



BYFORD TAFE CAMPUS FEASIBILITY STUDY

Prepared for Shire of Serpentine Jarrahdale
November 2020

CONTENTS

| | |
|----------------------------------|----|
| Executive Summary | 3 |
| Introduction | 6 |
| TAFE Needs Assessment | 7 |
| Strategic Alignment | 19 |
| Economic and Social Benefits | 27 |
| Location Options Assessment | 30 |
| Key Findings and Recommendations | 35 |
| Appendix | 39 |

EXECUTIVE SUMMARY

This study demonstrates that the proposed Byford TAFE campus presents an opportunity to create local jobs, support skills development and improve the livability of the fast-growing Shire of Serpentine Jarrahdale. The development will also catalyse private sector investment in the Byford Town Centre and leverage off the significant METRONET investment in the new Byford Train Station and extension of metropolitan rail services.

Analysis of population and education participation trends and forecasts, government policies and engagement with stakeholders identified the following key findings.

LACK OF TAFE ACCESS

Apart from the Armadale campus, TAFE offerings are relatively inaccessible via public transport and are at least 25 minutes from Byford via car. Particularly, construction trades training is not highly accessible to residents in the Shire of Serpentine Jarrahdale. The lack of local provision of TAFE opportunities can discourage future participation in vocational training.

HIGH POPULATION GROWTH

The Shire of Serpentine Jarrahdale is the fastest growing local council area in Western Australia. The population of the Shire increased by an average of 7.3% over the 2010-20 period. With significant levels of undeveloped Urban zoned land in Byford and Mundijong / Whitby and key infrastructure investment in the extension of the Armadale line and Tonkin Highway, the Shire's population is expected to increase from an estimated 34,653 in 2020 to 55,627 in 2030. Over the longer term, the Shire of

Serpentine Jarrahdale estimates that its population will increase to approximately 130,000 by 2050.

INCREASING TAFE DEMAND

The number of residents in the Shire of Serpentine Jarrahdale who are likely to attend TAFE is approximately 600 as of 2020 with the potential to double to 1,200 by 2035. The broader area is expected to experience a significant increase in TAFE attendees which would put increasing pressure on the existing TAFE campuses and the capacity to meet the forecast need of residents in the Shire of Serpentine Jarrahdale.

NEED FOR SKILLED WORKERS

Employers in the Peel region reported local worker skills and experience shortages across a range of industry sectors, including technicians and trade workers and community and population service workers. These skills needs are likely to increase as new infrastructure in the area (such as the West Mundijong Industrial Area, METRONET and extension of Tonkin Highway) drives increased private sector investment and skilled worker requirements.

POLICY ALIGNMENT

The proposed TAFE campus at Byford is strongly aligned with State Government and local government initiatives for economic recovery, economic growth and development, skills development and town centre activation.

EXECUTIVE SUMMARY

BENEFITS OF BYFORD TAFE CAMPUS



**ECONOMIC ACTIVITY
AND PRODUCTIVITY**



**SKILLS DEVELOPMENT
AND EMPLOYMENT**



**IMPROVED HEALTH /
WELL-BEING AND
REDUCED WELFARE
DEPENDENCY**



**BYFORD TOWN CENTRE
ACTIVATION AND LIVEABILITY**

TRAINING REQUIREMENTS

This study revealed that a Byford TAFE campus is best placed to accommodate skills development and training requirements in:

- Education and training;
- Health / population services;
- Construction trades;
- Agriculture / intensive horticulture / livestock / equine;
- Tourism / hospitality; and
- Manufacturing / food processing / logistics.

There is a demonstrated need for the campus to provide workshops in addition to classroom learning environments in order to support trades training delivery.

These skills requirements were informed by the forecast demographics and employment outlook for the Shire, the existing TAFE provision in the wider region, stakeholder input and strategic initiatives such as the West Mundijong Industrial Area.

LOCATION, BUILT FORM AND IMPLEMENTATION CONSIDERATIONS

Whilst the Byford TAFE campus will create long term benefits, a significant investment will be required to deliver the campus. To ensure benefits are maximised, this study identified the following findings and recommendations in order to guide further planning and the delivery of the TAFE campus.

- **Location:** Site A (located directly north of the Coles retail centre) is preferable due to proximity to the new Byford station, potential to co-locate with the proposed Health Hub and relatively lower infrastructure costs than site B located directly north (see page 31). The future location of the bus and vehicle infrastructure associated with the new Byford train station however will influence this assessment. Moreover, sites A and B are in private ownership and this will influence the ability of the sites to cost-effectively accommodate a TAFE campus.
- **Facility and Infrastructure Requirements:** Two options were identified and a larger scale option was preferred. This option could accommodate approximately 1,000-1,500 students within a 10,000 sq.m, 2-3 storey building on a 0.8 ha site. Workshops could be developed on the ground-floor along with limited undercroft parking.
- **Timing:** Delivery of a dedicated TAFE campus by 2030 is recommended. This commitment should become a State Government policy action. Consideration should also be given to interim training by 2025 within the Byford Town Centre to support initial delivery of training.

EXECUTIVE SUMMARY

Summary of Facility Options

| ITEM | OPTION 1 | OPTION 2 (RECOMMENDED) |
|---|-------------------------|-----------------------------------|
| Site area | 0.4 ha | 0.8 ha |
| Students (est.) | 600-1,000 | 1,000-1,500 |
| Staff (est.) | 80 | 135 |
| Course offering focus | Institutional learning | Trades and institutional learning |
| Building floorspace (sq.m) | 6,000 | 10,000 |
| Building typology | 2-3 storey construction | 2-3 storey construction |
| Building footprint (sq.m) | 3,000 | 5,000 |
| Infrastructure and Facility Cost Estimate | \$17,148,000 | \$28,580,000 |
| Total employment (construction and ongoing) | 222 FTE | 370 FTE |

Source: Urbis, Rawlinsons, DPLH, South Metropolitan TAFE



INTRODUCTION

STUDY BACKGROUND AND PURPOSE

The Shire of Serpentine Jarrahdale is a major growth area supporting the population growth of Perth and Peel. The Shire has experienced the fastest population growth rate in Western Australia over the past decade and it is expected to continue to grow from a population of 35,000 to 55,000 by 2030.

Alongside this growth, vocational training and education needs are increasing and accessible training options are limited.

In recognition of the current and future need, the Shire of Serpentine Jarrahdale identified the provision of a TAFE campus in Byford as a key requirement to increasing local vocational education and training opportunities for young people in the region. The campus is also considered an important social infrastructure project to support the activation of the Byford Town Centre which is set to benefit from a significant State Government investment through METRONET.

To assist with advancing this opportunity, Urbis was engaged to prepare a feasibility study to explore the need, estimated infrastructure and facility construction costs, optimal location, benefits and operating considerations. In particular, this study seeks to understand:

- The current and future need for vocational education and key education requirements;
- The optimal scale, timing and location of a TAFE campus in Byford and the indicative infrastructure and facility costs; and
- The economic and social benefits of delivering the proposed TAFE campus.

STUDY APPROACH

This study included the following tasks:

- Identification and demonstration of the need for vocational education facilities for the growing population in Shire of Serpentine Jarrahdale
- Assessment of strategic alignment, with consideration of state, regional and local government policy objectives;
- Targeted consultation with key stakeholders to support the analysis (such as South Metropolitan TAFE, WA Department of Training and Workforce Development and the Shire of Serpentine Jarrahdale)
- Assessment of the optimal location option for the TAFE campus; and
- Demonstration of the public benefit of the proposed TAFE campus.

REPORT STRUCTURE

This report includes the following sections.

- **TAFE Needs Assessment:** Analysis of current and forecast demand for vocational education.
- **Strategic Alignment:** Identification of alignment with government strategies.
- **Economic and Social Benefits:** Identification of expected benefits from the new TAFE campus.
- **Location Options Assessment:** Analysis of three location options for the campus in Byford.
- **Key Findings and Recommendations:** Identification of preferred TAFE campus attributes, costs and implementation considerations.

01

TAFE NEEDS ASSESSMENT

STUDY AREA DEFINITION

Overview

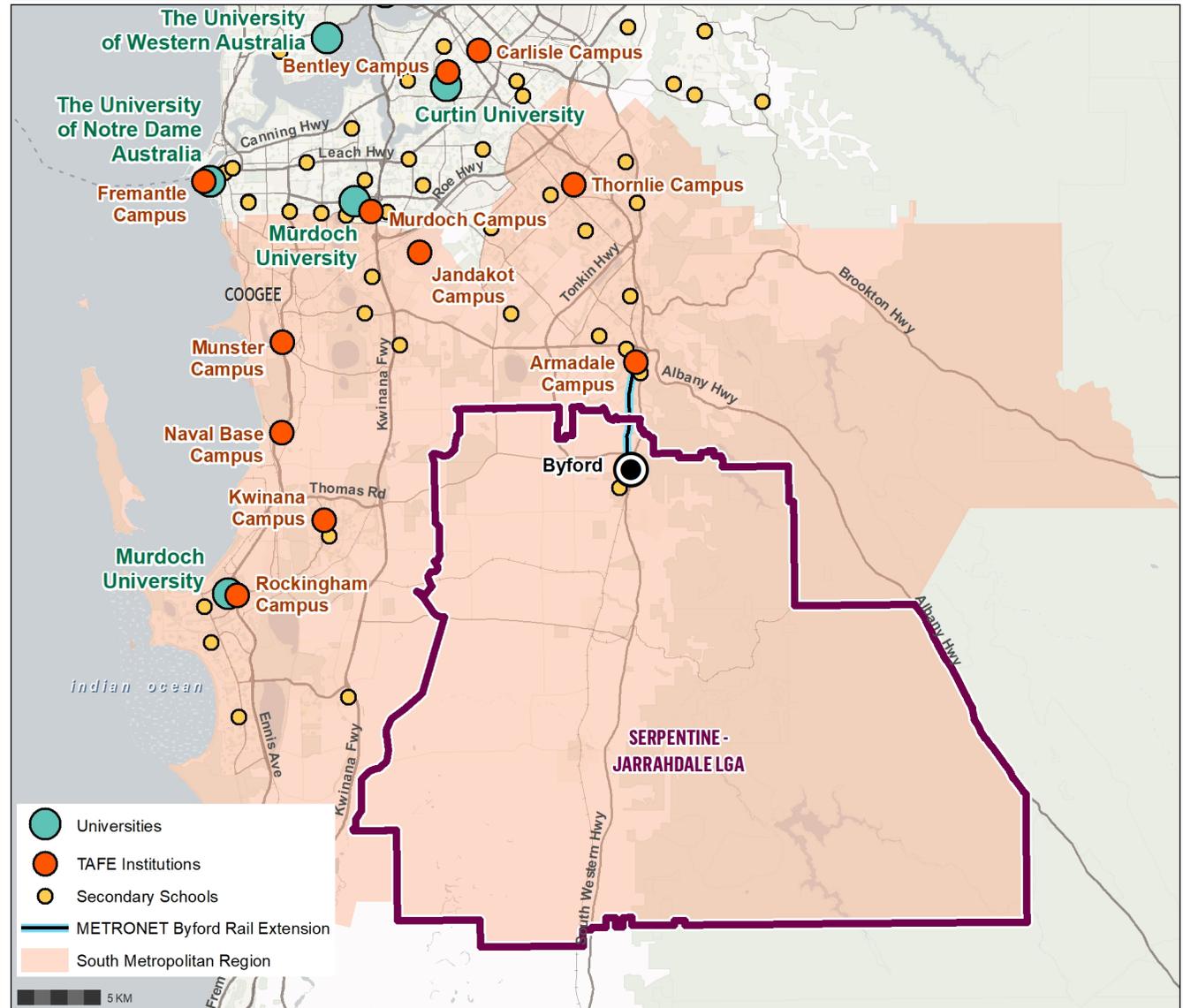
TAFE campuses have varying catchments depending on their location attributes such as accessibility (via car, public transport and active transport modes) and the location of other education facilities.

