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Minister’s message

In June 2010, the Victorian Government released *Ready for Tomorrow*, a Blueprint for Regional and Rural Victoria, which seeks to ensure that regional Victoria can continue to grow, remain prosperous and deliver investment and better liveability outcomes.

The Blueprint’s long-term Regional Settlement Framework is for ‘A State of Many Choices’, which includes a settlement plan for regional Victoria that complements the *Melbourne @ 5 Million* policy, bringing together a comprehensive plan for the whole of the State.

This new approach helps to ensure that regional Victoria maintains its character, identity and sustainable way of life; that services and infrastructure keep pace with growth and economic development; and that growth is focused in places that have the capacity to accommodate and sustain higher populations.

The Urban Development Program has been identified as a key component in assisting to deliver the outcomes of this approach across regional Victoria.

The Urban Development Program is a Government initiative which was established as one of the main outcomes of *Melbourne 2030*. The Program aims to ensure there is sufficient residential and industrial land both in metropolitan Melbourne and other key areas across regional Victoria to meet expected population growth, ensure a competitive land market, and reduce pressure on housing affordability.

One of the primary objectives of the Urban Development Program is to provide accurate and up-to-date information to assist the Victorian Government, local councils, infrastructure and service providers, and other major stakeholders in making informed decisions to help ensure an ongoing provision of land supply and supporting infrastructure for housing and employment requirements.

The Government is also working with Councils to support planning for large scale growth in major regional areas such as the Ballarat West Growth Area and the Armstrong Creek Growth Area within Greater Geelong.

Additionally, the Regional Towns Development Program was introduced two years ago by Government to help expedite the delivery of land for housing and employment across a number of these major areas. To date this has delivered such outcomes as Township Plans for Huntly and Strathfieldsaye within Bendigo, a ‘Residential Infill Opportunities’ study for Ballarat, the Traralgon Inner South Masterplan within Latrobe, and the Leneva Valley Design Guidelines within Wodonga.

With Victoria’s regional population growing at its highest rate since 1982, it is important to carefully plan for these future populations ensuring ongoing opportunities for sustained growth in housing and employment across major regional areas. Expansion of the Urban Development Program into regional Victoria will help ensure that rural settlements can continue to grow and deliver substantial investment and liveability outcomes.

JUSTIN MADDEN MLC
MINISTER FOR PLANNING
Executive summary

The 2009 Urban Development Program for Regional Victoria provides an analysis of supply and demand for residential and industrial land across parts of regional Victoria. Initially, this covers the municipalities of Ballarat, Greater Bendigo, Latrobe and Wodonga, but will cover other areas of regional Victoria in oncoming years. This component provides information on residential supply and demand for the municipality of Wodonga.

The following residential land supply assessment was undertaken by Spade Consultants Pty Ltd and commissioned by the Department of Planning and Community Development in conjunction with Regional Development Victoria and the Wodonga City Council.

It draws on important information and feedback obtained through a number of comprehensive consultations with key council officers, and Department of Planning and Community Development regional officers, undertaken through the course of the project.

Economic Profile and Activity

Wodonga is located approximately 275 kilometres north east of Melbourne on the Murray River. With Albury, on the north side of the river, the combined urban area is home to more than 100,000 residents. Wodonga’s zoned industrial areas (shown in red on the map below) are organised into several distinct clusters. A major intermodal facility, Logic Wodonga, is located at Barnawartha.

Presently, there are no areas identified for future industrial development beyond the areas currently zoned. Manufacturing is the largest industry sector in Wodonga, employing almost 2,900 persons.

Industrial Land Supply

There are approximately 1,049 hectares of zoned industrial land in City of Wodonga, all of which are in the Industrial 1 Zone. Of the total, around 605 hectares has been identified as supply (or vacant) and, of this figure, around 498 hectares has been identified as developable. This figure can be further broken down as follows:

- **232 hectares** of net developable supply within the primary urban area of Wodonga (Wodonga Urban Area);
- **266 hectares** of net developable supply at Barnawartha (at the Logic Wodonga development).

* Note there is an additional 210 hectares of land associated with the Logic Wodonga development located in the Shire of Indigo. That land is not included in this assessment.

