Socio-economic Impact of Sydney Zoo

Prepared for Sydney Zoo Pty Ltd as part of the State Significant Development application

SSD 7228

9 May 2016
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Introduction

This report has been commissioned by Sydney Zoo Pty Ltd (‘Sydney Zoo’) to provide additional information in relation to the Environmental Impact Statement lodge for the State Significant Development Application (SSDA) for Sydney Zoo and to address certain issues raised in public submissions.

1.1 Background

Sydney Zoo is a new attraction proposed in the Bungarribee precinct of the Western Sydney Parklands. It will feature animal exhibits in large open enclosures to create a safari-style experience that closer reflects their natural environment. Customer services areas in the zoo will include gift stores, restaurants, cafes, kiosks and amenities. The zoo will also feature a show arena, picnic areas, waterways and gardens.

This new facility is proposed in the centre of Western Sydney, which is identified as a strategic region for economic development in NSW. Following high population growth, and structural economic changes, the NSW Government has focussed policies and infrastructure investment to enhance living standards and maximise the potential in the region.

1.2 Purpose of this document

This socio-economic analysis forms part of the environmental impact statement for the Sydney Zoo proposal. This analysis has been prepared to address the Secretary of the Department of Planning and Environment’s environmental assessment requirements (SEARs) and section 79C(1)(b) of the Environmental Planning Act 1979 (NSW) outlined below:

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality.
2 Project Overview

Sydney Zoo has been proposed to be an exciting new attraction featuring Australian and exotic animals in large open-space enclosures. It is located over approximately 16.5ha and will form an integral part of the Bungarribee Precinct. The NSW Government announced Bungarribee Park will be redeveloped to create a 200 hectare ‘super park’ for Western Sydney. The Zoo will be located adjacent to the super park and will feature elevated boardwalks and glassed observation areas, where animals can be observed in a more natural setting than typical zoos. Fences will be tree-lined, to improve the naturalness of the exhibits.

Features of the Zoo include:

- **Animal exhibits** featuring exotic and native species in spacious, tree-lined enclosures to better reflect their natural environment.
- **Habitat buildings** for nocturnal, insect, and aquatic species, designed to blend in with the natural landscape.
- **Customer service facilities** including a restaurant, café, gift shop and kiosks.
- **Leisure and Entertainment** areas including a show arena, and picnic spaces for families.
- **Attractive amenities** such as wetlands, waterways, gardens and landscaping.
- **Supporting facilities** including a service yard with maintenance shelter, administration, food preparation, car park and veterinary spaces.

This new attraction will raise the profile of wildlife tourism in the region, providing new experiences for locals and tourists.

*Source: Misko + Associates*
3 Methodology

This socio-economic assessment forms part of the Environmental Impact Statement for the Sydney Zoo proposal and addresses the social and economic consequences of the development as well as certain issues raised in the public submissions for the State Significant Development application for Sydney Zoo. The methodology used to understand the social and economic impacts of the proposed Sydney Zoo is outlined below.

Area definition

This study focuses on the Blacktown local government area (LGA) where the Sydney Zoo site is located. More broadly, the Western Sydney region is also considered as part of the baseline. This is because much of the potential market for Sydney Zoo resides across this region, and it is also an important region in terms of future economic growth and policy attention for NSW. The definition of Western Sydney can vary. For the purposes of this report the region comprises of 14 local government areas as shown in Figure 1.

Figure 1: Local Government Areas within Western Sydney

3.1 Scoping of Issues

A brief assessment of the strategic and political importance of the Greater Western Sydney region is provided, including the key policy strategies of government for implementing growth and development of the region.

3.2 Socio-economic baseline

Identifying the social and economic context of the region allows the impacts of Sydney Zoo to be better understood. This is done by describing the socio-economic baseline, including historic information about the region, and identifying relevant forecasts to understand a ‘business as usual’ scenario. A survey of government strategies also provides an understanding of how Sydney Zoo fits in with the long-term vision for the region.

This study also includes an analysis of the population and demographics of Western Sydney. Factors such as family size and age profile are important to determine the impact of a Zoo in the community. The economic structure of the region and its comparison to NSW as a whole is considered.
particular, the industry make-up, employment and trends observed over time provide an insight into where the economy is heading.

Importantly, community values and social infrastructure were also considered in this study. This provides an understanding of how Sydney Zoo will impact the existing social environment.

3.3 Sydney Zoo visitor assumptions
An assessment of Sydney Zoo visitor assumptions is provided as a background to reviewing potential competitive dynamics and impacts on local operations.

3.4 Socio-economic impact assessment
This section analyses the impact of the Sydney Zoo on the regional and state economy. It aims to identify the impacts on local and regional business and industry. Additionally, impacts on community values, such as local character and amenity, heritage and the natural environment are considered. Economic impacts are separated into four primary impact categories:

- **Direct impacts** – from the construction and operation of Sydney Zoo.
- **International and domestic tourist expenditure** – from incremental expenditure by tourists in the NSW economy due to Sydney Zoo.
- **Visitor travel expenditure** – calculating the costs paid by visitors travelling to and from Sydney Zoo.
- **Wider economic benefits** – taking into account the flow-on effects of Sydney Zoo on other industries.

KPMG has utilised the approach proposed in an existing study done by Applied Economics\(^1\) to provide updated economic multipliers for each type of direct new spending attracted to Sydney Zoo. The updated multipliers take into account the changing structure in the NSW economy and provide a more realistic view of how the initial spending circulates within the local economy.

KPMG notes that an Input-output (IO) multiplier-based estimate is a simplified approach to understand indicative impacts of a major project. While it takes into account the forward and backward linkages of the production sector of an economy, it also uses some simplifying assumptions, including a lack of supply–side constraints, fixed prices, fixed ratios for intermediate inputs and production, and an absence of budget constraints. Therefore, we appreciate the estimates contained in this analysis may be at the upper end, and as such we have attempted to adopt conservative input assumptions to counter this impact.

To provide a comprehensive picture of how Sydney Zoo could impact the locality, two scenarios are considered based on Sydney Zoo visitation projections. A third and final extreme low-case assessment is also provided to specifically address the competitive scenario proposed in the Elanor submission with respect to the impact on Featherdale

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\(^1\) *Contribution of Taronga and Western Plains Zoos to the Economy of New South Wales*, Applied Economics, 2005
4 Socio-economic policy context

The proposed Zoo is located in Western Sydney which is one of the largest geographic regions in Australia by demographic and economic size. This region is projected to continue growing at a rapid pace over the coming decades, and will take on an increasingly important role in driving broader growth in Sydney and NSW. The importance of the region is also being recognised by the NSW Government and other key government stakeholders. Western Sydney has emerged as a strategic priority for economic growth, investment in infrastructure, and ongoing urban development and renewal.

4.1 A Plan for Growing Sydney

A Plan for Growing Sydney is the NSW Government’s strategy to maintain high standards of living for Sydneysiders, and takes a long-term view into understanding how the city will look in 2031. The strategy includes ways to provide more jobs in local communities, and to improve the productivity and competitiveness of Sydney. It also emphasises developing a sustainable city that protects its natural environment and adopts a balanced approach to use of land and resources.

Sydney Zoo can be part of Western Sydney’s transformation by bringing growth and development to the region. The Zoo will effectively integrate green spaces and support a balanced use of land. Other plans in the policy will also be complemented, such as the development of Parramatta as Sydney’s second CBD, and the continuation of the commercial core in Blacktown for long-term employment growth.

4.2 Rebuilding NSW Plan

The Rebuilding NSW Plan announced in 2014 brings $20 billion in infrastructure across NSW, with a goal to reduce congestion and promote productivity across major centres and regional communities. A range of measures form the plan across public transport, roads, health, education, sports and cultural infrastructure, and a long-term transport improvement plan for Parramatta and Western Sydney.