A review by Urbis of TAFE campus catchments nationally based on student databases and mobile phone analysis found that campuses in metropolitan growth areas typically had catchments that extend around 10km towards the CBD and 30km in the opposite direction.

Without knowing the potential scale or offering of the proposed campus in Byford, this study adopted the municipal boundary for this analysis. This is considered in line with the national catchment analysis though it is important to note that the campus would likely also attract a moderate share of students from neighbouring local council areas.

To help understand the attributes of residents in the study area, benchmarking analysis was undertaken against the South Metropolitan Region and Greater Perth. The South Metropolitan Region includes the local council areas of Armadale, Serpentine Jarrahdale, Gosnells, Cockburn, Kwinana and Rockingham.

Study Area Attributes



EXISTING TAFE SUPPLY

Key Findings

There are 12 existing TAFE campuses under the remit of South Metropolitan TAFE which cater to approximately 24,700 students.

Apart from the Armadale campus, these offerings are relatively inaccessible via public transport and are at least 25 minutes from Byford via car. For instance, a one-way public transport trip from Byford to the Rockingham TAFE campus takes more than two hours.

Whilst Armadale is the proximate TAFE campus and is set to be consolidated into one new campus in the Armadale City Centre, the campus is expected to have limited potential to expand its offering and accommodate a significantly greater number of students. Of key relevance, the expected capacity of the new campus will be depleted as the population in the City of Armadale grows by 30,000 residents over the coming decade. Furthermore, the campus is primarily focussed on courses such as community services and education support and does not offer trades courses.

The inaccessibility of vocational education options could lead to lower education participation as the population in the Shire of Serpentine Jarrahdale continues to grow. This could also be exacerbated as other areas of the Shire develop into major communities, such as Mundijong / Whitby.

Existing TAFE Campuses, South Metropolitan TAFE

| TAFE CAMPUS | DISTANCE FROM BYFORD (BY ROAD) | APPROXIMATE STUDENT NUMBERS (2019) | APPROXIMATE SITE AREA (HA) |
|-------------|--------------------------------|------------------------------------|----------------------------|
| Armadale* | 8 km | 602 | 0.3 |
| Thornlie | 22 km | 5,320 | 9.2 |
| Kwinana | 23 km | 653 | 1.2 |
| Naval Base | 25 km | 380 | 2.1 |
| Jandakot | 30 km | 562 | 0.4 |
| Munster | 30 km | 1,580 | 3.4 |
| Murdoch | 30 km | 4,343 | 11.8 |
| Rockingham | 32 km | 3,849 | 13.5 |
| Carlisle | 35 km | 2,663 | 20.0 |
| Bentley | 34 km | 2,609 | 7.1 |
| Fremantle | 40 km | 802 | 6.7 |
| Mandurah | 52 km | 1,323 | 23.8 |

Source: Urbis, South Metropolitan TAFE, PlanWA, Google maps

* The State Government announced in July 2020 that a new TAFE campus will be developed to consolidate the existing campus which is spread across three sites.

EXISTING TAFE SUPPLY – SOUTH METROPOLITAN TAFE

| TAFE CAMPUS | CURRICULUM HOURS | APPRENTICESHIPS | COURSE OFFERING FOCUS / SPECIALISATIONS |
|-------------|------------------|-----------------|---|
| Armadale* | 238,923 | 0 | <ul style="list-style-type: none"> Education support Community services |
| Thornlie | 1,656,003 | 266 | <ul style="list-style-type: none"> Metals, construction and electrical trades Specialist heavy automotive Satellite campus for Training Cyber Security Operations Centre |
| Kwinana | 150,228 | 186 | <ul style="list-style-type: none"> Specialist light automotive training centre |
| Naval Base | 61,319 | 319 | <ul style="list-style-type: none"> Defence-related trades (engineering, fabrication, ship-building) |
| Jandakot | 257,494 | 40 | <ul style="list-style-type: none"> Aerospace training |
| Munster | 682,389 | 168 | <ul style="list-style-type: none"> Oil and gas Applied engineering |
| Murdoch | 1,702,135 | 266 | <ul style="list-style-type: none"> Nursing Creative industries Information technology Horticulture Fitness |
| Rockingham | 939,346 | 976 | <ul style="list-style-type: none"> Metals, construction, electrical trades Satellite campus for Training Cyber Security Operations Centre |
| Carlisle | 755,205 | 1,337 | <ul style="list-style-type: none"> Light automotive, refrigeration and air conditioning English for migrants |
| Bentley | 1,052,710 | 341 | <ul style="list-style-type: none"> Hospitality and culinary arts Veterinary nursing Fashion |
| Fremantle | 265,746 | 36 | <ul style="list-style-type: none"> Maritime training Events management and tourism |
| Mandurah | 460,359 | 100 | <ul style="list-style-type: none"> Commercial cookery General education for adults Beauty Therapy Community Services |

Source: Urbis, South Metropolitan TAFE

* The State Government announced in July 2020 that a new TAFE campus will be developed to consolidate the existing campus which is spread across three sites.

DEMOGRAPHIC PROFILE

Key Findings

The age profile illustrates that the Shire of Serpentine Jarrahdale has a population with a high proportion of younger people (e.g. the average age is almost four years less than the Perth average) with a notably high proportion of residents aged 0-14 years.

While the 15-24 age group is of interest for TAFE enrolments, by the time a facility is developed the younger age group (10-14 years at 2016) is of increasing interest.

Labour force participation in the Shire of Serpentine Jarrahdale is above the Perth average, with the region having a notably high provision of workers employed in blue collar occupations.

There is a high level of residents with TAFE qualifications that have moved to the area given attributes such as affordability and proximity to construction work. The Byford campus could support apprenticeships for these workers and upskilling.

Demographic Profile, 2016

| | Byford TAFE Investigation Area | Comparison Regions | |
|------------------------------|-----------------------------------|------------------------------|---------------|
| | Serpentine-Jarrahdale | South Metropolitan Region | Greater Perth |
| Household Metrics: | | | |
| Average Household Income | \$108,353 | \$94,261 | \$100,524 |
| Var'n from Perth Avg. | +8% | -6% | |
| Average Household Size | 2.9 | 2.7 | 2.6 |
| Per Capita Income: | | | |
| Per Cap. Income | \$37,648 | \$36,408 | \$40,693 |
| Var'n from Perth Avg. | -7% | -11% | |
| Age Distribution: | | | |
| Aged 0-14 | 24% | 22% | 19% |
| Aged 15-24 | 13% | 13% | 13% |
| Aged 25-39 | 24% | 24% | 23% |
| Aged 40-59 | 26% | 26% | 26% |
| Aged 60+ | 13% | 16% | 19% |
| Average Age | 32.8 | 34.6 | 36.6 |
| Labour Force: | | | |
| Labour Force Participation | 72% | 69% | 68% |
| % Unemployed | 7% | 9% | 8% |
| % Managers and Professionals | 23% | 26% | 34% |
| % Other White Collar | 34% | 35% | 34% |
| % Blue Collar Occupations | 43% | 39% | 32% |
| Birthplace: | | | |
| Australian Born | 73% | 62% | 61% |
| Overseas Born | 27% | 38% | 39% |
| - Asia | 4% | 11% | 10% |
| - Europe | 11% | 12% | 12% |
| - Other | 12% | 15% | 16% |

Source : ABS Census (2016); Urbis

EDUCATION PROFILE

Key Findings

The proportion of residents attending tertiary education varies by age and geography. In the Shire of Serpentine Jarrahdale approximately 4% of the total population were attending tertiary education in 2016.

Of those enrolled in tertiary education, approximately 41% were enrolled in Technical and Further Education Institutions (incl. TAFE). We refer to this category as TAFE in the table with the full name in the footnote.

Of the 470 Serpentine-Jarrahdale residents attending TAFE in 2016, the split between those aged 15-24 years and 25+ years was relatively equal.

The propensity for those aged 15-24 years to attend TAFE while residing in Serpentine-Jarrahdale at 2016 was approximately 6.4%. For those aged 25 years and over, only 1.3% were enrolled in TAFE at 2016.

Compared with the South Metropolitan Region, residents in Serpentine-Jarrahdale are less likely to attend TAFE regardless of age. When compared with the Perth average, 15-24 year olds in Serpentine –Jarrahdale are slightly more likely to attend TAFE while those aged 25 years and over are less likely to attend TAFE.

Information regarding where students living in the Shire of Serpentine Jarrahdale are undertaking their studies and the types of courses was not able to be sourced.

Tertiary and Vocational Education Profile, 2016

| | Byford TAFE Investigation Area | Comparison Regions | | LQ Analysis ² | |
|---|-----------------------------------|--|----------------|---|--|
| | Serpentine- Jarrahdale | South Metropolitan Region ¹ | Greater Perth | Serpentine- Jarrahdale / South Metro Region | Serpentine- Jarrahdale / Greater Perth |
| Age Profile | | | | | |
| ERP 2016 | 27,696 | 510,490 | 2,022,044 | | |
| 15 - 24 years | 3,610 | 66,820 | 263,960 | | |
| 25+ years | 17,480 | 333,590 | 1,372,170 | | |
| Residents attending tertiary education: | | | | | |
| TAFE ³ | 470 | 10,180 | 38,140 | | |
| University ⁴ | 670 | 17,620 | 99,590 | | |
| Total attending tertiary education | 1,140 | 27,800 | 137,730 | | |
| No. residents attending TAFE by age^{3,5}: | | | | | |
| - 15- 24 years | 230 | 4,710 | 16,420 | | |
| - 25 years and over | 230 | 5,390 | 21,400 | | |
| Proportion of residents attending TAFE by age³: | | | | | |
| - 15- 24 years | 6.4% | 7.0% | 6.2% | 0.90 | 1.02 |
| - 25 years and over | 1.3% | 1.6% | 1.6% | 0.81 | 0.84 |

Note: Figures rounded to the nearest 10 units

1. South Metropolitan Region includes the municipalities of Armadale, Serpentine-Jarrahdale, Gosnells, Cockburn, Kwinana and Rockingham.

