COMBINED EMERGENCY MANAGEMENT ARRANGEMENTS

FOR

THE CITY OF BELMONT & TOWN OF VICTORIA PARK

PART TWO

EMERGENCY RISK MANAGEMENT (ERM)
1. Emergency Risk Management (ERM)

Emergency Risk Assessment Workshops for the communities of the City of Belmont and Town of Victoria Park were conducted in early 2008. The Risk Assessment was carried out in accordance with the Standard *AS / NZ 4360 – Risk Management* and the Application Guide (Manual 5) produced by Emergency Management Australia (EMA). The provisions of this Standard are used throughout Australia by emergency and risk management practitioners. In addition, the ERM Guide produced by the Fire and Emergency Services Authority (FESA) was referenced.

A diagram illustrating the process is below:

2. Context of Risk Assessment

The context of the Risk Assessment was described as follows:

*Conduct an analysis of Hazards facing the Belmont / Victoria Park communities, both residential and transient, which:*

- *Would pose a threat to life, property, the environment or commerce.*
- *Would require a large-scale emergency response.*
- *Would require support / action from the Local Government Authorities.*
- *Would require Recovery strategies to be adopted to return the community to normality.*
Within this context, due consideration was made to other “threats” such as criminal activities, house fires, car accidents etc. which are considered part of the day to day response from the emergency services. Whereas these threats may feature high in the eyes of an individual, they fall outside the context of this analysis. The COB / TOVP Emergency Management Arrangements are focused on the higher level emergency incidents identified in the Analysis.

2.1. Assessment Area

The assessment area comprises the combined metropolitan area for the Local Government Authorities of the City of Belmont and the Town of Victoria Park. These are described hereunder.

2.1.1. City of Belmont

The City of Belmont is located close to the Central Business District (CBD) of Perth and is the eastern gateway to the State Capital. It is bounded to the north by the Swan River, to the west by the Town of Victoria Park, to the south by the City of Canning and to the east by the City of Swan and Shire of Kalamunda. There are 6 postal districts, namely:

- Ascot
- Belmont
- Cloverdale
- Rivervale
- Redcliffe
- Kewdale

Redcliffe bounds the Perth International and Domestic Airport, whilst Kewdale houses a large-scale industrial area, including the Rail Freight Terminal. The City is therefore not only a major residential area but contains two prominent transport centres with all the associated risks. The City’s demographics are tabled at Annex A, including a map of the area.

2.1.2. Town of Victoria Park

The Town of Victoria Park provides the southern gateway to Perth City. It is bounded to the north by the Swan River and Perth Water, to the west by the City of South Perth, to the south by the City of Canning and to the east by the City of Belmont. The Town is bisected by Albany Highway and the south transit rail link. The Town’s demographics are tabled at Annex B, including a map of the area. The following postal districts fall within the Town boundaries:

- Burswood
- Victoria Park
- East Victoria Park
- Lathlain
- Carlisle
- Bentley
- Kensington
- St James
2.2. **Considerations**

To effectively complete the context of the Risk Assessment, the following considerations were addressed:

1. The impact of a failure of the Communities **Utility Infrastructure**.
2. The Risk posed by **Transport Terminals**.
3. The impact of a major emergency on **Commerce**.
4. The risks posed by **Special Events**.

2.2.1. **Utility Infrastructure**

Utilities such as Water Supply, Electricity, Sewage, Communications, Transport (rail, road, river and air) are essential to any modern city. Not only must the Risk Analysis address the loss of these utilities through the effects of natural or man-caused emergencies, but their failure must be considered in themselves, a risk. The experiences of the City of Auckland, New Zealand, which was without power for some five days, provides a case study worth noting.

2.2.2. **Transport Terminals**

The impact of a temporary loss of Perth Airport or the Kewdale Rail Terminal on the State’s economy is outside the context of the ERM. Both these terminals do pose a continuing threat to the residential communities which bound these complexes. Whereas the precise danger zone cannot be accurately forecast, suffice to say that any residential area within 1000 metres of a Terminal boundary is considered to have above average risk compared to the remaining residential areas.

2.2.3. **Commerce**

The impact of any disaster or utility failure could result in millions of dollars in lost productivity and job losses, which would impact not only the Belmont / Victoria Park Area, but the State in general. Whereas the primary goal of emergency management is directed towards People, the Recovery will be more prolonged and less successful if the needs of Business & Commerce are not actively considered in the process.

2.2.4. **Special Events**

The COB / TOVP LEMC, either alone or in conjunction with adjacent LGAs, is the approval Authority for all Special Events conducted within their precincts. The approval processes in place includes a requirement for All Event Organisers to:

1. Conduct a Risk Analysis for their Event
2. Prepare an Event Emergency Management Plan, and
3. Pay all Council and sundry fees required for the Event.

Despite these measures, significant Special Events such as the Australia Day “Skyworks” and the “Red Bull Air Race” present an emergency management risk. The Event Plans produced by the Organisers, must dovetail into the COB / TOVP Local Emergency Management Arrangements as part of the "All Hazards" approach.
3. Identified Risks

Within the Context described above, 19 Risks were identified as follows:

1. Criminal Act
2. Hazardous Material Incident
3. Severe Weather
4. Structural Fire
5. Air Crash
6. Earthquake
7. Human Epidemic
8. Industrial Accident
9. Marine Accident
10. Riverine Flooding
11. Road Accident
12. Special Events (2) “Skyworks” & “Red Bull Air Race”
13. Structural Collapse
14. Terrorist Act
15. Bushfire
16. Infrastructure Failure (Water, Power, Communications, Sewage)
17. Rail Accident
18. Space Debris Re-entry

Two Special Events were identified to be treated individually. The term Infrastructure Failure is used in the context of a major loss of Power, Water, Sewage, Communications or Transport System (Road or Rail), and are treated collectively. The Risk Register is at Annex A.