The proposed Sydney Zoo can complement other infrastructure and development plans. Projects such as the long-term transport improvement plan for Parramatta and Western Sydney will facilitate future tourism growth and recreational participation in the region. Sydney Zoo brings additional investment beyond the Government’s commitments to promote growth in the region.

4.3 Visitor Economy Industry Action Plan

The Visitor Economy Industry Action Plan was released in 2012 and sets a bold goal to double overnight visitor expenditure in NSW by 2020. The plan lists strategic imperatives including increasing visitation, improving visitor experience, and making NSW more competitive. Importantly, the plan cites high targets for growth in the visitor economy, but identifies a risk of losing market share if changes are not made to improve performance.

Sydney Zoo aligns with this policy’s goals, improving the tourism profile of the region to attract new visitors and increase expenditure. Combined with other local initiatives in Western Sydney such as the Museum of Applied Arts and Sciences relocation and Parramatta Stadium upgrade, Western Sydney can grow the tourism capabilities of NSW and contribute to achieving its visitor expenditure goals.

4.4 Western Sydney Parklands Strategic Plan of Management 2020

The Western Sydney Parklands represent the largest green corridor in Western Sydney and are central to the NSW state government’s strategy for developing and maintaining green space and improving the amenity and liveability of the Western Sydney region.
The Western Sydney Parklands Trust (WSPT) has developed the Western Sydney Parklands Plan of Management 2020. Development of the Plan of Management for the Western Sydney Parklands involved a broad range of consultation activities designed to gain stakeholder feedback and suggestions on the future management of the Parklands.

The consultation process was conducted in two stages between June and November 2010. The early part of the process helped raise awareness about the Trust’s objectives, and inform the community about the various opportunities to get involved in developing the draft Plan.

A key part of the plan is the land use framework, which represents the allocation of land in the park for various uses and development opportunities. Under this Framework, 1% of the WSPT managed land has been allocated to Tourism, a category composed of Hotels, theme parks, wildlife parks, camping areas, entertainment venues, cinemas, and convention/function centres.

Within this plan there are several key strategic directions to be taken by the WSPT which Sydney Zoo complements:

**Strategic Direction 1: Recreation and Parkland Infrastructure**

A high quality zoo would represent a significant contribution to the infrastructure of Western Sydney and the Parklands in particular. Zoos tend to be highly valued by the communities in which they operate, with strong visitor numbers supported by good levels of repeat visitation and community acceptance. As shown below, we project a minimum of 500,000 visitors per annum – in line with experiences at other zoos around Australia and New Zealand. This would categorise the zoo as a major attraction in the area.

The open, safari-style format of Sydney Zoo will lend itself to healthy passive recreation with potentially upwards of 2km of walkways through the grounds. With covered walkways the zoo will essentially be an all-weather attraction, making it a good alternative to other weather dependant activities.

**Strategic Direction 2: Environment and Conservation**

Sydney Zoo is strongly complementatory to the environmental objectives that are part of the Western Sydney Parklands strategy.

1. The zoo will use extensive natural vegetation for both display and screening purposes throughout the exhibits within the zoo, and as such will serve as a continuation of the natural bush corridor in the Parklands. It will also foster habitats and the residence of native birds, as having them within the zoo will complement the quality of the visitor experience.

2. Education and research in the fields of environment, culture and conservation will be a central tenet of Sydney Zoo’s operating ethos. Exhibition of Australian native animals to highlight the local indigenous culture, conservation education programs, and animal breeding programs will advance the strategic direction of Western Sydney Parklands.

3. The zoo design will include extensive solar power sources. As a primarily outdoor activity the energy consumption of the facility will be relatively low (e.g. little requirement for air conditioning) positioning the zoo to ideally become a carbon neutral attraction.

4. Wherever possible run-off water from rooftops and potentially the car park will be captured to replenish the water features within the zoo. Any wastewater from cleaning the animal enclosures will be captured and filtered to appropriate quality standards for redistribution as irrigation water over suitable sections of zoo gardens.
Strategic Direction 3: Culture and Participation

A 2007 U.S. based national audience survey\(^2\) found that zoos are culturally important family oriented attractions, and that “The public at large placed a high value on the role of zoos and aquariums in:

1. Teaching children about the natural world,
2. Teaching children respect for living creatures,
3. As a place for parents and children to discover new things together, and
4. As an educational resource for children in the community.

In this respect they become an important part of the cultural fabric of the communities that they serve, and a valuable proponent of family and cultural values.

Sydney Zoo will also be an important contributor to the emerging tourism cluster in the Western Sydney Parklands region. With Wet’n’Wild, Eastern Creek Motorsport Park, and Sydney Zoo as anchor tenants, this development strategy will improve amenity, and develop a tourism cluster in the Parklands area that has long term sustainability.

\(^2\) Why zoos & aquariums matter: Assessing the impact of a visit to a zoo or aquarium, Association of Zoos & Aquariums, 2007, aza.org
5 Existing socio-economic environment

5.1 Regional context
The proposed zoo falls within the Western Sydney Parklands, located approximately 33 kilometres west of Sydney CBD and 15 kilometres east of Penrith. Located on the Great Western Highway, and close to the M4 Western Motorway and Westlink M7, the proposed zoo sits in a strategic position of Western Sydney. Western Sydney spans a large geographical area, and is home to over two million people. Historic demographic trends paint a picture of rapid population growth in comparison to Eastern Sydney and the rest of NSW.

Challenges facing Western Sydney include: i) pockets of high socio-economic disadvantage, ii) a disconnect between resident labour forces and jobs in the region, and iii) a combination of lower value-add and cyclically vulnerable sectors in the local industry. The NSW Government has set an ambitious goal of generating 200,000 jobs by 2020 to tackle these challenges.

The zoo sits within the Blacktown local government area which consists of 48 residential suburbs and has a population of around 340,000, making it one of the most populated towns in NSW. It is also one of NSW’s new Growth Centres known as the North West Growth Centre.

Western Sydney needs to create 200,000 jobs by 2020
5.2 Population size, growth and mobility

Western Sydney faces unique challenges as a region. With a population of 2.1 million in 2014, which is approximately 28% of NSW’s total population, Western Sydney’s population growth has been consistently above the growth rates of both Greater Sydney and NSW (See Figure 2). At the local government area (LGA) level, Blacktown’s population growth rate has been even greater, indicating its importance for growth and development in the region. Figure 3 shows the population forecasts, which also indicate high population growth for Blacktown with a compounded annual growth rate (CAGR) of 1.98% between 2016 and 2041, compared to a CAGR of 1.40% for Greater Sydney. The population of Blacktown and Western Sydney indicate a greater tendency to reside in the area long-term, as shown in the internal migration data from the 2011 Census (see Figure 4). In Blacktown, the population is more established, with only 9% living in a different address one year earlier and 23% five years earlier compared to Greater Sydney which had mobility rates of 12% and 29% respectively. This highlights a need for local development to employ and support the region’s growing population.

Figure 2: Annual Population Growth 2005 to 2014

Figure 3: Population Forecasts (millions)

Figure 4: Internal Migration

Source: ABS catalogue number 3218.0, Census 2011, NSW Government Bureau of Transport Statistics
5.3 Age profile

The population age structure of the region is unique, with a significant proportion of the population aged under 15 years, and a lower proportion of the population in the older age (65 years and over) cohorts. The proportion of children aged under 15 years is marginally higher again in Blacktown at 23% (see Figure 5). A population concentrated in the younger age groups indicates a need for recreational and family activities, and also a need for future economic growth to provide employment as persons enter the workforce.

