Greater Wellington Regional Council and KiwiRail (ONTRACK and Tranz Metro) are working closely together to bring passengers more reliable and frequent train services.



Wellington Region Rail Programme

llington

apiti



For more information go to: www.ontrack.govt.nz www.gw.govt.nz





We're improving the Wellington railway system to provide more reliable and frequent passenger services.



# Wellington **Region Rail** Programme



### Introducing a fleet of **new electric trains** – the Matangi trains. These will begin to arrive in 2010.

Making tunnels on the Johnsonville line larger so the new trains can use the line. This work is now largely complete.

Extending electrification and double tracked lines to take commuter services to Waikanae.

Adding another line into Wellington Railway Station to reduce delays.

- Installing new power supply equipment and railway signalling to accommodate the new trains.
- Improving a number of platforms and station facilities.

Building additional train storage and upgrading maintenance facilities.

The trains have been ordered and will start arriving from 2010. Work started on improvements to the lines in 2008 and will continue over the next two years.

Some of the construction work cannot happen while trains are running. To keep disruptions to commuters to a minimum we will

# **Station Entry**

We are adding another main line into Wellington Railway Station to reduce congestion.

Currently there is a bottleneck where the multiple tracks reduce down to just two main lines in the rail yards. We will install a third line which will carry trains into the station in the morning and out in the evening.



- Dig foundation holes
- Erect steel traction poles to carry overhead wires
- Begin building a retaining wall near the Aotea Quay overbridge
- Install drains for the new tracks

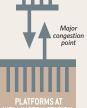
- Start laying new tracks
- Install new signalling system
- Continue installing traction poles
- Begin hanging overhead power lines
- Complete the retaining wall

- **Commission** new railway signalling equipment
- Connect the new main line into the existing tracks
- Connect new overhead wires

### WELLINGTON STATION ENTRY

#### **Current Situation**

All of the tracks in and out of Wellington Station need to go through a bottleneck of two lines in the vards



### SOLUTION

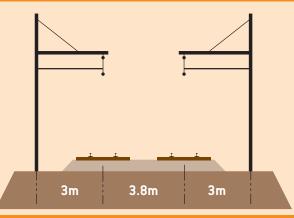
Create a THIRD TRACK to and from the Station



# Kapiti

Double tracked and electrified lines will be extended so commuter trains can travel to Waikanae. A second track means trains can travel in both directions simultaneously which will improve the frequency of services.

There will be improvements to stations at Paraparaumu and Waikanae. Additional storage for trains is also needed on the Kapiti Coast.



MacKays Crossing to Waikanae Double Track and Electrification				
Current Situation MacKays Crossing	1	Paraparaumu		Waikanae
	Single track		Not electrified	
Solution MacKays Crossing	1	Paraparaumu		Waikanae





#### From December 2008

 Initial ground preparation to widen the railway foundation for the second set of tracks.
Preliminary earthworks will settle for up to a year before new track can be laid

### From April 2009

- Construction of the wider rail foundation begun, away from the pre-load areas

### From June 2009

- Install 600 steel traction poles needed to carry the overhead wires that power electric trains
- Build the rail formation ballast, sleepers and rail
- Widen some railway bridges
- Attach overhead wires and install railway signalling equipment

## During 2010

- Continue to install railway formation, overhead wires and signalling equipment
- Progressively commission sections of the new track



# Powering the new trains

The first electric trains in Wellington were introduced in the 1930s – we are modernising the power supply equipment and railway signalling around the network so newer, more powerful trains can operate.

There will be **11 new substations**. Along with the existing **14 substations**, these will help power the Matangi trains.

Equipment will be installed in the substations from July onwards. Remedial work will also be done on the current substations.

The new substations are being built beside the railway at:



Lower Hutt

- Woburn
- Silverstream
- Paremata
- 🕨 Otaihanga Road
- Waikanae

The overhead lines will be improved – including more conductors to carry the power needed to run modern trains.

Track circuits are critical to the safe operation of trains. These detect where trains are and control the signalling system (the equivalent to traffic lights). About 30 percent of the older track circuits across the Wellington region will be replaced.

# Platforms

We will be improving railway station platforms around the region.

This includes extending and re-surfacing some platforms.

At others, we will move the railway tracks slightly or rebuild the platform to make sure the new trains fit comfortably beside the platforms.

## From January 2009

- Work begun on Johnsonville Line platforms at Crofton Downs, Ngaio and Awarua Street
- Work begun at Epuni station platform on the Hutt Valley Line

## From April 2009

- Extensions begun on Johnsonville Line platforms at Khandallah and Raroa

# From July 2009

- Begin extension of Simla Crescent station on the Johnsonville Line
- Extend second platform at Ngaio station
- Complete Crofton Downs station platform

# During 2009

 Start realignment of tracks and resurfacing work on Hutt Valley Line

# During 2010

- Work at Petone station on the Hutt Valley Line
- Rebuild Paraparaumu Line platforms at Redwood, Kenepuru, Pukerua Bay and Waikanae
- Build second platform at Paraparaumu station

