Transport News

MAY/JUNE 1979 Vol 7 No 3

PUBLIC TRANSPORT COMMISSION OF NEW SOUTH WALES

Special Tribute To Staff

When Sydney's magnificent Eastern Suburbs Railway was officially opened on Saturday, 23 June, the first passenger trains — according to critics — ran one hundred years late!

This is about how long it has taken to complete the 10 km of mainly underground line between Erskineville and Bondi Junction since the project was first proposed in the late 1800's.

Changes in Governments, shortages of finance, wars and massive engineering problems have intervened to make the project one of the most stop-start undertakings in transport history.

But the $168 million Eastern Suburbs Railway has now been completed by the Public Transport Commission well inside three years of the NSW Government's decision to complete construction of the ESR.

The last rail has been laid for some time; the finishing touches applied to the huge beautifully-designed underground railway stations; Australia's first automatic fare collection system is in operation; the Southern Hemisphere's longest escalators are carrying thousands of passengers at Martin Place and gleaming stainless-steel double-decked trains are rolling!

This issue of TRANSPORT NEWS records in some detail the history of the ESR — how it was built — and its special features which place it on a par with the world's most advanced rail systems.

Building of the ESR was one of the biggest engineering projects ever attempted in New South Wales, and it was a triumph for the skilled PTC staff and those of the consultants and outside contractors.

TRANSPORT NEWS pays a special tribute to all those who made the Eastern Suburbs Railway a reality.

Sydney's Eastern Suburbs Railway . . . Now A Reality!

When Sydney's Eastern Suburbs Railway opened and became operational on Saturday, 23 June, it introduced new features placing it on a par with the world's most advanced rail systems, and now provides a level of service unparalleled in Australia.

Completion of the $168 million line was achieved by the Public Transport Commission of NSW well inside three years of the NSW Government's decision to proceed with construction of the ESR to Bondi Junction.

As Hon Neville Wran, QC, MP, Premier of NSW, said recently:

'The Eastern Suburbs Railway is no longer a standing joke. The pipe-dream of so many decades is now a reality and it is only a reality because of the determination of the NSW Labor Government to grasp the nettle by completing its construction'.

He said a special Board of Review had been established by the NSW Government in mid-1976 to examine and recommend on the future of the Eastern Suburbs Railway.

'That Board recommended construction of the railway to Bondi Junction together with a range of cost-saving modifications. It estimated that the railway would be operational by late 1979 or early 1980.

'The State Government has delivered on both these counts by readying the Eastern Suburbs Railway for full operation on 23 June,' he added.

The new rail link provides a rapid-transit service enabling the movement of large numbers of passengers into and out of the city in the quickest possible time, with reduced road traffic congestion.

The Eastern Suburbs Railway will initially operate as a fast shuttle service between Central and Bondi Junction, after which it will be integrated with Illawarra Line services.

Modern Features

Other articles in this issue of 'TRANSPORT NEWS' outline in detail the many features of the new line. But they can be summarised as:

- **All double-decked suburban carriages.**
- **High service frequency; every five minutes in daytime peak and off-peak Mondays to Fridays; every 10 minutes weekends and weekday nights; and every 15 minutes weekend nights.**
- **Fast journey times —**
  Central/Bondi Junction 11 minutes
  Central/Edgecliff 8 minutes
  Martin Place/Bondi Junction 7 minutes.
- **Automatic fare collection system featuring magnetically encoded tickets to activate barriers, plus automatic ticket vending machines.**
- **New intermodal ticket arrangements, incorporating 'Multi-Trip Tickets', weekly, quarterly and yearly tickets, and general concession incentives.**
- **Ultra-modern station and platform facilities including closed-circuit television systems.**
- **Major bus interchange terminals over the rail stations at Edgecliff and Bondi Junction, providing quick transfer from buses to rail platforms via convenient escalators.**
- **Carefully controlled Eastern Suburbs bus service alterations designed to meet bus/rail requirements. This involved the conversion of bus services to feeder services to the interchanges, and the extension of many of these services from the interchanges towards the city to serve those areas remote from railway stations. (Eg. Taylors Square, St Vincent's Hospital etc.)**
- **Eastern Suburbs Railway involves a 10.5 km rail link from Erskineville to Bondi Junction (7 km from Central to Bondi Junction).**
- **On completion of the computerised signal complex at Sydney Yard, all points, crossovers and platform indicators will be remote controlled from that central signal box.**

PTC Bus Alterations

As indicated, opening of the Eastern Suburbs Line has resulted in numerous changes to existing PTC bus services — some have been discontinued, some amalgamated, and in some instances route changes were necessary.

The Sydney suburbs affected by the changes are: Double Bay, Rose Bay, Vaucluse, Watsons Bay, Dover Heights, Bellevue Hill, Bondi, Bronte and Waverley.

In redesigning bus facilities, the principal adopted was that those services which operate through the Bondi Junction and/or Edgecliff areas were diverted to the major bus/rail interchanges at those two locations.

Some of these bus services have been through routed towards the City, but a substantial proportion of the buses now terminate at the Bondi Junction and Edgecliff interchanges.

For the convenience of residents of the Clovelly and Coogee areas who may wish to use the rail service, peak hour express bus services operate from Coogee and Clovelly to the Bondi Junction Bus/Rail Interchange complex.

Fares And Ticketing Arrangements

In the development of the fare and ticketing arrangements, efforts were made, as far as practicable, to avoid any increase in transport costs. However, there were a few instances where variations both upwards and downwards were unavoidable.

The increases are expected to affect only a very small minority of passengers. To adopt lower fare scales which would avoid completely an increase in existing travel costs could have resulted in substantial erosion of revenue.

In the main, single journey fares for travel by train, or combined train and bus services are the same as the existing fares. In a very few cases costs have been reduced, such as on the longer distance journeys between Dover Heights and Circular Quay.

The previous cost of bus travel from Dover Heights to Market Street, Sydney, was 35 cents, and to points beyond Market Street to Circular Quay 45 cents. The combined bus/rail fare in this case is 35 cents, which is in line with the general cost of travel by rail over similar distances on other lines.

Weekly 'ESR Bus/Rail Pass'

For regular commuters a special weekly 'ESR BUS/RAIL PASS' is available for unlimited bus travel in the catchment area east of Edgecliff or Bondi Junction Stations; unlimited rail travel on the Eastern Suburbs Railway; plus unlimited bus or rail travel within the Sydney Inner-City area.

Similar passes are available also on a quarterly or yearly basis. The cost of a quarterly ticket is 11 times the weekly fare. The cost of a yearly ticket is 40 times the weekly fare, which represents a very substantial discount. Yearly tickets will not be available until 22 July.

Intermodal 'Multi-Trip Tickets'

To encourage the pre-payment of fares by off-peak travellers, and thereby reduce the workload of one-man bus staff, a special intermodal 'Multi-Trip Ticket' is available, which allows 12 combined bus/rail journeys for the price of 10 trips! These tickets are available at ESR stations, and are valid for 3 months.

Limited Through Buses

In the majority of cases, persons travelling from locations east of Bondi Junction and Edgecliff interchange stations to destinations east of the main City area, namely east of College Street, are able to undertake their journey on a through bus at existing fares.

However, there are some cases where a change of bus at the interchange is necessary, such as for journeys from Vaucluse to Darlinghurst.

The ESR's Woolloomooloo Viaduct with the city skyline as a backdrop.

In these cases a person who buys a ticket on a daily basis is required to pay separate fares on each bus, and this could result in an increase in cost. Ways of avoiding this have been investigated, but no satisfactory transfer arrangement that is simple to introduce and free of the opportunity of malpractice was found. Fortunately, very few passengers are likely to be affected.