Source: ABS catalogue number 1379.0.55.001, Census 2011

5.4 Cultural diversity

Overseas migration has played a significant role in shaping Western Sydney, with the cultures and traditions of South East Asia, South and Central Asia, North Africa and the Middle East well-represented in the region. Figure 6 shows that 35% of Western Sydney’s population was born overseas, which is above NSW with 31%.
5.5 Households and families

Western Sydney has a large concentration of family households, representing 79% of all households compared to 73% of NSW (see Figure 7). Blacktown has an even greater proportion of family households at 82%. Figure 8 breaks down family households further, showing that there is a high proportion in the region of couples with children under 15 (44% in Western Sydney) and single parents with children (11% in Western Sydney). The family demographic is shown further in Figure 9 where the average family size in Blacktown and Western Sydney is greater than the state average. A high concentration of family households, particularly with children, further emphasise the need for a variety of family and recreational activities which Sydney Zoo will provide.

Source: Census 2011
5.6 Household Expenditure

Understanding where households choose to spend their income is important for determining potential demand for goods and services. Figure 11 shows the expenditure of households across 17 consumption groups in NSW. Between 2000 and 2015, the greatest changes in household budget proportions occurred in health products and services (1.8 percentage points higher) and recreational and cultural products and services (1.9 percentage points higher) indicating that households have preferences and the budget to spend on these items. Recreational and cultural products includes both goods such as televisions and personal computers, and services such as fitness classes and cultural shows.

A large proportion of NSW residents choose to spend their time at zoos and wildlife parks. Figure 10 shows a breakdown of attendance to recreational activities in Australia by activity. This data includes multiple visits and indicates that 10% of recreational outings are to zoos and wildlife parks. While this survey does not include children under 15 years old, who would be more likely to frequent zoos and wildlife parks, it does show that these facilities are a regular choice for households to spend their leisure time.

**Figure 10: Attendance to Recreational Activities in Australia**
- % of Visits by people aged 15 yrs and over (2013-14)

**Arts, cultural and recreational activities are the highest growing budget item in NSW households**

**Figure 11: Household Expenditure in NSW - % of Total Household Budget**

Source: ABS catalogue 4114.0, ABS catalogue 5206.0
5.7 Income and employment

Average incomes in Blacktown and Western Sydney are lower than the NSW average. Table 1 shows the average wage and salary incomes for several local government areas where the average incomes of Blacktown and Western Sydney are $49,729 and $50,148 respectively, which is below the NSW average of $53,917.

Employment by occupation for Blacktown is shown in Table 1, where the highest occupation groups are clerical and administrative workers (17.5%), professionals (17.3%) and technicians and trades workers (11.4%). Compared to the state average, Blacktown has a higher amount of machinery operators (3.9 percentage points higher). Looking at employment by industry (Figure 12), Blacktown has a greater concentration of Manufacturing, Wholesale, Retail, and Transport, Postal and Warehousing employees, reflective of the region's traditional focus on manufacturing, and also serving as a transport corridor in the region between Sydney CBD and regional NSW, and also interstate travel between Victoria and Queensland.

Table 1: Wage and Salary Earners by Occupation - as % of Total Employed 2011

<table>
<thead>
<tr>
<th></th>
<th>Blacktown</th>
<th>Western Sydney</th>
<th>NSW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>10.3%</td>
<td>11.4%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Professionals</td>
<td>17.3%</td>
<td>18.5%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Technicians and Trades workers</td>
<td>11.4%</td>
<td>11.8%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Community and personal service workers</td>
<td>8.9%</td>
<td>9.0%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Clerical and administrative workers</td>
<td>17.5%</td>
<td>17.1%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Sales workers</td>
<td>8.2%</td>
<td>8.4%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Machinery operators and drivers</td>
<td>9.7%</td>
<td>7.9%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Labourers</td>
<td>11.3%</td>
<td>10.3%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Not stated</td>
<td>5.3%</td>
<td>5.6%</td>
<td>6.1%</td>
</tr>
<tr>
<td><strong>Total Labour force</strong></td>
<td><strong>72,319</strong></td>
<td><strong>868,096</strong></td>
<td><strong>3,146,772</strong></td>
</tr>
<tr>
<td>Average wage and salary income</td>
<td>$49,729</td>
<td>$50,148</td>
<td>$53,917</td>
</tr>
</tbody>
</table>

Source: ABS catalogue number 1379.0.55.001

At the macro-economic level, Blacktown LGA has a significantly greater need for employment generation, despite relatively strong performance for NSW as a whole.

According to the 2011 Census, unemployment in Blacktown was 7.2%, which was 2.3 percentage points higher than NSW unemployment in the same year. Unemployment trends in NSW show a slight increase over the past few years, but continue to outperform the average across Australia (see Figure 13).
Lower incomes and higher unemployment highlight the need for job creation in Western Sydney.
5.8 Business and industry

The strongest industries by gross regional product (GRP) in Greater Sydney are Financial and insurance services ($5.8bn), Professional, scientific and technical services ($28.8bn), and Manufacturing ($21.3bn) as shown in Figure 14. Between the 2008-09 and 2013-14 financial years, the largest decline for Greater Sydney has been in the Manufacturing sector, which declined by $1.2bn in value added during that period (CAGR of -1.1% over that period). Despite this, manufacturing has grown in the Blacktown LGA at a CAGR of 1.3%, and there is potential for the region to develop a competitive advantage in specialised, advanced manufacturing industries.

By 2036, Western Sydney will have a greater share of GRP than Sydney CBD, but it will require development and growth strategies to be in place to exceed the ‘business as usual’ scenario. Western Sydney has an opportunity to drive national prosperity.

Figure 14: Gross Regional Product by Industry - % of Total and 5 yr CAGR 2013/14

[Diagram showing % of Total Value Added by industry for Blacktown, Greater Sydney, and New South Wales for 2013/14, with CAGR from 2008/09 to 2013/14]

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5.8.1 Tourism

The impact of Sydney Zoo on the environment and local communities relies on understanding the current and future outlook of tourism in the region. Zoos are iconic locations that attract visitors as a main attraction, and encourage spending in the surrounding economy. Western Sydney has experienced strong visitor growth across international, domestic overnight, and domestic day trip groups (see Table 2). Sydney Zoo has the potential to capitalise on all these visitor groups, and enhance their experience of the region.

Table 2: Visitor Growth to Western Sydney 2010-2014

<table>
<thead>
<tr>
<th></th>
<th>International</th>
<th>Domestic Overnight</th>
<th>Domestic day trip</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Sydney</td>
<td>13.4%</td>
<td>10.5%</td>
<td>6.8%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Eastern Sydney</td>
<td>2.5%</td>
<td>4.4%</td>
<td>3.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Sydney Total</td>
<td>3.3%</td>
<td>5.7%</td>
<td>4.2%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Source: Tourism Research Australia

According to Tourism NSW, two-thirds of Interstate (and regional NSW) visitors to Sydney ventured out of the CBD during their visit\(^4\). Tourism NSW identifies that there are opportunities to improve tourism dispersion through greater education of what Western Sydney has to offer.

Visiting zoos, wildlife parks or aquariums was the third highest nature based activity undertaken by international tourists in NSW in 2014\(^5\). The top two nature based activities undertaken were visiting beaches, and visiting national parks, which are typically cheaper activities – indicating that there is a willingness to pay for animal exhibit attractions by international tourists.

Visitor nights measure the number of nights an individual, either international or domestic, spends away from home for various reasons. Figure 15 shows that while visitor nights to NSW for holidays has grown minimally in the past 5 years (0.8% annual average), it is forecast to grow at a stronger pace in the medium (3.3%) and long term (3.2%). These trends in interstate and international visitors indicate a huge potential for Sydney Zoo to bring new tourism spending to the region.

Figure 15: Visitor Nights in NSW - 5 year annual average growth (%)

Source: Tourism Research Australia

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5.9 Community values
Blacktown is a welcoming community that encourages residents to settle for life and attracts new residents. Blacktown Council fosters a community spirit by responding to issues regarding children, young people, older people, culturally and linguistically diverse communities, women, Aboriginal communities and people with disabilities.

An emphasis is placed on equal access to services and the ability to achieve and maintain a decent lifestyle. The council also aims to have people of all cultures empowered with strong community organisations such as SydWest Multicultural Services.

