



Long-term Strategic Plan for Rail

Greater Sydney metropolitan region

Overview report



June 2001



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The Hon Carl Scully
Minister for Transport
Minister for Roads
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Dear Minister,

Following a meeting of the Budget Committee of Cabinet on 30 November 2000, you asked me to develop a long-term strategic plan for rail, both for the operation of the rail network and the maintenance and development of the capital stock, incorporating independent analyses and a significant study of future land use and demand scenarios.

In accordance with your request, I am now pleased to present to you this high-level *Overview Report*, which summarises a detailed and integrated *Long-Term Strategic Plan for Rail for Sydney, the Central Coast, Newcastle, the Illawarra, the South Coast and the Blue Mountains*.

The *Overview Report* and the *Long-Term Strategic Plan for Rail* have been prepared with the active assistance of the State Rail Authority, Rail Infrastructure Corporation and the Department of Transport. Their valuable contributions are gratefully acknowledged.

A pragmatic and integrated plan

The *Long-Term Strategic Plan for Rail* is long overdue.

In contrast to the attention paid to road network development needs in recent years, there had not been a detailed and comprehensive examination of the needs of the greater metropolitan rail system since the former State Rail Authority was split up in 1996. As a result, planning was undertaken on an independent basis by Rail Access Corporation (now part of Rail Infrastructure Corporation) and the State Rail Authority, rather than in unison.

Further, it is generally acknowledged that by its very nature the Government's 1998 transport strategy *Action for Transport 2010* was not able to "drill down" to the level of detail required to fully analyse what was (and is) needed to achieve an efficient and effective metropolitan rail system.

The *Long-Term Strategic Plan for Rail* seeks to redress these deficiencies by **setting out, with expressly acknowledged assumptions and clearly argued justifications, a comprehensive program of short-term, medium-term and long-term operational, infrastructure and rolling stock changes to the metropolitan rail system.**

In doing so, it should be regarded not as "the final word" but rather as the *starting* point for ongoing strategic planning. For example, the timeframes for individual projects are based on the best advice on likely future patronage growth patterns available at present, but will need to be continually reassessed in the light of (for example) changes in land-use and employment patterns and changes in the economic climate.

The *Long-Term Strategic Plan for Rail* recognises **the importance of State Rail's taking a more proactive role than in the past in indicating its requirements for the future**—both as the sole operator of suburban and intercity passenger services in the metropolitan region and as the organisation now legally responsible for the timetabling and control of all

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passenger and freight train movements on the metropolitan rail network. With State Rail providing the necessary guidance, initially through this *Long-Term Strategic Plan for Rail*, Rail Infrastructure Corporation will no longer be left to “second guess” what its future requirements are.

Similarly, the development of the *Long-Term Strategic Plan for Rail* provides **an opportunity for the Government to guide the private sector in more productive directions**, by making it clear what the overall requirements for the metropolitan rail system are. In this regard, valuable lessons have been learnt in the late 1990s concerning the importance of ensuring private sector projects deliver what is actually required for an efficient and effective rail system, rather than being developed almost in isolation from these requirements. If a summary of the rail system requirements and responses set out in the *Long-Term Strategic Plan for Rail* were publicly released, private sector organisations submitting ideas for new rail infrastructure etc would be much better placed to put forward proposals that are likely to prove acceptable and attractive to the Government and the rail agencies.

Some changes in priorities

As already indicated, the starting basis for the *Long-Term Strategic Plan for Rail* is *Action for Transport 2010*. The *Long-Term Strategic Plan for Rail* builds on this foundation by specifically addressing:

- The best ways of achieving the regional and corridor transport objectives established by *Action for Transport*, and
- Issues which were largely beyond the scope of *Action for Transport*, including, in particular, rail safety and reliability issues and the rail system’s critical capacity constraints.

In some instances the new analyses, using a range of projections for the most likely growth in rail patronage on different rail corridors, now point to a **reordering of priorities, with a greater emphasis on reliability and capacity improvements before some (but not all) of the more ambitious projects proceed**.

For example, the original objectives of several *Action for Transport* projects will simply not be able to be achieved unless capacity-enhancement projects in other areas already subject to severe congestion, especially the inner city, are completed first.