Rail Travel Encouraged

To encourage travel on ESR trains and to discourage the use of 'through' buses to the Sydney Inner-city area a flat fare, which is 10 cents higher than the cost of a single journey combined bus/rail ticket, is charged for through bus journeys from a point east of Bondi Junction or Edgecliff Interchange stations to a destination on the City side of College Street, Sydney, and vice versa.

Many Advantages

The new line has introduced a new concept in commuter travel with many advantages such as:

- A rapid-transit rail service which enables the movement of large numbers of passengers into and out of the city in the quickest possible time.
- A reduction of road traffic on the arteries leading into and within the city proper as many buses terminate at the two interchange stations.
- A further reduction in road traffic as motorists recognise the speed and comfort of rail travel and switch to trains.
- A reduction of pollution of the atmosphere because of fewer vehicles using the roads.
- Conservation of fuel resources so vital to our Nation's future with the swing to pollution-free, energy-saving electric train travel.
- Improvement to the present Eastern Suburbs bus system which has become a modern co-ordinated intermodal bus/rail operation.
- Major relief to the congested City Circle rail system when ESR trains integrate with Illawarra Line services.

Whilst residents of the Eastern Suburbs are the main beneficiaries of the new railway, the benefits will ultimately flow throughout the whole Sydney community as suburban trains on other lines will operate more efficiently, and road traffic in the city and Eastern Suburbs will show a marked decrease. The passenger-carrying capacity of the Eastern Suburbs Railway is equal to that of an eight-lane highway — and without the environmental, pollution-creating fuel-using problems caused by such a highway!

The new $168 million Eastern Suburbs Railway has certainly been worth the wait!

All Aboard For Bondi Junction!

Saturday, 23 June 1979 will long be remembered as the day when Sydney's Eastern Suburbs Railway was officially opened.

The historic day started at 10.30 a.m. at Martin Place Station where about 850 invited guests, representative of a wide and varied cross-section of our community, assembled to hear speeches by the Chief Commissioner, Mr Alan S Reiher, Minister for Transport Hon Peter Cox, MP, and the Premier of NSW, Hon Neville Wran, QC MP.

After the symbolic unveiling of a plaque by the Premier, guests joined special trains for the historic journey to Bondi Junction.

On arrival, guests witnessed a ribbon-cutting ceremony by the Premier to commemorate the inauguration of train services on the $168 million line.

Guests then proceeded to the bus interchange deck immediately above the railway station where they joined thousands of onlookers for an Address of Welcome by the Mayor of Woollahra, Alderman BS Backhouse.

After further brief speeches by the Chief Commissioner and Minister for Transport, the Premier unveiled a plaque commemorating the arrival of the first Official Train, following which he was thanked by Hon SD Einfeld, MP.

Speakers at the Martin Place and Bondi Junction ceremonies extolled the many features of the world-class line and the undoubted benefits which would follow its opening for passengers, Eastern Suburbs residents, business interests and the community generally.

High praise was lavished on Commission staff and those of consultants and contractors who had combined as an efficient team to complete the ESR well ahead of the target date set by the NSW Government.

Invited guests then rejoined trains for return to Martin Place Station where they were entertained for luncheon on the colourful and spacious concourse level.

Right on time at 12.35 pm, trains left both Central and Bondi Junction stations with the first of about 250,000 passengers who were to be our guests for free 'joy rides' on the Eastern Suburbs Railway throughout Saturday and all day Sunday.

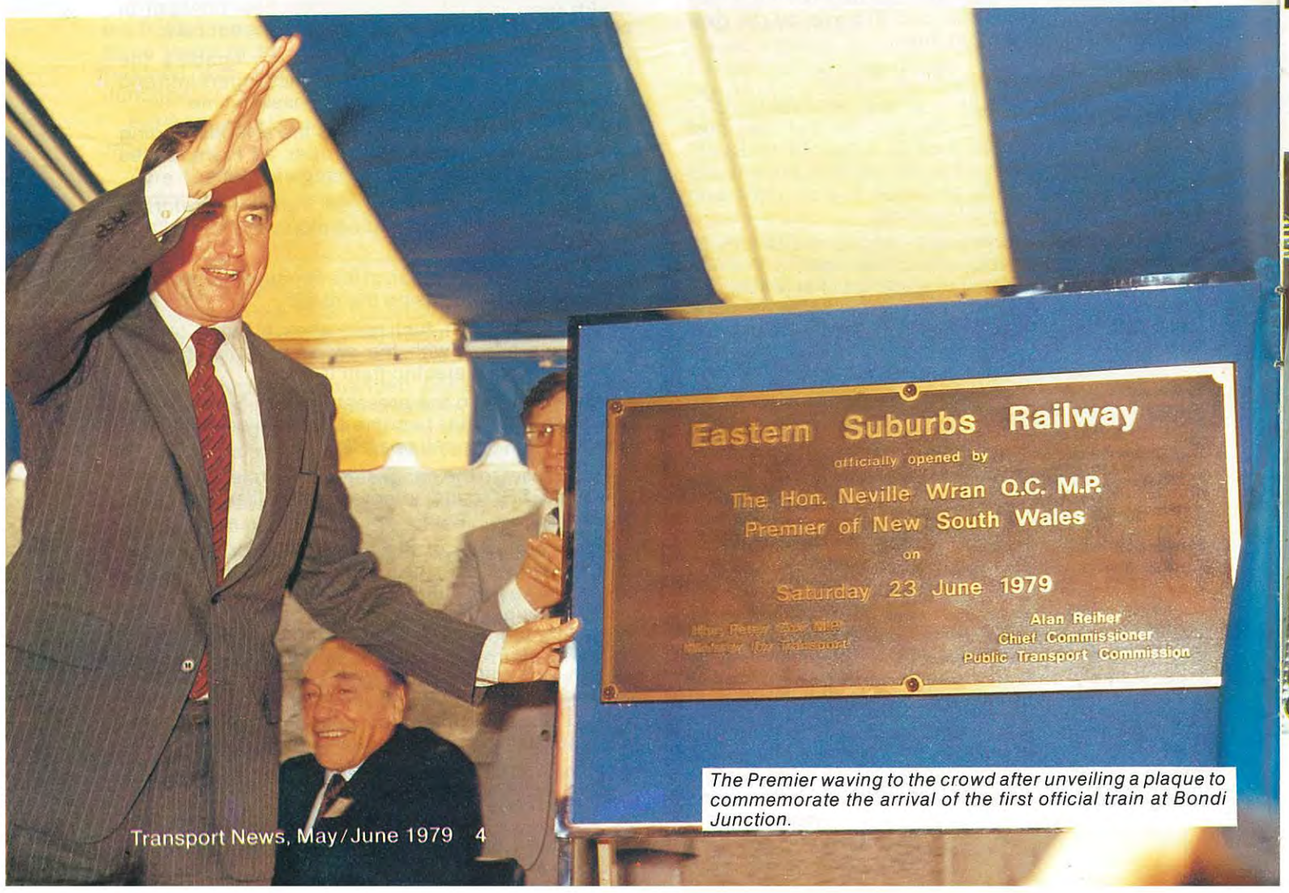
Thus was set the scene for the start of a new era in commuter travel in Sydney!

In the pre-dawn stillness of Monday, 25 June buses started feeding into the interchange complexes at Bondi Junction and Edgecliff with commuters joining trains to give fare-paying passengers their first sampling of a bus/rail mass transportation system equal to the best in the world.

On its first day of operation, the Eastern Suburbs Railway doubled our expectations — about 100,000 passengers travelled and extra trains had to be put into service to cope with the crowds.

Coincidentally, the shortest and quickest means of travel between the Eastern Suburbs and the city was officially opened on about the shortest day of the year — a year which is also significant for another reason.