Consumption

Based on analysis of aerial photography and stakeholder consultation, the consumption of land for industrial purposes has averaged 4.9 hectares per annum between 2004 and 2009. This comprises 4.1 hectares per annum in the primary urban area of Wodonga and 0.8 hectares per annum at Barnawartha.

Adequacy of Land Stocks

In total, there is in excess of 15 years of industrial zoned land within the municipality based on the average annual rate of land consumption in the period 2004 to 2009.

This assessment however carries three key qualifications.

Firstly, identifying the future location and amount of consumption of industrial land is an uncertain task. Current levels of consumption are used as an indication of the adequacy of industrial land supply. However, the level and location of future consumption may change due to:

- the investment and business activity behaviour of the private sector
- trends in the global economy
- propensity for certain activities to agglomerate
- directions in technology
The City of Wodonga has a number of large scale industrial areas including Logic Wodonga, Wodonga Enterprise Park and Baranduda Enterprise Park; and overall has 11 identified industrial areas with sufficient land to accommodate well beyond 15 years of land supply for industrial land uses.

The Wodonga Planning Scheme Municipal Strategic Statement (Clause 21.11) has developed a number of ‘Strategic Actions’ for these large scale industrial areas, which provide further direction to industrial land development across the municipality.

In total the City of Wodonga has in excess of 15 years supply of industrial land; consistent with Clause 11.02-1 of the State Planning Policy Framework which aims to ensure that sufficient land is available to meet forecast demand; and accommodate projected population growth over at least a 15 year period.

Secondly, that further large scale industrial investment, such as the Woolworths National Distribution Centre at Barnawartha, would result in a higher average rate of consumption in the longer term.

Thirdly, the industrial land market at Wodonga does not operate in isolation from that of Albury. For that reason the quantity of supply and demand at Albury, as well as any price differentials that may exist from time to time between the two markets, could have a bearing on the rate of consumption and therefore the adequacy of supply at Wodonga.
1.0 Introduction

1.1 Purpose and Context

The Urban Development Program has been one of the Victorian Government’s major initiatives to support the strategic intent of its key planning document for metropolitan Melbourne, Melbourne 2030. The Urban Development Program was set up in 2003 to assist in managing the growth and development of metropolitan Melbourne and the Geelong region, and help ensure the continued sustainable growth of these areas in order to maintain their high levels of liveability.

The primary purpose of the Urban Development Program is to improve the management of urban growth by ensuring that government, councils, public utilities and the development industry have access to up-to-date and accurate information on residential and industrial land availability, development trends, new growth fronts, and their implications for planning and infrastructure investment.

The main purpose of the Urban Development Program is to provide accurate, consistent and updated intelligence on residential and industrial land supply, demand and consumption. This in turn assists decision-makers in:

- maintaining an adequate supply of residential and industrial land for future housing and employment purposes
- providing information to underpin strategic planning in urban centres
- linking land use with infrastructure and service planning and provision
- taking early action to address potential land supply shortfalls and infrastructure constraints
- contributing to the containment of public sector costs by the planned, coordinated provision of infrastructure to service the staged release of land for urban development.

The information contained and reported within the Urban Development Program enables early action to be taken in areas where land shortfalls have been identified.

1.2 Regional Context

During 2009, the Urban Development Program was expanded across key provincial areas across regional Victoria. Initially, this covers the municipalities of Ballarat, Greater Bendigo, Latrobe and Wodonga, but will be expanded to other key areas in oncoming years.

An expanded Urban Development Program into regional Victoria will build local and regional data bases and, importantly, provide a platform for mapping and spatial analysis in each region. This will in turn allow councils and other key stakeholders in the planning and development sectors to make more informed decisions in the growth and investment of these key areas across regional Victoria.

The industrial land supply assessments for the municipalities of Ballarat, Greater Bendigo, Latrobe and Wodonga were undertaken by Spade Consultants Pty Ltd, and commissioned by the Department of Planning and Community Development in conjunction with Regional Development Victoria and the City Councils of Ballarat, Greater Bendigo, Latrobe and Wodonga.

These areas form the initial expansion of the Urban Development Program across regional Victoria. Other areas will be incorporated into the Urban Development Program in oncoming years.

