AUDITOR-GENERAL'S REPORT

PERFORMANCE AUDIT

Connecting with Public Transport
Ministry of Transport

The Legislative Assembly
Parliament House
SYDNEY NSW 2000

The Legislative Council
Parliament House
SYDNEY NSW 2000

In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **Connecting with Public Transport: Ministry of Transport.**

Peter Achterstraat
Auditor-General

Sydney
June 2007

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Foreword

Sydney has an extensive public transport network that includes RailCorp trains, State Transit Authority buses, Sydney Ferries Corporation ferries, light rail, private bus operators and taxis.

Interchange occurs when people transfer from one of these modes of transport to another, or between two services of the same mode. In addition, people join or leave the public transport system on foot, by bicycle, and by car.

This audit looks at how well Sydney's system of interchanges promotes increased use of public transport. It focuses on the critical role of the Ministry of Transport.

This is an area of increasing investment and strategic importance. The State Plan 2006 aims to increase the share of peak hour journeys on the public transport system. The Metropolitan Strategy 2005 identifies strategic transport corridors and major centres. An $8 billion Metropolitan Rail Expansion Plan was announced in 2005.

The report builds on our audit work over the last few years in the NSW transport sector. I believe it will inform planning and coordination of public transport infrastructure, and add to transparency in an area of increasing interest to commuters and the private sector.

Peter Achterstraat
Auditor-General

June 2007

Executive summary

The focus of our audit

The NSW Government released the *State Plan – A New Direction for NSW* in November 2006. A priority area is to increase the public transport system's share of peak hour journeys undertaken in Sydney.

Interchanges provide access to public transport. They include bus stops, railway stations, ferry wharves, taxi ranks, kiss and ride areas, cycle racks and park and ride areas. Many key aspects of integration come together at interchanges including information, ticketing, network accessibility, service coordination and personal security.

Our audit looks at the effectiveness of interchanges in promoting increased use of public transport in Sydney. More particularly, we asked three questions:

- Has the Government adopted a coordinated and strategic approach to developing interchanges?
- Are there adequate information systems to inform the public and management?
- Has funding of interchanges been adequately addressed?

The audit has included a review of interchange projects built since 1992-93. In more recent years there has been less interchange development. In this context, the audit has looked for areas for improvement that the Ministry of Transport can apply in its development of new processes.

Audit opinion

We see considerable potential for the Ministry of Transport to plan and manage interchanges more effectively, so as to make better use of our public transport network.

Interchanges can promote access to the public transport network with good waiting environments and fast transfers. But poor interchanges, with long walks, stairs, long waits, poor travelling information, and poor weather protection can substantially discourage access to public transport.

The State Government has in recent years developed a *State Plan*, a *Metropolitan Strategy* and an *Urban Transport Statement* to encourage development in accessible locations and improve transport between Sydney's centres. During this period, the Ministry has focused particularly on arrangements to improve private bus services.

We believe that the Ministry now needs to focus more on multi-modal transport planning and interchange performance. It needs to assign responsibility for the coordination and oversight of inter-modal operations to an entity resourced for the purpose. Without this it will continue to be very difficult to identify and address unmet needs, seek and secure stakeholder funding, and monitor and evaluate system performance.

Below, we explain in brief the basis for this opinion. Our analysis is set out in the report that follows.

Key audit findings

Has the Government adopted a coordinated and strategic approach?

The State Government has in recent years developed high level documents integrating land use and public transport, including the need to encourage development in accessible locations and improve transport between Sydney's centres.

We found that interchange projects prior to this were not selected within a long term strategic framework. There is little to indicate how or why specific projects were chosen, and what may have been needed in the longer term. There were no multi-modal transport plans that integrated Sydney's inter-modal transport network as a whole.

There is now an opportunity for a coordinating body to provide a strategic focus on interchanges. Coordination requires:

- a network linking bus routes with rail and ferry that responds to a more diverse range of commuter destinations and times
- closely integrated interchanges and terminus facilities
- network development involving fare coordination, schedule and service coordination, public information and marketing coordination and administrative coordination.

Are there adequate information systems to inform the public and management?

At most interchanges there is limited local signage. The main source of information for Sydney metropolitan passengers planning to travel by more than one travel mode is the Transport Infoline 131500 website. This service does not indicate how the interchange is laid out and which bus services depart from each rank. It does not assist people to plan part of a journey by taxi or by car.

There is no up to date system inventory and identification of interchange access attributes, capacity, utilisation and costs to enable assessment of performance. There is no listing of capital amenities provided such as shelters, timetable signage, seating, on-site retail vendors, security devices. There is no identification of access attributes such as rail service levels, capacity, utilisation and costs.

Nobody regularly reports on interchange and car park adequacy and performance. In addition, there is no evaluation process framework to establish the impact of an interchange on public transport. We found no 'before and after' studies or ongoing monitoring programs of usage, other than the limited information available from the RailCorp annual travel survey. We found little evidence of surveys of commuters to see if behaviour had actually changed as a result of interchange development. The Ministry of Transport should examine the opportunity to incorporate interchange facilities as part of the annual household travel survey.

We found no information about who is using newly constructed interchange facilities and what they used to do and whether there has been any improvement in travel time. We found nothing to indicate which facilities could be considered 'successes' and which 'failures' due to improved efficiency in movements through the interchange and increased capacity.

Has funding of interchanges been adequately addressed?	The State's total investment and future requirements cannot be readily identified.
	Funding objectives and options for interchanges need to be developed.
	There is a potential to make more use of alternative funding sources, such as from private sector investment and multiple use developments.

Recommendations

We recommend that the Ministry of Transport:

Assign clear responsibilities	▪ establish a coordinating and oversight entity to assess interchange standards, monitor interchange performance, plan access to the public transport system, and plan whole of network development
	▪ establish clear responsibilities for interchange "ownership", operation and maintenance
Develop a more strategic approach	▪ set performance objectives for interchanges such as demand levels, connectivity offered and cost-effectiveness achieved
	▪ develop multi-modal transport plans to improve interchange planning and overall effectiveness
	▪ further develop the 'quality gap' assessment using facility inspections against a set of specific standards and risk assessments
	▪ develop and publish a ten year rolling plan for interchanges
Develop and promote Best Practice	▪ develop and issue Best Practice Guidelines for different categories of interchanges, including arrangements for integrated emergency and security response
	▪ carry out a review against Best Practice Guidelines to assess the quality of the present interchange arrangements
	▪ work in partnership with local stakeholders to identify ways of ensuring good quality multi-modal interchanges, particularly those where quality falls short of the Guidelines.
Provide better information	▪ provide better information to the public, such as by including on the Transport Infoline 131500 website details of interchange layouts, transport services, kiss and ride facilities, park and ride facilities, taxi ranks and amenities
	▪ enhance the Transport Infoline 131500 website journey planner such as by adding an ability to plan part of the journey by taxi or car, as a means of encouraging a change in travel behaviour
	▪ develop a strategy to assess and, if necessary, improve brand awareness of the service
	▪ establish and maintain an accurate inventory of existing facilities, site ownership by facility, transport services provided, capital amenities provided, identification of access attributes, capacity, utilisation and costs
	▪ link the facilities inventory to a map including existing and planned bus, rail and ferry routes and services to develop a context for placing new facilities or expanding those already in existence

Systematically evaluate performance	▪ establish an evaluation process framework with performance objectives, performance monitoring and post evaluation to establish the impact of the interchange facilities on public transport
	▪ establish a means of systematically reviewing the frequency and character of transport service provided at individual facilities to ensure that it is adequate for the purpose
Address the need for long term funding	▪ forecast long term funding requirements for development, operations, maintenance and security
	▪ clearly state funding objectives and options for interchanges such as minimising the cost to commuters, minimising the cost to public agencies or promoting joint development
	▪ promote joint development of interchanges using a more market-oriented approach
	▪ continue to improve transparency in how *Parking Space Levy* funds are allocated to infrastructure projects by the use of criteria (including extent of achievement of the object of the PSL legislation) and evaluation of the relative merits of alternatives
	▪ identify and assess the adequacy of funding sources for interchanges, including for operations, maintenance and security
	▪ identify, secure and leverage further funding sources as necessary to address any shortfalls.

Response from the Ministry of Transport

Thank you for your letter dated 11 May 2007 forwarding the report of the Performance Audit, Connecting With Public Transport.

I wish to acknowledge the considerable liaison between our offices regarding the conduct of the audit and the content of the report.

The Ministry notes your comments regarding the need for overall coordination of interchanges and the need to develop a more strategic approach to the development of interchanges. The Ministry will review and examine the option of establishing a coordinating body to oversight interchanges.

In regard to the issue of a strategic approach to interchange development, as noted in your report the Ministry has already established a process for evaluation and ranking interchange proposals. However the Ministry agrees with your recommendations that this process needs to be enhanced and for this reason the Ministry will be reviewing its procedures.

Further, the Ministry will continue to provide input through the Urban Transport and State Plan processes in order to ensure that interchanges are considered within the broader context of transport planning.

In relation to the specific issues raised in your report, the following comments are provided:

Assign Clear Responsibilities

In relation to the establishment of an entity to coordinate and oversight interchanges, MoT will examine this option in conjunction with the various owners of interchange infrastructure. MoT has identified responsibilities for the ownership, operations and maintenance of interchanges and will continue to ensure that these responsibilities are clearly identified in the development of future projects.

Develop a More Strategic Approach

In connection with the development of performance objectives for interchanges and the processes for interchange planning and quality gap assessment, MoT has already implemented project criteria for developing forward interchange projects and programs. However, MoT acknowledges that its criteria can be enhanced by adopting the specific recommendations made in the audit report. MoT will therefore enhance its processes in this way.

Regarding the recommendation to produce 10 year rolling plans for interchange programs, MoT will continue to incorporate interchange programs within the Government's overall transport strategy statements including the Urban Transport Statement, the State Plan and specific regional planning initiatives.

Develop and Promote Best Practice

MoT will examine the development of best practice guidelines as suggested by audit.

In connection to the issue of emergency and security response, as indicated in the audit report MoT has already addressed this issue in relation to the Top 10 highest priority interchanges and has further identified 13 priority sites for review.

Provide Better Information

MoT will investigate the establishment of a database incorporating the features suggested by the audit. This investigation will also include scope for linking bus, rail and ferry services to the database to further enhance the process for determining future interchange plans.

The incorporation of car and taxi travel into the Transport Infoline 131500 website journey planner will also be examined.

Systematically Evaluate Performance

MoT will develop and implement a post project evaluation process as recommended by the audit report.

In connection with the recommendation covering the review of transport services, MoT's bus service contracts already provide for a network review process which will be used to review bus services as suggested by audit and MoT will examine the opportunity to incorporate rail and ferry services into the interchange review process.