4. Likelihood v Consequence

The Risk Management Standard applies the balance of Likelihood against Consequence to arrive at the “Level of Risk”. The criteria used for the Likelihood v Consequence descriptors are taken from the Emergency Risk Management Guide produced by FESA. These tables are reproduced below

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost Certain (A)</td>
<td>Is expected to occur in most circumstances; and/or high level or recorded incidents and/or strong anecdotal evidence; and/or a strong likelihood the event will recur; and/or great opportunity, reason, or means to occur; may occur once every year or more.</td>
</tr>
<tr>
<td>Likely (B)</td>
<td>Will probably occur in most circumstances and/or regular recorded incidents and strong anecdotal evidence; and/or considerable opportunity, reason or means to occur; may occur once every five years.</td>
</tr>
<tr>
<td>Possible (C)</td>
<td>Might occur at some time; and/or few, infrequent, random recorded incidents or little anecdotal evidence and/or very few incidents in associated or comparable organisations, facilities or communities; and/or some opportunity, reason or means to occur; may occur once every twenty years.</td>
</tr>
<tr>
<td>Unlikely (D)</td>
<td>Is not expected to occur; and/or no recorded incidents or anecdotal evidence; and/or no recent incidents in associated organisations, facilities or communities; and/or little opportunity, reason or means to occur; may occur once every one hundred years.</td>
</tr>
<tr>
<td>Rare (E)</td>
<td>May occur only in exceptional circumstances; may occur once every five hundred or more years.</td>
</tr>
</tbody>
</table>
Consequence

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insignificant (1)</td>
<td>• No injuries or fatalities. Small number or nil people are displaced and only for short duration. Little or no personal support required (support not monetary or material).&lt;br&gt;• Inconsequential or no damage. Little or no disruption to community.&lt;br&gt;• No measurable impact on environment.&lt;br&gt;• Little or no financial loss.</td>
</tr>
<tr>
<td>Minor (2)</td>
<td>• Small number of injuries but no fatalities. First aid treatment required. Some displacement of people (less than 24 hours). Some personal support required.&lt;br&gt;• Some damage. Some disruption (less than 24 hours).&lt;br&gt;• Small impact on environment with no lasting effects.&lt;br&gt;• Some financial loss.</td>
</tr>
<tr>
<td>Moderate (3)</td>
<td>• Medical treatment required but no fatalities. Some hospitalisation. Localised displacement of people who will return within 24 hours. Personal support satisfied through local arrangements.&lt;br&gt;• Localised damage which is rectified by routine arrangements. Normal community functioning with some inconvenience.&lt;br&gt;• Some impact on the environment with no long-term effect or small impact on environment with long term effect.&lt;br&gt;• Significant financial loss.</td>
</tr>
<tr>
<td>Major (4)</td>
<td>• Extensive injuries, significant hospitalisation, large number of displaced (more than 24 hours duration). Fatalities. External resources required for personal support.&lt;br&gt;• Significant damage that requires external resources. Community only partially functioning, some services available.&lt;br&gt;• Some impact on environment with long-term effects.&lt;br&gt;• Significant financial loss – some financial assistance required.</td>
</tr>
<tr>
<td>Catastrophic (5)</td>
<td>• Large number of severe injuries. Extended and large numbers requiring hospitalisation.&lt;br&gt;General and widespread displacement for extended duration. Significant fatalities. Extensive personal support.&lt;br&gt;• Extensive damage. Community unable to function without significant support.&lt;br&gt;• Significant impact on the environment and/or permanent damage.</td>
</tr>
</tbody>
</table>
5. Risk Matrix

Similarly, the Standard rates the level of Risk from “Very High” to “High” to “Moderate” to “Low”. Identified Risks with a rating of “Moderate” or above are addressed in these Emergency Management Arrangements.

<table>
<thead>
<tr>
<th>Likelihood Label</th>
<th>Consequences Label</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>A</td>
<td>Medium</td>
</tr>
<tr>
<td>B</td>
<td>Medium</td>
</tr>
<tr>
<td>C</td>
<td>Low</td>
</tr>
<tr>
<td>D</td>
<td>Low</td>
</tr>
<tr>
<td>E</td>
<td>Low</td>
</tr>
</tbody>
</table>

6. Risk Assessment

The Risks assessed as “Moderate” or above have been combined or renamed in line with the terms used in WESTPLANS, for the purpose of continuity. The results of the Risk Assessment after application of the process indicated that:

- No Hazards assessed as Very High
- Six Hazards assessed as High
- Nine Hazards assessed as Medium
- Four Hazards assessed as Low
### 7. Annex A – Risk Register