1.3 2009 Urban Development Program Reports

The 2009 Urban Development Program Reports for Ballarat, Greater Bendigo, Latrobe and Wodonga, as well as the 2009 Urban Development Program Annual Report for metropolitan Melbourne and the Geelong region, are available online at www.dpcd.vic.gov.au/urbandevelopmentprogram

Interactive online maps are also available. MapsOnline enables users to search for specific projects, generate reports and print or download maps and statistical reports. It allows users to search for specific land supply areas by region or municipality, estate name, Melway reference, street address or lot number.

To access the Regional Urban Development Program MapsOnline visit www.land.vic.gov.au/udp

For more information about the Urban Development Program, email the Department of Planning and Community Development at urbandevelopment.program@dpcd.vic.gov.au
2.0 Approach & Methodology

For the purposes of the Regional Urban Development Program, land is either zoned for industrial purposes or identified for future industrial use.

Industrial land identified by the Regional Urban Development Program includes land within the Industrial 1 Zone, the Industrial 2 Zone, the Industrial 3 Zone and the Business 3 Zone as well as land that has been identified for future industrial development by the relevant Council.

The Industrial 1 Zone is the most commonly used industrial zone. More specialised zonings tend to be located in specific areas such as the Industrial 2 Zone. This zone provides an area for heavy industrial uses.

The Industrial 3 Zone is a specialised zone that focuses on the needs of light industry, while the Business 3 Zone is aimed at facilitating the needs of industries with a high office based component.

Note that for the purposes of this report the regional component of the expanded Urban Development Program is referred to as the ‘Regional Urban Development Program’.

Methodology for assessing industrial land stocks

Industrial land data is collected and assessed using lot boundary, planning scheme information and aerial imagery. Additional information on the status of specific sites is gathered through stakeholder consultation, primarily discussions with relevant Council officers.

Industrial land supply and consumption data presented as part of the Regional Urban Development Program is based on aerial photography completed in mid 2009. Information relating to zoning, overlays and other planning matters relates to the same period.

Identifying land supply

Industrial land supply includes all zoned industrial supply within the municipality as well as land that has been identified by Council for future industrial development (unzoned supply).

In determining zoned land supply, each zoned industrial land parcel is assessed as either:

- **Vacant (Supply)** - zoned industrial land classified as available for industrial development. This includes land that is vacant, disused or assigned to marginal non-industrial uses with little capital value, such as farm sheds.
- **Occupied (Unavailable)** - zoned industrial land classified as unavailable for industrial development. This includes land already occupied by industrial uses, construction sites, major infrastructure, intensive farming operations or established residential premises.

In instances where industrial land was in the process of being approved for rezoning to another use (for example a Business, Residential or Mixed Use Zone) and, based on a Council request, the land was deleted from the Industrial land database.

In several instances discrete parcels of land (within one title) have been created to demonstrate a high degree of availability for development on a particular site. For example, where there is a significant area of land with a specific use operating from a small portion of the land and it is understood the balance of the land is regarded as a potential development site, the title area has been split to show the occupied and vacant components of the land. This has only been done at the request of the relevant Council officer.

Assessing the supply of industrial land

For all industrial land, each individual parcel is recorded with its size (hectare) and the applicable zone. This enables an assessment of the overall or gross supply of land either unavailable as supply (occupied) or available as supply (vacant or proposed major industrial area). Subsequently, a further assessment is conducted to determine a net measure of supply (‘developable area’).

Using a net measure of industrial land supply provides a more accurate basis for determining adequacy, as it measures the likely area available for development after accounting for local roads, open space, infrastructure requirements and environmental considerations. This varies from locality to locality, depending on site and regional-specific issues.
During 2008, the Department of Sustainability and Environment released maps indicating the location and extent of significant native vegetation across Victoria utilising satellite imagery. These maps were used as part of the assessment in determining the estimated net developable area.

Where native vegetation mapping indicated a classification of 'high' or 'very high' against vacant zoned land or land identified for future industrial purposes, the area impacted was removed from the gross area of land supply.

Further higher level (or regional) take outs were removed from larger key parcels of vacant zoned land or from land identified for future industrial development. This was carried out in consultation with the relevant Council.

Finally, the total area of remaining vacant land was separated into parcels of either greater than, or less than one hectare to allow for local discounts (specifically for local roads and open space). This was done through both consultation and by calculating typical take out rates for such factors from recently completed development.