Address the Need for Long Term Funding

MoT will continue to address long term funding requirements for the interchange program as part of its forward budget estimates.

MoT has already implemented a system of project assessment setting out clear evaluation criteria for the development of forward interchange programs. MoT will review this process to incorporate audit recommendations to enhance the process.

The Government recently announced through the Urban Transport Statement the examination of the joint development of facilities with the private sector. MoT will continue to examine these opportunities on a case by case basis as projects are being considered as part of the strategic planning process.

(signed)

Jim Glasson
Director General

Dated: 28 May 2007

1. Introduction

**State Plan to
increase use of
public transport**

The NSW Government's *State Plan – A New Direction for NSW*, released in
November 2006, aims to increase the use of public transport, particularly
for the journey to work.

This is a considerable challenge. In Sydney around one in five people use
public transport for the journey to work. The target is to increase this to
one in four by 2016.

But public transport's share of total travel has been falling due to a range
of factors.

> Traditionally, public transport's strength has been in moving
> large numbers of people efficiently between major collection
> points and central business districts (CBDs) and within CBDs. In
> general, public transport's share of total travel is small and
> declining in the face of a number of universal trends including:
>
> ▫ rising incomes
> ▫ the declining share of commuting trips relative to trips for
>   leisure and other purposes
> ▫ the falling cost of car travel
> ▫ more dispersed employment and settlement patterns
> ▫ more flexible working hours
> ▫ increased workforce participation by women with a resulting
>   increase in multi-trip requirements.
>
> As a result, it has often proved difficult and costly to induce a
> mode shift towards public transport.
>
> **Source:** Bureau of Transport Economics, *Greenhouse Policy Options for
> Transport,* 2002.

Added to this is the declining physical accessibility of Sydney's
metropolitan transport system. Its main lines were originally laid out like
the spokes of a wheel. Development and population was concentrated
along these spokes. Over the years, as the population increased, the
spokes extended and grew further apart and the population spread
between the spokes. Walking to public transport is not an option for many
who live further out of Sydney, as it is simply too far to walk.

Interchanges promote access to public transport

For this reason, interchanges are gaining increased importance. Interchanges promote access to public transport and may include bus stops, railway stations, ferry wharves, taxi ranks, kiss and ride areas, cycle racks and park and ride areas.

Local buses, park and ride and kiss and ride facilities expand the interchange catchment beyond the walking catchment, allowing people living in low-density areas to catch public transport. The importance of the motor vehicle in outer areas is illustrated by the table below:

Mode of access to rail stations

| Inner city average | Outer city average |
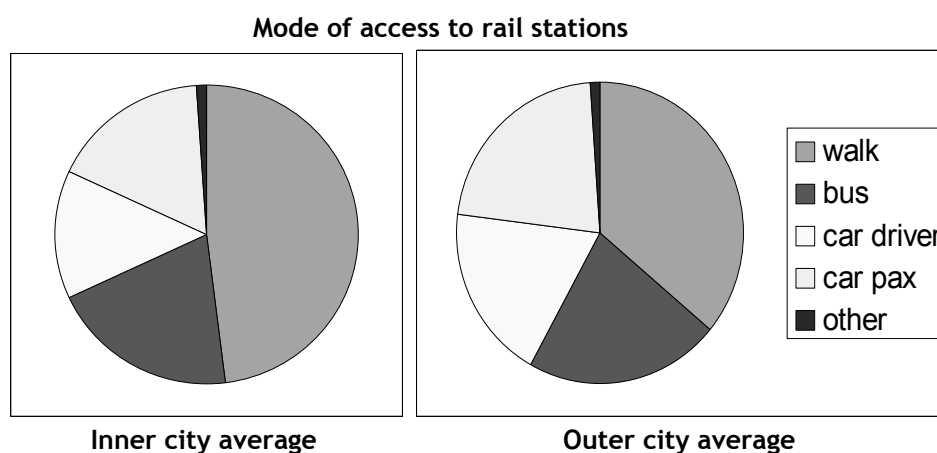
Source: Transport and Population Data Centre, 1999.

Modes served

Most Sydney interchanges are based on railway stations because of:

- speed and relative lack of congestion on rail corridors (compared to roads)
- capacity of the rail network
- relative reliability of rail services.

Major examples are at Bondi Junction, Parramatta, Liverpool, Mount Druitt and Blacktown. Most railway stations have local bus services, informal kiss and ride, and some parking facilities – usually developed on surplus land owned by RailCorp. Parking also occurs informally on nearby streets.

Major bus routes generally have less need for interchange facilities. Bus routes tend to have many stops that are relatively closely spaced. Most passengers are likely to walk to the bus stop or use kiss and ride. Examples of major bus only interchanges are at Lane Cove, Neutral Bay Junction and St Ives. The new bus transitways also have some purpose built facilities.

Ferry wharves have a similar role to that of rail stations, although generally on a lesser scale. Major examples are Manly Wharf and Circular Quay. As there is usually very little land available near wharves suitable for providing park and ride, any parking is on the street.

Interchange categories	The Ministry has categorised interchanges to reflect their size and planning importance, as follows:	

Interchange Category	Typical examples	Number
Global/regional	Central, Circular Quay, Parramatta	15
Major/specialised	Strathfield, Burwood, Westmead	32
Multi-access	Redfern, Granville, Lane Cove	100
Local access	Cronulla, St Ives, Penshurst	107
Strategic corridor bus stops	Spit Junction, Kingsford, Menai	32
		286

Interchange development

While there has been considerable interchange development during the last two to three decades, relatively few projects have been undertaken in recent years. The Ministry of Transport explained that during this time the major funding source - the *Parking Space Levy* - was committed to a small number of major infrastructure projects. The Ministry indicated to us that, as the funding commitment to these major projects is now starting to reduce, it has commenced a process to enable the selection and prioritisation of projects to maximise the benefits to the community.

This audit

Our audit looks at the effectiveness of interchanges in promoting increased use of public transport in Sydney.

To do this, we ask three questions:

- Has the Government adopted a coordinated and strategic approach to developing interchanges?
- Are there adequate information systems to inform the public and management?
- Has funding of interchanges been adequately addressed?

The audit has included a review of interchange projects built since 1992-93. In more recent years there has been less interchange development. In this context, the audit has looked for areas for improvement that the NSW Ministry of Transport can apply in its development of new processes.

Our findings in relation to each key question are discussed in the next three chapters.

2. Is there a coordinated and strategic approach?

At a glance

The key question we wanted to answer was:

Has the Government adopted a coordinated and strategic approach to developing interchanges?

Our assessment:

- There is an opportunity for a coordinating body to provide a strategic focus on interchanges.

- A framework for the participation of the private sector or local councils needs to be developed.

- One of the major problems associated with the operation of interchanges is no one has responsibility for the interchange as a whole. This lack of "ownership" of interchange facilities by operators and users contributes to poor features and poorly maintained facilities.

- The State Government has in recent years developed high level documents integrating land use and public transport, including the need to encourage development in accessible locations and improve transport between Sydney's centres.

- We found that interchange projects prior to this were not selected within a long term strategic framework. There is little to indicate how or why specific projects were chosen, and what may have been needed in the longer term.

- Performance objectives and measures of effectiveness for interchanges need to be developed.

- The Ministry's new prioritising processes are a step forward and potentially offer greater transparency. The processes need to be further developed, particularly to incorporate value for money assessment. This could be done through a new coordinating body.

- There is a need for specific guidance and minimum standards in relation to interchanges in order to ensure that interchanges are developed and improved in a consistent fashion.

2.1 Is there a mechanism or framework for participation and cooperation?

Our assessment

There is an opportunity for a coordinating body to provide a strategic focus on interchanges.

A framework for the participation of the private sector or local councils needs to be developed.

One of the major problems associated with the operation of interchanges is no one has responsibility for the interchange as a whole. This lack of "ownership" of interchange facilities by operators and users contributes to poor features and poorly maintained facilities.

Agency responsibilities

Several agencies have responsibilities related to inter-modal interchanges.

Predominant of these is the Ministry that:

- provides transport policy advice
- frequently has the lead role in funding new interchange works, as it administers the principal funding mechanism
- has led the development and upgrading of a number of inter-modal interchanges including major park and ride facilities, involving transport agencies, the private sector and local government
- plans and manages the bus network (including schedule and service coordination, fare coordination, public information)
- contracts State Transit Authority, private bus operators, and Sydney Ferries to deliver metropolitan bus and ferry services.

However, the Ministry does not:

- own, operate or maintain interchanges
- monitor interchange performance
- assess interchange standards
- plan and manage access to the public transport system
- plan and manage whole of network development.

Other agencies with responsibilities related to interchanges include:

- the various transport agencies that service the interchanges including State Transit Authority, Sydney Ferries, the private bus companies and RailCorp (that also owns the rail stations that form the core of many interchanges)
- Roads and Traffic Authority, including responsibility for bus priority measures
- Transport Infrastructure Development Corporation which delivers major transport infrastructure, such as interchanges, terminuses and related projects
- Public Transport Ticketing Corporation that leads development of an integrated ticketing system
- Department of Planning that coordinates land use planning and transport initiatives and works with the agencies and local councils, particularly in relation to growth areas.

Agency collaboration	The Government is endeavouring to strengthen liaison and collaboration between the Ministry, the Department of Planning, RailCorp and the Roads and Traffic Authority on transport planning issues by:

- strengthening the role of the Transport CEO Cluster Group to clear all major transport consultancies prior to commissioning, and major initiatives prior to Cabinet review
- establishing a Centre for Transport Planning and Development and a role of Transport Corridor Coordinator.

Stakeholder participation and cooperation	Stakeholder participation and cooperation can be used to:

- determine minimum service standards for interchanges, design standards, and prioritisation
- reduce opposition to future facilities by incorporating public concerns at the outset, rather than attempting to mitigate those concerns at the time of construction
- provide a more commercial focus to future developments and offer the prospect of public private partnerships over long periods.

The 2004 *Review of Bus Services in NSW* recommended that regional service planning forums, comprised of representatives from the lead operator, local government, the RTA, community transport local working groups and the Ministry, should be convened to assist with the service planning and review process. This process has commenced.

We found no framework for the participation of the private sector or local councils, other than in relation to local bus services or specific interchange developments.

"Ownership" of interchanges	One of the major problems associated with the operation of interchanges is no one has responsibility or "ownership" for the interchange as a whole, as seen from a commuter's perspective. RailCorp usually has the lead role as the major transport service provider. Its stations form the major part of interchanges, and most park and ride are built on its land. But RailCorp's responsibility has in the past been viewed as ending at its boundary.

