The West Gate Tunnel Project will reduce noise in homes, backyards and parks with the best quality noise walls in Victoria.

We know that noise is a key focus for residents and our studies confirm that noise is currently very high in some places.

The West Gate Tunnel Project will make changes to reduce noise for local communities including:

• Replacing existing noise walls
• Building new sections of noise walls near homes and community open spaces
• Using noise reducing asphalt on the roads
• Monitoring traffic noise levels.
• Introducing a better noise objective, to be maintained for at least 20 years

With these measures in place, the vast majority of homes, sporting grounds and parks along the West Gate Freeway will experience a significant reduction in traffic noise.

High quality noise walls

We are building more than 9 kilometres of new and improved noise walls for quieter homes, backyards and parks along the West Gate Freeway.

Existing noise walls will be replaced and extra noise walls put up in new areas along parks and sporting fields including Crofts, McIvor, Donald McLean and Hyde Street reserves.

These noise walls will be built to a high standard and have been designed with residents in mind to protect privacy, reduce traffic noise and provide an attractive outlook. The design uses textured concrete and acrylic panels of pale blues and greens, which allow light to pass through. Where space permits, planting will also be used to screen the noise walls.
**How noise is measured**

Noise is measured on a scale of units called decibels or dB for short. Noise measurements are usually adjusted to reflect how noise is perceived by the human ear, giving a noise unit called ‘A’ weighted decibels or dB(A).

Noise from traffic varies over time, both from second to second, and from day to night. The term LA10 is used to describe the noise level which is exceeded for 10 per cent of a measurement period, which for road traffic noise affecting residential properties, is measured 18 hours, from 6am to midnight.

When measuring traffic noise, we use professional acoustic consultants who follow best practice methodology, guidance and regulatory requirements.

**Did you know**

- Doubling the amount of traffic (for example from 100,000 vehicles per day to 200,000 vehicles per day) increases the noise level by about 3 dB(A)
- An increase in noise level of 3 dB(A) is only just audible to the human ear
- A decrease of 10 dB(A) halves the perceived loudness of noise

**A better noise objective for the west**

In response to community feedback and to address unique noise issues along the project route, we have developed a traffic noise objective of 63 dB(A) LA10 specifically for the West Gate Tunnel Project. This is quieter than the existing standard for freeways.

With some residents experiencing traffic noise today of up to 70 dB(A) LA10, this will provide a real and immediate improvement.

**Monitoring to ensure compliance**

Traffic noise will be measured before and after the West Gate Tunnel Project opens and during operation of the freeway to make sure the noise objective is being achieved. If measured noise is higher than the required level we will take action to reduce noise at the affected properties.

---

**dB(A) Scale**

<table>
<thead>
<tr>
<th>dB(A)</th>
<th>Noise Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>quiet bedroom</td>
</tr>
<tr>
<td>20</td>
<td>busy general office</td>
</tr>
<tr>
<td>40</td>
<td>passenger car at 60km/h, 7m distance</td>
</tr>
<tr>
<td>60</td>
<td>heavy truck at 40km/h, 7m distance</td>
</tr>
<tr>
<td>80</td>
<td>jet aircraft 250m overhead</td>
</tr>
<tr>
<td>100</td>
<td>hazard to hearing from continuous exposure</td>
</tr>
<tr>
<td>120</td>
<td>threshold of hearing</td>
</tr>
<tr>
<td>140</td>
<td>threshold of pain</td>
</tr>
</tbody>
</table>

**Noise from traffic**

commerication starts becoming difficult

---

**Artist impression of Moonee Ponds Creek**