Discount factors [at each level] differ between municipalities depending on a variety of factors, specifically local geography.

Calculating consumption

To determine consumption based trends, the Regional Urban Development Program has examined available aerial photography between specific periods with an emphasis on securing at least five years of data. Due to the limited availability, and quality, of aerial photography this has not always been possible. Given the limited availability of photography, for each municipality at least two prior periods (years) have been assessed using the methodology outlined above (i.e assessing each lot as either 'vacant' or 'occupied').

In comparing the extent to which consumption has occurred land has been 'backcast' against previous periods to ensure like for like areas have been compared. This has been done to ensure that the effect of the rezoning of new industrial land or the rezoning of industrial land to non-industrial uses does not distort the actual consumption that has occurred between periods.

Adequacy of industrial land supply

The adequacy of supply is calculated by dividing the total net supply of zoned and unzoned land (that identified for future industrial development) by the historic average annual rate of consumption. The result is a figure expressed in years.
3.0 Overview

Wodonga is a major Victorian regional city located approximately 275 kilometres north east of Melbourne. It is separated from its 'twin city' Albury by the Murray River which also forms the boundary between Victoria and New South Wales.

Wodonga’s estimated residential population was 35,733 as at 30 June 2009. The estimated residential population of the combined Albury-Wodonga urban area at the same date was 104,609 making it one of the largest inland urban areas in Australia.

Wodonga is located at the junction of the Hume Highway, Murray Valley highway and Kiewa Valley Highway and on the primary Sydney-Melbourne railway line.

Regional Victorian cities such as Wodonga require an adequate supply of industrial land for jobs and services, such as manufacturing, logistics and warehousing, to support continued economic development. The Regional Urban Development Program provides the state government and other stakeholders with a strategic overview of the supply and demand of industrial land across key regional Victorian cities.

The Regional Urban Development Program monitors industrial land zoned as:

- Industrial 1 Zone
- Industrial 2 Zone
- Industrial 3 Zone
- Business 3 Zone

The Industrial 1 Zone is a general industrial zone and is the only industrial zone applied in the City of Wodonga.

There have been a number of distinct development trends in the industrial development sector over recent decades some of which appear applicable to Wodonga. These include:

- A growth in the floor area of industrial premises and ultimately a larger floor area per employee;
- Growth in the warehousing and transport sector in part due to Albury-Wodonga’s strategic location as a regional hub servicing a substantial area of southern New South Wales and northern Victoria as well as its high quality transport infrastructure;
- The extent to which developers are prepared to offer a more flexible approach to industrial land development with growth in the customised provision of land and buildings for specific uses and the potential for either leasehold or freehold tenure.

The 2007 Audit of Industrial Land in Provincial Victoria indicated that about 75% to 85% of industrial land is occupied by industrial uses. The remainder is occupied by non-industrial uses such as residential, churches and car dealerships.

The Regional Urban Development Program employs the same methodology and a similar presentation style to the metropolitan Urban Development Program which assesses industrial land in greater Melbourne as well as Geelong.

The major difference is that of scale. Whereas the metropolitan Urban Development Program measures some 23,000 hectares of industrial land supply in metropolitan Melbourne, the Regional Urban Development Program (Wodonga Report) assesses around 1,050 hectares. In terms of consumption, metropolitan Melbourne has consumed in the order of 300 hectares of land per annum between 2000 and 2009, while the City of Wodonga has consumed around 5 hectares per annum from 2004 to 2009.

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1 ABS, Regional Population Growth, 2008-09 [Cat. No. 3218.0]
4.0 Building Activity

A variety of factors influence the level of building activity. In regional locations the key factors include:

- The investment and business activity behaviour of the private sector
- Trends in the global and local economy
- The availability of credit and borrowings for business decisions such as a decision to make a capital investment in property for a business
- Levels of land supply in the area
- Economic activity within the region
- The degree to which other regional centres compete for investment

The industrial built form in Wodonga reflects the diversity of the city’s industrial base. West Wodonga is the primary location for smaller service industry style development. Larger footprint premises tend towards the industrial area between Bandiana and Baranduda as well the industrial clusters on the western approach to the urban area. The Logic Wodonga development (at Barnawartha) is designed to accommodate large industrial users.