Moreover many facilities are not owned or maintained by RailCorp, with some often owned by local councils, or constructed by local councils on RailCorp land under a lease agreement. These arrangements with councils only address the general upkeep of the facilities – such as emptying bins, pressure hosing the footways and making repairs to roadways. They do not include such items as information and signage.

This lack of "ownership" of interchange facilities by operators and users contributes to features such as long walking distances, lack of weather protection, poorly maintained timetables and information displays and at times dirty and poorly maintained facilities.

For example at one major interchange:
- the directional and rank signage was out of date in places
- graffiti and vandalism had rendered many of the signs unreadable
- the physical infrastructure (shelters, footpaths) were dirty and damaged
- the interchange roadway was subsiding in high traffic areas.

The issue of interchange ownership is not new. Possible solutions were suggested in a RailCorp paper fifteen years ago:

> The following are some possibilities which could be pursued:
> ▫ one service provider take on the role
> ▫ the Department of Transport take on the role
> ▫ the owner of the development be given the responsibility and users contribute to the costs
> ▫ privatisation of some of the major interchanges with the various users contributing
> ▫ the responsibility be shared depending on the category of interchange.
>
> This is an important matter which should be put on the transport agenda as being critical to the future efficiency of the transport system.
>
> Source: RailCorp, *CityRail Interchange Policy Working Paper,* 1992.

In 2001 the Ministry was considering how best to deal with the issue:

> ▫ all interchanges to have an Operating Manual.
> ▫ where possible, each interchange to have a person clearly identified as responsible for its operations.
>
> Source: NSW Department of Transport, (Draft) *Interchange Planning and Design Practice Notes*, 2001.

Precinct Manager   RailCorp as the main service provider has recently been trialling the concept of a Precinct Management Deed, agreed to by a facility's joint owners, and a Precinct Manager who is a RailCorp staff member to act on their behalf to achieve:

- safe and managed bus and interchange operations
- operations performance monitored and issues reported
- effective maintenance of systems/facilities
- timely rectification of breakdowns and vandalism issues
- coordinated emergency readiness.

RailCorp have appointed one such Precinct Manager, with responsibility for Bondi Junction, Parramatta, Mt Druitt and Blacktown.

Precinct security   RailCorp indicated to us that a major driver was the need for an integrated security response to an incident. This needs to involve the various stakeholders and local authorities such as police, fire and ambulance. The Ministry, together with NSW Police and the Premier's Department, has also been focusing on this subject and has initiated the establishment of Transport Security Precinct Committees for the 10 interchanges considered to be most at risk.

Limits to usefulness

There are obvious benefits in RailCorp appointing a Precinct Manager, but there are also limits to the use of this approach as:

- major activities at many interchanges are bus or ferry related. Even where RailCorp has a predominant role, as at Parramatta interchange, a recent review of bus usage showed that less than half the bus passengers arrived by rail

- State Transit Authority would find it difficult to take on a similar role. It does not have similar facilities expertise and it needs to compete with private buses that are not responsible for providing their own infrastructure

- the Precinct Manager is only present at individual interchanges on a part time basis (and may be on leave).

Another suggestion

The *Review of Bus Services in NSW*, 2004 suggested that the issue be addressed by assigning a lead role to the Transport Infrastructure and Development Corporation:

> consideration should be given to the Transport Infrastructure and Development Corporation taking a lead role in working with other relevant Government agencies to resolve the issues of ownership, funding and maintenance of amenities at new interchanges and stations
>
> Source: NSW Government, *Review of Bus Services in NSW*, 2004.

But the Transport Infrastructure and Development Corporation was set up to project manage major State transport projects, not minor works and maintenance for interchanges and car parks.

A coordinating body

There is no coordinating body to provide a strategic focus on interchanges.

Responsibility for interchanges falls between the agencies. There is coordination on a project basis and in relation to changes to rail timetables that are focused on serving the CBD. But coordinating transport services needs to be more than just coordinating bus schedules for CBD workers. Coordination requires:

- a network linking bus routes with rail and ferry that responds to a more diverse range of commuter destinations and times

- closely integrated interchanges and terminus facilities

- network development involving fare coordination, schedule and service coordination, public information and marketing coordination and administrative coordination.

The *Review of Bus Services in NSW* identified the establishment of a Passenger Transport Authority as an issue in 2004.

> In the longer term, serious consideration should be given to the establishment of an appropriate entity to enable the separation of asset control from the operation of services, to realise a range of benefits as outlined in this Report.
>
> Source: NSW Government, *Review of Bus Services in NSW*, 2004.

There are many examples of major cities moving in this direction to achieve closer integration and joint planning of services. They tend to operate under one readily identifiable brand – such as the *Transperth* example highlighted below.

> ### Transperth
>
> The Transperth integrated public transport network is centrally-controlled, planned, marketed and coordinated by the Transperth branch of the PTA. Transperth has a range of contracted service providers including Transperth Train Operations (an in-house division of the PTA), three contracted bus companies, one contracted ferry operator and a series of ancillary contracts such as cleaning and maintenance.
>
> Source: (Perth) Public Transport Authority website accessed 7 March 2007.

We observed that most major cities have moved in this direction, as for example:

- Transperth Public Transport Authority
- Queensland Transport and *Translink*
- Auckland Regional Transport Authority
- Transport for London
- Greater Vancouver Transportation Authority
- OC Transpo the transit authority for Ottawa
- New York Metropolitan Transportation Authority
- Chicago Transit Authority
- Washington Metropolitan Area Transit Authority
- Massachusetts Bay Transportation Authority
- San Francisco County Transportation Authority
- Los Angeles County Metropolitan Transportation Authority
- RATP the transport authority for Paris
- BVG the transport authority for Berlin
- VBZ the transport authority for Zurich
- ATAC the transportation authority for Rome.

NSW has had some similarly named, but quite different in purpose, organisations in the past including:

- a committee known as the 'public transport authority' had an advisory role for some years but was discontinued in 2003-04
- an 'urban transit authority' that for some years coordinated mainly bus transport in the Sydney, Newcastle and Wollongong metropolitan areas, being separate from State Rail
- the *Olympic Roads and Transport Authority* (ORTA) which the NSW Government developed for the 2000 Sydney Olympics. Unlike other transport authorities, ORTA focused intensively on a single event and limited other commuter activities.

The Ministry has control of delivery of all bus services and is in a strong position to play a more prominent role.

Recommendation   We recommend that the Ministry:

- establish a coordinating and oversight entity to assess interchange standards, monitor interchange performance, plan access to the public transport system, and plan whole of network development
- establish clear responsibilities for interchange "ownership", operation and maintenance.

2.2   Are objectives and plans sufficiently clear and comprehensive?

Our assessment   The State Government has in recent years developed high level documents integrating land use and public transport, including the need to encourage development in accessible locations and improve transport between Sydney's centres.

We found that interchange projects prior to this were not selected within a long term strategic framework. There is little to indicate how or why specific projects were chosen, and what may have been needed in the longer term.

Performance objectives and measures of effectiveness for interchanges need to be developed.

The Ministry's new prioritising processes are a step forward and potentially offer greater transparency. The processes need to be further developed, particularly to incorporate value for money assessment. This could be done through a new coordinating body.

State Plan and related transport announcements   The State Government has in recent years developed high level documents concerning public transport and land use:

- The *State Plan*, November 2006, aims to increase the share of peak hour journeys on a safe and reliable public transport system, identifying current projects and new directions for consideration.
- The *Metropolitan Strategy 2005* identifies strategic transport corridors and major centres. Plans for the South West and North West growth centres identify the need for major improvements to the bus network including bus priority lanes, bus acquisition, interchange upgrades and subsidies for early operation of services. The Strategy includes an action to develop and implement a parking policy.
- A network of bus services on 'strategic' bus corridors connecting centres across Sydney was identified by the 2004 Review of Bus Services. The strategic network will be integrated with local bus services through bus contract reform to create larger, integrated contract regions. The bus network will be supported by improved passenger facilities at bus stops such as shelters, information, signage and lighting, improved walking access to bus stops, and interchanges.

The Government has also announced a range of current and committed capital works:

- The $8 billion *Metropolitan Rail Expansion Plan* announced in June 2005 is to be delivered in five stages over the next 15 years:

  1. the South West Rail Link from Glenfield to Leppington

  2. the CBD Rail Link, a new rail line from Redfern to Chatswood, via the Sydney CBD

  3. the North West Rail Link from Epping to Rouse Hill, via Castle Hill

  4. extension of the South West Rail Link from Leppington to Bringelly or to the south

  5. extension of the North West Rail Link from Rouse Hill to the Richmond Line near Vineyard.

- The November 2006 *Urban Transport Statement* outlined work on interchanges including completion of the Parramatta interchange, the development of the Chatswood transport interchange, and a new Mid City Interchange precinct around Town Hall.

- In November 2006 the Minister for Transport announced $45 million would be spent on commuter car parks at Seven Hills, St Marys, Glenfield, Blacktown and Wentworthville, and examination of the potential for new commuter car parks at Revesby and Schofields-Quakers Hill, and Glenfield.

- In March 2007 the Minister for Transport announced $35 million would be spent on four new bus/rail interchanges for Hurstville, Macarthur, Morisset and Windsor, with scoping and planning to start at five future sites at Auburn, Eastwood, Revesby, Granville and St Marys. The Minister also announced that four car parks would be upgraded.

The *Urban Transport Statement* identifies the need to focus on transport product, not capital works. But there is little to indicate how or why specific interchange projects have been chosen, and what may be needed in the longer term.

Performance objectives and measures of effectiveness

There are no performance objectives and measures of effectiveness for interchanges.

Performance objectives need to be specifically relevant to the region or corridor in which the system planning effort is being conducted. Measures of effectiveness that might reflect the objectives of a region or corridor could include:

- demand for the interchange and park-and-ride service based on socioeconomic, urban development, and trip data

- connectivity and mobility characteristics provided by the system

- level of community acceptance and support

- cost-effectiveness

- estimates of reduction in vehicle kilometres of travel

- reduction in emissions.

Prioritising funding of interchanges

The Ministry has developed a means of prioritising funding of interchanges. The aim was to develop a policy framework:

- capable of evaluating and prioritising interchanges so that a forward planning and 5 year capital works (or longer) program could be developed
- sufficiently flexible to incorporate and accommodate solicited and unsolicited applications for funding by local authorities, not considered as part of the overall 5 year capital works program
- comprehensive enough to withstand scrutiny and deal with the range of issues that affect interchanges
- fair, consistent and transparent in approach
- simple to apply and avoids the need for comprehensive data collection.

The prioritising process categorises all existing interchanges based on size and type and then assesses funding potential on the basis of:

- supportive of Metropolitan Strategy (40%)
- supportive of transport policy and transit network hierarchy (20%)
- existing passenger numbers (15%)
- ease of implementation (25%) comprising availability of supporting funds (15%) and other factors that would facilitate the implementation (10%) including an existing plan to upgrade the station or parts of the station area in conjunction with the RailCorp Easy Access Upgrades, Southern Sydney Freight Rail Line, Clearways duplication project, or an existing master plan by the local council.