<table>
<thead>
<tr>
<th>Risk Statement</th>
<th>Likelihood Rating</th>
<th>Consequence Rating</th>
<th>Level of Risk</th>
<th>Action Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Crash</td>
<td>C</td>
<td>4</td>
<td>HIGH</td>
<td>1</td>
</tr>
<tr>
<td>Criminal Act</td>
<td>B</td>
<td>3</td>
<td>HIGH</td>
<td>2</td>
</tr>
<tr>
<td>Hazardous Material Incident</td>
<td>B</td>
<td>3</td>
<td>HIGH</td>
<td>3</td>
</tr>
<tr>
<td>Road Accident</td>
<td>C</td>
<td>3</td>
<td>HIGH</td>
<td>4</td>
</tr>
<tr>
<td>Severe Weather</td>
<td>B</td>
<td>3</td>
<td>HIGH</td>
<td>5</td>
</tr>
<tr>
<td>Structural Fire</td>
<td>C</td>
<td>3</td>
<td>HIGH</td>
<td>6</td>
</tr>
<tr>
<td>Earthquake</td>
<td>E</td>
<td>3</td>
<td>MEDIUM</td>
<td>7</td>
</tr>
<tr>
<td>Exotic Animal Disease</td>
<td>D</td>
<td>4</td>
<td>MEDIUM</td>
<td>8</td>
</tr>
<tr>
<td>Human Pandemic</td>
<td>E</td>
<td>4</td>
<td>MEDIUM</td>
<td>9</td>
</tr>
<tr>
<td>Industrial Accident</td>
<td>C</td>
<td>2</td>
<td>MEDIUM</td>
<td>10</td>
</tr>
<tr>
<td>Marine Accident</td>
<td>E</td>
<td>3</td>
<td>MEDIUM</td>
<td>11</td>
</tr>
<tr>
<td>Riverine Flooding</td>
<td>D</td>
<td>3</td>
<td>MEDIUM</td>
<td>12</td>
</tr>
<tr>
<td>Special Events (2) “Skyworks” &amp; “Red Bull Air Race”</td>
<td>C</td>
<td>2</td>
<td>MEDIUM</td>
<td>13</td>
</tr>
<tr>
<td>Structural Collapse</td>
<td>E</td>
<td>3</td>
<td>MEDIUM</td>
<td>14</td>
</tr>
<tr>
<td>Terrorist Act</td>
<td>D</td>
<td>4</td>
<td>MEDIUM</td>
<td>15</td>
</tr>
<tr>
<td>Bushfire</td>
<td>D</td>
<td>2</td>
<td>LOW</td>
<td>16</td>
</tr>
<tr>
<td>Infrastructure Failure (Water, Power, Communications, Sewage)</td>
<td>D</td>
<td>2</td>
<td>LOW</td>
<td>17</td>
</tr>
<tr>
<td>Rail Accident</td>
<td>E</td>
<td>2</td>
<td>LOW</td>
<td>18</td>
</tr>
<tr>
<td>Space Debris Re-entry</td>
<td>E</td>
<td>1</td>
<td>LOW</td>
<td>19</td>
</tr>
</tbody>
</table>
### 7.1. Air Crash Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK AIR CRASH</th>
<th>RISK RATING</th>
<th>DATE COMPILED: MAR 2008</th>
</tr>
</thead>
</table>

#### RISK STATEMENT
Air traffic over Perth from domestic, international, local aircraft presents a HIGH level risk to life, property and infrastructure.

#### RISK ANALYSIS
1. Any impact of a light aircraft into a residential or commercial area will cause loss of life in the 1 – 10 range and 1 – 2 buildings damaged / destroyed.
2. The Red Bull Air Race presents a risk of a competition aircraft crash into the viewing public with loss of life in the 10 – 100 range and 1 – 2 buildings damaged / destroyed.
3. The impact of a domestic or international jet crash could cause 100 – 1000 deaths and possible destruction of a high-density buildings or domestic dwellings.

#### RECOMMENDED TREATMENT OPTIONS
2. Combat Agency Response preparedness.
3. Mass casualty capability

#### RESPONSIBLE AGENCY
1. WA Police Service – WESTPLAN AIR CRASH & Air Crash Response Plan Metropolitan.
2. FESA Response capability Air Crash.
3. Hospital & SJA Mass casualty response plans
4. Town of Victoria Park for Air Shows with Event Organisers (Bridging Procedures)

#### PRIORITY STATUS
2. Review Air Show Event Plan & Integrate with COB / TOVP Procedures

#### IMPLEMENTATION
1. Review Air Crash Contingency Plan for Perth & Jandakot
2. Review the Red Bull Air Race Contingency Plan
3. Desktop Exercise “Air Crash”
4. Revise Arrangements & Contact Details

#### BUDGET CONSIDERATIONS
1. Plan Review Costs
2. Desktop Exercise Preparation & Conduct Costs

#### MONITOR AND REVIEW
Review annually prior to Red Bull Air Race

### APPROVAL FOR RECOMMENDATION IMPLEMENTATION

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
</table>
### 7.2. Criminal Act Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK CRIMINAL ACT</th>
<th>RISK RATING</th>
<th>DATE COMPILLED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
A large scale criminal act poses a risk to the community and, as evidenced by acts in other parts of Australia (Port Arthur) and requires community Recovery measures.

**RISK ANALYSIS**
Acknowledged as a HIGH Risk for some circumstances

**RECOMMENDED TREATMENT OPTIONS**
1. Community Education targeting anti-social behaviour.
2. WA Police and Community Safety Strategies.
3. Use of CCTV in identified locations.

**RESPONSIBLE AGENCY**
1. Police
2. City and Town for Public facilities

**PRIORITY STATUS**
The COB / TOVP LEMC have very limited scope to affect this Risk. In consideration of this, the priority should be directed towards other more significant Risks.