A longer-term conceptual framework

At the same time, the new analyses have permitted the development of a **more coherent long-term view** of a possible “ultimate” form of a greater metropolitan rail system, serving the multiple social, economic, employment and educational access and other transport needs of a metropolis of (perhaps) six million people.

This provides an essential long-term but non-prescriptive context for all rail development proposals, in much the same way as long-term regional and corridor plans have guided road network development over the last 55 years.

Just as vital road corridors have been reserved in the past, there is now **an urgent need to take action to protect future rail corridors**, and especially the corridors identified in alignment studies for new rail lines required in the next 10–20 years, through planning controls, land acquisitions and other measures.

Choosing the most appropriate mode of public transport

The *Long-Term Strategic Plan for Rail* focuses heavily on the transport tasks most suited to heavy rail—for passenger transport, the movement of large numbers of people at comparatively high speeds.

In doing so, however, the *Long-Term Strategic Plan for Rail* expressly recognises that **in many situations other public transport modes, including road and “transitway”-based buses and light rail, are more suitable**, especially when relatively small numbers of people are involved.

For example, in the case of several of the possible new longer-term rail corridors in suburban Sydney the *Long-Term Strategic Plan for Rail* suggests that other modes should probably be used at the outset, with rail modes being adopted for a corridor only if and when the much higher speeds and capacities of heavy rail become important or when constraints such as road congestion prevent buses from fulfilling their transport tasks.

In short, transitways and other “feeder” bus services will serve a vital role *in combination with* heavy rail.

The *Long-Term Strategic Plan for Rail* also expressly recognises **the importance of easy inter-modal and rail–rail interchanging**. As the metropolis develops, the amount of interchanging required will inevitably increase, although rail operation studies suggest that even in the long term rail–rail interchanging should be able to be minimised for the most heavily trafficked routes.

Innovative approaches

A range of “non-traditional” options for enhancing the capacity, performance and safety of the metropolitan rail system have also been examined.

While the *Long-Term Strategic Plan for Rail* makes it clear that there are no “magic bullet” solutions, as has sometimes been claimed, a series of investigations and pilot installations are recommended, and several of the options, including communications-based signalling and new “metro”-style railway lines operating independently of the existing rail network, are identified as having potentially important benefits, especially in the medium to longer term.

The critical issue of capacity constraints

Probably the most important single aspect of the *Long-Term Strategic Plan for Rail*, however, is its clear identification of the seriousness of the looming problem of severe capacity constraints on the metropolitan rail network.

This problem reflects the fact that in the last 50 years there have been almost no track amplifications—the equivalent of road widenings to provide extra traffic lanes—on the metropolitan rail network.

This means all types of services—fast and slow, and to and from a wide variety of locations via a wide variety of routes—are forced to share the same overcrowded tracks, with few if any overtaking opportunities and with major congestion at the routes’ numerous junctions.

The system is rapidly approaching gridlock. This is already manifest in the extreme day-to-day sensitivity of CityRail services to even the most minor of disruptive incidents.

The *Long-Term Strategic Plan for Rail* sets out a detailed program of changes in rail operating patterns and essential capacity-enhancing works for the next decade, with another prime objective being to restore the physical separation of different types of CityRail services in order to improve on-time running.

This program of works is essential *regardless* of whether a communications-based signalling system—sometimes presented as an “alternative”—is adopted.

But the *Long-Term Strategic Plan for Rail* also makes it clear that **by between about 2011 and about 2015 the relief provided by these corridor-based enhancements will be effectively exhausted and a new rail route through the**

inner city and the CBD, between Eveleigh and St Leonards, will be essential. Again, this conclusion applies *regardless* of whether a communications-based signalling system is adopted.

In essence the situation now is analogous to that before the Eastern Suburbs Railway was built in the 1970s. By providing a new route through the inner city and CBD, the Eastern Suburbs Railway provided vital relief for the City Circle and the North Shore line through the CBD, but this capacity relief will shortly be completely used up, even with all the capacity augmentations proposed for the next ten years, and another additional route through the CBD will once again be required.

Initial investigations into the new route are now underway. Once the route and staging options and their operational implications have been identified, a relatively early decision will need to be made by the Government, as a lead time of at least ten years is likely to be required before construction of even the first stage or stages could be completed.

Because of the complexity of almost all aspects of this project, it will be essential to start serious planning for this new line immediately.

Yours sincerely,

Ron Christie
Coordinator General of Rail

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