In addition to this, where another transport agency or local council has a priority (say a station upgrade or precinct development), the Ministry investigates whether the project and interchange can be built at the same time (for example, Mt Druitt station upgrade and interchange), so maximising the benefits of any potential cost savings.

Quality gap assessment of interchanges

In conjunction with its work on prioritisation, the Ministry has developed a gap analysis to identify the amount of investment required to upgrade an interchange to meet identified standards. The first step was the identification of minimum facilities by interchange category followed by an evaluation of the "quality" of existing facilities compared to minimum acceptable standards. Minimum service level guidelines included facilities within the interchange as well as the accessibility of the site for both vehicles and passengers including:

- interchange access by mode
- type and quality of facilities by mode and internal pedestrian and vehicular movements and layout arrangements
- comfort and convenience including shelters, seating, telephones, toilets, vending machines etc
- information including route maps, fare and timetables
- safety and security including lights at stops and shelters, CCTV, emergency help telephones, and design features.

The results of the quality gap assessment indicated that significant improvements were likely to be warranted, with around a third of interchanges rated as poor, as shown.

Interchange type	Total number	Number rated poor - requiring significant improvement
Global/regional	15	5
Major/specialised	32	12
Multi-access	100	49
Local access	107	5
Strategic corridor bus stop	32	15
	286	86

Source: Ministry of Transport, *Interchange Ranking Project Metropolitan Sydney*, October 2006.

The approach is broadly based on that developed in London. Again, a broadly similar approach is used in Melbourne. All three involve first establishing a 'quality gap' for each interchange, then prioritising a smaller number of interchanges as candidates for investment - consistent with the funding available.

But there are significant differences in approach:

- In London the 'quality gap' is the difference between the physical score and the prioritising score. The physical score is determined using physical data and a 'mystery shopper survey' of appearance, environment, security, access, information and staff presence. The prioritising score is based on the extent to which each interchange is assessed as likely to promote each of 20 objectives of the Mayor's strategy. The benefit cost of the package is then assessed.

- In Melbourne the 'quality gap' is the result of a physical audit against a detailed set of benchmarks for each type of interchange. Works needed to fill the gap are then subjected to a benefit cost assessment. The prioritising score is determined by analysing patronage levels and the attainment of specific transport and urban planning policy goals.

- In Sydney the 'quality gap' is the result of a desk audit against a list of minimum facilities (such as lighting, station name, seats) for each type of interchange. The prioritising score is mainly determined by metro strategy importance (global, major, multi-access, local), number of feeder bus services, and level of patronage.

Kiss and ride

Note that the quality gap assessment did not address facilities for kiss and ride. We could find no systematic analysis of the adequacy of such facilities, even though a significant proportion of passengers rely on kiss and ride to access the public transport system. Anecdotal evidence suggests that, as a result of limited drop off zones (such as for only two cars at Mt Druitt), much drop off activity is illegal and is attracting the attention of council rangers. This example highlights the need for cooperative planning involving commuters, councils and government transport agencies.

Prioritising funding of park and ride facilities

RailCorp has developed a means of prioritising expenditure on park and ride facilities, with particular focus on facilities affected by rail expansion plans. It is based more on rail-related characteristics:

- centre type (15%)
- level of bus service (15%)
- station patronage in the peak period (10%)
- existing commuter car park size (15%)
- existing station access by cars (10%)
- rail travel time to Central (10%)
- arterial road access (10%)
- housing density around station (5%)
- passenger growth in the peak period (5%).

Unmet demand for park and ride facilities

There are around 23,000 parking spaces located in dedicated commuter car parks on the RailCorp network in the metropolitan area. There are also some unrestricted Council owned car parks that further increase park and ride capacity.

Against this, it has been estimated that in 2004 around 55,000 cars were parked at or near the station to catch a train on a typically busy day (Tuesday to Thursday).

As a result, most Sydney commuter car parks fill very early in the morning peak period and are not available to those who:

- start later or work flexible hours, often due to family commitments
- do not work, often due to age or disability.

Where dedicated commuter parking is not provided, or undersupplied, parking takes place on surrounding streets, vacant land or shares existing spaces supplied for other uses. But this informal park and ride capacity, and associated public transport patronage, is under threat as:

- councils progressively introduce more restrictive parking controls
- town centres become more dense and parking conflicts with other land uses
- council owned car parks are being viewed as potential sites for re-development.

Sydney appears to have a disproportionate number of commuters parking on residential streets, when compared to other major Australian cities.

Peak time car parking			
City	Car park spaces	Total cars parking	Number parked in streets
Sydney	23,000	55,000	32,000
Melbourne	30,100	41,000	10,900
Brisbane	16,500	18,800	2,300

Nor did we find other major world cities with such extensive commuter parking in residential streets. For example:

- US cities tend to have large park and ride facilities with few if any cars parking on residential streets. Boston's Massachusetts Bay Transportation Authority provides over 40,000 spaces. Chicago's Illinois Regional Transportation Authority provides over 50,000 spaces.

- European cities tend to have park and ride facilities closer to city centres, where residential parking is scarce and parking facilities are more likely to be privately operated and charged for usage.

We found no projection of the number of commuter car spaces needed and no historical record of the increase in commuter car spaces over the years.

Limitations of prioritising processes

The prioritising processes are a step forward and potentially offer greater transparency. However, they should be enhanced to include:

- an assessment of the potential of the interchange investment to increase the level or share of public transport and benefit cost or value for money assessment

- an assessment against the public transport targets of the *State Plan*, which was not available at the time

- consideration of the value of system wide improvements, such as improvements to signage, information provision, measures to make passengers feel more safe and secure and facilities which make the network more accessible

- consultation with stakeholders such as local government, developers and private bus operators, although this could occur after projects have been selected

- a quality gap assessment that reflects the state, extent or suitability of those facilities (such as extent and condition of shelter, distance walked, roads crossed) or their impact on passenger perception

- consideration of security and emergency issues.

As the present or future demand for such facilities is unknown, it is not possible to know if enough are being provided. Nor is there a basis for identifying and reserving future land requirements, as an integral part of planning future transport corridors. The Ministry and RailCorp have consultants looking at demand and supply in some areas. This type of study would need to be replicated across the system to identify demand and supply at a system level.

Other cities including Perth and Brisbane are developing overall transport plans where interchanges are viewed as one element of a larger system that should be improved to make public transport more effective.

Multi-modal transport planning

Most interchanges appear to be in need of improvement, and demand for car parking greatly exceeds supply. But it is usually more effective to plan public transport facilities as part of a coordinated system, rather than plan individual facilities and try to tie these together afterwards.

The Ministry has asked private bus contractors to prepare integrated network plans at a local level:

> The desired outcomes of the Service Planning Guidelines include:
>
> ▫ a network of integrated regional, district and local services that link people with regional centres and other patronage generators
>
> ▫ maximised integration between public transport modes to improve service delivery, reduce duplication and optimise the effective use of appropriate infrastructure and available resources
>
> ▫ the efficient use of available resources
>
> On or before the third anniversary of contract commencement, each Operator must prepare and have approved by the Director General an Integrated Network Plan.
>
> Source: Ministry of Transport, *Service Planning Guidelines,* June 2006.

The Ministry needs to further develop the use of multi-modal transport plans to improve interchange planning and overall effectiveness

Recommendation

We recommend that the Ministry:

- set performance objectives for interchanges such as demand levels, connectivity offered and cost-effectiveness achieved
- develop multi-modal transport plans to improve infrastructure planning and overall effectiveness
- further develop the 'quality gap' assessment using facility inspections against a set of specific standards and risk assessments
- develop and publish a ten year rolling plan for interchanges.

2.3 Are there general policies to guide facility acquisition, maintenance, and service?

Our assessment
There is a need for specific guidance and minimum standards in relation to interchanges in order to ensure that interchanges are developed and improved in a consistent fashion.

Asset management
The Government's Total Asset Management policies generally guide facility acquisition, maintenance and service. RailCorp has operating and maintenance procedures for stations and there are many other legal requirements that apply to passenger facilities generally, such as from the *Passenger Transport Act 1990*.

But there is no specific guidance and there are no minimum standards in relation to interchanges, as might be expected. This makes it difficult to ensure that interchanges are developed and improved in a consistent fashion.

Emergency and security risk management
As outlined in Section 2.1, a major concern is the need for an integrated security response to an incident. This needs to involve the various stakeholders such as transport operators and private sector interests with local authorities including police, fire and ambulance.

The Ministry together with NSW Police and the Premier's Department have initiated Transport Security Precinct Committees for the 10 interchanges considered to be the highest priority. This requires:
- development of coordinated emergency response arrangements
- regular security assessments and development of protective security strategies
- exercises to test security and emergency response arrangements.

The Ministry, together with NSW Police and the Premier's Department, have identified a further 13 lower priority sites for review, in the light of experiences gained at the ten high priority sites.

Ministry draft
In 2001 the Ministry developed a series of guidance notes for interchange planning and design. Its stated aim was *to encourage best practice outcomes in planning and designing public transport interchanges, and to provide a guide to issues related to transport oriented development adjacent to interchanges.*

This consisted of a series of Practice Notes covering:
- planning for interchanges
- transport oriented land uses
- planning for ease of transfer
- functional design issues
- passenger movement and transfer
- vehicle movement and site planning
- mobility and easy access
- planning for individual transport modes
- types of interchange
- total asset management.

For example, the Practice Note on total asset management was to include:

- Establish existing condition of interchange assets
- Prepare an asset maintenance program for each of these assets
- Provide for the regular maintenance of interchanges and incorporate:
  - regular graffiti removal
  - light fittings and all electronic signage, and CCTV equipment - to be regularly serviced and repaired
  - regular servicing of lifts and escalators
  - repair or replacement of damaged structure or shelter panels
  - repair of paved pedestrian pathways and walkways
  - maintenance of roadway and hard stand areas of the interchange
  - cleaning of road drainage pits.

Source: NSW Department of Transport, (Draft) *Interchange Planning and Design Practice Notes*, 2001.

Attention to personal safety and general aesthetics can encourage the use of interchanges. Safety and security is as much a perception as it is real. Frequent and consistent removal of graffiti, broken glass and rubbish is important when providing an environment that feels safe and secure to the user.

The Practice Notes remain in draft form, as they were never finalised and adopted.

Transport for London's *Best Practice Guidelines*

Transport for London has established Best Practice Guidelines to set out basic standards of facilities for each category of interchange.