It will be exactly 100 years next September since the first steam tram ran from the old Sydney railway station to the corner of Hunter and Elizabeth Streets to inaugurate the Government-owned street transport system in Sydney.



The Premier waving to the crowd after unveiling a plaque to commemorate the arrival of the first official train at Bondi Junction.

Station Master, Bondi Junction, Mr Jim Smith welcoming Mr and Mrs Reiher (left) and Mr and Mrs Cox on arrival of the Official Party.

The Minister for Transport, Hon Peter Cox, MP speaking at the Martin Place ceremony.

Many past and present Commission employees were included in the guest list for the Official Opening. 83 year old Mr Wal Todd who, prior to his retirement 15½ years ago, worked on construction of every station on the City Underground is shown here with Mr Kevin Ryan, Project Manager ESR (left) and Mr Ross Gordon, Commissioner.

Unveiling of the plaque at Martin Place Station by the Premier was recorded for posterity by a large number of media photographers.

Driver of the train carrying the Official Party was Mr Don Nicholls, senior Train Driver in NSW, shown here with Mr Alan S Reiher, Chief Commissioner. Seated in the cab is Mr Charles Gruss, Engineman Class 5.

Official Party arriving at Martin Place Station was escorted by Station Master, Mr John Andrews.

History of the Eastern Suburbs Railway

After more than a century of uncertainty the Eastern Suburbs Railway is now a reality!

Australia's most modern commuter line will carry an estimated 43 000 passengers a day, or 13 million passengers a year as part of a bus/rail transport system.

The idea of a railway serving the Eastern Suburbs has inspired generations of planners and politicians and sparked off a score of Royal Commissions and committees of inquiry.

Back in the last century, the Sydney railway terminal was called Redfern Station, which was located on what today is the southern side of Devonshire Street (Redfern Station, as we know it, was called Eveleigh).

The first proposals for an Eastern Suburbs line were associated with demands that the rail terminal be extended into the city proper.

But in those years (and for many years after) Sydney provided only a quarter of the population of New South Wales, and the politicians of the day were aware of what this meant to them.

A typical view was that of John Sutherland, Minister for Works, when in 1868 he was asked to extend the railway from Redfern into the city. Although representing the electorate of Paddington (where the voters favoured a railway); he pointed out that the amount needed to build a railway from Redfern into the city proper would be enough to extend the western line from Bathurst to Orange.

Sutherland's priorities were borne out by events; the railway reached Orange in 1877 but did not get to St James until 1926.

Strong opposition came also from powerful country interests and the first suburban railways could only get Parliamentary approval if they formed part of a line to the country.

The first suburban railway — 16 km from Redfern to Hurstville — was opened in 1884, and two years later it had reached Waterfall. The Strathfield-Hornsby Line was opened in 1886 and extended to the Hawkesbury shortly after. Both these lines were proposed to Parliament on the basis that they formed part of the Illawarra and Northern lines — but there was no way in which an Eastern Suburbs line could be part of a country service.

Small Population

Another limiting factor was the small population of the Eastern Suburbs — and numbers are important if a city railway is to be viable.

In 1871 the boroughs of Paddington, Woollahra, Waverley and Randwick contained only 11 000 people. Twenty years later their population had risen to only 45 000.

Waverley, for example, had shown a population increase of 300 per cent to 9 000 over the ten years to 1891, living in 1 900 houses. But only one-fifth of its area had been built on.

The first real attempt to persuade Parliament to provide public transport for the Eastern Suburbs came with a draft bill of 1873 to authorise the building of a horse-drawn tramway from Redfern to the city and to the Eastern Suburbs. This was passed on to a sub-committee for consideration and there it was lost: the fate of many a proposal over the years to come.

But given the cost-saving option of building a tramway system to link the city with the Eastern Suburbs, the Government of the day was quick to seize it.

Despite opposition from private transport operators The Tramways Extension Bill was passed early in 1880. The first line from Liverpool Street to Randwick Racecourse, was opened in September 1880, with an extension to Randwick in March 1881 — the same month as the Darlinghurst-Ocean Street line came into service. The tramway network gradually spread across the suburbs, reaching Bondi Beach in 1894,

Dr JJC Bradfield, the visionary who planned a City and Eastern Suburbs Railway.

Before — *Early construction photo showing excavation beneath Chalmers Street for new Central ESR platforms.*

After — *Restored Chalmers Street showing attractively landscaped pedestrian boulevarde.*

Rose Bay in 1898 and Watsons Bay in 1909.

Despite the success of the trams, a rail link continued to be urged on a series of reluctant governments. In 1890 a Royal Commission proposed the building of a city terminal and the extension of four tracks into the city terminating at Circular Quay, with provision for an extension to the Eastern Suburbs. But no action was taken — nor was there any action after another Royal Commission made similar suggestions in 1896.

Central Station was built in 1906, but the agitation for a City and Eastern Suburbs railway continued, and plans continued to be drawn up and pigeonholed.

Dr Bradfield's Scheme

In 1915 Parliament approved a proposal for a City and Eastern Suburbs railway drawn up by Dr JJC Bradfield, the Chief Engineer, Metropolitan Railway Construction. This entailed the building of the present City Circle loop, with provision for a rail link off this to the Eastern Suburbs via a tunnel beneath the Domain and a viaduct over Woolloomooloo to Kings Cross.

There were to be stations at Glenmore Road, Paddington, at a site near Elizabeth Street, Paddington, Woollahra, Bondi Junction. Waverley, Little Coogee (near Frenchman's Road, Randwick), Coogee (near High Street and Belmore Road), Daceyville, Rosebery and Waterloo, linking with the Illawarra line near Erskineville Station.

The visionary Dr Bradfield (planner of the Sydney Harbour Bridge) foresaw an extension from Bondi Junction to Watsons Bay and an inner loop between Central Station and Daceyville with stations at Moore Park (serving the Sydney Cricket Ground, Sports Ground and Showground), and at Randwick Racecourse.

City Railway

During the 1920's work continued on the city railway to complete the Town Hall – Wynyard link in time for the opening of the Harbour Bridge but still the Eastern extensions languished, despite regular demands for the work to begin. After paying for the city railway, the governments of the day could not find the funds to extend the work.

In 1947 an Act was passed authorising completion of the City Circle and railway extensions into the suburbs (including the Eastern link) which provided for a station at Martin Place with the line going on a viaduct over Woolloomooloo to Kings Cross and eventually to Bondi Beach. Another line was to go out from St James via Taylor Square and the Cricket Ground to terminate at Kingsford, with a further extension from Taylor Square via Paddington, Woollahra, Bondi Junction, Waverley, Bronte and Clovelly to Coogee.

Work proceeded slowly until 1952 when a recession caused the Government to order a halt. By this time tunnels had been driven from the Domain to a point beneath Rowe Street, the Chalmers Street excavation had been completed; tunnels driven a short distance from a shaft in Prince Alfred Park, and some of the work at Erskineville and Redfern had been carried out.

In 1962 the Government commissioned a report from overseas experts De Leuw Cather and Company which recommended that the line be completed basically on the earlier route to Bondi Junction thence proceeding to Kingsford. Nothing was done on this report until 1967 when an Act covering work on the proposal was passed and work actually began.

In 1976 the Government abandoned the section Bondi Junction to Kingsford as recommended by the Urban Transport Advisory Committee and commissioned a report by an Eastern Suburbs Railway Board of Review. In November 1976 the Government accepted that Board's recommendation to proceed with the project with certain modifications to reduce costs.

The cost-saving decisions announced at this time included the elimination of the proposed station at Woollahra and reduction of station concourse areas at Martin Place and Bondi Junction.

