¹⁶ ABS 5368.0 International Trade in Goods and Services.
- ¹⁷ Western Australia Department of Mines and Petroleum, Resource Data Files
- ¹⁸ ABS 5368.0 International Trade in Goods and Services.
- ¹⁹ ABS 5368.0.55.003(004) International Trade in Services by Country, State and Detailed Services Category
- ²⁰ Construction Industry Snapshot Western Australia, November 2015
- ²¹ Committee for Perth
- ²² The West Australian
- ²³ Business News
- ²⁴ WA Today
- ²⁵ FACTBase report
- ²⁶ Ministerial media release
- ²⁷ Domain.com.au
- ²⁸ Premier's media release
- ²⁹ Perth Now
- ³⁰ The Sunday Times
- ³¹ Department of Commerce
- ³² International Airport Review
- ³³ ABC Online
- ³⁴ Startup Ecosystem preliminary report
- ³⁵ Australian Financial Review
- ³⁶ Phys.org
- ³⁷ reneweconomy.com.au
- ³⁸ Startup Smart
- ³⁹ Forbes.com
- ⁴⁰ Office of Science

Acknowledgments

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