The Best Practice Guidelines seek to address both physical and organisational barriers to interchange by:

- promoting awareness of good practice in interchange design with the aim of ensuring that interchanges are developed and improved in line with a clear and consistent set of principles
- providing operational guidelines
- setting out some initial guidance on the development of joint funding packages.

Source: Transport for London, *Intermodal transport interchange for London – Best practice guidelines*, 2001.

To assist this process, Transport for London commissioned surveys of over 600 interchange locations in London to evaluate how they perform in terms of the aspects of interchange that are most important to passengers: ambience, personal security, accessibility, information provision, and staff presence and helpfulness.

The guidelines make clear that a combination of physical improvement and consideration of 'softer' aspects are necessary for benefits to be maximized. Such 'soft' aspects focus on how things appear to passengers, particularly issues such as information provision and signage.

The guidelines also point to the need for an 'interchange agreement' that:

- ▫ Identifies interfaces between all the parties involved in managing and serving the interchange, including external parties, particularly the fire brigade, ambulance service, police and local authorities
- ▫ Clear responsibilities for managing these interfaces
- ▫ Unambiguous accountabilities for the tasks that are required to ensure that the interchange operates successfully.

Source: Transport for London, *Intermodal transport interchange for London - Best practice guidelines*, 2001.

Recommendation

We recommend that the Ministry:

- ▪ develop and issue Best Practice Guidelines for different categories of interchanges and car parks, including arrangements for integrated emergency and security response
- ▪ carry out a review against Best Practice Guidelines to assess the quality of the present interchange arrangements
- ▪ work in partnership with local stakeholders to identify ways of ensuring good quality multi-modal interchanges, particularly those where quality falls short of the Guidelines.

3. Are there adequate information systems?

At a glance

> **The key question we wanted to answer was:**
>
> Are there adequate information systems to inform the public and management?
>
> **Our assessment:**
>
> ▪ At most interchanges there is limited local signage. The main source of information for Sydney metropolitan passengers planning to travel by more than one travel mode is the Transport Infoline 131500 website.
>
> ▪ The Transport Infoline 131500 website does not indicate how the interchange is laid out and which bus services depart from each rank. It does not assist people to plan part of a journey by taxi or by car.
>
> ▪ There is no up to date system inventory and identification of interchange access attributes, capacity, utilisation and costs to enable assessment of performance. There is no listing of capital amenities provided such as shelters, timetable signage, seating, on-site retail vendors, security devices. There is no identification of access attributes such as rail service levels, capacity, utilisation and costs.
>
> ▪ Nobody regularly reports on interchange and car park adequacy and performance. In addition, there is no evaluation process framework to establish the impact of an interchange on public transport. We found no 'before and after' studies or ongoing monitoring programs of usage, other than the limited information available from the RailCorp annual travel survey. We found little evidence of surveys of commuters to see if behaviour had actually changed as a result of interchange development. The Ministry of Transport should examine the opportunity to incorporate interchange facilities as part of the annual household travel survey.
>
> ▪ We found no information about who is using newly constructed interchange facilities and what they used to do and whether there has been any improvement in travel time. We found nothing to indicate which facilities could be considered 'successes' and which 'failures' due to improved efficiency in movements through the interchange and increased capacity.

3.1 Is information about interchanges readily accessible?

Our assessment

At most interchanges there is limited local signage. The main source of information for Sydney metropolitan passengers planning to travel by more than one travel mode is the Transport Infoline 131500 website.

The Transport Infoline 131500 website does not indicate how the interchange is laid out and which bus services depart from each rank. It does not assist people to plan part of a journey by taxi or by car.

There is no up to date system inventory and identification of interchange access attributes, capacity, utilisation and costs to enable assessment of performance. There is no listing of capital amenities provided such as shelters, timetable signage, seating, on-site retail vendors, security devices. There is no identification of access attributes such as rail service levels, capacity, utilisation and costs.

Transport Infoline 131500

The main source of information for Sydney metropolitan passengers planning to travel by more than one travel mode is the 131500.com.au website, owned and operated by the Transport Administration Corporation. This is administered within the Ministry, but has been established a statutory body under the *Transport Administration Act 1988*. The Corporation operates this website using the name 'Transport Infoline 131500'.

The information service provided by Transport Infoline includes:
- timetables for train, bus and ferry services
- ticket and fare information for government operated services
- trip planning for combined transport modes, for example a bus and train trip
- trip planning and timetables for school bus services operated by Sydney and Newcastle Buses
- travel to special events and attractions
- accessible travel information for people with disabilities
- up-to-date news on the latest service interruptions and developments across the transport network, including CityRail trackwork.

Similar services are available in other major cities such as *Transperth*, Melbourne's *Metlink, Adelaide Metro,* Washington DC's *Metro*, the UK *Transport Direct* and *Traveline Scotland*. We found all such services are now web based and no city that still identifies its service by use of a call centre phone number, such as 131500. A more recognisable and more easily remembered brand name would help to promote awareness of the service.

Some of these services seem to be more user friendly, better at letting people know where things are and where the capacity is.

Sydney's Transport Infoline 131500 service does not:

- provide ticket and fare information for privately operated services
- indicate how the interchange is laid out and which bus services depart from each rank. Individual bus operators are relied upon to create these maps and place them on their websites. Only a few operators take the effort
- assist people to plan part of a journey by taxi. There is no information on taxi ranks and services
- enable part of the journey to be by car. The linked CityRail website has a station facilities list that can be checked to see if a particular station has park and ride facilities. There is no indication of the extent of kiss and ride facilities.

The following illustrates the complexity of a major interchange from a consumer's perspective.
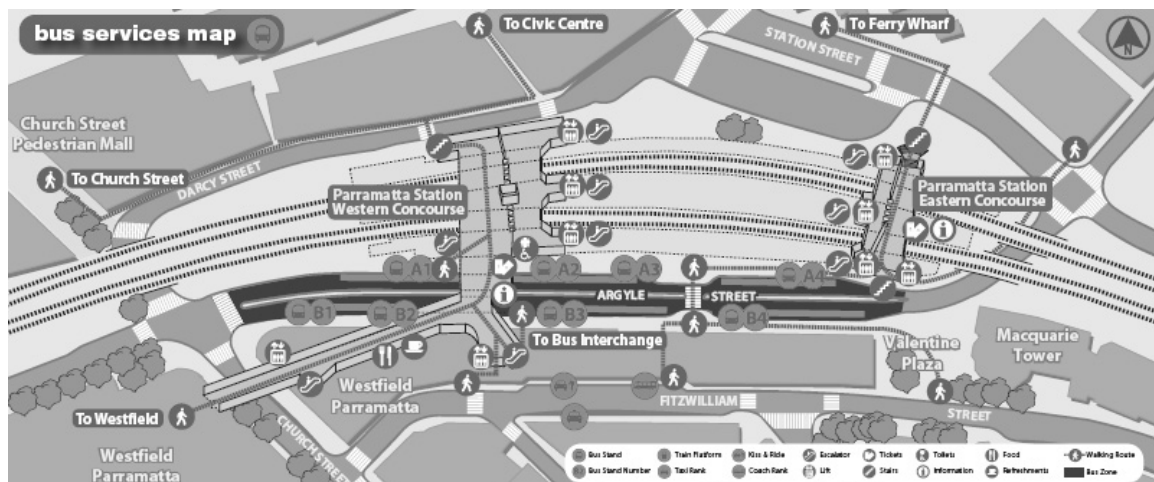
Parramatta Interchange

The UK's *Transport Direct* addresses the motorist as well as the public transport user. It enables one to plan and compare door-to-door public transport or car journeys throughout Britain, whereas other sites only provide information for either public transport *or* car. *Transport Direct* can also provide an estimate of the full cost of a journey taking into account the costs of running and owning a car.

One website, for example, helps park and ride users by showing next to each facility's name the parking spaces in each car park and the highest number used in the month. Another indicates each month the time of the day when each car park is expected to be full.

Information for management

RailCorp has had consultants prepare reports on individual interchange projects or individual rail lines. For example in 2006 RailCorp engaged consultants to examine commuter parking options studies for selected sections of the CityRail suburban network:

- East Hills Line between Kingsgrove and East Hills
- Richmond Line between Quakers Hill and Riverstone
- South Line between Ingleburn and Macarthur.

RailCorp's CityRail website also has a simple listing of station facilities, such as whether there is an escalator, toilet, payphone or car parking.

However, there is no up to date system inventory and identification of interchange access attributes, capacity, utilisation and costs.

The Ministry recognised the need for a comprehensive inventory in 2001, but this work did not proceed.

The Ministry's recent 'quality gap assessment', discussed in section 2.2, was necessarily a subjective assessment, as it had no such inventory to refer to. There is no listing of capital amenities provided such as shelters, timetable signage, seating, on-site retail vendors, security devices. There is no identification of access attributes such as rail service levels, capacity, utilisation and costs.

To be meaningful, such system inventory needs to be referenced to a map so that it can be used to develop a picture of the existing network. Existing and planned bus, rail and ferry routes and services would need to be overlaid onto this graphical representation of the system plan to develop a context for placing new facilities or expanding those already in existence.

Recommendation	We recommend that the Ministry:

- provide better information to the public, such as by including on the Transport Infoline 131500 website details of interchange layouts, transport services, kiss and ride facilities, park and ride facilities, taxi ranks and amenities
- enhance the Transport Infoline 131500 website journey planner such as by adding an ability to plan part of the journey by taxi or car, as a means of encouraging a change in travel behaviour
- develop a strategy to assess and, if necessary, improve brand awareness of the service
- establish and maintain an accurate inventory of existing facilities, site ownership by facility, transport services provided, capital amenities provided, identification of access attributes, capacity, utilisation and costs
- link the facilities inventory to a map including existing and planned bus, rail and ferry routes and services to develop a context for placing new facilities or expanding those already in existence.

3.2   Is there an evaluation framework?

Our assessment   Nobody regularly reports on interchange and car park adequacy and performance. In addition, there is no evaluation process framework to establish the impact of an interchange on public transport. We found no 'before and after' studies or ongoing monitoring programs of usage, other than the limited information available from the RailCorp annual travel survey. We found little evidence of surveys of commuters to see if behaviour had actually changed as a result of interchange development. The Ministry of Transport should examine the opportunity to incorporate interchange facilities as part of the annual household travel survey.

We found no information about who is using newly constructed interchange facilities and what they used to do and whether there has been any improvement in travel time. We found nothing to indicate which facilities could be considered 'successes' and which 'failures' due to improved efficiency in movements through the interchange and increased capacity.

Evaluation   We found that there is no evaluation process framework to establish the impact of an interchange on public transport. We found little evidence of benefit cost assessments.

Costs per passenger are likely to vary significantly. For example we found that the cost of commuter car spaces in NSW can range from $6,000 per space on level ground to $36,000 per space at a multi level car park.

