DELIVERING OUR TRANSPORT FUTURE NOW

rail revitalisation

gawler line

Australian Government

Nation Building Program

Government of South Australia

Department for Transport, Energy and Infrastructure

Adelaide's public transport network is receiving a $2.6 billion overhaul to develop a state-of-the-art and sustainable system that offers faster, cleaner and more frequent and efficient travel.

The Gawler line revitalisation will upgrade the track and key stations in preparation for new electric trains on the Adelaide transport network in 2013.

It includes:

- upgrading the track
- building new stations at Munno Para and Elizabeth
- upgrading the Gawler and Elizabeth South stations
- building a new car park at Smithfield station
- electrifying the line to run cleaner more efficient trains.

Track closure and public transport alternatives

The first stage of the track upgrade between North Adelaide and Mawson Interchange was completed in 2010. Between September 2011 and early 2012 the next stage between Mawson Interchange and Gawler Central will be upgraded in preparation for electrification.

The fastest and safest way for these improvements to be made is by closing that part of the line.

Every effort will be made to minimise the inconvenience and plans are in place to offer public transport alternatives for train users.

The department thanks residents and commuters for their patience while these important infrastructure works take place.

2010 2011

track upgrade works The new electric rail needs a new base to support a fast, tens of thousands of commuters every day.

now **station upgrade** Key

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line closure

The Gawler line will be closed between Mawson Interchange and Gawler Central while the track and key stations on the line are upgraded.

The majority of the track will be closed for approximately seven months, while train services are expected to resume earlier between Mawson Interchange and Salisbury.

In addition, the first masts will be installed along sections of the Gawler line to support the overhead wiring system required for electrification.

Customers will be given advance notice of all changes.

Replacement buses

Express, limited-stop and all-stop bus services will operate between Gawler Central and Mawson Interchange during this time. Full details on substitute bus services are available from Adelaide Railway Station, the InfoCentre, Adelaide Metro retailers in the northern suburbs and by visiting adelaidemetro.com.au

track upgrade

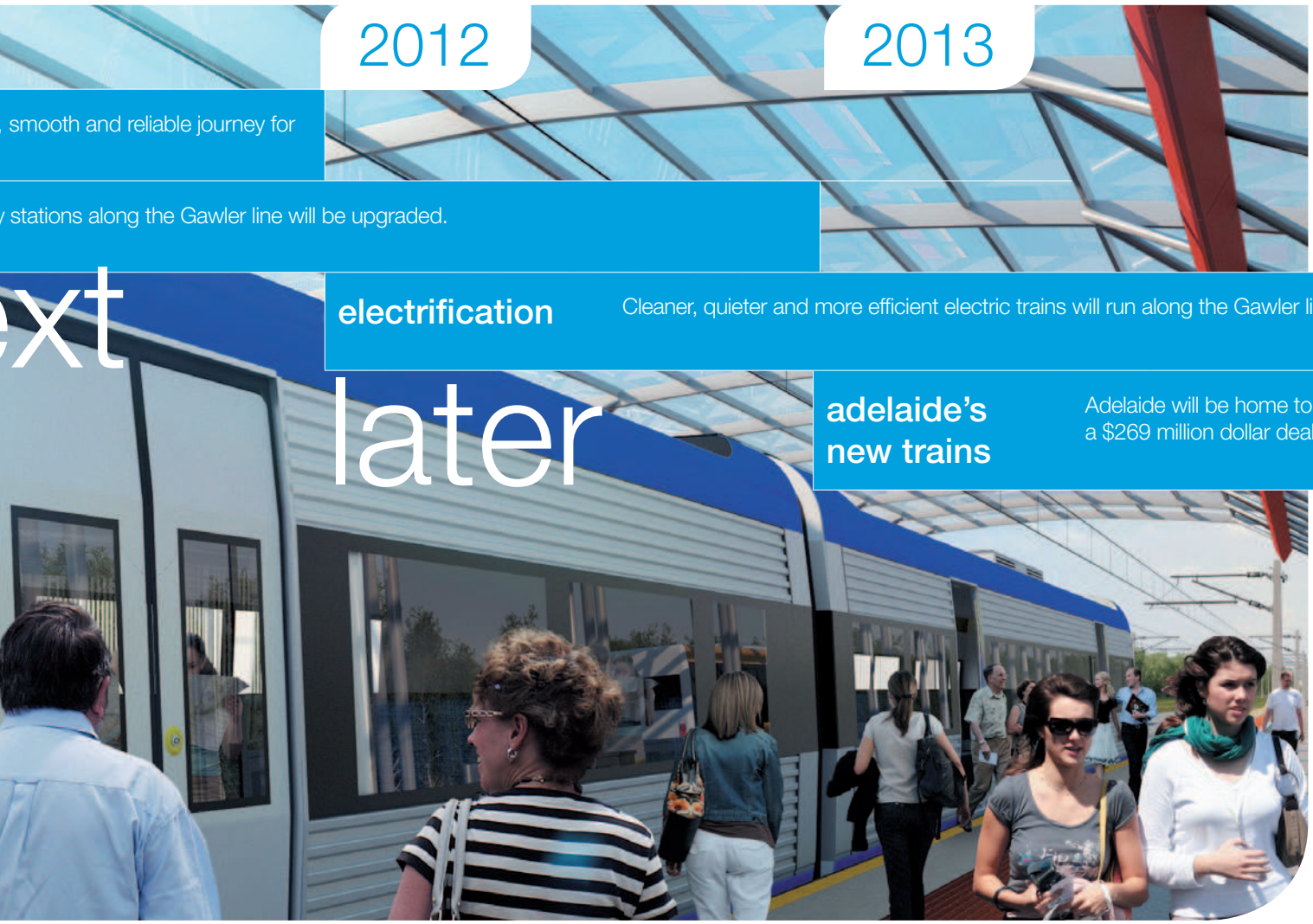
The new electrified rail network needs a new base that will support a faster, smoother and more reliable journey for commuters.