2 An LQ is a simple ratio used to determine the concentration or dominance of a particular industry/group in a region (i.e. Local Government area) in comparison to a larger reference or benchmark region (i.e. Greater Perth). In general, an LQ above 1 indicates that there is a degree of specialisation or

3 TAFE includes Technical or Further Education Institutions (incl TAFE Colleges)

4 University includes other Tertiary Institutions

5 Excludes not stated / not applicable

Source : ABS Census (2016); Urbis

EDUCATION PROFILE

Key Findings

In addition to the aforementioned participation trends, there are numerous VET students not counted in this estimate. For instance, the Byford Secondary College had an estimated 328 students participating in VET courses as of 2020.

The key courses were in the areas of:

- Hospitality;
- Business;
- Sport and recreation;
- IT;
- Community services; and
- Health science.

The number of VET students has increased significantly as Byford has grown. In 2017, there were 136 VET students compared to the 328 in 2020.

VET Participation (no. of students), Byford Secondary College, 2020

| | 2020 |
|--|------------|
| Certificate II in Hospitality | 55 |
| Certificate II in Business | 54 |
| Certificate II in Sport and Recreation | 38 |
| Certificate II in Information, Digital Media and Technology | 26 |
| Certificate II in Community Services | 23 |
| Certificate IV in Health Science Foundations | 17 |
| Certificate II in Visual Arts | 16 |
| Certificate IV in Preparation for Health and Nursing Studies | 15 |
| Certificate II in Creative Industries | 14 |
| Certificate III in Retail | 9 |
| Certificate II in Music Industry | 9 |
| Certificate III in Screen and Media | 8 |
| Certificate II in Electrotechnology (Career Start) | 6 |
| Certificate III in Aviation (Cabin Crew) | 4 |
| Certificate III in Education Support | 3 |
| Certificate III in Business | 3 |
| Certificate II in Engineering | 3 |
| Certificate II in Automotive Servicing Technology | 3 |
| Certificate II in Building and Construction (Pathway - Trades) | 3 |
| TOTAL | 328 |

Source: Byford Secondary College

* This list excludes other courses with one or two VET students

POPULATION FORECASTS

Key Findings

The Shire of Serpentine Jarrahdale is the fastest growing local council area in Western Australia. The population of the Shire increased by an average of 7.3% over the 2010-20 period.

With significant levels of undeveloped Urban zoned land in Byford and Mundijong / Whitby and key infrastructure investment in the extension of the Armadale line and Tonkin Highway, the Shire's population is expected to increase from an estimated 34,653 in 2020 to 55,627 in 2030.

Over the longer term, the Shire of Serpentine Jarrahdale estimates that its population will increase to approximately 130,000 by 2050.

The significant historical, current and future growth will drive increased need for local and accessible vocational education facilities.

Population Forecasts, 2020-2035

| | Population (no.) ¹ | | | |
|--|--------------------------------|---------|---------|---------|
| | 2020 | 2025 | 2030 | 2035 |
| Serpentine-Jarrahdale | 34,653 | 44,877 | 55,627 | 66,225 |
| South Metropolitan Region ² | 569,462 | 650,178 | 733,533 | 811,824 |
| | Annual Population Growth (%) | | | |
| | 20-25 | 25-30 | 30-35 | |
| Serpentine-Jarrahdale | 5.3% | 4.4% | 3.5% | |
| South Metropolitan Region ² | 2.7% | 2.4% | 2.0% | |
| <i>Perth</i> | 1.3% | 1.4% | 1.5% | |
| | Annual Population Growth (no.) | | | |
| | 20-25 | 25-30 | 30-35 | |
| Serpentine-Jarrahdale | 2,045 | 2,150 | 2,120 | |
| South Metropolitan Region ² | 16,143 | 16,671 | 15,658 | |

1. As at June.

2. South Metropolitan Region includes the municipalities of Armadale, Serpentine-Jarrahdale, Gosnells, Cockburn, Kwinana and Rockingham.

Source: ABS; Forecast.id; Urbis

WORKER PROFILE

Key Findings

Evaluating the current industries of high employment across the Shire of Serpentine Jarrahdale and comparing to the South Metropolitan Region and Greater Perth, as well as examining the plans for employment land and industry development, can show the likely trends for employment in the future. This information can be used to identify key areas of skills shortages and align TAFE courses to these areas.

Key industries located in the Shire of Serpentine Jarrahdale in 2016 included:

- Agriculture, forestry and fishing;
- Arts and recreation services;
- Construction; and
- Education and training.

Industries currently showing relatively lower levels of employment as of 2016 included:

- Health care and social assistance;
- Retail trade;
- Professional, scientific and technical services;
- Financial and insurance services; and
- Electricity, gas, water and waste services.

Industry of Employment, 2016

| | Byford TAFE Investigation Area | Comparison Regions | | LQ Analysis ¹ | |
|---|--------------------------------|-----------------------|-------------------------|--------------------------|---|
| | | Serpentine-Jarrahdale | South Metropolitan Area | Greater Perth | Serpentine-Jarrahdale / South Metropolitan Area |
| Industry of employment | | | | | |
| Construction | 17.1% | 11.6% | 8.7% | 1.48 | 1.97 |
| Education and Training | 14.1% | 10.9% | 9.9% | 1.29 | 1.43 |
| Agriculture, Forestry and Fishing | 11.0% | 1.0% | 0.7% | 11.16 | 15.34 |
| Public Administration and Safety | 7.2% | 7.7% | 7.1% | 0.94 | 1.01 |
| Health Care and Social Assistance | 6.5% | 11.3% | 13.6% | 0.57 | 0.48 |
| Retail Trade | 6.4% | 13.3% | 10.9% | 0.48 | 0.59 |
| Accommodation and Food Services | 5.8% | 6.7% | 7.1% | 0.86 | 0.81 |
| Manufacturing | 5.6% | 10.5% | 6.2% | 0.53 | 0.90 |
| Transport, Postal and Warehousing | 5.3% | 4.7% | 4.8% | 1.13 | 1.12 |
| Arts and Recreation Services | 3.9% | 1.3% | 1.9% | 3.02 | 2.05 |
| Professional, Scientific and Technical Services | 3.3% | 4.1% | 7.9% | 0.81 | 0.42 |
| Administrative and Support Services | 2.9% | 2.8% | 3.2% | 1.02 | 0.90 |
| Wholesale Trade | 2.3% | 2.9% | 3.0% | 0.81 | 0.79 |
| Mining | 2.2% | 1.7% | 3.3% | 1.28 | 0.66 |
| Rental, Hiring and Real Estate Services | 1.6% | 1.7% | 2.0% | 0.94 | 0.79 |
| Financial and Insurance Services | 0.6% | 1.3% | 3.0% | 0.47 | 0.20 |
| Information Media and Telecommunications | 0.5% | 0.5% | 1.2% | 0.91 | 0.41 |
| Electricity, Gas, Water and Waste Services | 0.5% | 1.6% | 1.2% | 0.30 | 0.40 |
| Other Services | 3.3% | 4.5% | 4.3% | 0.73 | 0.76 |

Source: ABS Working Population Profile, Urbis

Note: Excludes not stated, not applicable, and inadequately described results.

1. An LQ is a simple ratio used to determine the concentration or dominance of a particular industry in a region (i.e. Local Government Area) in comparison to a larger reference or benchmark region (i.e. State). It is traditionally used to compare an industry's share of regional employment, however it can also be used for other economic measures, such as value add, imports or exports. In general, an LQ above 1 indicates that there is a degree of specialisation or concentration in that particular industry within the area.

EMPLOYMENT FORECASTS

Key Findings

Australian government regional employment projections (pre-COVID-19) by industry indicate that the key growth industries in Perth South-East are expected to include:

- Accommodation and food services;
- Professional, scientific and technical services;
- Transport, postal and warehousing;
- Education and training; and
- Public administration and safety.

Given this growth outlook, there is a need to support these sectors through training opportunities within a future Byford TAFE campus.

Furthermore, infrastructure investment and population growth in the Shire of Serpentine Jarrahdale (such as METRONET and the Tonkin Highway extension) will support growth in the above industries and the construction and health care sectors.

Employment Projections, 2019-24

| Industry | Employment Growth (%) | | | Employment Growth ('000 jobs) | | |
|---|-----------------------|-----------------------|------------------|-------------------------------|-----------------------|------------------|
| | Perth - South East | Perth - South West | Greater Perth | Perth - South East | Perth - South West | Greater Perth |
| Accommodation and Food Services | 10.2 | 16.6 | 8.8 | 2.05 | 2.87 | 6.58 |
| Administrative and Support Services | - 0.1 | 2.0 | 2.3 | - 0.01 | 0.12 | 0.80 |
| Agriculture, Forestry and Fishing | - 3.0 | - 7.9 | - 4.2 | - 0.07 | - 0.15 | - 0.36 |
| Arts and Recreation Services | 2.3 | 9.7 | 5.8 | 0.11 | 0.38 | 1.34 |
| Construction | 2.0 | 3.8 | 1.6 | 0.47 | 0.66 | 1.64 |
| Education and Training | 6.9 | 13.8 | 9.1 | 1.29 | 2.89 | 8.13 |
| Electricity, Gas, Water and Waste Services | 11.4 | 13.6 | 9.5 | 0.41 | 0.59 | 1.54 |
| Financial and Insurance Services | - 1.5 | - 7.3 | - 1.5 | - 0.09 | - 0.24 | - 0.38 |
| Health Care and Social Assistance | 4.9 | 12.5 | 10.1 | 1.57 | 3.64 | 13.41 |
| Information Media and Telecommunications | 6.3 | 0.8 | 1.3 | 0.21 | 0.01 | 0.15 |
| Manufacturing | - | 7.2 | 3.1 | - | 1.15 | 2.17 |
| Mining | 5.3 | 13.8 | 12.9 | 0.83 | 1.91 | 9.67 |
| Other Services | 3.2 | 5.3 | 8.3 | 0.35 | 0.42 | 3.88 |
| Professional, Scientific and Technical Services | 9.1 | 7.6 | 11.7 | 1.82 | 1.25 | 11.09 |
| Public Administration and Safety | 7.8 | 8.4 | 9.6 | 1.11 | 1.12 | 6.45 |
| Rental, Hiring and Real Estate Services | - 4.4 | 5.6 | - 0.2 | - 0.20 | 0.19 | - 0.04 |
| Retail Trade | 4.7 | - 0.2 | 1.5 | 1.25 | - 0.05 | 1.52 |
| Transport, Postal and Warehousing | 11.0 | 0.4 | 4.1 | 1.86 | 0.04 | 2.11 |
| Wholesale Trade | 0.6 | 1.0 | 1.0 | 0.06 | 0.06 | 0.33 |

Source: Labour Market Information Portal ABS 2019

Note: Employment projections were undertaken pre-COVID-19 and do not take the impacts of this into account.

FORECAST TAFE DEMAND

Key Findings

Based on this analysis, the number of residents in the Shire of Serpentine Jarrahdale who are likely to attend TAFE is around 600 at 2020 with the potential to double to 1,200 by 2035 (excluding school students attending VET courses).