The Ministry's new prioritising process does not examine the likely impact of the interchange on public transport. It does not ask the question. Further, it proposes that a benefit cost or value for money assessment be conducted <u>after</u> projects have been selected.

Kogarah Commuter car park
- 7 levels, 346 spaces
- common boundary with rail corridor
- significant rail infrastructure works and track possessions
- total cost $12.8 million

Wyong Interchange and Commuter car park
- 8 space bus stop, 6 space kiss and ride zone, 3 space taxi zone
- 48 space short term parking
- 130 space commuter car park
- total cost $3 million

We found that other authorities undertake assessments on a systematic basis. For example:

- the Victoria Smartlink assessment includes a rigorous engineering based "gap-analysis" by rating the standard of various facilities – such as platforms, shelters, lighting, against a desired standard of benchmark established for each category of interchange and estimating the cost of improvements. The value of the cost of improvement is used as an indicator of the size of the gap at each interchange. Finally each interchange is assessed using cost-benefit analysis and projects were ranked to reflect their return on investment.

- Transport for London uses a strategic public transport model of the morning peak to assess savings to passengers of improving the quality of interchanges. The model represents the Underground, rail, tram, light rail and bus network in detail throughout Greater London, with each station and platform being modelled individually. It also incorporates significant walk links to enable interchange movements within stations and between bus, tram and rail services.

We found no 'before and after' studies or ongoing monitoring programs of usage, other than the limited information available from the RailCorp annual travel survey. We found little evidence of surveys of commuters after a development to see if behaviour has actually changed.

We found no information about who is using newly constructed interchange facilities, what they used to do and whether there has been any improvement in travel time. We found no information to indicate which facilities could be considered 'successes' and which 'failures'.

We found no information on the impact of providing park and ride facilities. As a result, it is not possible to assess with any confidence:

- how much park and ride capacity is needed, where and under what circumstances. For example, increased rail service will affect the demand. Changes in bus services, development of new outlying areas and changes in car availability will also drive demand. But by how much? And could the park and ride facilities be bigger and further apart, located at high frequency stations?

- what proportion of the car park benefit was in reduced congestion, what proportion was reduced access time to station, and what proportion was improved local amenity (and what costs to local bus operators)?

Other cities conduct periodic surveys of park and ride facilities, as for example in Boston:

> Periodic surveys are conducted at park-and-ride lots at transit stations. Performance is measured in terms of capacity, use, and the time of day at which lots fill up.
>
> Source: Boston Metropolitan Planning Organization, 2006.

Overseas experience suggests that the most successful interchange facilities are those provided with transport services at no more than 10 to 15 minute intervals. However, we found no systematic review to ensure transport service levels support the effective operation of individual interchanges, other than in consultants' studies for new developments. Minimum transport service standards need to be identified, detailing what levels of peak and off-peak service will be provided by the transport service provider to each interchange.

The Ministry recognised the need for this type of management information when in 2001 it proposed (but did not subsequently undertake):

- Regular review of interchange performance in consultation with stakeholders
- Regular updating of services and forecasting of future requirements for expansion and programming of upgrading works

Source: NSW Department of Transport, (Draft) *Interchange Planning and Design Practice Notes*, 2001.

Specification of performance objectives, performance monitoring and post evaluation would normally be expected as a condition of funding and approval.

Interchange operation needs to be accompanied by a systematic evaluation process, analysing the critical aspects of the service provided, the security attributes of the site and design, the maintenance costs and savings provided by the design, and the success of the site as reflected by parking demand, patronage, and other measures of effectiveness.

Recommendation

We recommend that the Ministry:

- establish an evaluation process framework with performance objectives, performance monitoring and post evaluation to establish the impact of the interchange facilities on public transport
- establish a means of systematically reviewing the frequency and character of transport service provided at individual facilities to ensure that it is adequate for the purpose.

4. Has funding been adequately addressed?

At a glance

> **The key question we wanted to answer was:**
>
> Has funding of interchanges been adequately addressed?
>
> **Our assessment:**
>
> - The State's total investment and future requirements cannot be readily identified.
> - Funding objectives and options for interchanges need to be developed.
> - There are no criteria for how the funds available from the *Parking Space Levy* are allocated in aggregate to interchanges, car parks, bus ways, bus layovers, transitways and the like. We noticed no evaluations of how this expenditure furthered the object of discouraging car use in those business districts bearing the tax.
> - The NSW *Urban Transport Statement* pointed to the need for future investigation of funding options, including private sector investment, and opportunities for multiple use developments. In our view, actions to promote joint development of interchanges could include developing a market-oriented approach – including promoting what government can contribute to such developments.
> - No charge is made for commuter car parking on railway land. It is not clear that this is a Government policy, but it has been the custom for many years. The Government could introduce some level of ticketing and derive some level of return to help fund security and maintenance.
> - There is no basis of knowing the extent to which funding options are sufficient to adequately address all the needs of interchanges.

4.1 Can the State's investment and future requirements be identified?

Our assessment   The State's total investment and future requirements cannot be readily identified.

Significant investment   The Ministry has reported that from 1992 to the end of 2003-04 it provided over $175 million for interchanges, commuter car parks and ferry wharves (including $67 million on bus/rail interchanges).

Examples of projects completed are:

Location	Description	Cost million	Completion Date
Holsworthy	Interchange and car park	$9	Feb-03
Rockdale	Interchange and car park	$5.7	Dec-02
Engadine	Bus/rail interchange	$1.4	Sep-02
Kogarah	Car park	$12.8	Jul-02
Gosford	Car park	$5	Apr-02
Wyong	Interchange and car park	$3	Feb-02
Strathfield	Bus/rail interchange	$0.8	Nov-01
Liverpool	Bus/rail interchange redevelopment	$8.9	Sep-00
Kissing Point	Ferry wharf	$2.2	Dec-99
Cabarita	Ferry wharf	$2.7	Dec-99
Balmain (Elliott St)	Ferry wharf	$0.9	Feb-99
Padstow	Bus/rail Interchange and car park	$5.2	Nov-98
Newcastle	Bus/rail interchange and layover	$0.2	Sep-98
Abbotsford	Ferry wharf	$1.9	Jul-98
Woy Woy	Bus/rail interchange	$2.9	Dec-97
Ashfield	Bus/rail interchange	$1.2	Dec-97
Hurstfield	Bus/rail interchange	$1.4	Oct-97
Cabramatta	Interchange and car park	$1.5	Oct-97
Warwick Farm	Car park increase	$0.5	Feb-97
Minto	Car park	$0.6	Feb-97
Balmain (Thames St)	Ferry wharf	$0.1	Feb-97
Meadowbank	Wharf, interchange and car park	$2.6	Aug-96
Blacktown	Bus/rail interchange	$1.5	Aug-96
Parramatta	Bus/rail interchange	$2.8	Dec-95
Hornsby	Car park	$1.9	Oct-95
Sutherland	Car park	$4.2	Feb-95
Gordon	Car park	$3.5	Nov-94

Source: Ministry of Transport, *Parking Space Levy Review: Improving Public Transport*, 2003.

As can be seen from the above list, the investments in interchanges vary considerably from a fraction of a million dollars to many millions of dollars.

However, this does not necessarily indicate the full costs of such assets (including the costs of other agencies), nor the costs of assets completed before 1992 or since 2003/04.

For example the State's *Accessible Transport Action Plan* entails improvements to access paths, manoeuvring areas, resting points, waiting areas, ramps, signs, lifts, toilets, doorways, information services, allocated spaces, payment of fares, surfaces, lighting and handrail and grab rails. The Plan indicates that around $370 million has been invested in upgrading RailCorp stations.

The State's total investment cannot be readily identified. Ministry annual reports only identify the Ministry's contributions to major projects. In the last fifteen years the Ministry has allocated almost $200 million to the development of interchanges, including some large park and ride facilities. But these contributions can be supplemented by contributions from other sources. Other contributions from the Commonwealth (in earlier years), the transport agencies, local councils and the private sector point to a very significant investment in interchange facilities. For example, the recently completed Parramatta Transport interchange alone cost in excess of $200 million.

Future funding requirements

Near term funding requirements are identified in a rolling four year plan. Individual project requirements are specified, but long term requirements for capital, operations, maintenance and security are not identified. The prioritisation processes do not indicate how much is needed for car parks and interchanges, nor how much funding is available.

Costs are likely to rise, particularly for maintenance and security, as:
- the existing interchange infrastructure is now ageing and will inevitably require increased funding for maintenance and major repairs. Costs are also likely to rise as a result of the shift from small facilities to larger structured facilities with more passenger amenities
- security is a major concern at CityRail station commuter car parks due to poor surveillance and activity as the security of car parking facilities on the CityRail network has not kept pace with community expectations. RailCorp's customer feedback records indicating poor personal and vehicle security as a major source of customer dissatisfaction at a number of locations of the network.

Recommendation

We recommend that the Ministry:
- forecast long term funding requirements for development, operations, maintenance and security.

4.2   Are funding objectives and options clearly stated?

Our assessment   Funding objectives and options for interchanges need to be developed.

The *NSW Urban Transport Statement* pointed to the need for future investigation of funding options, including private sector investment, and opportunities for multiple use developments.

No charge is made for commuter car parking on railway land. It is not clear that this is a Government policy, but it has been the custom for many years.

Funding objectives   Funding objectives and options for interchanges need to be developed and could encompass the following broad objectives:
- minimising the cost to commuters
- minimising the cost to public agencies
- promoting the use of joint use facilities
- promoting joint development
- promoting privatisation opportunities.

Also, for example as in the UK, detailed funding objectives could require that:
- there must be no need for operating subsidies
- full scheme costs must be exceeded by the revenues plus non-user benefits
- non-user benefits must exceed the grant required.

In 2003 the *Ministerial Inquiry into Sustainable Transport in NSW* recommended that the NSW Government:

- Evaluate the use of public private partnerships to build and operate public transport infrastructure.
- Pursue commercial development opportunities at and around public transport hubs to help finance infrastructure upgrades.
- Consider implementing a modest transport improvement rate / levy.
- Only consider public debt as a funding source when other more desirable funding options have been fully explored, and only for efficient and effective projects that would generate additional community benefits.

Source: NSW Government, *Ministerial Inquiry into Sustainable Transport in NSW*, 2003.

The only suggestion of an objective is that the Ministry's new prioritisation process for interchange projects assigns some preference to projects part funded by others, including RailCorp, local councils and private sector interests.

Funding options   Potential sources of funds for interchanges include:
- Ministry of Transport
- transport agencies
- private developers
- local councils.

An important source of interchange improvements in Sydney has been the commercial development of airspace over key stations, such as Bondi Junction, Chatswood, Parramatta and St Leonards. In these locations the value of land surrounding the interchange makes it viable to consider the economics of developing the air space.