The key indicator of building activity is the Australia Bureau of Statistics Building Approvals.

Graph 4.1: Number of Industrial Building Approvals: City of Wodonga (2000-2008)

An analysis of the number of building approvals for warehouses and factories between 2000 and 2008 shows a high degree of variability. On average, building approvals for 8 factories and 5 warehouses were granted on an annual basis over the period. The absence of any clear trends in the volume or type of approvals underlines the unevenness in investment in industrial buildings.

The substantial spike in the value of building approvals in 2004 (Graph 4.2) relates to the approval of the Woolworths National Distribution Centre at Barnawartha with a value of more than $60 million.
Discussions with local real estate agents indicate that:

- industrial land sale prices in Wodonga are in the range of $100 to $120 per square metre (of land);
- rental costs for industrial premises are in the range of $60 and $80 per square metre of floorspace.
5.0 Industrial Land Supply

5.1 Overview

Industrial land in the City of Wodonga is located in two key areas; within the primary urban area [the Wodonga Urban Area] and at Barnawartha [at the Logic Wodonga development].

Within the Wodonga Urban Area industrial areas are clearly defined as distinct industrial clusters. Two industrial clusters are located adjacent to the Hume Freeway on the eastern approaches to the Wodonga Urban Area. The first cluster at West Wodonga remains largely undeveloped at this point of time while the second, located at and around the junction of the Hume Freeway and Melbourne Road [the old Hume Highway] has been developed into a relatively large lot subdivision.

A third is located north-west of the Wodonga Central Business district [CBD] and largely fulfills a service industry role. Each cluster is well served by road transport with easy access to the Hume Freeway which bypasses Wodonga.

A fourth cluster is located on the east side of the Kiewa Valley Highway between Bandiana and Baranduda and is partially developed.

At Barnawartha the ‘Logic Wodonga’ development offers a substantial area of industrial land designed and developed as an intermodal hub or inland port with access to both the Hume Freeway and main Sydney to Melbourne railway line. Logic Wodonga, which commenced in 2003, straddles a municipal boundary.

While there is also industrial land in Albury [refer Section 4.3] this report only provides detailed analysis of industrial land within Wodonga.

Accordingly the assessment of the Wodonga industrial land market contains an analysis of two separate areas:

- Wodonga Urban Area [which includes all industrial land in the primary Wodonga urban area]
- Barnawartha [which includes the industrial land at the Logic Wodonga development located within the City of Wodonga municipal boundary]

Where data is presented that combines the total of the two areas it is identified as Wodonga Total.

5.2 Zoned Industrial Land

There are approximately 1,049 hectares of zoned industrial land at Wodonga. All zoned land is in the Industrial 1 Zone.

The primary urban area of Wodonga contains 726 hectares, or 69%, of total zoned land. The Logic Wodonga development at Barnawartha has an area of 323 hectares, or 31%, of zoned industrial land within the municipality.

The Wodonga City Council has not identified any additional areas for future industrial development beyond those sites already zoned.

5.3 Supply of Industrial Land

Table 5.1 sets out the distribution of zoned industrial land between the Wodonga Urban Area and Barnawartha and provides a breakdown of land categorised as either ‘supply’ [vacant] or ‘unavailable’ [occupied]. Of this around 605 hectares have been identified as supply, which is defined as land that is available although portions of it may not be immediately developable.

This is comprised of 312 hectares in the Wodonga Urban Area and 293 hectares at Barnawartha.
Table 5.1: Occupied and vacant (supply) industrial land stocks (gross ha), 2009

<table>
<thead>
<tr>
<th>Area</th>
<th>Ind 1 Zone</th>
<th>Ind 2 Zone</th>
<th>Ind 3 Zone</th>
<th>Bus 3 Zone</th>
<th>All Zoned Land</th>
<th>Unzoned Land</th>
<th>Total Zoned and Unzoned Land</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
</tr>
<tr>
<td>Wodonga Urban Area</td>
<td>312.0</td>
<td>414.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>312.0 414.5</td>
</tr>
<tr>
<td>Barnawartha</td>
<td>293.4</td>
<td>28.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>293.4 28.9</td>
</tr>
<tr>
<td>Wodonga Total</td>
<td>605.4</td>
<td>443.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>605.4 443.4</td>
</tr>
</tbody>
</table>

Source: Spade Consultants Pty Ltd and Department of Planning and Community Development, 2009

Net Area differs from the gross area of supply by discounting the gross area to allow for factors such as native vegetation constraints as well as the provision of regional and local roads and open space. Table 5.2 provides an estimate of net supply for the Wodonga Urban Area and Barnawartha.