The analysis additionally demonstrates that the broader area is expected to experience a significant increase in TAFE attendees. This would put increasing pressure on the existing TAFE campuses and the capacity of these facilities to accommodate the needs of residents of the Shire of Serpentine Jarrahdale.

The analysis in this table is best described by the following steps:

- (1) - (3) Estimated population by age group
- (4) - (5) Propensity to attend TAFE by age group.
- (6) - (8) Applying the propensity to attend TAFE to population forecasts by age.

This model assumes that the proportion of the population attending TAFE remains constant into the future.

It is important to note that there is potential that the current lack of access to a TAFE is limiting the proportion of students currently enrolled in TAFE and that these forecasts are not achieved if appropriately accessible TAFE options are not provided.

Forecast TAFE Demand, 2020-35

| | Steps | Serpentine-Jarrahdale | | | | South Metropolitan Region | | | |
|---|------------------------|-----------------------|------------|--------------|--------------|---------------------------|---------------|---------------|---------------|
| | | 2020 | 2025 | 2030 | 2035 | 2020 | 2025 | 2030 | 2035 |
| Estimated Population | (1) | 34,650 | 44,880 | 55,630 | 66,230 | 569,460 | 650,180 | 733,530 | 811,820 |
| - Population aged 15-24 years | (2) | 4,850 | 6,710 | 8,570 | 10,120 | 74,730 | 85,650 | 97,850 | 108,210 |
| - Population aged 25+ years | (3) | 21,660 | 27,770 | 34,680 | 41,690 | 370,990 | 422,040 | 476,240 | 528,290 |
| Propensity to attend TAFE¹ | | | | | | | | | |
| - 15-24 years | (4) | 6.4% | 6.4% | 6.4% | 6.4% | 7.0% | 7.0% | 7.0% | 7.0% |
| - 25+ years | (5) | 1.3% | 1.3% | 1.3% | 1.3% | 1.6% | 1.6% | 1.6% | 1.6% |
| Estimated future TAFE¹ student population | | | | | | | | | |
| - 15- 24 years | (6) = (2) x (4) | 310 | 430 | 550 | 640 | 5,270 | 6,040 | 6,900 | 7,630 |
| - 25 years and over | (7) = (3) x (5) | 290 | 370 | 460 | 550 | 5,990 | 6,820 | 7,690 | 8,540 |
| Total TAFE students | (8) = (6) + (7) | 600 | 800 | 1,010 | 1,190 | 11,260 | 12,860 | 14,590 | 16,170 |

Note: Figures rounded to the nearest 10 units

1. TAFE includes Technical or Further Education Institutions (incl TAFE Colleges). Assumes most students attend TAFE.

Source : ABS Census (2016); Urbis

FUTURE TRAINING AND SKILLS REQUIREMENTS

Key Findings

Development of a TAFE in Byford is a long-term prospect envisaged to be completed within 8-10 years. Given the significant population growth and industry development expected for the Shire in the next decade, this study explored the drivers which will influence the training requirements for a Byford TAFE campus. Key factors are summarised below.

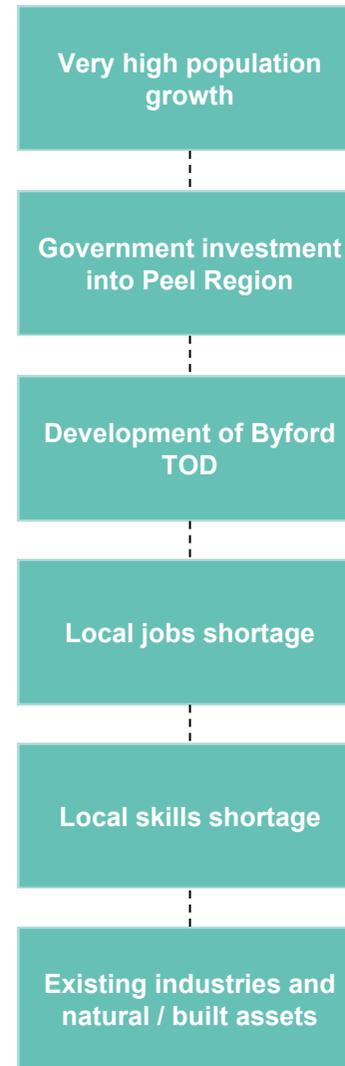
- **Worker Shortages:** Peel employers reported local worker skills and experience shortages across a range of industry sectors, including technicians and trade workers and community and personal service workers according to the Peel Development Commission.
- **Population Growth:** High population growth will increase demand for population services.
- **Declining Apprenticeships / Traineeships:** A significant decline in apprenticeship and traineeship commencements since 2013 (due to factors such as the state of the economy and labour market, subsidies for employers and TAFE fees) has likely exacerbated skills needs.
- **Accessibility of Vocational Training:** Shire residents need to travel long distances to access courses (particularly trades course as these are not available at Armadale).
- **Infrastructure Investment:** New infrastructure in the area will drive demand for skilled workers. This includes West Mundijong Industrial Area, the new container port in Kwinana, METRONET's extension of the Armadale passenger railway line to Byford, and the extension of Tonkin Highway to the South Western Highway in Mundijong.

Based on the above considerations, the key training and skills requirements are expected to be:

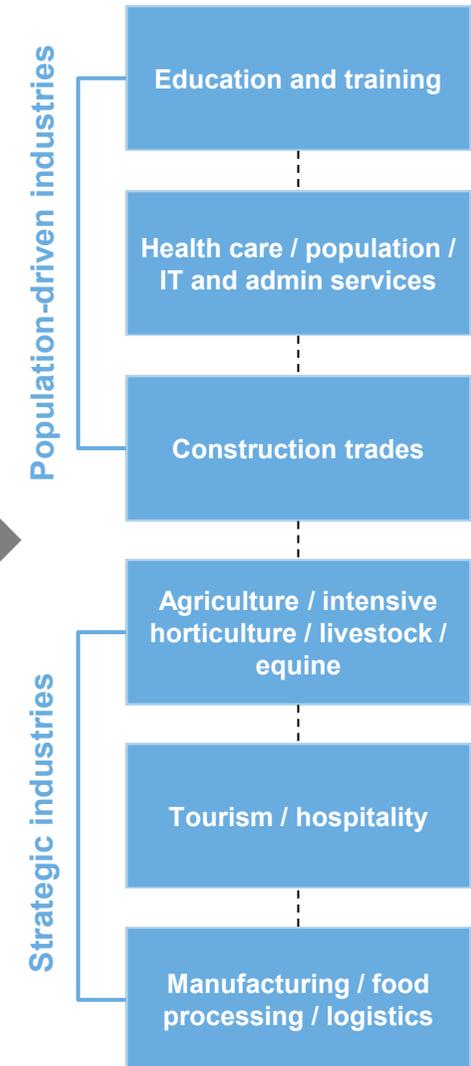
- **Population-driven services** to cater for the fast-growing population, such as health care, retail, education and construction; and
- **Strategic industries** aligned with the existing industry strengths and development of West Mundijong Industrial Area and the potential Tonkin Hwy intermodal terminal, such as agri-food, tourism, logistics, equine and manufacturing.

Identified Training and Skills Requirements

Key Drivers for TAFE Development



Key Industries to Target



02

STRATEGIC ALIGNMENT

STRATEGIC ALIGNMENT

Key Findings

The proposed TAFE campus at Byford is strongly aligned with State Government and local government strategies for economic recovery, economic growth and development, industry development, training and skills development and town centre activation.

Importantly, the proposed TAFE campus at Byford would help deliver the aims of key policies such as:

- DiversifyWA;
- DTWD Strategic Plan;
- South Metropolitan and Peel Sub-Regional Planning Framework;
- South Metropolitan TAFE Strategic Plan;
- Peel Regional Investment Blueprint;
- METRONET;
- The Shire's local planning strategy and economic development strategy; and
- The Byford Town Centre Structure Plan.

Importantly, the TAFE campus would support increased ongoing local employment to address the current low level of jobs in the Shire of Serpentine Jarrahdale. This will include employment within the TAFE, the Byford town centre and broader industries across the region.

Alignment to Strategic Imperatives

| STRATEGIC IMPERATIVE | ALIGNMENT FINDINGS |
|--|---|
|  Economic Development | <p>The TAFE campus will enable fulfillment of key objectives of the WA Recovery Plan, including rebuilding TAFE and reskilling our workforce, and building infrastructure. The TAFE will enable residents to gain skills suitable for employment within the key industry sectors listed in Diversify WA and the Peel Recovery Plan, such as technology and advanced manufacturing, tourism and events, primary industries, mining and construction.</p> |
|  Industry Development | <p>The TAFE campus will help achieve the objectives of the DTWD Strategic Plan 2019-2023, Peel Regional Investment Blueprint and Shire of Serpentine-Jarrahdale Economic Development Strategy by addressing the need for Peel residents to access local training that leads to jobs and careers, and increase their skills to lead to the priority industry occupations within the agriculture, warehouse/logistics, agri-food, health / aged care, population services, IT / office admin and tourism sectors.</p> |
|  Skilled Workforce | <p>The TAFE campus will address the need for key workforce development skills detailed in the Transform Peel Workforce Skills Analysis Report Summary, including science, engineering, maths and information technology. It meets the criteria in the South Metropolitan TAFE Strategic Plan 2020-2022 to provide students with skills for jobs and pathways to further education, and for the development of partnerships with local businesses and industries within the Shire of SJ to provide tailored workforce development solutions.</p> |
|  Employment Self-Sufficiency | <p>The TAFE campus will directly contribute to and further facilitate improvement of the Shire's current low employment self-sufficiency; supporting the Shire's draft Local Planning Strategy, the Shire's 2021 WA State Election: Priorities and Requests, the South Metropolitan and Peel Sub-Regional Planning Framework and the State Government's Our Priorities: Sharing Prosperity goal of creating and additional 150,000 jobs across WA. Depending on the scale, the TAFE will provide 220 – 370 jobs (construction and ongoing).</p> |
|  Byford Town Centre TOD | <p>The location of the TAFE campus near the new Byford station within the Byford town centre will generate public transport trips to Byford, capitalising on the return to investment from METRONET's Byford Rail Extension and providing vibrancy to the town centre, a key priority outlined in the Shire's 2021 WA State Election: Priorities and Requests.</p> |