Larger projects may involve funding from several sources. For example:

- the $30 million Blacktown Bus Terminal was opened in April 2006. This infrastructure was financed with $9.1 million from the *Parking Space Levy*. The remainder of the funding for the project was provided by the Roads and Traffic Authority and the private sector shopping centre owner.

Blacktown Bus Terminal in shopping centre redevelopment

Parking Space Levy Fund

Since 1992 the *Parking Space Levy Fund,* administered by the Ministry, has been the principal source of funds for interchanges. Prior to this and in the earlier years of the levy's collection until 1998, other funding was available from the Commonwealth's *Better Cities Program* and *Urban Public Transport Fund,* and the State's *3X3 Levy*. Some funding has also been available from private/public joint ventures.

The amount raised from the *Parking Space Levy* is $45 million a year. During the period 1992-93 to 2006-07 the expenditure of funds from this levy amounted to almost $400 million. Of this, the proportions were approximately:

- 17% on park and ride facilities
- 30% on bus/rail interchanges
- 34% on the new bus T ways
- 19% on a range of projects, ranging from wharf repairs to high speed rail studies.

The *Parking Space Levy* was introduced by legislation through the *Parking Space Levy Act 1992*. The object of the Act is to discourage car use in business districts by imposing a levy on off-street commercial and office parking and to use the revenue raised to finance the development of infrastructure to encourage the use of public transport to and from those districts.

There are no criteria for how the funds available from the *Parking Space Levy* are allocated in aggregate to interchanges, car parks, bus ways, bus layovers, transitways and the like. Should these alternatives be assessed for likely impact on reducing congestion in the levied centres? There is no explanation of the decisions made. There appears to be scope to improve the transparency of this process.

As outlined in section 2.2, the Ministry has introduced prioritisation processes for interchange projects. It now needs to improve transparency in how *Parking Space Levy* funds are allocated to other infrastructure projects by the use of criteria (including extent of achievement of the object of the PSL legislation) and evaluation of the relative merits of alternatives.

Need to increase private sector investment

As noted above, in 2003 the *Ministerial Inquiry into Sustainable Transport in NSW* recommended that the NSW Government:

□ evaluate the use of public private partnerships to build and operate public transport infrastructure

□ pursue commercial development opportunities at and around public transport hubs to help finance infrastructure upgrades.

Public private partnerships are typically complex and involve high capital costs, lengthy contract periods involving long-term obligations and a sharing of risks and rewards between the private and public sectors. This means that proposals for such partnerships must be consistent with an agency's asset strategy and long term plans and should have undergone an economic appraisal.

In 2006 the *NSW Urban Transport Statement* pointed to the need for future investigation of funding options, including private sector investment, and opportunities for multiple use developments.

RailCorp has identified potential for joint development opportunities:

> The financing of the construction and operating of new commuter car parking in the future could be partly achieved through aligning the new facility with retail opportunities providing local services subject to existing retail facilities. Other opportunities could include day-care facilities and other services that would meet commuter needs. Providing these facilities near rail stations would also improve passive surveillance due to the increase level of local activity.
>
> Source: RailCorp, *Park and Ride Discussion Paper,* 2006.

In our view, actions to promote joint development of interchanges could include:

- developing a market-oriented approach – including promoting what government can contribute to such development in terms of access, building densities, parking requirement reductions, and possibly property exchange
- exploring opportunities for shared use with businesses and community service organisations whose own requirements do not compete with the needs of the public transport user
- developing designs that encourage the clustering of private buildings near the interchange.

Charging for commuter car parking

No charge is made for commuter car parking on railway land. This has been identified for some time as an effective subsidy and potential source of funds, as evidenced by the following:

> No charge is currently levied on the users of station car parks. In many cases there is an opportunity cost to State Rail for the land occupied by the car park. At a time of increasing emphasis on obtaining economic returns on Government assets the question of charging for cars parking at stations needs to be addressed: would the revenue from parking fees outweigh the decrease in fare box revenue resulting from a fall in patronage?
>
> The introduction of charges for station car parks would need to be associated with a general upgrading of the facilities, including improved security both for the car and the traveller, which is a major concern for many. Some form of reservation system would ensure parking availability for regular travellers. However restrictions on alternative parking close to the station would need to be introduced.
>
> Source: Ministry of Transport, *Study of Car Parking at Railway Stations in the Sydney Metropolitan Area,* 1989.

It is not clear that this is a Government policy, but it has been the custom for many years. Any conversion of existing free car parks to secure paid parking would raise concerns about the equitable treatment of drivers across the network. However, there is some evidence to suggest that users might be prepared to pay a charge for a demonstrably higher level of service.

> Users had concerns about lot security, the lack of lighting, and the quality of transit services offered. Analysis of focus group data determined that schedule adherence rather than frequency was the cause of most concerns. Participants expressed a willingness to pay for parking that was fenced, security patrolled, and lighted, with shelters for waiting.
>
> Source: US Transportation Research Board, *Study of Park-and-Ride Facilities and Their Use in the San Francisco Bay Area of California*, 2005.

Such arrangements are for example common in the UK, as illustrated by the following.

UK private parking company

Charging around $5 a day

- □ in partnership with London Underground to manage 2,950 spaces at 34 station car parks along two lines

- □ more than 25 staff, all car parks are manned 10 hours a day, 6 days a week (with Sundays and Bank Holidays free to the public and unmanned)

- □ managing cash collections and enforcement, also responsible for maintenance and cleaning.

The Government could introduce some level of ticketing and derive some level of return to help fund security and maintenance. As this would generate a revenue stream, the private sector could be involved. The Government would need to apply charging on a system wide basis, possibly utilising the planned new integrated ticketing process. Any parking charges would need to be planned and managed on a catchment basis, consistent with what councils charge in the surrounding area, as commuters may alternatively park in residential streets.

Recommendation   We recommend that the Ministry:

- clearly state funding objectives and options for interchanges such as minimising the cost to commuters, minimising the cost to public agencies or promoting joint development

- continue to improve transparency in how *Parking Space Levy* funds are allocated to infrastructure projects by the use of criteria (including extent of achievement of the object of the PSL legislation) and evaluation of the relative merits of alternatives

- promote joint development of interchanges using a more market-oriented approach.

4.3 Are funding options sufficient?

Our assessment
With no projection of requirements, there is no basis of knowing the extent to which funding options are sufficient to adequately address all the needs of interchanges.

No basis of knowing
We found no basis of knowing the extent to which funding options are sufficient to adequately address all the needs of interchanges.

It is likely that there is a significant gap. In addition to the costs of new interchange facilities, for which capital costs can be quite large, most existing facilities require ongoing financial support. In particular, there is no obvious funding source for the operating, maintenance and security costs associated with interchanges.

The risk is that opportunities to invest in interchanges and promote the use of public transport will be limited by the availability of funds from the *Parking Space Levy*. The driver should be the goals for public transport and rigorous evaluation of the potential for such investments to assist in achieving those goals. All funding sources should be explored.

Recommendation
We recommend that the Ministry:

- identify and assess the adequacy of funding sources for interchanges, including for operations, maintenance and security
- identify, secure and leverage further funding sources as necessary to address any shortfalls.

Appendices

Appendix 1   About the audit

Audit objective

The objective of the audit was to examine the effectiveness of interchanges in promoting increased use of public transport in Sydney. Interchanges may include park and ride facilities.

Lines of inquiry and audit criteria

Has the Government adopted a coordinated and strategic approach to developing interchanges?

- There is a mechanism or framework for inter-agency and private sector participation and cooperation.
- Objectives are sufficiently clear and comprehensive. There is a plan. There are linkages to the State and Metropolitan Plans. Facilities are constructed at strategic locations.
- There are general policies to guide facility acquisition, maintenance, and service.

Are there adequate information systems to inform the public and management?

- Information about interchanges is readily accessible. It includes identification of existing facilities, identification of site ownership by facility, listing of transport services provided along with responsible agency or private sector organisation, listing of capital amenities provided, identification of access attributes, capacity, utilisation and costs
- It is linked to a geographic information system or referenced to a map so that it can be used to develop a picture of the existing interchange and park and ride network.
- There is an evaluation process framework. Measures of effectiveness are clearly identified, monitored and reported.
- The frequency and character of the transport service provided at individual facilities is assessed to ensure that it is adequate for the purpose.

Has funding of interchanges been adequately addressed?

- The State's investment can be identified. Projected requirements are also identified.
- Funding objectives and options are clearly stated, such as minimising the cost to public agencies, promoting the use of joint use facilities, joint development, and privatisation opportunities.
- Funding options are sufficient.

Audit scope

We focused on the planning, development, operation and maintenance of inter-modal interchanges in the Sydney metropolitan area. This involved the NSW Ministry of Transport and the transport agencies RailCorp, State Transit Authority, Sydney Ferries and the Roads and Traffic Authority. Other agencies included NSW Treasury, Transport Infrastructure Development Corporation, Independent Transport Safety and Reliability Regulator, Independent Pricing and Regulatory Tribunal, Department of Planning, and the Infrastructure Implementation Group of the NSW Premier's Department.

The audit did not seek to:
- duplicate reviews already conducted in relation to this topic
- question the merits of Government policy objectives.

Audit approach
We acquired subject matter expertise by:
- interviewing staff and examining relevant documents, including guidelines, reports, studies, strategies and reviews relating to public interchanges and public transport
- interviewing key stakeholder representatives
- drawing comparisons where appropriate with other states and countries
- reviewing government and best practice guidelines relevant to the above.

Audit selection
We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to Parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.

Audit methodology
Our performance audit methodology is designed to satisfy Australian Audit Standards AUS 806 and 808 on performance auditing, and to reflect current thinking on performance auditing practices. We produce our audits under a quality management system certified to International Standard ISO 9001. Our processes have also been designed to comply with the auditing requirements specified in the Public Finance and Audit Act 1983.

Acknowledgements
We gratefully acknowledge the co-operation and assistance provided by the Ministry and RailCorp, State Transit Authority, Sydney Ferries Corporation, RTA and the Department of Planning. In particular, we wish to thank our liaison officers and staff who participated in interviews, assisted with document review or provided other material relevant to the audit.

We were also assisted by discussions with a number of external bodies including Action for Public Transport and the Commuter Council, industry groups such as the NSW Bus and Coach Association and the NSW Taxi Council, the Rail, Tram and Bus Union NSW, and local government such as Western Sydney Region of Councils.

Audit team
Our team leader for this performance audit was Chris Yates, who was assisted by Neville Johnson. Sean Crumlin provided direction and quality assurance.

Audit cost
Including staff costs, printing costs and overheads the estimated cost of the audit is $190,000.

