MELBOURNE METRO RAIL PROJECT
EXPANDING MELBOURNE’S UNDERGROUND RAIL NETWORK

UPDATE TO THE STANDING COMMITTEE ON THE ECONOMY & INFRASTRUCTURE
24 MAY 2016

Evan Tattersall
CEO
Melbourne Metro Rail Authority
MELBOURNE’S RAIL NETWORK
FUTURE RAIL NETWORK PATRONAGE

- Population growth
- Inner city jobs
- Road congestion
- Parking costs
- Environmental impacts

Annual patronage millions

Historical  Forecast

0  50  100  150  200  250  300  350  400  450  500
METRO TUNNEL CURRENT RAIL NETWORK
Melbourne population now at 4.4 million, expected to rise to 8 million by 2051.

$10.9 billion Metro Tunnel Fully Funded

Providing capacity for 39,000 additional passengers in each peak period.

Benefit Cost Ratio of 1.1 and 1.5 with wider economic benefits.

Boardings on metro trains to double to 1.5m every weekday by 2031.
METRO TUNNEL ARDEN-MACAULAY PRECINCT
TYPICAL HIGH CAPACITY METRO TRAIN
HIGH CAPACITY SIGNALLING
COMMUNITY CONSULTATION & ENGAGEMENT
COMMUNITY ENGAGEMENT
DEEPER CBD ALIGNMENT

TUNNELLING UNDER THE YARRA
CBD NORTH STATION
CALD ENGAGEMENT
MANAGING
CONSTRUCTION
METRO TUNNEL SIMULTANEOUS CONSTRUCTION
FINSBURY CIRCUS, LONDON (FUTURE LIVERPOOL ST STATION, CROSSRAIL)
TUNNEL BORING MACHINES (TBMS)
PRE-CAST CONCRETE SEGMENTS
The Environment Effects Statement (EES) will cover a comprehensive range of impact assessments.

- Concept design
- Construction methodology
- Impact assessment
- Environmental Performance Requirements
## ENVIRONMENT EFFECTS STATEMENT

<table>
<thead>
<tr>
<th>Key EES milestones</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Public Exhibition</td>
<td>25 May – 6 July 2016</td>
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<tr>
<td>Inquiry hearings</td>
<td>August / September 2016</td>
</tr>
<tr>
<td>Final assessment</td>
<td>Late 2016 / Early 2017</td>
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COMMUNITY INFORMATION SESSIONS

The $10.9 billion Metro Tunnel includes a new cross-city rail tunnel and five new underground stations. It will free up space in the City Loop, allowing more trains to run in and out of the city.

The project’s Environment Effects Statement is on exhibition from 25 May - 6 July 2016, and public submissions are invited during this period. Want to find out more? Come along to an information session to learn about the Metro Tunnel.

**Wednesday 1 June, 5-8pm:** State Library of Victoria, Experimedia Room, 328 Swanston Street, Melbourne

**Thursday 2 June, 11am-2pm:** University of Melbourne, Alan Gibbard Building, Room G20, 161 Barry Street, Carlton

**Thursday 2 June, 5-8pm:** Rydges on Swanston, 701 Swanston Street, Carlton

**Saturday 4 June, 1-4pm:** Kensington Recreation Centre, cnr Kensington Rd & Altona St, Kensington

**Tuesday 7 June, 5-8pm:** Punthill, 7 Yarra Street, South Yarra

**Thursday 9 June, 5-8pm:** Lithuanian Club, 44 Errol Street, North Melbourne

**Wednesday 15 June, 5-8pm:** Seasons Botanic Gardens, 348 St Kilda Road, Melbourne

**Saturday 18 June, 11am-2pm:** Melbourne Town Hall, 90-130 Swanston Street, Melbourne

**Tuesday 21 June, 11am-2pm:** Melbourne Town Hall, 90-130 Swanston Street, Melbourne

**Friday 24 June, 5-8pm:** Kensington Recreation Centre, cnr Kensington Rd & Altona St, Kensington

**Saturday 25 June, 11am-2pm:** Punthill, 7 Yarra Street, South Yarra

**Tuesday 28 June, 5-8pm:** Seasons Botanic Gardens, 348 St Kilda Road, Melbourne

To find out more about the Metro Tunnel and register for future updates:

- 1800 551 927
- @melbournemetro
- Melbourne Metro Rail Authority
- [facebook.com/metrotunnel](http://facebook.com/metrotunnel)
SUSTAINABILITY
MMRA SUSTAINABILITY VISION

We want to achieve excellent **environmental**, **social** and **economic** outcomes across all phases of Melbourne Metro.