STRATEGIC ALIGNMENT

Summary of Relevant Policies and Strategies

| POLICY / STRATEGY | RELEVANT OBJECTIVES | ALIGNMENT TO TAFE CAMPUS | |
|--|---|---|---|
| WA Recovery Plan <i>Government of Western Australia</i> | <ul style="list-style-type: none"> ▪ Goal: Return Western Australia to a proper level of functioning following the COVID-19 pandemic, alongside opportunities for enhancement where they lead to increased resilience, efficiencies and effectiveness. ▪ \$5.5 billion investment plan to assist in creating jobs and open up investment opportunities <hr/> <p>Key priorities:</p> <ul style="list-style-type: none"> ▪ Driving industry development ▪ Boosting local manufacturing ▪ Building infrastructure ▪ Investing in renewable energy and new technologies ▪ Rebuilding TAFE and reskilling our workforce ▪ Maintenance blitz ▪ Building schools for the future ▪ Building METRONET ▪ Major road construction ▪ Building community infrastructure | <ul style="list-style-type: none"> ▪ Developing a TAFE in a location which currently has limited access to a TAFE and where the only accessible TAFE has significantly limited course options is a key component to the priority of 'Rebuilding TAFE and reskilling our workforce'. ▪ The TAFE will be able to provide local residents with options to develop skills for school leavers or to upskill / reskill mature age students. | |
| Diversify WA (2019) <i>Government of Western Australia</i> | <p>Economic development framework for WA to match global trends with our State's unique strengths, and identifies six priority sectors for development.</p> <p>Key Sectors:</p> <ul style="list-style-type: none"> ▪ Energy ▪ Tourism, Events and Creative Industries ▪ International Education ▪ Mining and Mining Engineering and Technical Services (METS) ▪ Technology and Advanced Manufacturing ▪ Primary Industries | <p>Goal: create 150,000 new jobs by mid 2024</p> <p>Strategic levers to be used:</p> <ul style="list-style-type: none"> ▪ Providing a supportive business environment ▪ Research and collaboration ▪ Strategic government investment ▪ Supporting priority investment ▪ Engagement and communication ▪ Training, skills and building local industry <p>Key initiatives:</p> <ul style="list-style-type: none"> ▪ Jobs and Skills Centres (DTWD) ▪ Future Jobs, Future Skills – STEM Skills Strategy (JTSI) | <ul style="list-style-type: none"> ▪ A TAFE in Byford can provide students with skills relevant to the key sectors targeted in <i>Diversify WA</i>. ▪ The Byford TAFE course offering can ensure STEM is a key focus across all relevant courses. ▪ There is potential for a Jobs and Skills Centre to be linked to the Byford TAFE. |

Source: Urbis, misc. policy / strategy documents

STRATEGIC ALIGNMENT

Summary of Relevant Policies and Strategies

| POLICY / STRATEGY | RELEVANT OBJECTIVES | | ALIGNMENT TO TAFE CAMPUS |
|---|---|---|---|
| Peel Recovery Plan <i>Government of Western Australia</i> | <ul style="list-style-type: none"> ▪ Part of the WA Recovery Plan <p>The Peel Recovery Plan will deliver a pipeline of jobs in sectors including:</p> <ul style="list-style-type: none"> ▪ Construction ▪ Manufacturing ▪ Tourism and hospitality | <ul style="list-style-type: none"> ▪ Renewable energy ▪ Education and training ▪ Agriculture ▪ Conservation and mining | <ul style="list-style-type: none"> ▪ A TAFE will provide local Peel residents with the necessary skills to gain employment in the key growth industry sectors outlined in the <i>Peel Recovery Plan</i>. |
| South Metropolitan Peel Sub-Regional Planning Framework <i>Western Australian Planning Commission</i> | <ul style="list-style-type: none"> ▪ Shire of Serpentine Jarrahdale remains a key food production area in Perth. ▪ Proposed primary distributor roads linking Tonkin Hwy and West Mundijong Intermodal Freight Terminal to Kwinana, and extension of Tonkin Hwy south to Mandurah and Pinjarra. | <ul style="list-style-type: none"> ▪ Shire of Serpentine Jarrahdale projected to experience high population growth – population and dwellings to increase by over 600% by 2050 compared to the overall South Metropolitan and Peel Region to increase by 250%. ▪ Strong focus on increasing employment self-sufficiency levels from 65% to 83% across sub-region. | <ul style="list-style-type: none"> ▪ A TAFE will provide post-secondary education options for the very fast growing Shire of Serpentine Jarrahdale resident population, and skills for the key local industries of food production and construction. |
| Byford Rail Extension <i>METRONET</i> | <ul style="list-style-type: none"> ▪ Extension of Armadale passenger rail line to Byford town centre. | | <ul style="list-style-type: none"> ▪ The TAFE will be a key generator of reverse trips into / out of Byford at peak periods. ▪ The TAFE will help activate the town centre and encourage private investment in the centre. |

Source: Urbis, misc. policy / strategy documents

STRATEGIC ALIGNMENT

Summary of Relevant Policies and Strategies

| POLICY / STRATEGY | RELEVANT OBJECTIVES | ALIGNMENT TO TAFE CAMPUS |
|--|---|---|
| Our Priorities: Sharing Prosperity <i>Government of Western Australia</i> | <ul style="list-style-type: none"> ▪ Currently on hold indefinitely due to the COVID-19 pandemic <hr/> <p>Key areas of focus:</p> <ul style="list-style-type: none"> ▪ A strong economy <ul style="list-style-type: none"> - Create 150,000 jobs - Repair the State's finances and maintain a 3% surplus of general government revenue ▪ A bright future <ul style="list-style-type: none"> - Improve the health and wellbeing of children in the early years – improve the number of children developmentally on-track by 10% - Increase student reading and numeracy - Increase participation in STEM to 85% of all Year 12 students ▪ A liveable environment <ul style="list-style-type: none"> - Build METRONET and increase homes close to public transport by 45% - Increase conservation for future generations by 5 million ha - Make a cleaner, more sustainable environment with 75% of waste generated in WA recycled | <ul style="list-style-type: none"> ▪ A TAFE in Byford is likely to create an additional 220 – 370 jobs (construction and operational), contributing to the <i>Our Priorities</i> goals of creating 150,000 jobs across WA. |
| Development Control Policy 2.4: School Sites <i>Western Australian Planning Commission</i> | <ul style="list-style-type: none"> ▪ Provide guidance on the general catchment size for a TAFE college - one every 60,000 – 70,000 residents. ▪ This may be as high as one every 250,000 residents, depending on the demographics of the catchment area. ▪ Other location or remoteness factors may also impact the minimum resident catchment size. | <ul style="list-style-type: none"> ▪ The projected population growth in the Shire of Serpentine Jarrahdale meets the criteria for a general TAFE campus catchment. Given the young age profile of the Shire's population the standard catchment definition in <i>DC 2.4: School Sites</i> will be appropriate. |

Source: Urbis, misc. policy / strategy documents

STRATEGIC ALIGNMENT

Summary of Relevant Policies and Strategies

| POLICY / STRATEGY | RELEVANT OBJECTIVES | ALIGNMENT TO TAFE CAMPUS | |
|--|---|---|--|
| Peel Regional Investment Blueprint <i>Peel Development Commission</i> | <p>Agriculture Priority Area: The Peel's agriculture and food production sectors will be enhanced through continued innovation, investment and research. Strategies include:</p> <ul style="list-style-type: none"> ▪ Internationally recognised food research capability ▪ Rural operations training facility ▪ West Mundijong Agri-food precinct <p>Tourism Priority Area: Grow the Peel tourism economy through infrastructure investment and product diversification. Strategies include:</p> <ul style="list-style-type: none"> ▪ Strengthen relationships between tourism related industries to support connectivity and growth; ▪ Develop a high quality, service-oriented workforce that responds to consumer needs; and ▪ Enable Indigenous leaders and their communities to develop cultural tourism ventures and events. <p>Capable People Priority Area: The Peel's workforce will be highly skilled and adaptable to structural and technological change to support an economy that is strong, diverse and high performing. Strategies include:</p> <ul style="list-style-type: none"> ▪ Human capital will be developed to ensure the region can grow and prosper. ▪ Peel people of all working ages, backgrounds and abilities will be more advanced skilled and experienced to be highly sought after and competitive in the labour market. ▪ Peel residents have substantially increased access to, and governance over, regionally based vocational training and higher education. ▪ Peel's young people will have access to education and training pathways programs that lead to employment in priority industry occupations. | <ul style="list-style-type: none"> ▪ A TAFE in Byford will meet several objectives of the <i>Peel Regional Investment Blueprint</i>, including: <ul style="list-style-type: none"> - Providing access to regionally-based vocational training and higher education; - Ensuring Peel's young people will have access to education and training pathways programs that lead to employment in priority industry occupations; and - Provide a local training facility for people seeking employment in the agriculture and tourism industries. | |
| Transform Peel Workforce Skills Analysis Report Summary <i>Peel Development Commission</i> | <p>35 year plan to establish an innovative primary industry hub comprising three initiatives:</p> <ul style="list-style-type: none"> ▪ Peel Food Zone ▪ Peel Business Park ▪ Peel Integrated Water Initiative | <p>Workforce development needs:</p> <ul style="list-style-type: none"> ▪ Work readiness (work ethic, attitudes, willingness to learn, communication) ▪ Science ▪ Technology ▪ Engineering ▪ Mathematics ▪ Information communication technology | <ul style="list-style-type: none"> ▪ A TAFE will be a key facilitator for Peel and south-east metropolitan Perth residents to gain the necessary skills in the key workforce development needs areas, enabling their employment in the Peel primary industry hub as outlined in the <i>Transform Peel Workforce Skills Analysis Report Summary</i>. |

Source: Urbis, misc. policy / strategy documents

STRATEGIC ALIGNMENT

Summary of Relevant Policies and Strategies

| POLICY / STRATEGY | RELEVANT OBJECTIVES | ALIGNMENT TO TAFE CAMPUS |
|--|--|---|
| Strategic Plan 2019 – 2023 <i>Government of Western Australia</i> <i>Department of Training and Workforce Development</i> | <p>Goal: Maximise the quality and impact of public investment in the VET sector.</p> <p>Key priorities:</p> <ul style="list-style-type: none"> Drive accessibility and participation in training that lead jobs and careers, especially in the regions Embed STEM and digital capability into VET Drive innovative, quality training content and delivery with employers and industry Support micro-credentials for more agile skills development Promote a contemporary and dynamic VET sector domestically and internationally | <ul style="list-style-type: none"> A TAFE will provide access to training in Byford for the Shire of Serpentine Jarrahdale and nearby residents where access is limited. A new TAFE will be an opportunity to provide modern facilities and course delivery modes. The TAFE can partner with the existing Byford Secondary College's VET program and existing and emerging local businesses to meet the goals of the DTWD <i>Strategic Plan 2019-2023</i>. |
| South Metropolitan TAFE Strategic Plan 2020 – 2022 <i>TAFE WA</i> | <p>Key priorities:</p> <ul style="list-style-type: none"> Provide students with skills for jobs and pathways to further education Partner with businesses, industry and education organisations to collaboratively build capability and respond to rapid technological advancements Respond to the STEM agenda by building the capacity of our staff and promoting STEM opportunities to students. <p>Key strategies relevant to the Shire of Serpentine Jarrahdale:</p> <ul style="list-style-type: none"> Develop business consultation capability and extend workforce development services Engage with local industries to develop tailored workforce development solutions Foster strong community and industry connections with engaged, responsive and effective Jobs and Skills Centres Ensure a strong focus on skilling the workforce to meet growing health and social assistance needs Deliver programs that encourage and promote access to vocational education and training | <ul style="list-style-type: none"> A TAFE in Byford responds to the overall priorities outlined in the <i>South Metropolitan TAFE Strategic Plan 2020-2022</i> and key strategies for the Shire of SJ. This includes: <ul style="list-style-type: none"> It will provide students with skills for employment and pathways to further education. A TAFE is an opportunity to develop partnerships with local businesses and industries as the Shire's population growth and investment in the area drives economic growth. A TAFE will be able to deliver vocational education and training. |
| Shire of Serpentine-Jarrahdale Economic Development Strategy 2018-2023 <i>Shire of Serpentine-Jarrahdale</i> | <ul style="list-style-type: none"> Population expected to double in next decade, quadruple by 2050 Recent population growth has fuelled economic growth 79% of residents employed outside SJ <p>Key opportunities:</p> <ul style="list-style-type: none"> Food processing Advanced manufacturing Warehouse and logistics Agriculture and livestock | <ul style="list-style-type: none"> Horticulture and aquaculture Equine Tourism, trails and events Health, aged care and retirement living <p>Key objectives:</p> <ul style="list-style-type: none"> Jobs – support and facilitate new business growth and deliver more employment opportunities <ul style="list-style-type: none"> A TAFE in Byford will enable the growing Shire of Serpentine Jarrahdale resident population to gain appropriate skills required for employment in the key industry growth areas listed in the Shire's <i>Economic Development Strategy 2018-2023</i>. These skills will contribute to improving the current very low employment self-sufficiency within the Shire. |