5.10 Social infrastructure
Blacktown local government area has many education facilities, with 119 high schools and primary schools in the local area. The Narimba campus of University of Western Sydney is located nearby at Quakers Hill, and forms the Narimba Education Precinct with TAFE, Wyndham College and St John Paul II Catholic College. TAFE also has locations nearby at Blacktown and Mt Druitt. New facilities and expertise brought by Sydney Zoo provide an opportunity for future learning and education programs with youths and students (discussed further in Section 8).

There are over 800 parks and sporting reserves and over 140 sporting clubs. Notable venues include Blacktown Olympic Park, Blacktown Leisure Centre, and Blacktown Aquatic Centre. Blacktown Council collaborates with NSW Sports and Recreation to provide development courses in management, fundraising and skill development for local sporting clubs.

Blacktown Arts Centre promotes visual and performing arts, literature, film and new media in Blacktown’s CBD. There are also several nearby motorsport parklands which include Sydney Dragway, Eastern Creek International Raceway, and Eastern Creek International Karting Raceway.

Sydney Zoo is positioned to complement these recreation and leisure facilities and be integrated into what the local community has to offer.

---

7 http://www.sydwestmsi.org.au/about/what-we-do
5.11 Summary of socio-economic environment

Western Sydney has unique challenges given the traditional east-west split between housing and job creation, and the high population growth. The demographics of Western Sydney show that there is high concentration of families, particularly with 1 or more children, and a diversity of cultures. There is high demand for family activities and recreational facilities, and the potential for large welfare benefits in providing more choice for consumers.

The NSW government has released several strategies to target economic and social development in NSW and the region, including the ambitious goal to generate 200,000 jobs by 2020.

Employment rates in NSW have been high compared to the national average. However, this strength is not shared evenly across the regions, with Western Sydney and particularly Blacktown experiencing higher unemployment due to concentrations of vulnerable industries.

The economy of Western Sydney has traditionally been dominated by a large concentration of manufacturing firms. There are also strong sectors in transport and construction due to the geographical position of the region. There is an opportunity to diversify into areas such as tourism, which has experienced high growth over the past few years and is forecast to continue growing significantly.

Other growth and development initiatives in the region can be complemented. For example, the second airport proposed at Badgerys Creek will become a catalyst for new economic developments and enhance the contribution that recreational facilities such as Sydney Zoo will add to the community.

Sydney Zoo presents a unique opportunity to help achieve Western Sydney’s vision for the future

With a large number of schools and tertiary institutions nearby, there are numerous opportunities for involvement in education programs and collaborations at Sydney Zoo, such as vocational training, youth employment, and promotion of Aboriginal culture.

Sydney Zoo provides a unique opportunity to complement the high concentration of families, align with the Government’s strategies for growth and development in the region, and provide diversification into an emerging tourism industry.
6 Sydney Zoo visitor assumptions

This section provides benchmarks analysis, assessing the feasibility of achieving projected visitation levels.

Sydney Zoo has assessed that local audience penetration by zoos in the Sydney market is lower than that of other comparable cities. This is due to a mix of geography, and low levels of on-going investment in existing facilities to improve visitor amenity and therefore visitor interest. On this basis Sydney Zoo is likely to be unlocking a latent market of non-participants in the Sydney audience – growing the market and increasing economic activity in this sector, rather than attracting visitation from other venues with no net increase in the size of the market.

In this way the development of Sydney Zoo is not a zero sum game, but should improve overall visitor participation and the attractiveness of the Western Sydney area as a recreational precinct.

Sydney Zoo is projecting visitation in the range of 500,000 to 875,000 people per annum. The achievability of the outlined visitation expectations can be tested by examining three benchmarks on zoo visitation around Australia and New Zealand:

<table>
<thead>
<tr>
<th>Benchmark 1: Comparable visitation levels for major zoos in the region</th>
<th>Visitor Numbers</th>
<th>City Population</th>
<th>Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide Zoo</td>
<td>353,600</td>
<td>1.2 m</td>
<td>29.5%</td>
</tr>
<tr>
<td>Auckland Zoo</td>
<td>716,327</td>
<td>1.4 m</td>
<td>51.2%</td>
</tr>
<tr>
<td>Melbourne Zoo</td>
<td>1,292,000</td>
<td>4.1 m</td>
<td>31.7%</td>
</tr>
<tr>
<td>Perth Zoo</td>
<td>665,242</td>
<td>1.8 m</td>
<td>37.0%</td>
</tr>
<tr>
<td>Taronga Zoo</td>
<td>1,159,627</td>
<td>4.6 m</td>
<td>25.3%</td>
</tr>
</tbody>
</table>

The average market penetration as measured by visitation relative to city population is 34.9%. This is typically driven by good levels of both local and tourist visitation and high levels of repeat visitation.

<table>
<thead>
<tr>
<th>Benchmark 2: Assessing demand for quality tourism facilities in Western Sydney</th>
<th>Tourist attractions have historically received strong visitor support in Western Sydney:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Australia’s Wonderland received an estimated 885,000 visitors to the theme park in FY 1995/96, of which 3.6% were international tourists. This equates to an adjusted estimate of 1.05 million visitors in 2011 (Sydney’s population increased by 19% in the interim).</td>
<td></td>
</tr>
<tr>
<td>2. Wet N Wild has estimated a projected 900,000 visitors per annum, despite being open only seven months per year.</td>
<td></td>
</tr>
</tbody>
</table>

One of the key developmental imperatives for the Western Sydney region is the construction of good quality passive recreation activities and attractions. The construction of the second Sydney international airport at Badgerys Creek will also be beneficial. As hotels and other infrastructure will be constructed in the area, there is the potential for the precinct around the Sydney Zoo, Eastern Creek Motorsport Park

8 Excluding free-of-charge visitation
and Wet N Wild to become a tourism cluster, thereby making the area more attractive to visitors and increasing attendance levels.

When assessing the scope of Sydney to absorb another major Zoo, it is instructive to look at the situation in other cities. For example, Melbourne currently supports three zoos with combined total visitation of 1.93 million people per annum:

These are:
1. Melbourne Zoo – 1,292,000 visitors in FY 2013, less than 5km from CBD,
2. Werribee Zoo - 421,000 visitors in FY 2013, 32 km south west of Melbourne CBD; and
3. Healesville Zoo – 349,000 visitors in 2013, almost 70 km east of Melbourne CBD.

The total market penetration of the three zoos in Melbourne combined is 50.6%. This suggests that if Taronga Zoo, Featherdale Wildlife Park (currently with 1.16 million and 380,000 annual visitation respectively) and Sydney Zoo combine to achieve the same penetration, then pro-rata to Greater Sydney’s population there is sufficient “spare capacity” in the Sydney market to sustain a second zoo with visitation up to 900,000 people per annum.

### 6.1 Bottom up visitor estimation

Based on these penetration benchmarks, the market penetration of Sydney Zoo can be estimated using a combination of a “heat-map” approach, cross-checked with overall market penetration benchmarking to estimate Sydney Zoo audience size.

The heat map categorises each Local Government Area (LGA) by expected market penetration. Note that “Very High” penetration LGAs are categorised at 30% - which is lower than the average of 34.9% for capital city Zoos in the table above. This infers that conservative estimates have been used to calculate the visitor estimation. Each LGA penetration estimate is then multiplied by population to derive an estimate of visitation from each area as shown in the table on the following page.