All parts of the track will be completely upgraded, including:

- replacing or refurbishing the steel rails
- upgrading the track base for support, including improved drainage
- installing new, gauge convertible concrete sleepers
- upgrading eleven level crossings
- constructing a 'turn-back' facility at Elizabeth station to allow trains to start and finish journeys from this station in the future providing more frequent services.

Preparations are well underway, with construction scheduled to commence from 18 September 2011.

This is the largest section of track to be upgraded as part of the State Government's Rail Revitalisation project, which means the track must be closed to get the work done as efficiently and safely as possible.



station upgrades

Some major stations along the Gawler line will be rebuilt or upgraded to offer customers a safer, easier and a more convenient connection with the new rail system.

Station improvements will make connecting with buses, cars and bikes easier and more comfortable for train commuters. New platform surfaces will minimise the step and gap between platforms and trains.

New Munno Para and Elizabeth stations will include:

- a fully-enclosed overpass with lifts and stairs, improving customer access and safer pedestrian crossing over the rail corridor
- architecturally designed shelters (Munno Para) and a canopy shelter (Elizabeth)
- a bus interchange integrated into the eastern platform to improve transfers between bus and train
- improved lighting, CCTV surveillance and emergency telephones
- passenger information display systems on all platforms to inform customers about train running times.

Elizabeth South and Gawler

Elizabeth South station will be upgraded with a new shelter, seating and wind break. Both stations will receive improved lighting, CCTV monitoring and a real-time passenger information on train arrivals and departures.

Smithfield car park

A new car park is being built on the eastern side of Smithfield station, with capacity for 100 additional vehicles.

on completion of electrification.

alia's newest and safest electric trains under iver the city's purpose built suburban rail fleet.

Adelaide's new trains

Adelaide will be home to Australia's newest and safest electric trains under a $269 million deal to deliver the city's purpose built suburban rail fleet.

The first of the new A-City trains will be on the rails within two years and will be the first rail vehicle in Australia to meet stringent new international crash specifications.

The 22, three-car trains will have a wide body providing more room for passengers and features designed to optimise the journey experience.

Other features include:

- enhanced CCTV covering rear, front and interior
- customised air conditioning and disability compliance
- Passenger Emergency Intercom (at each doorway)
- maximum speed of 110 kph supported by energy monitoring technology
- fully fitted and integrated smartcard ticketing system.

The new A-City trains will be complemented by the State Government's on-going program to fully refurbish 70 vehicles from the existing 3000/3100 class fleet while converting 54 to electric propulsion.

electrification

Overhead wires and supporting masts will be installed along the length of the line, which will power the electric trains.