**IMPLEMENTATION**
No Treatment Options to be developed by the City or the Town.

**BUDGET CONSIDERATIONS**
Nil

**MONITOR AND REVIEW**
As requested by Police.

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.3. Hazardous Materials Incident Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK HAZMAT INCIDENT</th>
<th>RISK RATING</th>
<th>DATE COMPILED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
Hazardous materials pose a risk to life, property and the environment. Specialist response actions are required and localised or full scale evacuations are the norm.

**RISK ANALYSIS**
The movement and storage of Hazardous Materials in the area is significant by comparison with the rest of the Metropolitan Area. In particular, the Kewdale Industrial Area poses a threat to surrounding residents.

**RECOMMENDED TREATMENT OPTIONS**
1. Application of the Regulations for the transport and storage of dangerous goods.
2. EM Response Plans
3. Local Evacuation Plans

**RESPONSIBLE AGENCY**
FESA Fire & Rescue Services is the HMA for this Risk. The COB / TOVP LEMC have an active role to assist with evacuation in the response to this threat.

**PRIORITY STATUS**
This is a high priority for treatment options as there is large scale storage or transport of Hazardous Materials within the area.

**IMPLEMENTATION**
Maintain evacuation plans.

**BUDGET CONSIDERATIONS**
Nil

**MONITOR AND REVIEW**
Exercise a Hazmat Scenario every year.

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7.4. Road Accident Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK ROAD ACCIDENT</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH</td>
<td>MAR 2008</td>
<td></td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
The balance of Likelihood against Consequence for this Risk is mid-range for both criteria. The assessment of HIGH is therefore valid in some circumstances; however, response to this Risk is almost reduced to a procedure by the Police and Emergency Services. Support from the City’s EM Structure is not envisaged unless the locality and nature of the Road Accident required extraordinary traffic control or resource support measures.

**RISK ANALYSIS**
Acknowledged as a HIGH Risk for some circumstances

**RECOMMENDED TREATMENT OPTIONS**
- 4. Public Education
- 5. Road Traffic Code
- 6. Road Safety Campaigns

**RESPONSIBLE AGENCY**
- 3. Police and FESA
- 4. Road Safety Authority

**PRIORITY STATUS**
COB / TOVP have very limited scope to affect this Risk. In consideration of this, the priority should be directed towards other more significant Risks.

**IMPLEMENTATION**
No Treatment Options to be developed by COB / TOVP.

**BUDGET CONSIDERATIONS**
Nil

**MONITOR AND REVIEW**
As requested by Police or Road Safety.

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7.5. Severe Weather Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK SEVERE WEATHER</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
Perth experiences a severe weather event on average once a year. The most notable was the 1994 Metropolitan Storm which resulted in over 2,500 residences being damaged and a loss of domestic power for 4-5 days. Storms also cause flash flooding.

**RISK ANALYSIS**
The risk is primarily to residential properties. However, some modern buildings may experience water penetration.

**RECOMMENDED TREATMENT OPTIONS**
1. Building roof maintenance.
2. Maintenance and clearing of storm water drains.
3. Public Awareness programs. Such as Emergency Management Australia’s [Storm Guide](#)
4. EM Plans and storm damage capability.

**RESPONSIBLE AGENCY**
FESA SES is the HMA for this risk. Well established procedures are in place to Respond to this threat. The City should assist with annual programs conducted by the SES.

**PRIORITY STATUS**
This should be an annual priority before the Winter onset.

**IMPLEMENTATION**
Annually during April / May

**BUDGET CONSIDERATIONS**
Cost of distribution of Public Awareness pamphlets, produced by the HMA. Cost associated with maintenance of Buildings and Drains.

**MONITOR AND REVIEW**
Annually.

### APPROVAL FOR RECOMMENDATION IMPLEMENTATION

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
</table>

---

City of Belmont & Town of Victoria Park
### 7.6. Structural Fire Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK</th>
<th>STRUCTURAL FIRE</th>
<th>RISK RATING</th>
<th>DATE COMPiled:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
This is the most readily identifiable HIGH Risk facing the COB / TOVP LEMC.

**RISK ANALYSIS**
Many buildings, including commercial outlets, do not have modern fire protection systems installed. Furthermore, many buildings are high rise and are beyond the limit of available fire appliances. This coupled with high people density, workers and patrons; makes fire a priority threat for emergency services.

**RECOMMENDED TREATMENT OPTIONS**
3. Promotion of Fire Awareness Programs.

**RESPONSIBLE AGENCY**
The HMA for this Risk is the FESA, Fire & Rescue Service. COB / TOVP has a significant role in the response to such and emergency, through the provision of access control during and after the incident, evacuation plans and security surveillance.

**PRIORITY STATUS**
1. Attention to this Risk remains a High priority.

**IMPLEMENTATION**
Implementation of the recommended Treatment Options is ongoing. The Councils support the Fire Services by promoting Fire Awareness Programs.

**BUDGET CONSIDERATIONS**
Costs associated with any planned promotion.

**MONITOR AND REVIEW**
Annually, in conjunction with FESA Fire Awareness Programs.

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7.7. Earthquake Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK EARTHQUAKE</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEDIUM</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

#### RISK STATEMENT
Perth metropolitan area lies in an earthquake risk zone. Previous experience has caused no loss of life and only minor cosmetic damage to structures. Nevertheless, should an earthquake of similar magnitude to Meckering (6.7 Richter) occur with an epicentre near Perth, the effects could be catastrophic.