**Figure 16: Heat Map of Sydney Zoo market penetration**

<table>
<thead>
<tr>
<th>Penetration Brackets</th>
<th>LGA Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>1%</td>
</tr>
<tr>
<td>Low</td>
<td>5%</td>
</tr>
<tr>
<td>Med</td>
<td>15%</td>
</tr>
<tr>
<td>High</td>
<td>25%</td>
</tr>
<tr>
<td>Very High</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: Sydney Zoo calculations
In addition to local visitors, a component of tourist visitation is also estimated, based on capturing a small component of domestic and local tourists who are staying with friends and family:

<table>
<thead>
<tr>
<th>LGA</th>
<th>Population</th>
<th>Penetration</th>
<th>Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ashfield</td>
<td>41,234</td>
<td>Low</td>
<td>2,063</td>
</tr>
<tr>
<td>2 Auburn</td>
<td>73,738</td>
<td>High</td>
<td>18,485</td>
</tr>
<tr>
<td>3 Bankstown</td>
<td>182,352</td>
<td>High</td>
<td>45,586</td>
</tr>
<tr>
<td>4 Blacktown Hills</td>
<td>169,872</td>
<td>High</td>
<td>42,468</td>
</tr>
<tr>
<td>5 Blacktown</td>
<td>303,528</td>
<td>Very High</td>
<td>91,058</td>
</tr>
<tr>
<td>6 Botany</td>
<td>39,356</td>
<td>Low</td>
<td>1,968</td>
</tr>
<tr>
<td>7 Burwood</td>
<td>32,423</td>
<td>Mwd</td>
<td>4,863</td>
</tr>
<tr>
<td>8 Camden</td>
<td>56,720</td>
<td>High</td>
<td>14,180</td>
</tr>
<tr>
<td>9 Campbelltown</td>
<td>145,667</td>
<td>High</td>
<td>36,492</td>
</tr>
<tr>
<td>10 Canada Bay</td>
<td>75,763</td>
<td>Med</td>
<td>11,364</td>
</tr>
<tr>
<td>11 Canterbury</td>
<td>137,454</td>
<td>Mwd</td>
<td>20,638</td>
</tr>
<tr>
<td>12 Fairfield</td>
<td>187,666</td>
<td>Very High</td>
<td>56,390</td>
</tr>
<tr>
<td>13 Holroyd</td>
<td>99,163</td>
<td>Very High</td>
<td>29,749</td>
</tr>
<tr>
<td>14 Hornsby</td>
<td>156,847</td>
<td>Mwd</td>
<td>23,527</td>
</tr>
<tr>
<td>15 Hunters Hill</td>
<td>13,229</td>
<td>Very Low</td>
<td>132</td>
</tr>
<tr>
<td>16 Hurstville</td>
<td>78,855</td>
<td>Mwd</td>
<td>11,828</td>
</tr>
<tr>
<td>17 Kogarah</td>
<td>55,806</td>
<td>Mwd</td>
<td>8,371</td>
</tr>
<tr>
<td>18 Kuringai</td>
<td>109,267</td>
<td>Low</td>
<td>5,465</td>
</tr>
<tr>
<td>19 Lane Cove</td>
<td>31,530</td>
<td>Low</td>
<td>1,576</td>
</tr>
<tr>
<td>20 Leichhardt</td>
<td>52,198</td>
<td>Low</td>
<td>2,610</td>
</tr>
<tr>
<td>21 Liverpool</td>
<td>180,143</td>
<td>High</td>
<td>45,098</td>
</tr>
<tr>
<td>22 Manly</td>
<td>39,747</td>
<td>Very Low</td>
<td>397</td>
</tr>
<tr>
<td>23 Marrickville</td>
<td>76,500</td>
<td>Low</td>
<td>3,925</td>
</tr>
<tr>
<td>24 Mosman</td>
<td>27,453</td>
<td>Very Low</td>
<td>275</td>
</tr>
<tr>
<td>25 North Sydney</td>
<td>62,289</td>
<td>Very Low</td>
<td>623</td>
</tr>
<tr>
<td>26 Parramatta</td>
<td>166,858</td>
<td>High</td>
<td>41,715</td>
</tr>
<tr>
<td>27 Penrith</td>
<td>178,467</td>
<td>High</td>
<td>44,617</td>
</tr>
<tr>
<td>28 Penrith</td>
<td>178,467</td>
<td>High</td>
<td>44,617</td>
</tr>
<tr>
<td>29 Pletwater</td>
<td>57,115</td>
<td>Very Low</td>
<td>572</td>
</tr>
<tr>
<td>30 Rockdale</td>
<td>97,340</td>
<td>Mwd</td>
<td>14,601</td>
</tr>
<tr>
<td>31 Ryde</td>
<td>103,038</td>
<td>Mwd</td>
<td>15,456</td>
</tr>
<tr>
<td>32 Sutherland</td>
<td>53,188</td>
<td>Mwd</td>
<td>5,278</td>
</tr>
<tr>
<td>33 Sutherland</td>
<td>210,683</td>
<td>Mwd</td>
<td>31,629</td>
</tr>
<tr>
<td>34 Sydney</td>
<td>169,505</td>
<td>Very Low</td>
<td>1,695</td>
</tr>
<tr>
<td>35 Worringah</td>
<td>140,741</td>
<td>Very Low</td>
<td>1,407</td>
</tr>
<tr>
<td>36 Waverley</td>
<td>63,487</td>
<td>Low</td>
<td>3,174</td>
</tr>
<tr>
<td>37 Willoughby</td>
<td>67,356</td>
<td>Low</td>
<td>3,368</td>
</tr>
<tr>
<td>38 Woollahra</td>
<td>52,158</td>
<td>Very Low</td>
<td>522</td>
</tr>
<tr>
<td>Sub Total</td>
<td>3,903,321</td>
<td>649,321</td>
<td>17%</td>
</tr>
</tbody>
</table>

| 39 Blue Mountains | 75,770 | High | 18,943 |
| 40 Grafton        | 162,440| Mwd  | 24,866 |
| 41 Hawkesbury     | 62,353 | Low  | 3,118  |
| 42 Lismore        | 48,259 | Mwd  | 6,489  |
| 43 Wyong          | 149,746| Low  | 7,497  |
| Sub Total         | 493,568| 60,402| 12%    |

In addition to local visitors, a component of tourist visitation is also estimated, based on capturing a small component of domestic and local tourists who are staying with friends and family:

<table>
<thead>
<tr>
<th>Domestic tourists</th>
<th>International tourists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Overnight Visitors</td>
<td>8,300,000</td>
</tr>
<tr>
<td>Visiting Friends &amp; Relatives</td>
<td>37.7%</td>
</tr>
<tr>
<td>Holiday or Leisure</td>
<td>29.2%</td>
</tr>
<tr>
<td>Assumed penetration</td>
<td>2%</td>
</tr>
</tbody>
</table>

Based on this analysis, annual visitation of locals of around 710,000 can be expected as a base case, which represent market penetration of 15.3%. This penetration rate is lower than those cross-checked above against several benchmarks. Additionally, the base case also includes a conservative estimate of 55,500 interstate tourists and 33,500 international tourists.
7 Economic Impact assessment

The audience penetration assessment suggests that there is sufficient scope in Sydney’s zoo market for three differentiated operators to co-exist in the Sydney market. Total audience penetration with the inclusion of Sydney Zoo is comparable with that experienced in Melbourne, with three zoos in that city experiencing healthy visitation numbers and commercial viability.

Studies showing the economic benefits of competition to the community as a whole are widespread. Competition promotes improved amenity, product differentiation, capital re-investment for greater consumer appeal and utility in the long term.

This section looks to address the wider economic impacts of the addition of Sydney Zoo to the Western Sydney visitor economy. Specifically, the potential for overall adverse social and economic impacts as a result of the development of Sydney Zoo.

In order to do this, three cases are proposed based on expected visitation and also conservatively factoring some exchange of market share from other facilities. These cases are:

Low Case

This scenario assumes forecast visitation to Sydney Zoo of 500,000 visitors per annum - at the lower end of the range. It also conservatively assumes a strong competitive impact on Featherdale of approximately 25% visitor reduction – or 104,000 per annum. This creates net visitation of 396,000 to the region.