Source: Urbis, misc. policy / strategy documents

STRATEGIC ALIGNMENT

Summary of Relevant Policies and Strategies

| POLICY / STRATEGY | RELEVANT OBJECTIVES | Creating / delivering TOD centres in Byford and Mundijong challenges: | ALIGNMENT TO TAFE CAMPUS |
|---|---|--|---|
| 2021 WA State Election: Priorities and Requests <i>Shire of Serpentine-Jarrahdale</i> | <p><i>High population growth challenges:</i></p> <ul style="list-style-type: none"> ▪ Create pathways for primary, secondary and post-secondary education for local young people. <p><i>Low employment self-sufficiency challenges:</i></p> <ul style="list-style-type: none"> ▪ Diversify local employment to support greater professional service, industry and manufacturing-based opportunities that reflect the skills and attributes of our residents. ▪ Develop skills and training pathways for young people in the Shire so they have access to local, high quality post-secondary education. | <p><i>Financial capacity of Shire to deliver infrastructure challenges:</i></p> <ul style="list-style-type: none"> ▪ Ensure the planning of Byford Metronet facilitates a vibrant Transit Orientated Development for the Byford Town Centre. ▪ Secure State and Federal Government support and funding to deliver community infrastructure. ▪ Optimise Shire assets to assist in delivering upon community priorities. | <ul style="list-style-type: none"> ▪ A TAFE in Byford is a key solution to the issue raised in the Shire's <i>2021 WA State Election: Priorities and Requests</i> for access to skills and training pathways for increasing number of young residents of the Shire. ▪ The Byford town centre location will drive trip generation and promote development of a vibrant TOD around the new Byford station. |
| Shire of Serpentine-Jarrahdale Local Planning Strategy (draft September 2019) <i>Shire of Serpentine-Jarrahdale</i> | <p>Key relevant objectives:</p> <ul style="list-style-type: none"> ▪ Achieve greater housing densities in proximity to the Byford Town Centre, neighbourhood activity centres, schools, community facilities, public open space and transport nodes and corridors to improve accessibility and enhance community connections. ▪ Maintain a strong equestrian identity and the continued development of the equine industry as a significant contributor to the local economy ▪ Strengthen agricultural production as a significant economic contributor to the Shire and the broader region, promoting the Shire as a 'food bowl'. ▪ Promote alternative technologies and sustainable practice in agriculture and food production. ▪ Facilitate a range of industries within Rural Enterprise areas. | <ul style="list-style-type: none"> ▪ Promote tourism activities based on the natural rural landscape ▪ Improve accessibility to strategic centres and employment nodes within the wider region. ▪ Create activated, vibrant, and economically thriving activity centres which concentrate retail and commercial uses and are also a community hub ▪ Attract business development and facilitate local employment opportunities. ▪ Encourage the growth, development and diversification of the local economic base ▪ Facilitate local employment opportunities and improve employment self-containment and self-sufficiency. ▪ Tourism growth to contribute to employment self-sufficiency. | <ul style="list-style-type: none"> ▪ A TAFE in the Byford town centre will be a key component in meeting several objectives of the Shire's <i>Local Planning Strategy</i>. These are: <ul style="list-style-type: none"> - Bring additional economic activity to the Byford town centre; - Provide opportunities for permanent employment in Byford due to the TAFE operation; - Provide local residents with skills needed to diversify local economic base and strengthen existing industries. |

Source: Urbis, misc. policy / strategy documents

03

ECONOMIC AND SOCIAL BENEFITS



LITERATURE REVIEW

Key Findings

Studies have shown that TAFE provides significant and ongoing economic and social benefits. The key benefits include:

- Increased economic activity and productivity;
- Increased exports;
- Increased employment directly and increased employment prospects for students; and
- Numerous social benefits such as increased wellbeing, greater social cohesion and reduced welfare dependency and crime.

Literature Review Findings

| STUDY | KEY FINDINGS |
|---|---|
| Economic Activity and Productivity | <ul style="list-style-type: none"> ▪ TAFE campuses across Australia are estimated to directly provide \$3 billion in value to the Australian economy annually, including \$2.3 billion in wages, salaries and other employment benefits. ▪ Estimated \$84.9 billion total annual benefit generated by the TAFE system (includes higher worker incomes, higher employer profits). ▪ A higher skilled workforce yields high tax revenue for government (estimated at \$25 billion annually). |
| Exports | <ul style="list-style-type: none"> ▪ TAFE provides international exports (TAFE education to foreign students) worth \$134 million annually. |
| Employment and Skills Development | <ul style="list-style-type: none"> ▪ Estimated increase in employment of 486,00 positions annually for the VET-educated population relative to those without post-school education. ▪ Increased provision of VET training programs is likely to increase the total participation in apprentices and trainees as a share of Australian employment. ▪ Students who complete VET qualifications with a TAFE move into the labour force with higher earning-generating skills than those without post-school qualifications. |
| Social Benefits | <ul style="list-style-type: none"> ▪ Reduced public expenditure on social assistance and public healthcare (estimated at \$1.5 billion annually). ▪ Promotes stronger economic and labour market outcomes in regional areas. ▪ Assist in bridging the gap to further education for local special and at-risk groups of young Australians, including those of highest socio-economic disadvantage, Aboriginal and Torres Strait Islanders, and those with disabilities. ▪ Ensures greater social cohesion and helps to reduce crime. ▪ Better health outcomes for local residents due to the linkage of higher levels of education to better health outcomes. |

Sources: An Investment in Productivity and Inclusion: The Economic and Social Benefits of the TAFE System (2020), Centre for Future Work at the Australia Institute; Skills Development and the benefits for TAFE (2010), Gerald Burke; The Importance of TAFE to Victoria's prosperity (2018), KPMG; Urbis.

ECONOMIC AND SOCIAL DEVELOPMENT BENEFITS

Key Findings

The proposed Byford TAFE campus will generate significant and ongoing benefits, including:

- Increased capacity for local residents to develop job-relevant skills;
- Improved local and regional economic productivity through increased economic activity, earnings and industry and business partnerships;
- Reduced local and regional unemployment, especially within high-risk groups such as young adults;
- Increased capacity of the South Metropolitan TAFE system to educate students; and
- Provision of a range of social, liveability and town centre activation benefits.

Key Economic and Social Development Benefits of Byford TAFE Campus

| BENEFIT | DESCRIPTION |
|--|--|
| Skills Development | <ul style="list-style-type: none"> ▪ Local residents will have better access to education that will increase their earnings when they move into the labour force. ▪ Provide local industry with increased access to skilled workers, facilitating opportunities to expand production and employ more people. ▪ Increased literacy and numeracy increases employability. |
| Economic Activity and Productivity | <ul style="list-style-type: none"> ▪ Increased local economic activity and productivity for local employers due to the improved skills of local workers. ▪ Potential to develop partnerships with local industry, helping drive innovation. |
| Employment | <ul style="list-style-type: none"> ▪ Increased local employment as TAFE graduates more likely to be employed than workers with less training. ▪ Increased local household expenditure due to increased education levels. ▪ The Byford TAFE will provide 220 – 370 jobs (direct and supply chain) during the construction and operational phases. |
| TAFE Campus Capacity | <ul style="list-style-type: none"> ▪ The TAFE campus will have capacity to educate up to 1,500 students annually. ▪ Free up capacity in nearby campuses to accommodate students from their local catchments (e.g. Armadale and Rockingham) |
| Social Benefits | <ul style="list-style-type: none"> ▪ The TAFE can improve social cohesion as a key anchor of the Byford town centre community. ▪ Improved youth employment will reduce welfare dependency, decrease crime and improve health and well-being outcomes. |
| Byford Town Centre Activation and Liveability | <ul style="list-style-type: none"> ▪ Improve equity and access to education and training for local residents. ▪ A TAFE will attract people to the Byford Town Centre and assist in supporting and developing local businesses. |

Sources: An Investment in Productivity and Inclusion: The Economic and Social Benefits of the TAFE System (2020), Centre for Future Work at the Australia Institute; Skills Development and the benefits for TAFE (2010), Gerald Burke; The Importance of TAFE to Victoria's prosperity (2018), KPMG; Urbis.

04

LOCATION OPTIONS ASSESSMENT

LOCATION OPTIONS

Overview

Three potential sites for the Byford TAFE campus were identified by the Shire of Serpentine Jarrahdale and assessed within this report.