Not all of the work of the planners of the past has been lost in the development of the new railway. The stations are close to the locations envisaged by the engineers and designers long ago and the platforms at Town Hall Station which handle the Eastern Suburbs traffic were partly built by Dr Bradfield half a century ago as part of his city and suburban system to cater for a new line he envisaged to serve the western suburbs.

Facts At A Glance

The Eastern Suburbs Railway is a 10 kilometre line basically consisting of seven underground stations linked by tunnels (Redfern*, Central, Town Hall, Martin Place, Kings Cross, Edgecliff and Bondi Junction); viaducts across two valleys (at Woolloomooloo and Rushcutters Bay) and one short above-ground section near Woollahra.

(* Redfern will not be used until integration with Illawarra Line services.)

	$ Million
Total Cost	**168**
Break-up —	
Tunnels (between stations)	50
Stations (including lower platforms)	46
Viaducts	6
Trackwork	7
Installations — signalling, communications, electrical	14
Escalators	9
Preparatory Works and Service Diversions	9
Design and Planning	15
Property — 256 resumptions	8
Trains	4

Distances	
Erskineville–Central	3.0 km
Central–Bondi Junction	7.0 km
Bondi Junction to dead-end	0.5 km
Total:	10.5 km
comprising	
Box tunnels (open cut)	1.5 km
Arch driven tunnels	7.0 km
Viaducts, track on grade	2.0 km
Total:	10.5 km

Excavation
One and a half million tonnes of sandstone and spoil.

Concrete
Five hundred thousand cubic metres were used to form the tunnel walls, floors and ceilings.

Travel times

Central to Bondi Junction	11 minutes
Central to Edgecliff	8 minutes
Martin Place to Bondi Junction	7 minutes

Frequency Of Service
5 minutes in daytime peak and off-peak Mondays to Fridays
10 minutes weekends and weekday nights
15 minutes weekend nights

Anticipated Passenger Journeys

Daily . . . estimated at	43 000
Annual journeys . . . estimated at	13 million

Rolling Stock To Be Used And Service
Initially trains will operate shuttle service between **Central and Bondi Junction**
LATER will be integrated with Illawarra Line, thus giving Illawarra Line a better service and greatly reducing congestion on existing City Circle Line. When irregularities occur, there will not be the same 'snowballing' effect.

Consists of Trains
DOUBLE-DECKED carriages, comprising 4 cars in peak hours, made up of 2 trailer cars and 2 power cars . . . seating capacity of 488 passengers each 4 car train.

Power
Traction power at 1 500v DC supplied from existing Prince Alfred Substation and from a new substation at Edgecliff.

Signalling
Modern signalling provides a basic 90 second headway between trains.
Track circuits feature high frequency jointless resonated circuits, dramatically reducing need for insulated joints.

Escalators
39 escalators provided at a cost of about $9 million. Longest escalator is at Martin Place linking concourse and platform levels. It has a 16 metres vertical rise, equal to about a five-storey building.

Closed Circuit Television
Installed at Martin Place, Kings Cross, Edgecliff and Bondi Junction at a cost of $85 000.

Lowest Point
13 metres below sea level at a point between Central and Town Hall (below Hay Street).

Steepest Grade
ESR between Town Hall and Central, has grades of 1 in 32 . . . equalling the steepest grade in the Sydney Metropolitan area — the section between Wynyard and Harbour Bridge approach.

Colourful Stations are Eye-catchers!

Not only are the stations on the Eastern Suburbs Railway the most modern in Australia, but with their bright, spacious surroundings and striking colour schemes, they are also the most attractive.

Their design makes movement of passengers from street level (or bus interchanges) to platforms rapid and easy. For passenger convenience the PTC installed 39 escalators at ESR stations at a cost of $9 million.

Each station has its own distinctive colour scheme for immediate recognition. In addition, station names in contrasting graduated colours are repeated along platform lengths in banks of three names. This provides passengers with quick identification of the stopping place, irrespective of whether travelling on the top or bottom decks, or in the end saloons of double-decked trains.

Redfern

This station, which will not be used until ESR services are integrated with Illawarra Line trains, is 15 metres below street level. The foundations and steelwork have been designed to accommodate a future 12-storey building.

The colour scheme for Redfern is a combination of blue, yellow and beige.

Central

The concourse and platforms at this station are located below Chalmers Street, and served by four escalators.

The concourse provides ready access to the other electric train platforms, to country and interstate trains, and to Broadway through the Devonshire Street tunnel.

The roof at Central is fitted with a metal-ribbed ceiling in the station identification colour – green. Walls and columns are finished in green and white tiles and the concourse, like the platform, is paved with studded rubber.

Chalmers Street, above the station, has been restored and incorporates a pedestrian mall and bus shelters roofed with translucent acrylic.

Town Hall

The two ESR platforms here were built during construction of the City Railway 50 years ago. The previously unused platform has been redecorated with yellow plywood ceilings, and columns have been faced with stainless steel. Four new escalators integrate the new platform with the existing Town Hall system.

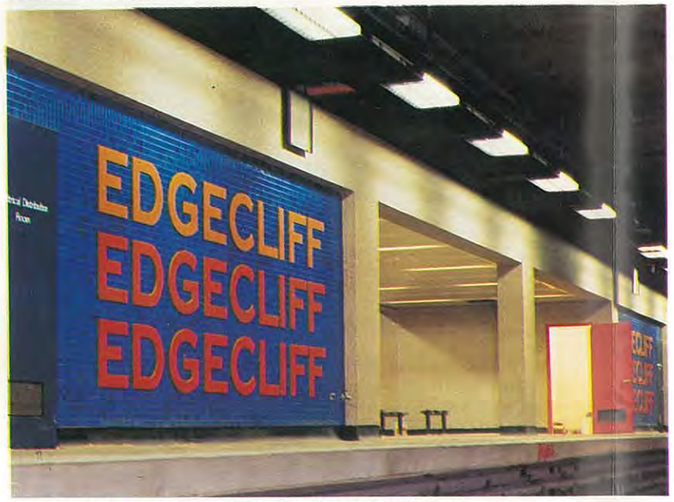
Martin Place

The station at Martin Place has been designed to cater for the large number of city workers who will use it during peak travelling times.

The predominant colour throughout is red, with extensive use made of white terrazzo and off-form finished concrete.

Immediately below street level, between Phillip and Macquarie Streets, is the gallery level entered by stairs from the recently completed plaza. It will feature kiosks, concessions and an open sidewalk-type cafe. From here, passengers are carried by three escalators to the concourse where the ticket offices and barriers are located. The terrazzo-paved concourse also connects to the lower sections of

Bondi Junction with its colourful light grey and orange tonings.



Edgecliff Station, showing the three-level signs which clearly identify ESR stations for passengers travelling on the top or bottom decks, or in the end saloons.

Martin Place through an arcade lined with exposed aggregate panels matching in colour the plaza above. From the concourse six escalators lead down to the island platform through shafts lined with red glazed tiles.

Platform and escalator shafts are finished with deep red moulded plywood ceilings coved at intervals for lighting, and hinged to allow access to the services located above them.

Ventilating air for the station is drawn from the Domain through tunnels passing under Sydney Hospital.

Kings Cross

This station is located below Victoria Street which was restored after construction had taken place. The concourse is entered by an arcade from Darlinghurst Road or stairs on each side of Victoria Street. Access will be provided also from Brougham Street to serve residents of the new Woolloomooloo redevelopment.

The concourse is paved with grey-green terrazzo forming a background for a colour scheme of orange which appears in the plywood ceilings and tiled

Platform edges are well illuminated and painted for safety reasons.

One of the levels of Martin Place ablaze in ruby red.