Base Case

The base case scenario assumes there are 799,000 visitors to Sydney Zoo per year, with only a small diversion from other businesses (creating net visitation of 789,000). This consists of 710,000 local visitors, 55,500 interstate tourists and 33,500 international tourists9. This is aligned with the visitation analysis provided above that suggests there is a significant latent market in Western Sydney and the additional of a high quality, diversified offering to the Western Sydney market will in fact grow audience participation in the area.

Elanor Case

Finally in order to specifically address competitive issues raised in the submission from Elanor Investors with respect to Featherdale Wildlife Park, analysis of the prospect of Featherdale going out of business is presented – The “Elanor Case”. This case is discussed in detail in Section 7.8.

9 The initial KPMG Economic Impact Assessment submitted December 2015 conservatively assumed only 20% of Sydney Zoo’s estimates of non-local visitors as an input to the base case. This has been revised to 50% to better reflect expectations around potential non-local visitation.
7.1 Capital and operating expenditure

Two primary categories of outlays are reflected in this analysis: capital outlays (capex) involving the construction of infrastructure and facilities and annual operating outlays (opex) made by Sydney Zoo. The former are one-time outlays and recur on an as needed basis while the latter recur annually and might increase annually to reflect changes in costs and the services provided. When articulating the full magnitude of economic benefits that flow from Sydney Zoo, it is important to separately present the benefits of annual operating outlays from once-off capital spending.

The capex outlay for Sydney Zoo is estimated at $24.2 million. Being independent of the number of zoo visitors, this spending is fixed for both low and base cases.

In the case of opex, Sydney Zoo’s estimate of $13.3 million annual spending is based on 700,000 visitors per annum. Given the different visitation presented across the scenarios, a recalibration of opex is required to reflect the different operating outlays required to cater for visitor needs.

As shown below, opex spending ranges between $11.5 million and $13.7 million across the impact scenarios due to changes in the number of visitors.

Table 3: Sydney Zoo - Annual Operating Expenditure

<table>
<thead>
<tr>
<th></th>
<th>Sydney Zoo’s estimate</th>
<th>Low Case</th>
<th>Base Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of visitors</td>
<td>700,000</td>
<td>500,000</td>
<td>799,000</td>
</tr>
<tr>
<td>Salaries, wages and on costs</td>
<td>5,645,377</td>
<td>4,838,895</td>
<td>5,828,449</td>
</tr>
<tr>
<td>Animal care</td>
<td>635,090</td>
<td>635,090</td>
<td>635,090</td>
</tr>
<tr>
<td>Maintenance consumables</td>
<td>835,000</td>
<td>715,714</td>
<td>862,078</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>3,097,500</td>
<td>2,655,000</td>
<td>3,197,948</td>
</tr>
<tr>
<td>Utilities</td>
<td>595,000</td>
<td>510,000</td>
<td>614,295</td>
</tr>
<tr>
<td>Marketing</td>
<td>1,613,000</td>
<td>1,382,571</td>
<td>1,665,307</td>
</tr>
<tr>
<td>Printing/postage/stationery</td>
<td>50,000</td>
<td>50,000</td>
<td>50,811</td>
</tr>
<tr>
<td>Other expenses</td>
<td>828,244</td>
<td>709,923</td>
<td>855,103</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13,299,211</strong></td>
<td><strong>11,497,194</strong></td>
<td><strong>13,709,080</strong></td>
</tr>
</tbody>
</table>
7.2 Tourist expenditure

As discussed in Section 5.8.1, growing the tourism sector in Western Sydney is identified as a significant growth strategy for the future. Some international and interstate visitors may increase their length of stay in NSW as a result of their visits to Sydney Zoo and accordingly spend more in NSW. Average tourism expenditure per day is $140 and $178 for international and domestic visitors respectively\(^\text{10}\). We note that no recreational expenditure associated with local visitors has been included in this analysis as it would generally represent a transfer from one expenditure type to another (with the exception of travel costs).

It has been assumed that tourist-induced expenditure will occur due to the development of Sydney Zoo, and the following assumptions have been incorporated in this analysis:

- All non-local zoo visitors would spend an extra half day in Sydney due to their visit to Sydney Zoo.
- 50% of their daily expenses are assumed to be spent on NSW goods and services as a result of extra time spent in the State (additional to the marginal travel expenses associated with travelling to and from Sydney Zoo).

Total projected tourist expenditure induced from visiting Sydney Zoo is substantial, approximately $3.5 million per annum in the low case scenario and $7.2 million for the base case.

---

\(^{10}\) Tourism Research Australia, International & Domestic Visitor Surveys, March 2015
7.3 Visitor travel expenditure

The cost of travel expenditure for all visitors to Sydney Zoo has been calculated separately. This has been done on the basis that all expenditure on travel to and from Sydney Zoo would be incremental to the NSW economy, including that spend by local residents. Net visitation (after accounting for reduced visitation of Featherdale) is used to account for visitors who decide to travel to Sydney Zoo instead of Featherdale.

Estimates of travel costs for residents has been calculated using the data from the market penetration analysis outlined in Section 6.1. These have taken into account population residential distances from the zoo and benchmarked penetration rates.

Based on estimated annual visitor numbers and estimated trip costs per person, estimated access costs total $1.4 million per annum for the low case and $2.9 million for the base case. This has been determined based on the distances from each LGA to Sydney Zoo and travel costs per kilometre sourced from Austroads data\textsuperscript{11}, which resulted in estimates that, for local visitors, travel costs to Sydney Zoo are around $2.6 per person per trip, while travel costs for non-local visitors were estimated to be around $12 per person trip.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure18.png}
\caption{Annual Visitor Travel Expenditure}
\end{figure}

\begin{itemize}
\item \textbf{NSW}:
\begin{itemize}
\item Low case: $0.9 million
\item Base case: $1.8 million
\end{itemize}
\item \textbf{Interstate}:
\begin{itemize}
\item Low case: $0.4 million
\item Base case: $0.7 million
\end{itemize}
\item \textbf{International}:
\begin{itemize}
\item Low case: $0.1 million
\item Base case: $0.4 million
\end{itemize}
\item \textbf{Total}:
\begin{itemize}
\item Low case: $1.4 million
\item Base case: $2.9 million
\end{itemize}
\end{itemize}

7.4 Wider Economic Impacts

In addition to the direct impacts discussed so far, subsequent flow-on effects to other parts of the economy can be expected as a consequence of operating Sydney Zoo. The wider economic benefits analysis takes into account the potential benefits of economic activity that may accrue to businesses in the NSW economy as a result of direct spending from zoo visitors, tourists and constructing and operating Sydney Zoo.

The aggregate value of this direct and indirect spending can be calculated by applying appropriate economic multipliers developed by the Centre for Agricultural and Regional Economics and adjusted by KPMG\textsuperscript{12}.

As discussed previously, to avoid confusion in communicating the wider economic impacts of Sydney Zoo, one-time impacts of capex need to be reported separately from annual impacts of on-going expenditure.

As shown below, the total economic impact for once-off capex of $61 million is the sum of the direct impact of $24.2 million and the flow-on effect of $36.8 million.

Figure 19: Once off impact of Capital Expenditure

The direct economic impacts of Sydney Zoo across the two ongoing expenditure scenarios (discussed in detail in the earlier sections) are used as inputs in estimating the wider economic benefits. These direct impacts are summarised in Table 4.