Site A:

Immediately north of Byford Village Shopping Centre
 20 Abernethy Rd, Byford
 Approx. 1.5 ha

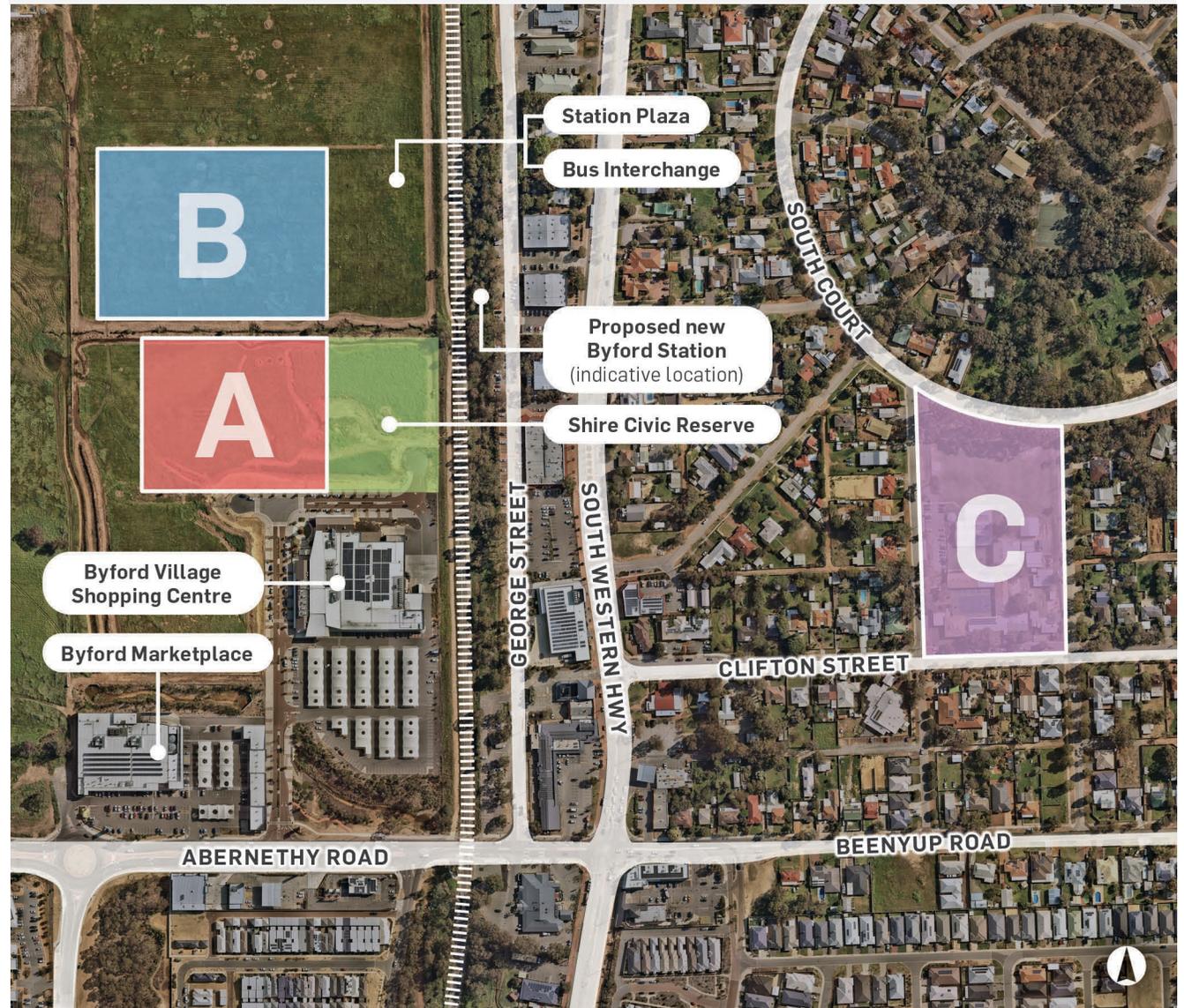
Site B:

North of Byford Village Shopping Centre
 20 Abernethy Rd, Byford
 Approx. 2.1 ha

Site C:

Byford Primary School
 36 Clifton St, Byford
 Approx. 1.8 ha

Map of Location Options



Source: Urbis

ASSESSMENT APPROACH

Overview

The three site options were assessed against five key success driver categories to determine which site is most suitable for a future TAFE campus.

The key considerations included:

- **Transport access** via public and private transport modes;
- Proximity to a growing **catchment population**;
- **Lot suitability** to accommodate the required built form;
- **Proximity to activity centre / co-location with other related land uses** such as civic, education and community uses; and
- **Cost considerations** associated with the infrastructure and purchasing costs of the sites.

Location Assessment Criteria

| | SUCCESS DRIVER | DESCRIPTION |
|---|--|--|
|  | Transport Access | <ul style="list-style-type: none"> ▪ Access to high frequency public transport (train, tram or rapid bus) ▪ Access to highways or main roads for vehicle transport ▪ Ability to avoid stop / start traffic (e.g. traffic lights) ▪ Ease of getting in and out |
|  | Catchment Population | <ul style="list-style-type: none"> ▪ The size and demographic profile of residents in the catchment area will result in a sufficient scale for a multi-purpose campus in the future. |
|  | Lot Suitability | <ul style="list-style-type: none"> ▪ Ability to accommodate appropriately the required built form design configuration. ▪ Lot size / configuration allows for staged development and future expansion. ▪ Approval, environmental and community risks in developing the site are minimal or can be mitigated. |
|  | Proximity to Activity Centre / Co-location with Other Related Land Uses | <ul style="list-style-type: none"> ▪ Businesses / industries nearby can facilitate practicum placements for students. ▪ Located nearby a secondary school/s that will provide VET students. ▪ Co-location with other land uses that can complement and catalyse additional investment in the area. ▪ Location provides operational synergies – e.g. shared spaces. |
|  | Cost Considerations | <ul style="list-style-type: none"> ▪ Infrastructure needed to facilitate development can be cost-effectively delivered. ▪ Built form solution can be accommodated on the site in a cost effective manner. ▪ Cost of purchasing the site and relocating existing land uses. |

Source: Urbis

ASSESSMENT OUTCOMES

Key Findings

Site A is considered marginally the most optimal out of the three options, with the site more suitable than site B due to:

- The relatively lower costs associated with servicing and preparing the site for the built form, and
- Co-location opportunities with existing and future uses.

Sites A and B are highly comparable in terms of location, with the key factor being location within the Byford town centre and close proximity to the new train station.

Site C is less suitable as the suburban location is less appropriate and the potential lower cost considerations are insufficient to mitigate this.

The design for the associated infrastructure for the future train station (e.g. bus and parking infrastructure) could impact on the preferred site however concept designs suggest that this infrastructure can be accommodated adjacent to this site.

Moreover, both sites A and B are in private ownership and this will influence the appropriateness of these sites.

Assessment Summary

| LOCATION DRIVER | SITE #A | SITE #B | SITE #C |
|---|-----------|-----------|----------|
| Transport Access | VERY HIGH | VERY HIGH | MODERATE |
| Catchment Population | HIGH | HIGH | HIGH |
| Lot Suitability | HIGH | HIGH | MODERATE |
| Proximity to Activity Centre / Co-location with Other Related Land Uses | HIGH | HIGH | MODERATE |
| Existing Infrastructure Suitability | MODERATE | LOW | HIGH |
| Overall Site Appropriateness | VERY HIGH | HIGH | MODERATE |

SITE ASSESSMENT

| SUCCESS DRIVER | SITE #A | SITE #B | SITE #C |
|--|--|--|---|
| Transport Access | <ul style="list-style-type: none"> Opposite new Byford train station 200 m from South Western Hwy Vehicles may need to cross railway line at level crossing New access road needs to be provided On-road cycle access only | <ul style="list-style-type: none"> Opposite new Byford train station 200 m from South Western Hwy Vehicles may need to cross railway line at level crossing New access road needs to be provided On-road cycle access only | <ul style="list-style-type: none"> 500 m (7 min walk) from new Byford train station 350 m from South Western Hwy Road access through residential area On-road cycle access only |
| Catchment Population | <ul style="list-style-type: none"> Number of residents in the Shire of Serpentine Jarrahdale who are likely to attend TAFE is estimated to increase from 600 to 1,200 by 2035 Potential for additional students from outside the Shire of Serpentine Jarrahdale (e.g. Armadale and Murray) to attend courses offered at Byford | | |
| Lot Suitability | <ul style="list-style-type: none"> The site is smaller than site B Additional underdeveloped land adjacent may offer potential for future expansion Town centre location is appropriate for education land use and traffic Environmental constraints need to be assessed | <ul style="list-style-type: none"> The site is larger than site A and could provide additional space for expansion Additional underdeveloped land adjacent may offer potential for future expansion Town centre location is appropriate for education land use and traffic Environmental constraints need to be assessed | <ul style="list-style-type: none"> The site is the smallest of the three options No potential for additional land for expansion Residential area location may not be suitable for traffic volumes and may limit certain types of trades courses due to noise or other emissions Site is already developed for education – minimal environmental constraints |
| Proximity to Activity Centre / Co-location with Other Related Land Uses | <ul style="list-style-type: none"> Town centre location provides high amenity and access to nearby businesses, potential for shared spaces 10 min walk to Byford Secondary College 10 min drive to planned West Mundijong Industrial area | <ul style="list-style-type: none"> Town centre location provides high amenity and access to nearby businesses, potential for shared spaces 10 min walk to Byford Secondary College 10 min drive to planned West Mundijong Industrial area | <ul style="list-style-type: none"> 5-8 min walk to town centre and majority of local businesses 12 min walk to Byford Secondary College 10 min drive to planned West Mundijong Industrial area |
| Cost Considerations | <ul style="list-style-type: none"> Essential services already provided – will need upgrading Significant levels of fill will be required Site needs to be purchased from Coles Small site likely to require more costly built form solution to accommodate required scale | <ul style="list-style-type: none"> Some levels of fill required Essential service infrastructure will need to be provided Site needs to be purchased from LWP Larger site provides more flexibility for built form solutions | <ul style="list-style-type: none"> Essential services already provided Site already in government ownership Existing built form may be suitable to accommodate first stage Small site likely to require more costly built form solution to accommodate required scale for later stages Cost of relocating primary school to suitable location |
| Overall Site Appropriateness | <ul style="list-style-type: none"> Town centre location opposite train station highly appropriate | <ul style="list-style-type: none"> Town centre location opposite train station highly appropriate | <ul style="list-style-type: none"> Residential area location not ideal |

05

KEY FINDINGS AND RECOMMENDATIONS

KEY FINDINGS

TAFE Opportunity

This study revealed that there is an increasing need to accommodate a TAFE campus in Byford to support the training and skills requirements of the growing population of the Shire of Serpentine Jarrahdale.

The **needs analysis** illustrated that the number of residents in the Shire that are undertaking vocational education is expected to increase from 600 in 2020 to 1,200 in 2035. Whilst the proposed campus in Byford will not cater to all of these vocational education needs, there is a strong case to progress planning for a campus to be operational by 2030.

The **stakeholder engagement** and **policy review** found that there are expected to be key skills and training requirements in the Shire over the coming decade and beyond, with both population services and strategic industries in need of skilled workers.

Assessment of the **economic and social benefits** identified a range of temporary and permanent increases to local employment, along with significant long-term positive economic and social impacts resulting from the higher levels of education, skills and employment.

The assessment of several **location options** identified a preferred site which offered a range of town centre activation benefits, leveraged the investment in the new METRONET Byford station, and provides a suitably sized site for the TAFE campus.

Strategic Considerations

Policy Merit:

Future skills needs driven by:

- Increasing population requires additional population services (e.g. managers, hospitality, health, mechanical, construction);
- Existing and expanding SJ industries (e.g. equine, tourism, agriculture / horticulture); and
- Increasing industrial employment across Mundijong and Peel (e.g. transport, logistics, plant operators, agrifood services).

Needs analysis outcomes:

- The current population can support 600 vocational education places in 2020 and is projected to increase to 1,200 by 2035; and
- Access to nearby TAFEs which have the capacity for additional students and / or offer courses aligned with the future skills needs are limited.

Strategic Merit

- Directly contribute to **economic development** of the South metro / Peel Region and rebuilding of TAFE capability and capacity by:
 - Leveraging cost efficiencies of providing a multi-purpose campus for trades and institutional training; and
 - Expanding capacity of other TAFE campuses by providing online and blended learning.
- Encourage local **industry development** and expansion by facilitating links and partnerships between TAFE, schools offering VET training programs and local businesses.
- Prepare the local workforce with **appropriate skills** that match local and regional industry needs, increasing Shire **employment self-sufficiency** as the population grows and industries mature.