#### RISK ANALYSIS
1. Possible collapse of older buildings or facades.
2. Trapped persons under debris.
3. Loss of infrastructure, short and long term.
4. Bridge collapse.

#### RECOMMENDED TREATMENT OPTIONS
1. Public Education – “What to do during an Earthquake” such as Emergency Management Australia’s [Earthquake Action Guide](#).
3. HMA Response Plan Earthquake
4. Urban Search & Rescue (USAR) Capability
5. Mass Casualty Response Plans

#### RESPONSIBLE AGENCY
1. FESA SES for WESTPLAN EARTHQUAKE.
2. FESA SES and COB / TOVP for High Risk Building Assessment.
3. FESA SES and COB / TOVP for production / distribution of Public Awareness material.
4. FESA Fire & Rescue for USAR capability

#### PRIORITY STATUS
1. Public Education Program – Earthquakes
2. FESA F & R for USAR Plan

#### IMPLEMENTATION
1. Public Awareness Program with Rates Notices.
2. LEMC Briefing on USAR Arrangements

#### BUDGET CONSIDERATIONS
1. SES / EMA to fund Public Awareness Material
2. COB / TOVP to distribute and advertise through website.

#### MONITOR AND REVIEW
1. Review Public Awareness Program every 2 years.

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.8.  *Exotic Animal Disease Hazard Treatment Options*

<table>
<thead>
<tr>
<th>RISK EARTHQUAKE</th>
<th>RISK RATING</th>
<th>DATE COMPiled:</th>
<th>MAR 2008</th>
</tr>
</thead>
</table>

**RISK STATEMENT**
An outbreak of any exotic animal disease in Australia would constitute an economic disaster. Furthermore, an impact of a lesser disease would pose quarantine restrictions which would adversely affect commerce and transport.

**RISK ANALYSIS**
This risk mainly applies to the land and stables used to support the horse racing industry. Recent events in the Eastern States provide ample evidence of the magnitude of the disruption generated.

**RECOMMENDED TREATMENT OPTIONS**
- Maintenance of quarantine standards and regulations.
- Consideration be given to the development of a Traffic Management Plan for identified areas of quarantine be declared.

**RESPONSIBLE AGENCY**
The Department of Agriculture, in conjunction with the WA Police and Local Health and Veterinary Officials.

**PRIORITY STATUS**
This should noted for action by 2010

**IMPLEMENTATION**
Submission by LEMC to DEMC for this issue.

**BUDGET CONSIDERATIONS**
Nil

**MONITOR AND REVIEW**
2010-2011

<table>
<thead>
<tr>
<th>APPROVAL FOR RECOMMENDATION IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANISATION</td>
</tr>
</tbody>
</table>
7.9. **Human Epidemic Hazard Treatment Options**

<table>
<thead>
<tr>
<th>RISK HUMAN PANDEMIC</th>
<th>RISK RATING MEDIUM</th>
<th>DATE COMPILLED: MAR 2008</th>
</tr>
</thead>
</table>

**RISK STATEMENT**
There is evidence that the human population is becoming increasingly vulnerable to a number of viral infections, transmitted by birds and animals. Spread of contamination throughout the human population is further promoted through global travel and mass commuter transport systems. The SARS outbreak of 2002/03 recorded 10% deaths from the Total Confirmed Cases. Other viruses could be more devastating and will demand extraordinary response measures to contain the disease.

**RISK ANALYSIS**
The Risk is constantly reviewed by the World Health Organisation (WHO) and The State Health Department and the Alert status will vary from time to time.

**RECOMMENDED TREATMENT OPTIONS**
1. Monitor WHO Alerts
2. WESTPLAN Human Epidemic.
3. Health Department Response Plan for Perth Metropolitan Area.
4. COB / TOVP Local Arrangements under the Health Plan

**RESPONSIBLE AGENCY**
The Department of Health is the HMA for this Risk. In conjunction with the WHO, the Department monitors global health alerts and activates its graduated response of testing, reporting and quarantine of individuals by Doctors and Medical facilities. The wider and more community disruptive response to a full blown pandemic have been documented, but have not been widely made public. The COB / TOVP LEMC should be provided with this information should it affect any of the LGA facilities.

**PRIORITY STATUS**
In view of the magnitude of this threat and its proximity to Australia, arrangements down to Local level should be detailed.

**IMPLEMENTATION**
1. Liaise with the Department of Health (DOH) and obtain the State’s response details for inclusion / consideration into the Local EM Arrangements.
2. Re-consider the impact of Human Epidemic on Welfare Centre Management.
3. Consider the impact of Human Epidemic on the traffic flow should the use of Public Transport be denied.

**BUDGET CONSIDERATIONS**
Staff / Consultants for Plan review implications.

**MONITOR AND REVIEW**
Any Special Plans developed against the response to Human Epidemic should be reviewed annually or on Alert Advice from the DOH.

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
</table>

City of Belmont & Town of Victoria Park
7.10. Industrial Accident Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK INDUSTRIAL ACCIDENT</th>
<th>RISK RATING</th>
<th>DATE COMPILED: MAR 2008</th>
</tr>
</thead>
</table>

RISK STATEMENT
The concentration of industrial facilities in the Kewdale precinct constitutes a threat to life and property within the complex and adjacent suburbs.

RISK ANALYSIS
The risk context is made with respect to incidents occurring at a particular facility. Transport accidents are covered elsewhere in the assessment. The threat from fire, explosion, hazardous material incident or toxic plume (or a combination of all) is minimised by the enforcement of regulations. However, the threat exists.