Benefits of electrification include:

- Environmental. You will notice less engine noise, vibration and local air pollution.
- Energy efficiency. Electric trains can utilise renewable energy supplies (such as wind and solar).
- Better services. Along with improved reliability, electric trains can accelerate and decelerate faster, allowing trains to reach top speed sooner and maintain that speed for longer.
- Financial. Electric trains are cheaper to buy, maintain and operate than diesel trains.

Infrastructure to be installed:

- masts and overhead wires
- new substations to power the system
- safety screens at bridges and pedestrian overpasses

Environment

To ensure the safe operation of the system and meet appropriate standards, some vegetation needs to be cleared along the existing rail corridor.

This is similar to clearance of vegetation near other high voltage power lines. Vegetation clearance will be minimal and follow strict guidelines based around the safe operation of electric train services. Replacement plantings will offset vegetation removals.

Safety

The system will be similar to the networks that operate successfully in Perth, Brisbane, and in many other locations around the world.

Screening will be installed at bridges and pedestrian overpasses and access to stations will be via overpasses and dedicated pedestrian entrance paths only.

Signage will be installed and a safety

What best describes your area of interest?

☐ Track upgrade works ☐ Rail Electrification ☐ New trains ☐ Station upgrades
☐ Other:

Do you have any comments?

Which of the following best describes you?

☐ Local resident ☐ Local business owner ☐ Train commuter
☐ Mobility aid user ☐ Member of an interest group ☐ Cyclist
☐ Other:

Please post your completed form in a plain sealed envelope (no stamp required) to:
Rail Revitalisation: Reply Paid 1533, Adelaide SA 5001.

Thank you for taking the time to complete this form and register your interest.

awareness program launched before the start of the electrified services to educate the community on the changes associated with an electric rail network.

Powering the network

The electrified rail network will be powered by a direct connection with ETSA Utilities' high voltage distribution network.

New railway substations will be constructed to convert the ETSA supply to the voltage needed for the network.

The power running through the overhead wires will carry a similar voltage to that running above many roads.

Government of South Australia
Department for Transport, Energy and Infrastructure

project mailing list and comments form
gawler line

Would you like to be added to the project mailing list? ☐ Yes ☐ No ☐ Already a member

Title: Mr / Miss / Ms / Mrs / Dr / Other

First Name:

Last Name:

I would prefer to receive information by: ☐ Post or ☐ Email

Postal Address:

Postcode:

Email Address: Phone/Mobile Phone:

Your details will be treated confidentially and will not be used for any purpose other than to provide project information.

rail electrification explained

1. Insulators

To separate 'live' equipment from masts.

2. Overhead wiring

To transmit electrical energy to trains.

3. Pantograph

This is the frame on the top of electric trains. It contacts with the overhead wires that are connected to the power supply.

4. Cantilever arms

To support the overhead wiring system.

5. Masts

Made from concrete, masts will be approximately 50 metres apart and 7.5 metres tall.

new ticketing system

A brand new metrocard ticketing system is coming to Adelaide's public transport network in 2013.

The technology will work by simply touching the metrocard against a validator in the vehicle to deduct a fare.

Metrocards will be able to be 'topped up' or recharged at some stations, vending machines, retail outlets, on trains and trams and on the internet.

A state-of-the-art ticketing system is another key component in making Adelaide's rail network faster, more frequent, and more efficient.

safety and security

Constantly improving safety and security along the rail network is a high priority.

Lighting is being improved, emergency phones are being installed at numerous stations and CCTV surveillance is being upgraded both at stations and onboard trains.

More than 300 cameras have already been installed at a number of stations across the network, with more being rolled out.

A $37 million program to refurbish 3000/3100 series railcars is well underway and includes security enhancements to existing CCTV, more cameras and a live CCTV feed to the driver's compartment.

Security guards are present on all trains which depart Adelaide Railway Station from 6.00pm.

for more information, or to provide your thoughts

We will continue to keep you updated on works and projects associated with the Gawler line. To provide information or feedback or to join the project mailing list:

track upgrades and stations

- fill in and mail the attached feedback form
- submit your comments electronically at infrastructure.sa.gov.au
- email dtei.rr@sa.gov.au
- call 1300 782 454.

rail electrification

- fill in and mail the attached feedback form
- submit your comments electronically at infrastructure.sa.gov.au
- email dtei.electrification@sa.gov.au
- call 1800 644 735.

information sessions

- information sessions will be held at various locations along the Gawler line later in 2011
- keep an eye out for more information in the coming months
- details will mailed to local residents and mailing list members.