

Wellington Region Rail Programme



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

The Wellington Region Rail Programme includes:

- Introducing a fleet of **new electric trains** – the Matangi trains. These will begin to arrive later in 2010.
- Making **tunnels** on the Johnsonville line larger so modern 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.

Work started on improvements to the lines in 2008 and will continue through into 2011.

Some of the construction work cannot happen while trains are running. To keep disruptions to commuters to a minimum we will work at night, in the holidays and during off-peak periods as much as possible.

Matangi trains

The Matangi fleet includes 48 new two-car electric multiple units, which will start to arrive later in 2010.

The new trains will feature a low-floor multi-functional area in the trailer car which will improve access and has room for wheelchairs, buggies and bikes.

Other features include air-conditioning, passenger-operated doors, public address systems and electronic display screens.



Powering the new trains

We are modernising the power supply equipment so more powerful trains can run.

There will be 11 new substations. Remedial work will also be done on the current 14 substations. Together this will help power the Matangi trains. The new substations have been built beside the railway at:

- Wellington (2 substations)
- Ngaio
- Woburn
- Paremata
- Waikanae.
- Kaiwharawhara (2 substations)
- Lower Hutt
- Silverstream
- Otaihanga Road

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

Signalling

Track circuits are critical to the safe operations of trains. These detect where trains are and control the signalling system (the equivalent to traffic lights). About 190 (30 percent) of the older track circuits are being replaced.

Platforms

We are improving railway station platforms.

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.

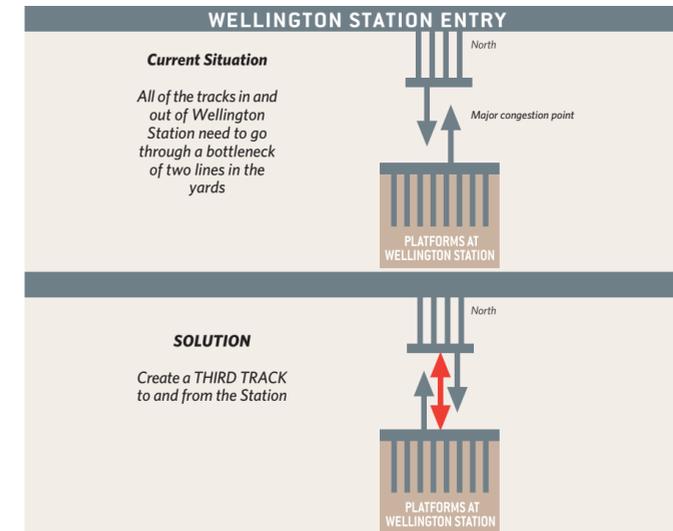
- **During 2009**
 - Crofton Downs, Ngaio, Awarua Street, Raroa, Khandallah and Simla Crescent on the Johnsonville Line
 - Epuni and Petone on the Hutt Valley Line
 - Pukerua Bay on the Paraparaumu Line
- **During 2010**
 - Redwood, Paraparaumu and Waikanae
 - Wellington Railway Station
 - Box Hill and Johnsonville

Station entry

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

Delays occur at 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.

- **Feb – June 2009**
 - 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
- **From July 2009**
 - Start laying new tracks
 - Install new signalling system
 - Continue installing traction poles
 - Begin hanging overhead power lines
 - Complete the retaining wall
- **During 2010**
 - Commission new railway signalling equipment
 - Connect the new main line into the existing tracks
 - Connect new overhead wires
 - Commission new line into operation



Power and Platforms

Station entry