RECOMMENDED TREATMENT OPTIONS
1. Documented and practices evacuation plans.
3. Regular checks by Statutory Authorities administering the Regulations.

RESPONSIBLE AGENCY
FESA Fire & Rescue.

PRIORITY STATUS
High

IMPLEMENTATION
Ongoing as part of the FESA Charter.

BUDGET CONSIDERATIONS
Nil to COB / TOVP

MONITOR AND REVIEW
Annually

APPROVAL FOR RECOMMENDATION IMPLEMENTATION

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.11. Marine Accident Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK MARINE ACCIDENT</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEDIUM</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
A number of commercial Ferries operate from the Barrack Street Jetty, providing point to point transport or entertainment / tourist cruises upstream and downstream. A marine accident could occur.

**RISK ANALYSIS**
Ferry operators are well regulated by the Department of Planning & Infrastructure and marine safety regulations are enforced. The increased use of the River by recreational boating could lead to a collision, with the potential for a vessel fire or a sinking.

**RECOMMENDED TREATMENT OPTIONS**
1. Maintenance of Marine Safety Regulations
2. Training and qualification for all boat skippers.
3. Maintain a marine rescue capability.

**RESPONSIBLE AGENCY**
The Department of Planning and Infrastructure is the HMA for this Risk. The WA Police Service is the primary Response Agency.

**PRIORITY STATUS**
Treatment Options for this Risk are ongoing and are tested annually through preparation for major Special Events such as “Skyworks”.

**IMPLEMENTATION**
Ongoing.

**BUDGET CONSIDERATIONS**
Nil

**MONITOR AND REVIEW**
Before all Special Events.

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# 7.12. Riverine Flood Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK</th>
<th>RISK RATING</th>
<th>DATE COMPiled:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RIVERINE FLOOD</td>
<td>MEDIUM</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**

The latest 1:100 year flood prediction indicates that large areas of river-frontage in the COB / TOVP area of operation would be inundated.

**RISK ANALYSIS**

The predictions do show large areas of residential, commercial and transport access at risk. Whereas the likelihood of occurrence is low, the effect on the community as a whole would be substantial. Furthermore, as one of the few threats with warning and prediction data, it should be one of the primary EM Plans for development.

**RECOMMENDED TREATMENT OPTIONS**

1. Building restrictions on Flood Plains.
2. Flood Mitigation Response plans.
4. At Risk interface with threatened properties.

**RESPONSIBLE AGENCY**

FESA SES is the HMA for this Threat. Belmont has experience of road and lane traffic control during minor floods, but should consider the impact of the 1:100 year predictions. A full evacuation Plan for the identified high risk areas is recommended.

**PRIORITY STATUS**

High

**IMPLEMENTATION**

In consultation with FESA SES develop a Local Flood Response Plan to append to these arrangements.

**BUDGET CONSIDERATIONS**

Under current project scope.

**MONITOR AND REVIEW**

Once Flood Plan is available.

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7.13. Special Event Skyworks Treatment Options

<table>
<thead>
<tr>
<th>RISK LOTTO SKYWORKS</th>
<th>RISK RATING MEDIUM</th>
<th>DATE COMPiled: MAR 2008</th>
</tr>
</thead>
</table>

**RISK STATEMENT**
This annual event attracts 300k – 400k patrons to the City’s foreshore, King’s Park and South Perth to celebrate Australia Day. Such public concentrations present risks associated with accidents onshore and on the river. Anti-social behaviour also presents the risk of casualties. The fireworks display has the potential for accidental explosion or to cause fires onshore.

**RISK ANALYSIS**
Experience has shown that all of the above incidents can occur.

**RECOMMENDED TREATMENT OPTIONS**
1. Enforcement of behavioural guidelines for the event.
2. Special EM Plan for the event.
3. Coordination of all Local Authorities and Response Agencies.

**RESPONSIBLE AGENCY**
The City of Perth is the de facto HMA for this event although the South Perth and Victoria Park share event approval. The Police provide the event Incident Controller with FESA and St. John Ambulance providing response resources.

**PRIORITY STATUS**
This is a priority risk event.

**IMPLEMENTATION**
Review Plan arrangements each year.

**BUDGET CONSIDERATIONS**
Nil

**MONITOR AND REVIEW**
Annually

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RISK</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED BULL AIR RACE</td>
<td>MEDIUM</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

RISK STATEMENT
This air race takes place over Perth Water and uses the foreshore as a landing ground for competition aircraft. International Media interest is strong. The event is witnessed by patrons from vantage points around the foreshore.

RISK ANALYSIS
There is a high level of safety maintained by the event organisers. Nevertheless the risk is present for an aircraft to crash into the river or onshore. The later could result in mass casualties and / or fire to foreshore buildings.

RECOMMENDED TREATMENT OPTIONS
1. Special Event plan for the Race.
2. Special Event Response Plan from Police and FESA.

RESPONSIBLE AGENCY
As the primary risk is one of Air Crash, the Police are the designated HMA. The City of Perth, as with “Skyworks”, provides a number of event resources and supports the Response as required. The Town of Victoria Park also participates in support for the event.

PRIORITY STATUS
This is a high priority risk.

IMPLEMENTATION
Review Event Plans on an annual basis.

BUDGET CONSIDERATIONS
Nil

MONITOR AND REVIEW
Annually.