---

\textsuperscript{12} These multipliers were previously applied by Access Economics to estimate the impact of Taronga Zoo and Western Plains Zoo, and hence have been applied in this evaluation. The multipliers measure the flow-on effects of income re-spent in the economy, taking into account the leakages between income and spending, including government taxes, household savings, and income that is spent on imports into NSW. These leakages reduce the proportion of expenditure that is re-spent on local goods. The multipliers used are 2.5 for capital expenditure and 2.4 for other direct impacts. Multipliers for employment have been adjusted for inflation, ranging between 5 and 9 jobs per million dollars of industry value.
Table 4: Inputs to Wider Economic Impact Analysis

<table>
<thead>
<tr>
<th></th>
<th>Low Case</th>
<th>Base Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Visitation to Sydney Zoo</td>
<td>500,000</td>
<td>799,000</td>
</tr>
<tr>
<td>Net Visitation (after accounting for loss of other businesses)</td>
<td>396,000</td>
<td>789,000</td>
</tr>
<tr>
<td>Operating Expenditure</td>
<td>$11,497,194</td>
<td>$13,709,080</td>
</tr>
</tbody>
</table>

The total wider economic impacts of Sydney Zoo across the ongoing expenditure scenarios are shown below. Total impacts range from $39 million at the low case to $57 million in the base case scenario. The low case differs mostly from the base case in visitor travel expenditure and tourist expenditure, as these impacts are more sensitive to change in visitation.

The base case presents a solid contribution to the economy at $57 million per annum. This scenario shows benefits flowing significantly from all three impact categories, including increased tourism (both interstate and international), with total impacts valued at $17 million. This reflects Sydney Zoo effectively contributing to the creation of a ‘tourism cluster’ in Western Sydney, building the industry and promoting the NSW Government’s vision in the Visitor Economy Industry Action Plan (discussed in Section 4.3).
7.5 Employment

The construction and operation of Sydney Zoo will add incremental employment opportunities into the local labour market.

To determine direct employment impacts, the proponents of Sydney Zoo have indicated they anticipate about 59 full time equivalent positions plus up to 50 part time positions will be directly generated through the operations of the facility.

KPMG has assessed the anticipated total employment impacts associated with both the construction and operational phases of the Sydney Zoo using the Input Output employment multipliers.

The construction phase of Sydney Zoo is anticipated to generate a once-off impact of about 160 incremental fulltime person years of employment.

The operational phase of Sydney Zoo is anticipated to generate an on-going impact of between 89 (Low case) and 120 (Base case) per annum.

*Figure 22: Employment Impacts*

Within occupations, operation of Sydney Zoo will possibly raise demand for zookeepers, initially putting pressure on the availability of qualified staff, but in the long-term drawing more people to the profession.

For comparison, the impacts presented in sections 7.4 and 7.5 are summarised in the table below.

*Table 5: Summary of Annual Wider Economic and Employment Impacts*

<table>
<thead>
<tr>
<th>Phase</th>
<th>Variable</th>
<th>Low Case</th>
<th>Base Case</th>
</tr>
</thead>
<tbody>
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<td>Construction Impacts</td>
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<td>$61m</td>
</tr>
<tr>
<td></td>
<td>Employment (full time equivalent)</td>
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<td>160</td>
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<tr>
<td>Operation Impacts</td>
<td>Gross State Product ($m)</td>
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<td>$57m</td>
</tr>
<tr>
<td></td>
<td>Employment (full time equivalent)</td>
<td>89</td>
<td>120</td>
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7.6 Directly affected businesses
KPMG acknowledges that the opening of a new tourism or recreational facility creates excitement and may draw visitation from other establishments. However, positive aspects of competition drive innovation, productivity, and the prevention of complacency in business practices.

7.6.1 Featherdale Wildlife Park
Located 6 kms from the proposed Sydney Zoo site, Featherdale has operated since 1972 and features over 300 species on display. They also care for over 1,700 birds and animals and are actively involved in breeding and conservation programs, and engage in educating visitors about Australian wildlife.

The Sydney Zoo product offering is significantly differentiated from Featherdale, and as a result the competitive threat to Featherdale’s business should be relatively low. KPMG has reviewed Sydney Zoo’s operating plan and notes that:

- Sydney Zoo will be less specialised, having a much broader animal collection and with little focus on birds. There are no current plans to have an aviary in Sydney Zoo, differing from an estimated 70% of the species/exhibits by number at Featherdale are birds;
- Sydney Zoo is designed to have a longer visit time, at 3-4 hours, and so will have a different purchase decision driver compared to Featherdale;
- Sydney Zoo admissions will be priced higher than Featherdale; and
- The Australian Animals collection at Sydney Zoo will be presented in the context of an Aboriginal cultural advancement strategy – which further differentiates the exhibit presentation even where there is the greatest potential for overlap.

The prospect of two wildlife parks operating in close proximity can be compared to the wildlife attraction offerings on the Gold Coast, where the David Fleay Wildlife Park and Currumbin Wildlife Sanctuary have operated successfully for over 50 years (see case study on next page).

Additionally, the visitor estimation discussed in Section 6 identifies the ‘spare capacity’ for zoo visitation in Sydney given the current market penetration rates.
7.6.2 Taronga Zoo

Taronga zoo is located in Sydney Harbour and cares for over 4,000 animals from over 350 species. It is an iconic tourist destination, attracting over 1.4 million visits in 2013/14. Taronga Zoo is actively involved in education and conservation, with programs such as the Taronga Conservation Science Initiative.

Sydney Zoo can complement Taronga Zoo by providing an opportunity for Western Sydney residents to experience and learn about exotic animal species. It also offers a fitting reflection of balancing development between Western and Eastern Sydney as discussed in Section 5.

7.6.3 Other Local Businesses

There are several business located nearby to the proposed site of Sydney Zoo that also provide family and recreational activities including Wet ‘n’ Wild Sydney, Eastern Creek International Raceway, and Blacktown International Sportspark. Together with Sydney Zoo, tourism to Western Sydney can be greatly encouraged, building a reputation for enjoyable family activities across a wide range of experiences.

Source: Gold Coast Bulletin

Case study – David Fleay Wildlife Park and Currumbin Wildlife sanctuary

Located 8km apart on the Gold Coast, David Fleay Wildlife Park (Fleays) and Currumbin Wildlife Sanctuary (Currumbin) have operated for over 50 years providing Wildlife experiences for locals and tourists. These parks demonstrate the feasibility of two wildlife exhibits operating in close proximity. Currumbin is a larger attraction, with around 400,000 visitors per year, while Fleays operates at a smaller scale with around 17,000 visitors per year.

Fleays underwent a multimillion dollar upgrade which was completed in February 2016. A proponent for the project, Burleigh MP Michael Hart commented on the experience Fleays can offer –

"Instead of trying to compete with attractions like Currumbin Sanctuary, we are looking to create a complementary experience which will benefit everyone.”

Fleays’ marketing plan focusses on its differentiation and strengths. This includes Ranger-led activities that develop emotional attachments for visitors, sharing the story of the parks conception by conservationist David Fleay, developing indigenous links to enhance the visitors experiences, and creating signature experiences such as ‘Wally’ the platypus.

Currumbin has avian life as one of its key differentiators, in addition to exhibits of native wildlife such as kangaroos, koalas and dingos. It is characterized by its own unique origin by beekeeper and flower grower Alex Griffiths, who established the sanctuary to prevent rainbow lorikeets from consuming his plants. Unique stories combined with product differentiation create opportunities for wildlife attractions to coexist.

These Wildlife attractions complement the tourism economy of the Gold Coast, where visitors expect to have a range of experiences available to them and new attractions encouraging them to visit longer and more frequently.

Source: Gold Coast Bulletin


14 Including free-of-charge visitors
7.7 Local amenity

Sydney Zoo will have a strongly positive effect on the amenity of Western Sydney Parklands. There is a focus on buildings blending into the environment, such as the reptile and insect habitat buildings that merge into the landscape. Another example is the admin, curatorial and veterinarian building which is designed with a low profile and stepped to match the slope of the land. Animal enclosures are spacious, with tree-lined fences to better reflect natural habitats and appearance of the landscape.

Community consultation has indicated a desire for local attractions to have amenities such as family picnic spots and more food options, such as those provided by Taronga Zoo. These comments indicate the appeal of the facilities and services proposed to be provided by Sydney Zoo to Western Sydney residents and beyond.