In the Wodonga Urban Area, the gross area of zoned supply of 312 hectares has been estimated as providing 232 hectares of net supply.

At Barnawartha, the gross area of zoned supply of 293 hectares has been estimated as providing 266 hectares of net supply. The reason there is little difference between the gross area of supply and the net area of supply at Barnawartha is that the development area is largely free of constraints and, importantly, it has already been subdivided into large developable parcels with roads and other services already excluded from the gross area.

Across both industrial areas, it is estimated there are some 498 hectares of net zoned supply.

Table 5.2: Estimated stock of zoned vacant industrial land stocks (net developable area ha), 2009

<table>
<thead>
<tr>
<th>Area</th>
<th>Ind 1 Zone</th>
<th>Ind 2 Zone</th>
<th>Ind 3 Zone</th>
<th>Bus 3 Zone</th>
<th>All zoned Land</th>
<th>Unzoned Land</th>
<th>Total Zoned and Unzoned Land</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
</tr>
<tr>
<td>Wodonga Urban Area</td>
<td>231.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>231.5</td>
<td>0.0</td>
<td>231.5</td>
</tr>
<tr>
<td>Barnawartha</td>
<td>266.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>266.3</td>
<td>0.0</td>
<td>266.3</td>
</tr>
<tr>
<td>Wodonga Total</td>
<td>497.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>497.8</td>
<td>0.0</td>
<td>497.8</td>
</tr>
</tbody>
</table>

Source: Spade Consultants Pty Ltd and Department of Planning and Community Development, 2009

Graph 5.1 highlights the relative size of the two industrial areas as well as the amount of zoned supply and unavailable [or occupied] land. While the primary urban area of Wodonga represents the larger area of zoned industrial land, there is not a significant difference in the amount of supply available between the Wodonga Urban Area and Barnawartha.
Industrial land at Albury

The industrial land market at Wodonga does not operate in isolation from that of Albury. The Albury Land Use Strategy (2006) identified 923 hectares of land that is described as either occupied lots (736 hectares), vacant serviced lots (157 hectares) or vacant buildings and land (31 hectares).

These figures do not include areas identified for future industrial development or unserviced industrial land.

Industrial land in Albury is located within several distinct clusters mainly along the Hume Highway (Freeway) alignment. A significant area similar in scale to the Logic Wodonga development has been identified as a potential future industrial area at Ettamogah.

Table 5.3 provides an analysis of the area of individual lots both occupied (unavailable) and vacant (supply) in the Wodonga Urban Area. Currently there is a supply of 31 lots with an area less than 0.5 hectares. Lots of this size are largely consumed by single users and provide little scope for further subdivision.

Current identified supply of larger lots indicates a total of 6 lots between 5 and 10 hectares in size, and 9 lots of 10 hectares or above in size. These lots provide flexibility in land supply as they can be used in total for large users or can be further subdivided into smaller lots.

Of the 425 lots which have been identified as unavailable, 121 are less than 0.1 hectares in area, 189 are between 0.1 and 0.5 hectares and 46 are between 0.5 and 1 hectare.

An additional supply of larger lots (5 hectares and greater) is available at Barnawartha.
Table 5.3: Number of zoned supply and unavailable industrial lots by lot size cohort, 2009

<table>
<thead>
<tr>
<th>Area</th>
<th>&lt;0.1 hectares</th>
<th>0.1 to 0.5 hectares</th>
<th>0.5 to 1 hectares</th>
<th>1 to 5 hectares</th>
<th>5 to 10 hectares</th>
<th>10+ hectares</th>
<th>Total Lots</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
<td>Unavailable</td>
<td>Supply</td>
</tr>
<tr>
<td>Wodonga Urban Area</td>
<td>6</td>
<td>121</td>
<td>25</td>
<td>189</td>
<td>12</td>
<td>46</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Spade Consultants Pty Ltd and Department of Planning and Community Development, 2009
6.0 Consumption of Industrial Land

The Regional Urban Development Program has utilised aerial photography for Wodonga in order to undertake industrial land assessments for the years, 2004, 2006 and 2009. This time series data is used to establish trends over time and measure the uptake or consumption of industrial land.