APPROVAL FOR RECOMMENDATION IMPLEMENTATION

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.15. Structural Collapse Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK STATEMENT</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRUCTURAL</td>
<td>MEDIUM</td>
<td>MAR 2008</td>
</tr>
<tr>
<td>COLLAPSE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RISK STATEMENT
The collapse of a structure, be it an existing building, one under construction, a bridge or a construction crane. These are considered under this Risk Treatment.

RISK ANALYSIS
COB / TOVP have a number of old Heritage Listed Buildings or Facades. There are also construction projects, both Public and Commercial within the area. Whereas OHS Legislation and work practices have improved the safety on construction projects, catastrophic failure could occur.

RECOMMENDED TREATMENT OPTIONS
1. Worksafe Inspections.
2. Building Codes.
3. USAR Response Plan and capability.

RESPONSIBLE AGENCY
1. FESA Fire & Rescue is the responsible HMA for Structural Collapse.
2. Department of Consumer & Employment Protection is responsible for monitoring workplace safety standards.
3. Councils responsible for Building Approvals.

PRIORITY STATUS
Low. These events are rare and occur without warning.

IMPLEMENTATION
Monitor Building Construction activity within the area. No Treatment Options to be developed.

BUDGET CONSIDERATIONS
Nil

MONITOR AND REVIEW
Ongoing basis.

APPROVAL FOR RECOMMENDATION IMPLEMENTATION

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 7.16. Terrorist Act Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK TERRORIST ACT</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEDIUM</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

### RISK STATEMENT
Perth, as with all other Cities could become the target for a Terrorist Act from internal or external sources.

### RISK ANALYSIS
This Risk will increase and decrease in accordance with the prevailing political situation around the world. Perth may be selected as a “soft target” in view of its isolated location from other mainstream cities. The Airport and significant International Events should be viewed as potential indicators.

### RECOMMENDED TREATMENT OPTIONS
1. Promotion of Federal Anti-terrorist Awareness Programs.
2. EM Planning with particular reference on the HMA Response Plans for Structural Collapse & Structural Fire.

### RESPONSIBLE AGENCY
The WA Police are the HMA for this Risk. The Response includes close association with Federal Police and the Defence Forces.

### PRIORITY STATUS
1. This is a High Risk but Low priority for Treatment Options.

### IMPLEMENTATION
Treatment Options for this Risk are managed by the State and Federal Police Services. COB / TOVP have a support role for Response and a lead role during Recovery.

### BUDGET CONSIDERATIONS
Nil

### MONITOR AND REVIEW
In accordance with advice from the HMA or Federal Police.

### APPROVAL FOR RECOMMENDATION IMPLEMENTATION

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# 7.17. Bush Fire Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK BUSHFIRE</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOW</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
No major areas of bushland fall within the COB / TOVP area of operation.

**RISK ANALYSIS**
This is considered a LOW risk, but grass fires can pose a traffic hazard

**RECOMMENDED TREATMENT OPTIONS**
1. Maintain Bushfire Management Programs. Such as FESA’s Be Bushfire Ready Brochure
3. Maintain liaison with FESA Fire Services for Response
4. Monitor Parklands during High threat periods.

**RESPONSIBLE AGENCY**
FESA Fire & Rescue is the HMA for this threat.

**PRIORITY STATUS**
LOW

**IMPLEMENTATION**
Prevention and Mitigation programs conducted annually.

**BUDGET CONSIDERATIONS**
Nil

**MONITOR AND REVIEW**
Annually.

---

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.18. Infrastructure Failure Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK INFRASTRUCTURE FAILURE</th>
<th>RISK RATING</th>
<th>DATE COMPiled:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOW</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**
The failure of a major utility for an extended period of time could cause moderate impact on the ability to conduct business.

**RISK ANALYSIS**
The loss of power for an extended period has been experienced previously in the Metropolitan Region. Lessons from the 1994 Severe Storm, which caused the blackout, have led to a significant “hardening” of the power network. Furthermore, essential services and many business enterprises have installed alternate power supply. The Service providers (Western Power, Water Corp, Domgas etc.) have contingency plans to maintain services and / or minimise disruption.

**RECOMMENDED TREATMENT OPTIONS**
3. Planned replacement of aging networks
5. Alternative Power Supply Options for key facilities

**RESPONSIBLE AGENCY**
Utility Enterprises.

**PRIORITY STATUS**
Low

**IMPLEMENTATION**
1. Review City / Town Facilities and assess the need for alternative power contingencies.

**BUDGET CONSIDERATIONS**
Contingent on the need to provide alternative power supply to key buildings.

**MONITOR AND REVIEW**
Annually

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
</table>
### 7.19. Rail Accident Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
<th>RISK ACCIDENT</th>
<th>RISK STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>MAR 2008</td>
<td>The southern rail transit route passes through Victoria Park.</td>
<td></td>
</tr>
</tbody>
</table>

#### RISK ANALYSIS
System failure leading to a rail accident could produce an incident involving fire and or mass casualties above ground or on a bridge. The Response to such an incident would not only require a complex rescue operation but would also severely disrupt public transport to and from the City.

#### RECOMMENDED TREATMENT OPTIONS
1. Maintenance of the Rail System.
2. EM Arrangements for Response to such incidents.

#### RESPONSIBLE AGENCY
The Public Transport Authority is the HMA for this Risk. FESA Fire Services is the prime Response Agency. COB / TOVP have a responsibility to support the Response operation by providing resources as required.