Section of the bus deck at the Bondi Junction Bus/Rail interchange complex.

columns. Walls are lined with white tile and precast terrazzo panels.

Booking office windows have surrounds of blue moulded panels which are used throughout the ESR system to identify ticket selling areas.

Three escalators operate from Darlinghurst Road to concourse level and the platform is reached by a further four escalators.

Edgecliff Bus/Rail Interchange

Edgecliff is one of the two bus/rail interchange stations on the ESR, with an extensive bus deck above the station. The station is in a development project of the Church of England Glebe Administration Board, with the PTC owning strata title to its sections of the building.

From the bus platform, stairways lead to the gallery and thence by stairs and escalators to the concourse area at New South Head Road level. Both gallery and concourse are paved with terrazzo and walls are lined with buff-coloured exposed aggregate render.

Section of Central Station showing the comfortable seating.

Modern and attractive signage has been installed at ESR stations to assist travellers.

Bondi Junction — end of the line. This station, along with Edgecliff, are the two bus/rail interchanges on the new ESR.

Columns are faced with attractive glazed tiles of deep blue – the basis for the station colour scheme.

Four escalators lead to the platform level which, like the concourse and gallery, is finished with ivory coloured plywood ceilings allowing total access to the necessarily complex services.

Bondi Junction Bus/Rail Interchange

This station is the other bus/rail interchange and terminus for the ESR line. The bus area is above the underground station and provides quick access for rail passengers.

Two escalators, complemented by stairs, operate between bus platforms and concourse which is lined with light grey exposed aggregate render. The ceiling is bright yellow metal slats with recessed lighting coves. Four escalators run from the concourse, through shafts with yellow moulded plywood ceilings to the rubber paved platform. The light grey exposed aggregate walls form a backdrop to the deep orange glazed tiled columns.

How The ESR Was Built

First, the Sydney Harbour Bridge . . . then the Opera House . . . and NOW the Eastern Suburbs Railway — each in its own way a masterpiece of design and engineering . . . a symbol of modern Sydney rising to eminence among the great cities of the world!

The 10 km Eastern Suburbs Railway linking the eastern suburbs of Sydney with the city basically consists of seven underground stations linked by tunnels, viaducts across the valleys at Woolloomooloo and Rushcutters Bay and a short above-ground section at Woollahra.

It represents one of the largest engineering projects undertaken in recent years by the NSW Government.

The route was determined to some extent by the undulating terrain of the eastern suburbs of Sydney and the need to avoid building foundations and poor ground material, where possible.

Erskineville is where the Eastern Suburbs Railway connects with the existing metropolitan rail network. The new line descends rapidly down a ramp (with a grade of 1/32) into twin box tunnels extending 1.3 kilometres beneath Alexandria Goods Yard to Redfern Station. These tunnels were constructed by the 'cut and cover' method because of the difficult ground conditions in this area of water-laden alluvial soil Extensive sheet piling was required as this method was used at depths of up to 16 metres. This work proved to be very difficult and expensive.

Redfern Station platform, located 15 m below ground level, marks the point where it became practical to use conventional means of drilling and blasting in the tunnelling works.

This method was used in the tunnels from Redfern to the Domain portal at Woolloomooloo and beneath Kings Cross. Generally, conventional tunnelling involved full face firing of a 2.8 m round (120 holes and up to two rounds per shift). Monitoring of ground vibration was necessary in most areas to protect buildings. The roof of the tunnels was usually supported with 4 m rock bolts. The tunnels were finished with a concrete lining varying in thickness from 200 mm to 600 mm.

The section between Edgecliff and Bondi Junction was formed by the use of a 179-tonne tunnel boring machine known as 'The Mole'. In principle, the machine consisted of a rotary cutting head pressed on to the tunnel face by a large hydraulic ram. The 4.5 m diameter cutting head was driven by large hydraulic motors and gouged away the face at a rate of 2 m per hour.

Equipment involved in these works included rock bolting systems for roof support, high speed drifters mounted on hydraulic booms or air legs, millisec delay detonators with mains voltage firing, truck mounted hydraulic drilling platforms, diesel powered rubber tyred heavy earth-moving equipment such as loader and rock buggies, concrete pumps, concrete immersion and form vibrators, steel formwork and concrete placing systems which allowed lining of the tunnels at rate of 30 m per day.

Tunnel Construction

Tunnels are usually wet areas and consequently, must be drained. In the ESR weep holes were left in the walls and the water drained to pump chambers located at the lower points of the system. These chambers up to 15 m below sea level have pumps which are automatically activated as the water level rises. The water is pumped to the surface and discharged into stormwater drains.

Supports

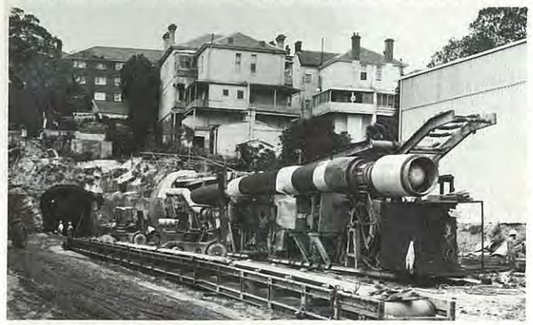
During construction of the line it was necessary to support building footings under the city and at Kings Cross.

One column footing of the State Theatre building located directly above the crown of the tunnel was underpinned. This necessitated an inclined drive up to the footing and the excavation of a chamber around it. Steel beams were installed on each side of the footing on concrete pads clear of the tunnel and the footing was gradually picked up on needle beams supported by flat jacks.

A more complex effort was necessary at Kings Cross where the rock above the station area was prestressed in order to minimise settlement when the arches were excavated. The first move was to install heavy steel beams and columns of flat jacks in the column drives. The beams were surrounded in concrete and grout forced between the concrete and the rock. The flat jacks were pressurised and had the effect of raising the roof level about 6 mm. The centre arch was then excavated and lined and then the outer arches excavated and lined. The maximum final settlement recorded at street level was about 9.5 mm and no damage was caused.

Further construction problems were encountered where the tunnels crossed underneath the existing City Circle tunnels just east of Martin Place — extensive steel supports were required to prevent subsidence of the overlying rock which is heavily stressed by City Circle train loads less than 3 m above the new tunnels.

Where the railway passes beneath the new Theatre Royal, special techniques were used to support the sleepers and rails to reduce noise and vibration.



Tunnelling work was speeded-up by using a tunnel boring machine, appropriately named 'The Mole', shown here at the Woollahra portal.

Overhead wiring train hauled by diesel-electric locomotive specially modified to eliminate harmful fumes.

Viaducts

The above-ground structure over Woolloomooloo is of a pre-stressed concrete continuous box girder viaduct with 10 spans varying in length from 43 m to 50 m. Soil studies showed this area to be saturated alluvial material, so the viaduct is supported on cased piles which extend up to 21 m to the bedrock.

The Rushcutters Bay viaduct also traverses a deep sand basin, overlying hard sandstone up to 30 m below the surface. It was necessary to design one of the supports of this viaduct as a portal frame to allow the Eastern Expressway to pass below.

In designing the viaducts, great thought was given to the aesthetics of the structures and minimisation of noise nuisance. The result was a three cell continuous girder with tapered underside and cantilevered 'wings'.

The girder is made up of precast units each 2.5 m long pre-stressed together on the site. The webs of the precast sections are placed directly under the rails and the horizontal members are designed to resist torsional loading. The tapered outer webs were subsequently adopted as being architecturally pleasing and the cantilever allows room for signal troughing and maintenance operations.

As will be appreciated, the viaduct components were very heavy, each weighing approximately 40 tonnes. The units were manufactured with great precision at the precasting yards and transported to the site and erected on falsework using a gantry crane. Subsequently, when a full span of segments had been erected, they were pulled together by tensioning cables tensioned with hydraulic jacks.

