Shaping the Future of the Railway

Phil Ellingworth, Chief Engineer, Metro Trains Melbourne
A history of dedication and innovation

Engine painters at Williamstown Workshops 1883

Railway staff near Colac in regional Victoria 1913
The Spine Of Melbourne

- Melbourne is the fastest growing capital city in Australia
- Every week 1800 new residents come to live in our city
- 7 out 10 fastest growing regions are in Greater Melbourne
- 4.4 million now, but will pass Sydney by 2054
- Rail patronage has soared over the last decade
- The railway will do the heavy lifting into the future
Here at Metro…

- Operate 2,340 services per day
- Service reliability & delivery is critical
- Metro has 5000 staff working in more than 1200 roles
- We’ve identified more than 220 distinct careers at Metro
- There’s over 70 different roles in the engineering space alone
- Metro will be an integral player in the delivery of the biggest infrastructure works program in the history of Victoria
Balancing delivery & assurance

MTM as delivery partner
• Provision of technical resources
• Modifications to existing infrastructure
• Coordination of works across the portfolio
• Managing access
• Modifying our control systems

MTM as Chief Engineer
• Responsible for ensuring our accreditation under the rail safety national law is not compromised – SFAIRP Basis
• Review & acceptance of design
• Technical assurance of the system
• Authorising configuration change
• Standards setting
• Advisory services
50 Level Crossing Removals

$5-6 billion

50 level crossings to be removed over 2 full terms of government

A huge program of works with estimated investment to be approximately $5-6 billion
LX Upgrade : Cranbourne-Pakenham (CTD)

The Cranbourne-Pakenham Line upgrade will deliver more services:

- Preparing the way for high capacity trains
- 9 level crossing removals
- 4 stations to be rebuilt
- Power and signalling upgrades
- New train depot at Pakenham
- Line capacity boosted by 42%
- Extra 11,000 customers in AM peak
Line extension to Mernda

$600 million

The South Morang line will be extended to Mernda, catering for the significant population growth in Melbourne’s north.
Melbourne Metro Rail Project

$11 billion

The Melbourne Metro Rail Project will double capacity through network core:

- 2 x 9km rail tunnels running from South Kensington to South Yarra
- New underground stations at Arden, Parkville, CBD Nth, CBD Sth, Domain
- Train/tram interchanges to be built at Parkville and Domain
High capacity trains
High capacity signalling
A sense of the complex journey ahead
Massive transformation & opportunity

MTM graduate program – strong & highly competed

Creation of railway engineers

Our partners are growing rapidly too

There has never been a more exciting time to be in rail

Each a major project
Collectively a mega program
Thank You