#### PRIORITY STATUS
Treatment Options for this Risk are outside Council’s scope.

#### IMPLEMENTATION
Ongoing.

#### BUDGET CONSIDERATIONS
Nil

#### MONITOR AND REVIEW
Response to this Risk should be exercised at least once within any 5 year period.

#### APPROVAL FOR RECOMMENDATION IMPLEMENTATION

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7.20. Space Debris Re-entry Hazard Treatment Options

<table>
<thead>
<tr>
<th>RISK SPACE DEBRIS</th>
<th>RISK RATING</th>
<th>DATE COMPILED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LOW</td>
<td>MAR 2008</td>
</tr>
</tbody>
</table>

**RISK STATEMENT**

It is expected that most Space Debris will now be captured rather than allowed to fall to earth under gravity. As such the risk is much diminished, but still possible.

**RISK ANALYSIS**

LOW

**RECOMMENDED TREATMENT OPTIONS**

Nil

**RESPONSIBLE AGENCY**

Police are the HMA for this Hazard.

**PRIORITY STATUS**

Treatment Options for this Risk are outside the Councils’ scope.

**IMPLEMENTATION**

Ongoing.

**BUDGET CONSIDERATIONS**

Nil

**MONITOR AND REVIEW**

In accordance with issued warnings.

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**APPROVAL FOR RECOMMENDATION IMPLEMENTATION**

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>DATE</th>
<th>SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Annex C – City of Belmont Demographics

In 2001, the total population of the City of Belmont was estimated at 29,850. It is expected to increase by over 8,500 people to 34,184 by 2011, at an average annual growth rate of 1.27%. This is based on an increase of more than 4,600 households during the period, with the average number of persons per household falling from 2.25 to 2.14.

<table>
<thead>
<tr>
<th>Population Areas by Suburb</th>
<th>Projected Population 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Belmont Total</td>
<td>34,184</td>
</tr>
<tr>
<td>Ascot</td>
<td>2,240</td>
</tr>
<tr>
<td>Belmont</td>
<td>6,025</td>
</tr>
<tr>
<td>Cloverdale</td>
<td>7,452</td>
</tr>
<tr>
<td>Kewdale</td>
<td>5,852</td>
</tr>
<tr>
<td>Redcliffe - Perth Airport</td>
<td>4,566</td>
</tr>
<tr>
<td>Rivervale</td>
<td>8,049</td>
</tr>
</tbody>
</table>
All areas in the City of Belmont are expected to increase in population to 2021, with the largest gains expected in the small areas with residential redevelopment potential, such as Rivervale, Cloverdale and Belmont. The population increases are based on household growth, which in turn relates to new residential opportunities. The forecast population growth rates are lower than household growth as a result of the decreasing number of people per household. This is a pattern that is likely to affect most areas of the City of Belmont during this period.

<table>
<thead>
<tr>
<th>Residential Suburbs</th>
<th>Projected Dwellings 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Belmont Total</td>
<td>15,216</td>
</tr>
<tr>
<td>Ascot</td>
<td>977</td>
</tr>
<tr>
<td>Belmont</td>
<td>2,779</td>
</tr>
<tr>
<td>Cloverdale</td>
<td>3,028</td>
</tr>
<tr>
<td>Kewdale</td>
<td>2,630</td>
</tr>
<tr>
<td>Redcliffe - Perth Airport</td>
<td>1,895</td>
</tr>
<tr>
<td>Rivervale</td>
<td>3,907</td>
</tr>
</tbody>
</table>
8.1. Map of the City of Belmont
9. Annex D – Town of Victoria Park Demographics

The total population of the Town of Victoria Park was estimated at 31,595 in 2001. It is expected to increase by 2011, at an average annual growth rate of 1.27%. This is based on an increase of more households during the period.

<table>
<thead>
<tr>
<th>Population Suburb</th>
<th>Projected Population 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town of Victoria Park Total</td>
<td>31,595</td>
</tr>
<tr>
<td>Burswood</td>
<td>2,363</td>
</tr>
<tr>
<td>Victoria Park</td>
<td>13,964</td>
</tr>
<tr>
<td>East Victoria Park</td>
<td>7,796</td>
</tr>
<tr>
<td>Lathlain</td>
<td>2,683</td>
</tr>
<tr>
<td>Carlisle</td>
<td>4,789</td>
</tr>
</tbody>
</table>
All areas in the Town of Victoria Park are expected to increase in population to 2011. The population increases are based on household growth, which in turn relates to new residential opportunities. The forecast population growth rates are lower than household growth as a result of the decreasing number of people per household. This is a pattern that is likely to affect most areas of the Town of Victoria Park during this period.

<table>
<thead>
<tr>
<th>Residential Suburb</th>
<th>Projected Dwellings 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town of Victoria Park Total</td>
<td>14,347</td>
</tr>
<tr>
<td>Burswood</td>
<td>1,599</td>
</tr>
<tr>
<td>Victoria Park</td>
<td>3,661</td>
</tr>
<tr>
<td>East Victoria Park</td>
<td>3,891</td>
</tr>
<tr>
<td>Lathlain</td>
<td>1,275</td>
</tr>
<tr>
<td>Carlisle</td>
<td>2,707</td>
</tr>
<tr>
<td>Bentley</td>
<td>345</td>
</tr>
<tr>
<td>Kensington</td>
<td>10</td>
</tr>
<tr>
<td>St. James</td>
<td>859</td>
</tr>
</tbody>
</table>
9.1. Map of the Town of Victoria Park