Other Works

As the tunnel and viaduct work progressed, installation of the continuously welded railway track supported on timber sleepers embedded in concrete followed. Each rail is fixed to sleepers with a new type of 'Pandrol' clip fastening. Access was then available for signalling and overhead wiring operations which were installed from the special work trains.

The overhead wiring will provide traction power at 1 500 volts DC from the existing Prince Alfred Substation and from the new substation constructed at Edgecliff.

Additional work trains were used to deliver transformers and other large items to the platform levels of each station.

Station Construction

The construction of the Redfern and Central Stations, located on the eastern side of the existing railway was commenced in the 1947–52 period. At that time, the stations were excavated by open cut methods and the steel frame structures of the stations were erected. When work ceased in 1952 the steel was left exposed and in 1967, these steel structures had corroded badly and major remedial work was required.

Whereas the above stations were excavated from the surface down, the lower levels of Martin Place, Kings Cross and Bondi Junction Stations were excavated and lined by tunnelling methods. However, the concourses were constructed in excavations opened from the surface and are connected to the platform level by escalator shafts. Since it was not feasible in the Martin Place and Kings Cross areas to excavate using explosives, the concourse excavations were completed using large dozers with ripping attachments and hand-held pneumatic tools.

As the station structural works were completed the finishing trades moved in. A high standard was demanded in this work through use of mosaic tiles, and various coatings on the walls, suspended moulded panels for ceilings and floor surfaces of either terrazzo, exposed aggregate or rubber.

Bus deck above Bondi Junction Station nearing completion.

Special Action To Protect Environment

Everything possible was done by the Commission to protect the environment whilst constructing the Eastern Suburbs Railway.

It is an inherent characteristic of all metropolitan railways that the wheel/rail interaction causes ground vibration and generation of air-borne noise. Overseas research indicates that noise and vibration in underground systems cannot be completely eliminated, but every effort has been made to reduce any nuisance to a reasonable level.

With the ESR we have been able to minimise the effect on the environment by constructing 70 per cent of the line underground, including stations.

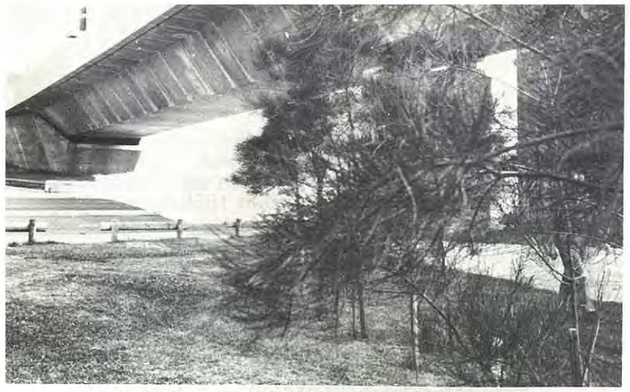
All properties along the route of the railway were inspected prior to any tunnelling, and ground vibration was monitored. Little damage was occasioned to properties.

Attractive Viaducts

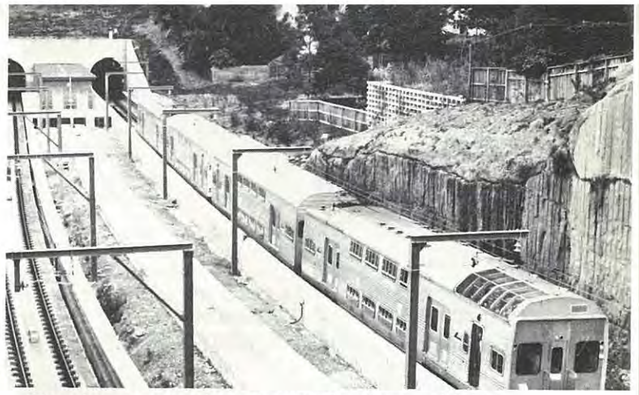
The only above-ground sections are the viaducts over Woolloomooloo Valley, Rushcutters Bay, and Glenmore Road, as well as a small open section at Woollahra where a planned station has been eliminated. The viaducts were designed to be aesthetically pleasing with slim tapered lines and were provided with acoustic parapets to minimise the effect of noise.

Throughout the new line, joints were eliminated by continuously welding the rails and neoprene pads placed between the rail base and sleeper plates.

The new line passes directly beneath the Theatre Royal, which involved provision of a special acoustic road-bed over a distance of 160 metres to eliminate vibration and noise for theatre patrons. The basement floor of the Theatre Royal stage is approximately 4 m above the top of the railway tunnels.



Attractive landscaping has been carried out beneath ESR viaducts.



The above-ground section at Woollahra which is being restored by heavy planting of trees and shrubs.

Discreetly placed rubber cushion pads support the concrete road-bed on which the rails are laid.

Pollution Control

The Public Transport Commission recognises the ever-increasing problems of pollution and its effect on the environment. The modern double-decked carriages produce no air pollution as they are electrically powered.

One of the main benefits which could accrue from the new railway is a big drop in air pollution from cars. We are confident that the new railway with its high frequency service and low-cost fares will divert many car drivers back to public transport. This will not only reduce air pollution from car exhausts, but it will also conserve a considerable quantity of fuel if sufficient car drivers change their travel pattern from car to rail.

Landscaping

Particular attention has been given to restoring areas adjacent to the railway, and we have received good co-operation from Local Government authorities and landowners in our efforts to landscape various areas affected.

These are some of the measures taken:

BONDI JUNCTION — Corner of Oxford and Newland Streets. Old shop in poor condition demolished and area beautified with park, seats and landscaping for the convenience of the general public. A free car park for approximately 300 commuters' cars has been provided by the PTC under the adjoining by-pass road. Discreetly placed planting will soften the harsh concrete and bitumen areas of the car park and bus deck.

WOOLLAHRA — Large areas surrounding above-ground section beautified with heavy planting. An area off Edgecliff Road has been converted into a park and handed over to Woollahra Council for future maintenance.

EDGECLIFF — On the Sydney side at the intersection of Edgecliff Road and Ocean Street area beautified with lawns and shrubs for a public park. Arrangements made with Council to maintain area.

RUSHCUTTERS BAY — Area underneath viaduct adjacent to Weigall Sports Ground leased to Woollahra Council for sporting purposes.

KINGS CROSS — Area on western side of Victoria Street given temporary landscaping of brick paving, planting and fencing to hide the adjoining area not developed.

WOOLLOOMOOLOO BASIN — Area under the viaduct beautified in conjunction with the Council of the City of Sydney.

CENTRAL RAILWAY — Area on western side of Chalmers Street converted into a boulevard and beautified in conjunction with the Council of the City of Sydney.

ALEXANDRIA — South Sydney Council is negotiating with the Commission for dedication of a 3 metre strip of land alongside Henderson Road for beautification.

REDFERN — The Commission has provided extensive landscaping on all surplus land in front of and behind the new underground station.

$9 Million For Escalators

Martin Place escalators longest in Southern Hemisphere

In a major move to provide speedy service and ease of access for Eastern Suburbs Railway passengers, the Commission has installed 39 escalators at stations on the new line. And the escalators linking the concourse and platform levels at Martin Place are the longest in general use in the Southern Hemisphere!

Built at a cost of $9 million, the escalators are the principal means of access between station platforms and the concourses and galleries and other levels above them.

Built to our specifications by the Otis Elevator Company at Bankstown, NSW, the escalators are of a heavy-duty type unique to the Eastern Suburbs Railway.

They have been constructed to the requirements of the PTC to cater for a flow of passengers far above that encountered by normal escalator installations.