Administrative spaces are stepped to match the landscape’s slope (left)
The reptile habitat building merges with the landscape (right)

Source: Misho + Associates
7.8 Impact Scenarios – the “Elanor Case”

The Elanor submission postulates that Sydney Zoo will have a devastating effect on Featherdale, potentially putting it out of business. While it is relatively unlikely that this extreme occurrence will eventuate, the following analysis has been performed in order to address the potential for negative overall social and economic impact in the locality as a result of the Sydney Zoo proposal.

7.8.1 The Elanor Case

This scenario considers the potential severe impacts on local businesses, particularly on Featherdale Wildlife Park located approximately 6 kilometres from the proposed site of Sydney Zoo. Elanor Investors has postulated that Sydney Zoo could severely reduce the numbers attending Featherdale, causing the business to close. Using Elanor’s published cost and revenue data, a breakeven point has been determined to estimate the drop in visitation that might, absent any capital investment by its owners, cause Featherdale to close.

Under this extreme scenario, economic analysis demonstrates (presented in Appendix A) there remains a net positive socio-economic contribution to the community even in the event Featherdale Park ceases to operate in its current form. A net benefit of $15m and net job creation of 60 full time equivalent positions are generated for the NSW economy (see Appendix A).
8 Sydney Zoo Social Programs

The proposed community engagement of Sydney Zoo is very strong, with the new facility likely to become an integral part of jobs creation, training and education in the Western Sydney community.

Sydney Zoo has already begun collaborating to integrate Aboriginal cultural education with the Australian natural heritage exhibit. This initiative seeks to contextualise Aboriginal culture, history and way of life with the animals and plants on which Aborigines depended. It is a key part of the education program proposed for school groups. Sydney Zoo plans to work with Darug organisation Muru Mittigar on the development of an experience delivered through both guided tours and technology (e.g. phone-based apps) that covers:

a. An overview of Aboriginal culture both in the whole Australian context and specific to the Darug people of Western Sydney.

b. Bush medicines, technologies and food. How Aboriginal people moved with the seasonality of the area in which they lived, including an explanation of the nomadic lifestyle and shelters.

Blacktown has the largest Aboriginal population in NSW. Sydney Zoo and Muru Mittigar are also working together to develop a “Ranger program” involving placement of Aboriginal staff in Sydney Zoo.

1) The ranger program is proposed to consist of multiple roles to allow workplace and cultural flexibility for the Aboriginal staff as required.

2) Rangers job description is proposed to cover:
   i) Cultural Awareness programs and tours within the Zoo for school groups and tourists
   ii) Animal welfare and keeper roles in the Australiana exhibits
   iii) Native planting, grounds maintenance, bush foods and medicines plant maintenance

This initiative may potentially see up to 10% Full Time Equivalent employees of Aboriginal descent in the Sydney Zoo. It will be the largest initiative of its kind in Sydney.

In addition Sydney Zoo is looking to establish a number of community programs, including:

i. Working with TAFE NSW on the development of vocational training across a range of industries, school work experience and volunteer programs

ii. Working with Western Sydney University to provide research partnerships and scholarships in a range of fields. From immersive visitor experience, interactive schools education programs, to bush regeneration and wildlife research.

Attached are letters from TAFE NSW, the University of Western Sydney and Muru Mittigar, detailing the strategic alliances outlined above.

In addition to this, Sydney Zoo has strong engagement with, and support from, Blacktown Council to ensure that jobs are created for the local community, as evidenced by this extract from an article on Blacktown Councils Website:

“Sydney Zoo Managing Director Jake Burgess said the zoo will be a significant contributor to job creation for the Western Sydney area.”

“The jobs created will be in a range of roles and industries. Importantly we will have a number of entry-level, flexible positions for young people seeking to join the workforce,” he said.

“Our brand will be widely recognised and working for us will represent a good start for young people. We are working proactively with Blacktown Council to maximise the number of roles provided to people from the local area.”

Mayor Bali confirmed Council is working with Sydney Zoo to ensure the majority of jobs remain locally available.

“Blacktown City is home to over 332,000 people, made up of over 184 different nationalities, speaking 156 different languages,” Mayor Bali said.

“We are discussing the potential of employing people from this diversity of nationalities to greet international visitors.”

Throughout the Urbis report, the potential loss of social programs is heavily predicated upon the closure of Featherdale. As previous sections demonstrated, it is unlikely that Sydney Zoo will lead to the closure of Featherdale Wildlife Park.

If the argument that Featherdale is likely to survive is accepted, then the argument of socio-economic cost due to loss of educational programs and other community benefits is invalid. In the case that Featherdale were to close operations, the high level of social engagement and education provided by Sydney Zoo would still provide a significant social benefit to the community through the creation of the programs outlined above.
Appendix A

This appendix item quantifies the economic impact scenario of the Elanor Case discussed in Section 7.8.

According to the Elanor Investors Group (Owners of Featherdale) 2014/15 annual report, revenue from Featherdale for the financial year was $10.1m\(^{16}\). Visitation in the same year was 383,698, which implies an average spend of $26.50 per visit. Operating expenses for Featherdale are grouped with a portfolio of hotel and tourism businesses. Combined revenue of hotel, tourism and leisure businesses was $32.8m and combined operating expenses were $23.8m, indicating a gross profit margin of 27.6%. While cost structures of hotels and wildlife parks are different, this figure is appropriate for Featherdale Wildlife Park as verified by revenue and operating expenses reported for Featherdale in 2013\(^{17}\).

In 2013, Featherdale’s revenue of $9.2m and operating expenses of $6.5m calculate a gross profit margin of 29.3%. This calculation is also closely matched by gross profit margin estimates for Sydney Zoo. Visitation of approximately 350,000 in the same year suggests a similar average spend per visit of $26.30 to the 2014/15 data.

Inflating the 2013 Featherdale operating expenses to 2015 dollars estimates them at $6.9 million. Since the majority of expenses are on staff and caring for animals in the facility, operating expenses are less elastic than changes in visitation. The estimated operating expenses for Sydney Zoo indicate that costs tend to increase at around half the rate of visitations. This variable rate and the $6.9 million estimated base operating costs at 2015 have been used to determine cost changes for Featherdale under alternative visitation scenarios (shown in Figure 23).

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The breakeven analysis suggests that a decrease in Featherdale visitors below 210,000 would lead to operating expenses exceeding revenues. Without new capital investment, this would make park operations unsustainable in the long term and likely result in a business downsize or closure.

This scenario assumes lower forecast visitation to Sydney Zoo and the diverted visitation from Featherdale creates net visitation of **116,000** to the region. To model the impact of Featherdale closing, the estimated operating expenditure (opex) of Featherdale has been deducted from Sydney opex to reflect a lower net contribution to the economy. Net additional opex is calculated to be $4.7 million. These inputs have been applied to the tourism expenditure, visitor travel expenditure and calculation of wider economic impacts described in sections 7.2 to 7.5.

Figure 24 illustrates the economic impacts of the Elanor Case. This demonstrates that even if Featherdale were to close, Sydney Zoo creates a total benefit of $15m to the NSW economy, after accounting for less net visitation and less net economic activity from operations of Sydney Zoo. Employment impacts on the economy are 60 annual fulltime equivalent jobs, after accounting for the adjustments across Sydney Zoo and Featherdale and the broader economy.

*Figure 24: Annual Economic Impacts – (Elanor Case)*
Inherent Limitations

This report has been prepared as outlined in the Introduction Section. The services provided in connection with this engagement comprise an advisory engagement which is not subject to Australian Auditing Standards or Australian Standards on Review or Assurance Engagements, and consequently no opinions or conclusions intended to convey assurance have been expressed.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, Sydney Zoo, consulted as part of the process.

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

The findings in this report have been formed on the above basis.

Third Party Reliance

This report is solely for the purpose set out in the Introduction Section and for Sydney Zoo’s information, and is not to be used for any other purpose or distributed to any other party without KPMG’s prior written consent. Other than our responsibility to the Sydney Zoo neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party’s sole responsibility.