Table 6.1 indicates average consumption of industrial land over the period of 4.1 hectares per annum in the Wodonga Urban Area and 0.8 hectares per annum at Barnawartha resulting in total consumption of 4.9 hectares over the municipality.

Table 6.1: Average Annual Consumption of Industrial Land (ha)

<table>
<thead>
<tr>
<th>Area</th>
<th>2004 to 2006</th>
<th>2006 to 2009</th>
<th>Total Consumption 2004 to 2009</th>
<th>Average Annual Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption: Wodonga Urban Area</td>
<td>7.2</td>
<td>2.0</td>
<td>20.4</td>
<td>4.1</td>
</tr>
<tr>
<td>Consumption: Barnawartha</td>
<td>0.1</td>
<td>1.3</td>
<td>4.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Consumption: Wodonga Total</td>
<td>7.3</td>
<td>3.3</td>
<td>24.5</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Source: Spade Consultants Pty Ltd and Department of Planning and Community Development, 2009

In the Wodonga Urban Area most of the consumption has occurred in the area to the west of the Wodonga CBD, though several parcels of land have also become occupied in the development area close to the intersection of Melbourne Road and the Hume Freeway.

At Barnawartha the Woolworths Distribution Centre which occupies some 23 hectares was identified as occupied in the 2004 assessment. Consumption at Barnawartha from 2004 to 2009 is due primarily to the establishment of the Border Express facility.

Developments, such as the Woolworths Distribution Centre, illustrate the high degree of variability in the consumption of industrial land in Wodonga.

Table 6.2: Average Annual Industrial Land Consumption by Zone Type (ha), 2004 to 2009

<table>
<thead>
<tr>
<th>Area</th>
<th>Industrial 1 Zone</th>
<th>Industrial 2 Zone</th>
<th>Industrial 3 Zone</th>
<th>Business 3 Zone</th>
<th>All Zoned Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption: Wodonga Urban Area</td>
<td>4.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Consumption: Barnawartha</td>
<td>0.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Consumption: Wodonga Total</td>
<td>4.9</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Source: Spade Consultants Pty Ltd and Department of Planning and Community Development, 2009

While this report bases its calculations on average consumption over the period 2004 to 2009, there is an ongoing need to monitor the take up of industrial land in municipalities such as Wodonga.
7.0 Adequacy of Industrial Land Stocks

The adequacy of supply is measured by dividing estimates of net supply (for both zoned and unzoned land) by an estimate of future demand (or consumption) of industrial land. The result is a measure of adequacy expressed in years.

Table 7.1: Adequacy of industrial land for Wodonga Total (2009)

<table>
<thead>
<tr>
<th>Area</th>
<th>Estimated net developable area (ha) - zoned land</th>
<th>Estimated net developable area (ha) - unzoned land</th>
<th>Years of zoned supply</th>
<th>Years of supply zoned and unzoned supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wodonga Urban Area</td>
<td>231.5</td>
<td>0.0</td>
<td>15+</td>
<td>15+</td>
</tr>
<tr>
<td>Barnawartha</td>
<td>266.3</td>
<td>0.0</td>
<td>15+</td>
<td>15+</td>
</tr>
<tr>
<td>Wodonga Total</td>
<td>497.8</td>
<td>0.0</td>
<td>15+</td>
<td>15+</td>
</tr>
</tbody>
</table>

Source: Spade Consultants Pty Ltd and Department of Planning and Community Development, 2009

The above table calculates the adequacy of supply in Wodonga Urban Area, Barnawartha and for Wodonga Total.

In total, there is in excess of 15 years of industrial zoned land within the municipality based on the average annual rate of land consumption in the period 2004 to 2009.

This assessment however carries three key qualifications.