At Central Station four escalators operate between the concourse (below Chalmers Street) and the platform. Two of these are at the northern (city) end of the station. Their height of rise is 12.15 m (39 ft 10 ins) while there are two longer escalators at the southern (Devonshire Street) entrance, with a rise of 15.32 m (50 ft 3 ins).

At Town Hall four escalators with a height of rise of 11.58 m (38 ft) operate between the concourse and the platforms of the Eastern Suburbs Railway.

Longest in Southern Hemisphere

Martin Place Station has been designed to cater for a large number of city workers and — because of its depth below street level — has been well provided with escalators.

Three escalators with 3.96 m (13 ft) height of rise operate from the gallery level (just below the street) to the concourse.

The record-breaking escalators link the concourse to the island platform below, and with a height of rise of 16.03 m (52 ft 7 ins) are the longest escalators currently in general use in the Southern Hemisphere. These six escalators carry passengers the height equivalent of a five-storey building!

Kings Cross

Kings Cross Station has seven escalators to provide public access to the platform far below Victoria Street.

From Darlinghurst Road three escalators with 9.14 m (30 ft) rise operate to the concourse. From here four escalators with 14.07 m rise (46 ft 2 ins) service the platform.

Other Stations

Edgecliff, a bus/rail interchange, has three escalators with 3.96 m rise (13 ft) between gallery and concourse. From the concourse four escalators with 10.16 m (33 ft 4 ins) rise operate to the platform.

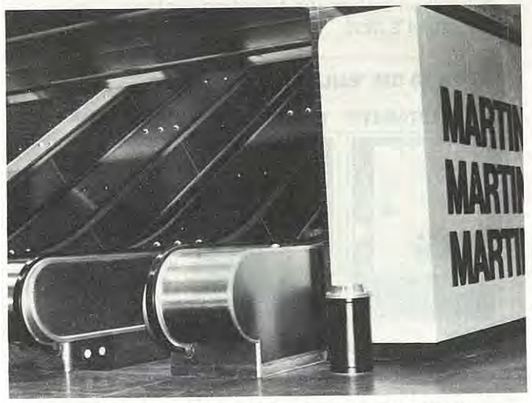
Bondi Junction Station, also a bus/rail interchange, has two escalators with 5.59 m (18 ft 4 ins) rise between concourse and bus deck, with four escalators of 13.46 m (44 ft 2 ins) operating between concourse and platform.

Although the Eastern Suburbs Railway platform at Redfern Station will not be functioning as part of the ESR system until at least six months after the opening of the Central/Bondi Junction link, two escalators have been installed there. These are of 12.88 m (42 ft 3 ins) rise and operate between the platform and the concourse.

Maximum design load of 12 888 persons per hour is on the platform-concourse escalators at Central, Martin Place, Kings Cross and Bondi Junction. At Edgecliff, Redfern and Town Hall, the persons per hour load for the platform-concourse escalators is 10 700.

The gallery-concourse escalators at Martin Place carry 8 000 persons per hour while those at Kings Cross, Edgecliff and Bondi Junction carry 10 700.

Speed of the escalators ranges from 27.43 m (90 ft) per minute (Martin Place gallery to concourse) to 44.19 m (145 ft) per minute (Central, Martin Place, Kings Cross and Bondi Junction concourse-to-platforms).



The escalators linking platform and concourse levels at Martin Place carry passengers the equivalent of a five-storey building. They are the longest in regular use in the Southern Hemisphere.

More Features of ESR

In addition to the many highlights of ESR stations mentioned in accompanying articles, these are only some of the other features which have all combined to make the Eastern Suburbs Railway the Nation's most modern mass transportation system:

Bright Lighting

Lighting at all the ESR stations, particularly platform edge illumination is of the highest standards and well above required levels.

Extensive safeguards have been taken also to ensure a continued power supply for the lighting system.

Each station has two transformers and two power boards. If one board should fail, this will affect only every second light and escalator. There is no danger of an entire section of a station being plunged into darkness. Should a major failure cause all power to be cut off, a further safeguard is provided in the form of an emergency battery system with sufficient power for five hours.

Closed-Circuit Television

Closed-circuit television systems at Martin Place, Kings Cross, Edgecliff and Bondi Junction Stations will assist staff in constantly monitoring platforms, automatic ticket barriers, arcades, galleries and concourses. This is an important safeguard and will enable staff to act promptly and correct any irregularities.

Television surveillance also is an effective deterrent against vandalism.

Non-Slip Sound Absorbing Platform Surface

Black studded rubber tiling is used extensively for platform surfaces because of its long life under heavy pedestrian usage; its non-slip qualities; and with the added advantage of absorbing footstep noise of the thousands of commuters arriving and departing at ESR stations.

Remote Control

Platform destination indicators on all ESR stations will be remotely controlled from the PTC's computerised signalling complex now being installed, as will all points and signals on the new line.

Closed-circuit television at ESR stations assists staff to monitor station premises.

Australia's First Automatic Fare Collection System

The 'Automatic Fare Collection' system now in use at Eastern Suburbs Railway stations is the first ever to be installed in Australia.

The essence of the 'AFC' system is efficiency and economy. Vending and ticket validating machines permit high rates of passenger flow, while maintaining protection against fraudulent use of the transport network.

As the Eastern Suburbs Railway is an intermodal bus/rail transport system, we were conscious of the need for introduction of smooth and speedy ticket selling and checking procedures.

The system is based on magnetically-encoded tickets of credit card size purchased from coin-operated ticket vending machines or booking offices.

These tickets cover bus/rail, rail/bus or rail only journeys and enable entry and exit from the Eastern Suburbs Railway network via automatic turnstile barriers.

The 'Automatic Fare Collection' system provides precise control of access, revenue control and audit of all transactions, log of passenger movements and the flexibility to accommodate multiple fare structures.

Equipment comprises the latest technology, featuring integral microprocessors, and involves over 90 individual items of equipment installed at stations from Central to Bondi Junction, namely:

- 55 entry, exit and reversible automatic turnstile barriers
- 32 ticket vending machines
- 9 booking office machines

The basic system design comes from Cubic Western Data, the prime contractor, who has supplied various forms of fare collection systems in San Francisco, Washington, Philadelphia, Chicago and currently Hong Kong.

Booking Offices

ESR station booking offices are equipped with modern electronic ticket issuing machines operated by the staff.

All types of tickets can be issued rapidly at the booking office windows, which are distinctly identified by the blue window surrounds.

At Town Hall new ticket issuing equipment, which conforms with that at the other ESR stations, has been installed in the booking office to enable the issue of the new magnetic stripe tickets.

The booking offices can handle a full range of ticket issue and booking functions.

Tickets purchased from ESR booking offices are magnetically encoded for use in the automatic turnstiles situated at Bondi Junction, Edgecliff, Kings Cross, Martin Place, Town Hall and Central (ESR) platforms.

Passengers using magnetic stripe tickets must enter and leave through the automatic turnstiles.

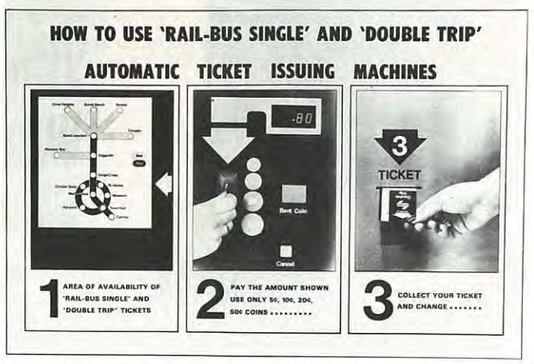
Ticket Vending Machines

There are three kinds of ticket vending machines in use on the ESR. These machines all issue tickets with a magnetic stripe for use in conjunction with the automatic turnstiles.