We will deliver an integrated project that connects the community in an environmentally sustainable manner.

To achieve this Vision – Melbourne Metro and our delivery partners will seek to meet a number of **targets** across **key themes** throughout the project lifecycle.
# SUSTAINABILITY TARGETS

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key target outcomes</th>
</tr>
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<tbody>
<tr>
<td><strong>Excellence</strong></td>
<td>- Achieving excellent ratings against key sustainability rating tools&lt;br&gt;- Publically reporting sustainability performance on an annual basis</td>
</tr>
<tr>
<td><strong>Urban Ecology and Vegetation</strong></td>
<td>- Contributing to urban forest and biodiversity targets set out by other authorities</td>
</tr>
<tr>
<td><strong>Climate Resilience</strong></td>
<td>- Undertaking climate change risk assessment and implementing adaptation measures</td>
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<tr>
<td><strong>Supply Chain</strong></td>
<td>- Developing and implementing local content strategies in line with key state policies and ensuring local SMEs are suitably involved in the project supply chain</td>
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<tr>
<td><strong>Communities</strong></td>
<td>- Ensuring project design leaves a positive legacy for Melbourne&lt;br&gt;- Ensuring heritage and identity are appropriately incorporated in project design&lt;br&gt;- Demonstrating how potential project impacts to the community have been considered, addressed and monitored</td>
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SUSTAINABILITY TARGETS

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<td>Workforce</td>
<td>• Developing and implementing workforce strategies in line with key state policies to encourage skills transfer, employment of apprentices / trainees, training programs and indigenous employment</td>
</tr>
<tr>
<td>Energy</td>
<td>• Reducing greenhouse gas emissions and energy consumption and encouraging renewable energy during project construction and operation</td>
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</table>
| Materials and Waste | • Reducing materials use during project construction including cement, timber and steel  
                        • Encouraging diversion of waste during project construction from landfill |
| Water       | • Reducing water use, reducing potable water use and minimising urban stormwater impacts during project construction |
SUSTAINABILITY RATING TOOLS

Minimum SCORE OF 71

Minimum 5 STAR RATING

For all stations under the Green Buildings Council of Australia – Green Star Accreditation
PROCUREMENT APPROACH
METRO TUNNEL PROPOSED WORK PACKAGES

EARLY WORKS
• Utility services relocation and protection services and other preparatory works (Managing Contractor)
• Tram diversion works (Franchisee Works)
• Construction power (Utility Service Provider)

TUNNEL AND STATIONS (AVAILABILITY PPP)
• 9km twin tunnels and five underground stations including fit-out
• Mechanical and electrical systems
• Tunnel and stations maintenance
• Commercial development opportunities

RAIL INFRASTRUCTURE (ALLIANCE)
• Track decline and tunnel portal cut and cover structures
• Existing tracks reconfiguration and realignment and modification of existing rail infrastructure (e.g. signalling)

RAIL SYSTEMS (ALLIANCE)
• High capacity signalling
• Conventional signalling upgrade
• Train control

WIDER NETWORK ENHANCEMENTS
• Works including turnbacks and signalling system upgrades required across the wider existing rail network
NEXT STEPS
NEXT STEPS

2016
- Business Case released
- Continue market engagement
- EES Process
- Release Expression of Interest for Major Works
- Commence Enabling Works (eg. Service relocation)

2017
- Decision on planning approval (late 2016/early 2017)
- Construction starts (eg. Site preparation, shafts)

2018
- Award major construction contract
- Commence Major Works

2026
- Target completion date
Website: www.melbournemetro.vic.gov.au
Twitter: @melbournemetro
LinkedIn: Melbourne Metro Rail Authority
Facebook: facebook.com/MetroTunnel