Firstly, identifying the future location and amount of consumption of industrial land is an uncertain task. Current levels of consumption are used as an indication of the adequacy of industrial land supply. However, the level and location of future consumption may change due to:

- investment and business activity behaviour of the private sector
- trends in the global economy
- propensity for certain activities to agglomerate
- directions in technology
- population trends
- environmental impacts and adaptation
- social attitudes.

Secondly, single large scale developments, such as the Woolworths Distribution Centre, illustrate the high degree of variability in the consumption of industrial land in Wodonga. Developments such as these would result in a higher average rate of consumption in the longer term.

Thirdly, the industrial land market at Wodonga does not operate in isolation from that of Albury. However, for the purposes of the Regional Urban Development Program, only industrial land supply within the City of Wodonga is assessed.
8.0 Industrial Maps
INDUSTRIAL DEVELOPMENT STATUS - 2009

- IN1Z UNAVAILABLE
- IN1Z SUPPLY
- IN2Z UNAVAILABLE
- IN2Z SUPPLY
- IN3Z UNAVAILABLE
- IN3Z SUPPLY
- B3Z UNAVAILABLE
- B3Z SUPPLY

PROPOSED INDUSTRIAL LAND

IN1Z UNAVAILABLE
IN1Z SUPPLY
IN2Z UNAVAILABLE
IN2Z SUPPLY
IN3Z UNAVAILABLE
IN3Z SUPPLY
B3Z UNAVAILABLE
B3Z SUPPLY

PROPOSED INDUSTRIAL LAND
Map 8.2: INDUSTRIAL DEVELOPMENT STATUS (BARNAWARTHA), 2009

**INDUSTRIAL DEVELOPMENT STATUS - 2009**
- IN1Z UNAVAILABLE
- IN1Z SUPPLY
- IN2Z UNAVAILABLE
- IN2Z SUPPLY
- IN3Z UNAVAILABLE
- IN3Z SUPPLY
- B3Z UNAVAILABLE
- B3Z SUPPLY

**PROPOSED INDUSTRIAL LAND**
- PROPOSED INDUSTRIAL LAND

1:10,000
**Future industrial land**
Land identified by the relevant municipal authority for future industrial development and current zoning not supportive of industrial development. Land which is has an ‘Urban Growth Zone’ applied, and a precinct structure plan has not yet been approved, may also fall into this category.

**Gross industrial land supply**
Measures the area of zoned industrial land identified by the Urban Development Program as suitable for industrial development. For more information, see Supply (industrial land).

**Local Government Area (LGA)**
A geographical area that is administered by a local council. Victoria has 79 LGAs.

**Lot (industrial)**
Discrete area of land defined by a parcel boundary identified in the Vicmap Property Database. Each lot has an associated land title, and is either zoned for industrial purposes or identified for future industrial use.

**MapsOnline**
An interactive online program that gives users the ability to search for specific projects, generate reports, and print or download maps and statistical reports. It also allows the user to search for specific land supply areas by region or LGA, estate name, Melway reference, street address or lot number, and contains mapping and statistical information sourced through the Urban Development Program. Registered users can also make site-specific feedback on-line.

**Net industrial land supply**
Measures the estimated area available for industrial development after accounting for local roads, open space, infrastructure and environmental considerations.

**Precinct Structure Plans**
In the Urban Growth Zone (UGZ), the precinct structure plan (PSP) is the key document that triggers the conversion of non-urban land into urban land. A precinct structure plan is a long-term strategic plan that describes how a precinct or a series of sites will be developed.

**Statistical Local Area (SLA)**
A geographical area created by the Australian Bureau of Statistics for statistical purposes. Victoria is divided into 200 SLAs. SLAs may be the same as an LGA or in most cases several SLAs aggregate to form LGAs.

**Supply (industrial Land)**
Zoned industrial land classified as available for industrial development. This includes land that is vacant, disused or assigned to marginal non-industrial uses with little capital value, such as farm sheds or vehicle storage.

**Unavailable (industrial Land)**
Zoned industrial land classified as unavailable for industrial development. This includes land already occupied by industrial uses, construction sites, major infrastructure, intensive farming operations or established residential premises.
Acknowledgements

This Urban Development Program report would not have been possible without the assistance and contribution of Spade Consultants Pty Ltd, the Wodonga City Council and Regional Development Victoria. The Department of Planning and Community Development would like to thank the representatives from these organisations for their valuable contributions.