These are:

- **Rail Only** issuing single or return tickets for rail travel between ESR stations and the City. These machines are at all ESR stations.
- **Double-Trip** — A new combined rail/bus ticket for two rail journeys between Bondi Junction/Edgecliff and the City and two bus journeys in the Eastern Suburbs bus feeder area. These are valid for three months. These machines are at Central, Town Hall, Martin Place and Kings Cross.
- **Rail/Bus** single journey ticket for travel by rail between the City and Edgecliff/Bondi Junction interchange stations plus bus travel in the bus feeder area. These machines issue the 35c rail/bus combination ticket only and they are located at Central, Town Hall, Martin Place and Kings Cross. Rail/Bus combination single tickets *to the City* are available for purchase on buses. As these tickets do not have a magnetic stripe they cannot be used in the automatic turnstiles.

These ticket vending machines are part of the $3 million automatic ticketing system which is Australia's first.



'Step-by-step' instructions on how to use automatic ticket machines have been printed in brochures and displayed on large signs to assist passengers.

Help And Courtesy Appreciated By Our Customers

Hardly a day goes by without us receiving either a letter or telephone expression from passengers on our rail, bus and ferry services of thanks and appreciation for some act of courtesy or assistance.

We are very pleased to be able to pass on to staff extracts from just a few recent letters:

Praise From Queensland Governor

His Excellency, Commodore Sir James Ramsay, CBE, DSC, Governor of Queensland expressed his thanks to the Chief Commissioner in the following terms:

'On my return to Brisbane I should like to let you know just how much my wife and I enjoyed our travel by train to Sydney and return over the Easter week-end.

I cannot praise too highly the courteous service of all those concerned — both on the train and at Sydney Central.

The special coach was most comfortable and the catering of Mr Keith Miller was exceptional.

I should also like to mention that on Easter Monday, my wife and I visited Moss Vale by car and in order to obviate the possibility of missing the 'Brisbane Limited' at 6.30 pm because of the unpredictable road traffic, we arranged to return from Moss Vale to Central in the 'Riverina Express'.

The ready response of the Reservations and the Station Masters at both Central and Moss Vale in facilitating this unscheduled trip reflects most favourably on the Railways of New South Wales.'

'Best Annual Report In 21 Years'

Mr J Maddox, Secretary of the Australian Railways Union very kindly conveyed congratulations to the Commission on the presentation of the 1978 Annual Report. Mr Maddox said:

'Would you please convey to the Chief Commissioner the Union's congratulations on such a comprehensive and detailed report for the previous financial year. I can say, without fear of contradiction, it is one of the best reports I have seen presented by the Commission during the 21 years I have been an officer of this Union.'

'On-Time' Running Praised By Member For Blue Mountains

Mr RJ Clough, MP, Member for Blue Mountains, wrote recently to the Chief Commissioner as follows:

'I am writing to you to ask you to congratulate Public Transport Commission staff for the magnificent results obtained in 'on time' running during the month of March.

As you are aware, I have little hesitation in writing to you when things go wrong, but it is my pleasure this month to indicate that the 'on time' running was the best that has been known for many years.

The 22 working days trains went from Mount Victoria to Sydney averaged an 'on time' running ratio of 19 days. Trains running from Sydney to Mount Victoria were less successful and this appears to be our problem area, but again results obtained were most satisfactory. The worst affected trains were the 5.15 pm and the 11.40 pm to Mount Victoria which were on time on 10 occasions out of 22, but other services showed a very marked improvement and I am very pleased indeed. Please convey my very best wishes to all concerned.'

'Team Effort' Thanked

Mrs S Steadman of Erskineville had this to say about the wonderful assistance she received from station staff at a number of locations:

'My 10 year old daughter recently caught the Rail Motor from Heathcote to Sutherland ahead of myself and my younger daughter. Somehow at Sutherland we missed each other and I continued home, only to find that my daughter was not there.

I rang Erskineville Station, who rang Heathcote and Sutherland Stations, located my daughter at Sutherland, put her on a train with the guard and rang me back to advise that she was safe and to pick her up at the Station Master's office at Central Electric — all inside seven minutes!

I would like to extend my deepest appreciation to Mr Dennis Bennett and Mr Jack Sheenan at Erskineville; the Station Assistant at Sutherland, Mr Noel Blanning the ASM at Central Electric and the guard on the South Coast train. Thank you gentlemen for looking after my daughter so well.'

Newcastle Alderman's Thanks

The following letter from Alderman FJ Edwards of Newcastle City Council speaks for itself:

'May I take up a few minutes of your valuable time to read my letter of commendation, congratulations and thanks to your railway division on behalf of my wife and I and 83 others who formed a party from Jayes Travel Newcastle to embark on the 'Indian-Pacific' train to Perth and back from Newcastle.

It was one of the great experiences of our lifetime to travel on this wonderful train and during the six days and nights we spent on it, I cannot speak too highly of the service, courtesies, attention we received from the conductors of each car, the waiters in the dining car and even from the chef who served up lovely and plentiful food.

Our cabin was everything we desired to make our trip as comfortable as was possible, and a special thanks must go to you and the people who designed this 'Mini Home'.

The work and thought and ideas put into it must have been tremendous and I never visualised that a 4 000 km plus journey could be made so restful with nearly all the benefits of home around you.

It was my first trip across to the west and I can assure you it wont be my last. Allow me to express many peoples' views (despite the criticism you have to endure) that NSW Railways have top rating over the other States' 'rattletraps'.'

Senior Citizens' Week Tours Appreciated

Mr CG Mathieson of Croydon wrote the following letter which was typical of many received praising the bus and ferry tours arranged to coincide with Senior Citizens' Week:

'My wife and I wish to thank you for the free harbour excursion extended to us and other pensioners during Senior Citizens' Week. It was a most enjoyable outing, in which we were entertained and generously treated. We were so well cared for that we felt we were honoured guests.'

Thanks From Overseas Visitors

Two recent letters from overseas indicate the high standard of our various services.

Mrs E Willats of Suffolk, England said:
'As an overseas visitor, I would like to express my appreciation for services received on your buses — bus crews were not only informative but very kind and helpful. I have enjoyed my stay in your country tremendously, aided and abetted by the services mentioned. My sincere thanks to all concerned.'

Mr J Barrie of London stated:
'. . . One of the things that we discovered on our visit was how terribly hospitable and friendly the Australians are, and the officers of the Sydney Transport Department were no exception to this rule.

. . . your new double-decked trains are a real credit.

. . . The most impressive train of all, of course was 'Southern Aurora' to Melbourne. This just knocks anything that we have in this country into obscurity.

. . . one of the things that impressed us was the incredible cheapness of your fares. These are less than half what is charged in London.'

Transport News is the House Journal of the Public Transport Commission of New South Wales, 11-31 York Street, Sydney.

Additional contributions: Staff are invited to submit items and photographs, suitably captioned, for consideration for publication, and it should be indicated if any material is required for return.

Contributions should be sent per 'Despatch' to: The Editor, *Transport News,* c/- Marketing Services, 11th floor, *Transport House.*

Inquiries: For any inquiries regarding production, distribution etc please telephone 38 4860 (PTC) or 29 1175 (Postal).

(Top)
During the initial stages of ESR operations special staff were on duty at stations to assist passengers. Staff wearing their attractive red blazers are shown here during one of the training sessions.

(Bottom)
Mr Alan S Reiher, Chief Commissioner addressing the large crowd at Bondi Junction bus interchange.

Cover photograph:
The Premier, Hon Neville Wran QC MP cuts the ribbon to officially open the Eastern Suburbs Railway. With him is the Minister for Transport Hon Peter Cox MP.