Location Considerations:

- **Transport access**, including public transport, within the Byford town centre will maximise access to students within the Shire, Peel Region and in South Metropolitan Perth.
- The **catchment population** within the Shire is sufficient to support a TAFE, now and in the future.
- There are **suitable lots** within Byford town centre appropriately sized and configured to enable development of a campus that can be staged if required.
- **Location** will enable provide a range of positive activation, liveability and economic benefits for local businesses in the town centre, and location within the Shire is suitable for leveraging synergies between West Mundijong industrial area and potential transport intermodal terminal.
- **Existing infrastructure** will allow cost-effective development of a campus that will meet the needs of the future generations.

PROPOSED TAFE FACILITY

Recommended Option

In order to best accommodate the identified needs for a TAFE campus in Byford, this study identified, at a high level, two built form and site options. These options are summarised below.

- **Option 1:** This facility could support approximately 600-1,000 students within classroom learning environments. This is expected to have similar amenities as the new Armadale campus.
- **Option 2:** This option includes trades and other skills training workshops as well as classroom learning environments. A larger footprint would be required to accommodate the additional space which could support approximately 1,000-1,500 students.

Option 2 is considered preferable as this provides a greater capacity to deliver trades courses which align with the skills needs of the region.

It is important to note that this is a high level estimate of facility attributes and costs.

TAFE Facility Options

| ITEM | OPTION 1 | OPTION 2 |
|--|-------------------------|-----------------------------------|
| Site area | 0.4 ha | 0.8 ha |
| Students (est.) | 600-1,000 | 1,000-1,500 |
| Staff (est.) | 80 | 135 |
| Course offering focus | Institutional learning | Trades and institutional learning |
| Building floorspace (sq.m) | 6,000 | 10,000 |
| Building typology | 2-3 storey construction | 2-3 storey construction |
| Building footprint (sq.m) | 3,000 | 5,000 |
| Infrastructure Cost Estimate* | \$17,148,000 | \$28,580,000 |
| Total employment (Construction and on-going, direct and indirect)** | 222 FTE | 370 FTE |

* Infrastructure costs includes building works, landscaping, site works. This excludes site purchase costs and external roadworks. Costs are based on Rawlinsons and benchmark estimates for other commercial construction projects.

** This is based on input-output analysis and is presented in terms of full-time equivalent job years.

IMPLEMENTATION RECOMMENDATIONS

Key Findings

This study preliminarily identified considerations to help inform the delivery of this project. Of key importance is:

- Acquiring the preferred site;
- Undertaking concept design, taking into consideration the location within the Byford town centre and potential co-location with the Health Hub (which is likely to be delivered first);
- Exploration of options to begin delivering TAFE training within the Shire prior to construction of the dedicated campus in 2030 to ensure the pipeline of skills is delivered and partnerships with local businesses can be established; and
- State government adoption and actioning of a policy commitment to deliver a TAFE campus in Byford by 2030.

The Shire of Serpentine Jarrahdale is recommended to lead the advocacy of the above recommendations.

Implementation Recommendations

| RECOMMENDATION | DESCRIPTION |
|--|--|
| Site Acquisition | Both site A and site B are currently in private ownership. The chosen site will need to be wholly or partially acquired from the owner. Subdivision of a portion of the existing lot may be required. |
| Initial Concept Design | High level concept designs will need to be undertaken to determine the appropriate scale, layout and form of the campus, and ensure the access to the site is safe and well-integrated with Byford town centre and Byford station. |
| Co-Location with Health Hub | Co-location with the planned Byford Health Hub may provide opportunities for partnerships and training placements with the organisations located there. |
| Interim Training Provision | Explore options to begin delivering TAFE training prior to completion of dedicated TAFE campus at 2030. Potential sites may include: <ul style="list-style-type: none"> - Health hub; - Existing / developing businesses; - Online delivery; and - Renting an existing space. |
| Local Industry and Business Partnership | Develop partnerships with existing local industries and businesses. Ensure the planning and delivery of West Mundijong Industrial Area identifies skills and training requirements that can be delivered by the TAFE. |
| Adopted as Policy | State government to adopt delivery of a TAFE campus in Byford town centre by 2030 as a policy commitment. |



APPENDIX

MURDOCH TAFE EXPANSION - CASE STUDY

Murdoch Campus

Site area: 11.8 ha

Total building size: 19,000 sq.m

Total building footprint: 14,500 sq.m

Students: 4,343

Curriculum hours: 1,702,135

Apprenticeships: 266

Stage 4 Expansion

Project: Addition of a 3-storey Training / Administration building to the existing TAFE campus

Cost: \$46.5 million

Status: Completed 2018

Building size: 11,500 sq.m

Building footprint: 6,500 sq.m

Building uses:

- Health and Lifestyle study area
- Business and Information Technology study area
- General and Specialized Learning Arts study area
- Early Childhood (Community Services) study area
- Administration offices
- Library
- Café
- Computer Labs

Key Outcomes:

- Expansion of available course offerings
- Training facilities
- Student amenity
- Expansion of student capacity

Murdoch TAFE



Images source:

<https://atconsulting.com.au/project/southmetrotafe/>

** Building and area attributes are estimates and student and learning attributes are informed by inputs from the South Metropolitan TAFE*



ARMADALE TAFE DEVELOPMENT - CASE STUDY

Armada Campus

Site area: 0.3 ha (main campus only)

Total building size: N/A

Students: 602

Curriculum hours: 238,923

Apprenticeships: 0

Planned New Building

Project: Multi-storey new building

Cost: \$22.6 million

Status:

- Architect appointed, sketch design stage

Key Outcomes:

- Consolidate existing three campuses
- Provide educational pathways for youths and re-training for older people across Perth's south-eastern suburbs
- Student amenity
- Enable high schools in the catchment area to partner with TAFE to offer VET for secondary school qualifications
- Increase range of course offerings and student numbers (currently 602 students and 3rd smallest South Metropolitan TAFE)

Existing TAFE and Announced New Campus



Image sources: Business News, Department of Training and Workforce Development, Mark McGowan Twitter

** Building and area attributes are estimates and student and learning attributes are informed by inputs from the South Metropolitan TAFE*

**WA's
BIGGEST
INVESTMENT
IN TAFE
EVER.**

COVID-19 AND THE POTENTIAL IMPACT ON DATA INFORMATION

The data and information that informs and supports our opinions, estimates, surveys, forecasts, projections, conclusion, judgments, assumptions and recommendations contained in this report (Report Content) are predominantly generated over long periods, and is reflective of the circumstances applying in the past. Significant economic, health and other local and world events can, however, take a period of time for the market to absorb and to be reflected in such data and information. In many instances a change in market thinking and actual market conditions as at the date of this report may not be reflected in the data and information used to support the Report Content.

The recent international outbreak of the Novel Coronavirus (COVID-19), which the World Health Organisation declared a global health emergency in January 2020 and pandemic on 11 March 2020, is causing a material impact on the Australian and world economies and increased uncertainty in both local and global market conditions.

The effects (both directly and indirectly) of the COVID-19 Outbreak on the Australian real estate market and business operations is currently unknown and it is difficult to predict the quantum of the impact it will have more broadly on the Australian economy and how long that impact will last. As at March 2020, the COVID-19 Outbreak is materially impacting global travel, trade and near-term economic growth expectations. Some business sectors, such as the retail, hotel and tourism sectors, are already reporting material impacts on trading performance now and potentially into the future. For example, Shopping Centre operators are reporting material reductions in foot traffic numbers, particularly in centres that ordinarily experience a high proportion of international visitors.

The Report Content and the data and information that informs and supports it is current as at the date of this report and (unless otherwise specifically stated in the Report) necessarily assumes that, as at the date of this report, the COVID-19 Outbreak has not materially impacted the Australian economy, the asset(s) and any associated business operations to which the report relates and the Report Content. However, it is not possible to ascertain with certainty at this time how the market and the Australian economy more broadly will respond to this unprecedented event. It is possible that the market conditions applying to the asset(s) and any associated business operations to which the report relates and the business sector to which they belong could be (or has been) materially impacted by the COVID-19 Outbreak within a short space of time and that it will have a lasting impact. Clearly, the COVID-19 Outbreak is an important risk factor you must carefully consider when relying on the report and the Report Content.

Any Report Content addressing the impact of the COVID-19 Outbreak on the asset(s) and any associated business operations to which the report relates or the Australian economy more broadly is (unless otherwise specifically stated in the Report) unsupported by specific and reliable data and information and must not be relied on.

To the maximum extent permitted by law, Urbis (its officers, employees and agents) expressly disclaim all liability and responsibility, whether direct or indirect, to any person (including the Instructing Party) in respect of any loss suffered or incurred as a result of the COVID-19 Outbreak materially impacting the Report Content, but only to the extent that such impact is not reflected in the data and information used to support the Report Content.

This report is dated **November 2020** and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (Urbis) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of **Shire of Serpentine Jarrahdale** (Instructing Party) for the purpose of a **Feasibility Study** (Purpose) and not for any other purpose or use. Urbis expressly disclaims any liability to the Instructing Party who relies or purports to rely on this report for any purpose other than the Purpose and to any party other than the Instructing Party who relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events including wars, civil unrest, economic disruption, financial market disruption, business cycles, industrial disputes, labour difficulties, political action and changes of government or law, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or made in relation to or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

Urbis has made all reasonable inquiries that it believes is necessary in preparing this report but it cannot be certain that all information material to the preparation of this report has been provided to it as there may be information that is not publicly available at the time of its inquiry.

In preparing this report, Urbis may rely on or refer to documents in a language other than English which Urbis will procure the translation of into English. Urbis is not responsible for the accuracy or completeness of such translations and to the extent that the inaccurate or incomplete translation of any document results in any statement or opinion made in this report being inaccurate or incomplete, Urbis expressly disclaims any liability for that inaccuracy or incompleteness.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading bearing in mind the necessary limitations noted in the previous paragraphs. Further, no responsibility is accepted by Urbis or any of its officers or employees for any errors, including errors in data which is either supplied by the Instructing Party, supplied by a third party to Urbis, or which Urbis is required to estimate, or omissions howsoever arising in the preparation of this report, provided that this will not absolve Urbis from liability arising from an opinion expressed recklessly or in bad faith.

Urbis staff responsible for this report were:

| | |
|----------|--------------|
| Director | Tim Connoley |
|----------|--------------|

| | |
|-------------------|--------------|
| Senior Consultant | Suzie Turner |
|-------------------|--------------|

| | |
|-------------------|--------------|
| Senior Consultant | Megan Aulich |
|-------------------|--------------|

| | |
|--------------|----------|
| Project code | P0025460 |
|--------------|----------|

| | |
|---------------|-------------|
| Report number | Version 2.0 |
|---------------|-------------|

© Urbis Pty Ltd

ABN 50 105 256 228

All Rights Reserved. No material may be reproduced without prior permission.

You must read the important disclaimer appearing within the body of this report.