Appendix 2   Glossary

Accessibility	Refers to the extent to which people have access to Sydney's main transport links.
Asset management	Total asset management (TAM) strategies are required by Treasury to ascertain whether agencies are planning and managing all assets efficiently and effectively in accordance with TAM policy.
Bus transitway	Transitways, or T ways, are roads dedicated for the exclusive use of bus services.
Catchment	The geographic area surrounding transport infrastructure that is considered accessible to commuters by walking, bus or use of a car.
Connectivity	Refers to the ease with which transport connections can be made at a particular interchange
Corridor	An area served by the transport links between town major centres.
Demand forecast	Estimating the future use of interchange facilities by commuters over a particular time period.
Evaluation	The specific process of reviewing the outcomes and performance of an initiative after it has been implemented.
Interchange	Interchange occurs when people transfer from one modes of transport to another, or between two services of the same mode. Interchanges may include bus stops, railway stations, ferry wharves, taxi ranks, kiss and ride areas, cycle racks and park and ride areas
Maintenance	As infrastructure ages and is used, its condition deteriorates. Maintenance is work undertaken to restore the infrastructure to an earlier condition.
Multi-modal	Using more than one mode of transport, such as road and rail.
Multi-modal transport plan	A plan coordinating transport by more than one mode and including specific objectives to be achieved, criteria for deciding priorities for spending, and appropriate performance indicators for deciding whether, and to what extent, the objectives of the plan have been achieved.
Park and ride	Park-and-ride facilities make readily available the option of mixed-mode travel. Park-and-ride facilities range from multi-story car parks to simple surface parking lots.
Performance measures	Performance measures identify how well services are being provided at a particular interchange.
Parking Space Levy	The Parking Space Levy was introduced by legislation through the Parking Space Levy Act 1992. It applies to commercial parking spaces in Sydney's CBD, North Sydney/Milsons Point ($900 per space per annum) and at Parramatta, Bondi Junction, St Leonards and Chatswood ($450 per space per annum).

Performance Audits by the
Audit Office of New South Wales

Performance Auditing

What are performance audits?

Performance audits determine whether an agency is carrying out its activities effectively, and doing so economically and efficiently and in compliance with all relevant laws.

Performance audits may review a government program, all or part of a government agency or consider particular issues which affect the whole public sector.

Where appropriate, performance audits make recommendations for improvements.

If you wish to find out what performance audits are currently in progress, visit our website at www.audit.nsw.gov.au.

Why do we conduct performance audits?

Performance audits provide independent assurance to Parliament and the public that government funds are being spent efficiently and effectively, and in accordance with the law.

Performance audits seek to improve the efficiency and effectiveness of government agencies so that the community receives value for money from government services.

Performance audits also assist the accountability process by holding managers to account for agency performance.

What are the phases in performance auditing?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team will develop audit criteria and define the audit field work.

At the completion of field work we will meet with agency management to discuss all significant matters arising out of the audit. Following this, we will prepare a draft performance audit report.

We meet with agency management to check that facts presented in the report are accurate and that recommendations are practical and appropriate. Following this, a formal draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the final report. The final report, which is tabled in Parliament, includes any comment made by the CEO on the conclusion and the recommendations of the audit.

Depending on the scope, performance audits can take several months to complete.

Copies of our performance audit reports can be obtained from our website or by contacting our Office.

How do we measure an agency's performance?

During the planning phase, the team develops the audit criteria. These are standards of performance against which the agency or program is assessed. Criteria may be based on best practice, government targets, benchmarks, or published guidelines.

Do we check to see if recommendations have been implemented?

Every few years we conduct a follow-up audit. These follow-up audits look at the extent to which action has been taken to address issues or recommendations agreed to in an earlier performance audit.

The Public Accounts Committee (PAC) may also conduct reviews or hold inquiries into matters raised in performance audit reports. Agencies are also requested to report actions taken against each recommendation in their annual report.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards. This includes ongoing independent certification of our ISO 9001 quality management system.

The PAC is also responsible for overseeing the activities of the Audit Office and conducts a review of our operations every three years.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament and from internal sources.

Further information

Further information can be obtained from our website www.audit.nsw.gov.au or by contacting us on 9275 7277.

Performance Audit Reports

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
85*	Internal Financial Reporting	*Internal Financial Reporting including a Better Practice Guide*	27 June 2001
86	Follow-up of Performance Audits	*The School Accountability and Improvement Model (May 1999) The Management of Court Waiting Times (September 1999)*	14 September 2001
87	E-government	*Use of the Internet and Related Technologies to Improve Public Sector Performance*	19 September 2001
88*	E-government	*e-ready, e-steady, e-government: e-government readiness assessment guide*	19 September 2001
89	Intellectual Property	*Management of Intellectual Property*	17 October 2001
90*	Intellectual Property	*Better Practice Guide Management of Intellectual Property*	17 October 2001
91	University of New South Wales	*Educational Testing Centre*	21 November 2001
92	Department of Urban Affairs and Planning	*Environmental Impact Assessment of Major Projects*	28 November 2001
93	Department of Information Technology and Management	*Government Property Register*	31 January 2002
94	State Debt Recovery Office	*Collecting Outstanding Fines and Penalties*	17 April 2002
95	Roads and Traffic Authority	*Managing Environmental Issues*	29 April 2002
96	NSW Agriculture	*Managing Animal Disease Emergencies*	8 May 2002
97	State Transit Authority Department of Transport	*Bus Maintenance and Bus Contracts*	29 May 2002
98	Risk Management	*Managing Risk in the NSW Public Sector*	19 June 2002
99	E-Government	*User-friendliness of Websites*	26 June 2002
100	NSW Police Department of Corrective Services	*Managing Sick Leave*	23 July 2002
101	Department of Land and Water Conservation	*Regulating the Clearing of Native Vegetation*	20 August 2002
102	E-government	*Electronic Procurement of Hospital Supplies*	25 September 2002
103	NSW Public Sector	*Outsourcing Information Technology*	23 October 2002
104	Ministry for the Arts Department of Community Services Department of Sport and Recreation	*Managing Grants*	4 December 2002
105	Department of Health Including Area Health Services and Hospitals	*Managing Hospital Waste*	10 December 2002

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
106	State Rail Authority	*CityRail Passenger Security*	12 February 2003
107	NSW Agriculture	*Implementing the Ovine Johne's Disease Program*	26 February 2003
108	Department of Sustainable Natural Resources Environment Protection Authority	*Protecting Our Rivers*	7 May 2003
109	Department of Education and Training	*Managing Teacher Performance*	14 May 2003
110	NSW Police	*The Police Assistance Line*	5 June 2003
111	E-Government	*Roads and Traffic Authority Delivering Services Online*	11 June 2003
112	State Rail Authority	*The Millennium Train Project*	17 June 2003
113	Sydney Water Corporation	*Northside Storage Tunnel Project*	24 July 2003
114	Ministry of Transport Premier's Department Department of Education and Training	*Freedom of Information*	28 August 2003
115	NSW Police NSW Roads and Traffic Authority	*Dealing with Unlicensed and Unregistered Driving*	4 September 2003
116	NSW Department of Health	*Waiting Times for Elective Surgery in Public Hospitals*	18 September 2003
117	Follow-up of Performance Audits	*Complaints and Review Processes (September 1999)* *Provision of Industry Assistance (December 1998)*	24 September 2003
118	Judging Performance from Annual Reports	*Review of Eight Agencies' Annual Reports*	1 October 2003
119	Asset Disposal	*Disposal of Sydney Harbour Foreshore Land*	26 November 2003
120	Follow-up of Performance Audits NSW Police	*Enforcement of Street Parking (1999)* *Staff Rostering, Tasking and Allocation (2000)*	10 December 2003
121	Department of Health NSW Ambulance Service	*Code Red:* *Hospital Emergency Departments*	15 December 2003
122	Follow-up of Performance Audit	*Controlling and Reducing Pollution from Industry (April 2001)*	12 May 2004
123	National Parks and Wildlife Service	*Managing Natural and Cultural Heritage in Parks and Reserves*	16 June 2004
124	Fleet Management	*Meeting Business Needs*	30 June 2004
125	Department of Health NSW Ambulance Service	*Transporting and Treating Emergency Patients*	28 July 2004
126	Department of Education and Training	*School Annual Reports*	15 September 2004

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
127	Department of Ageing, Disability and Home Care	*Home Care Service*	13 October 2004
128*	Department of Commerce	*Shared Corporate Services: Realising the Benefit including guidance on better practice*	3 November 2004
129	Follow-up of Performance Audit	*Environmental Impact Assessment of Major Projects (2001)*	1 February 2005
130*	Fraud Control	*Current Progress and Future Directions including guidance on better practice*	9 February 2005
131	Follow-up of Performance Audit Department of Housing	*Maintenance of Public Housing (2001)*	2 March 2005
132	Follow-up of Performance Audit State Debt Recovery Office	*Collecting Outstanding Fines and Penalties (2002)*	17 March 2005
133	Follow-up of Performance Audit Premier's Department	*Management of Intellectual Property (2001)*	30 March 2005
134	Department of Environment and Conservation	*Managing Air Quality*	6 April 2005
135	Department of Infrastructure, Planning and Natural Resources Sydney Water Corporation Sydney Catchment Authority	*Planning for Sydney's Water Needs*	4 May 2005
136	Department of Health	*Emergency Mental Health Services*	26 May 2005
137	Department of Community Services	*Helpline*	1 June 2005
138	Follow-up of Performance Audit State Transit Authority Ministry of Transport	*Bus Maintenance and Bus Contracts (2002)*	14 June 2005
139	RailCorp NSW	*Coping with Disruptions to CityRail Passenger Services*	22 June 2005
140	State Rescue Board of New South Wales	*Coordination of Rescue Services*	20 July 2005
141	State Budget	*In-year Monitoring of the State Budget*	28 July 2005
142	Department of Juvenile Justice	*Managing and Measuring Success*	14 September 2005
143	Asset Management	*Implementing Asset Management Reforms*	12 October 2005
144	NSW Treasury	*Oversight of State Owned Electricity Corporations*	19 October 2005
145	Follow-up of 2002 Performance Audit	*Purchasing Hospital Supplies*	23 November 2005
146	Bus Transitways	*Liverpool to Parramatta Bus Transitway*	5 December 2005
147	Premier's Department	*Relocating Agencies to Regional Areas*	14 December 2005
148	Department of Education and Training	*The New Schools Privately Financed Project*	8 March 2006

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
149	Agency Collaboration	*Agencies Working Together to Improve Services*	22 March 2006
150	Follow-up of 2000 Performance Audit	*Fare Evasion on Public Transport*	26 April 2006
151	Department of Corrective Services	*Prisoner Rehabilitation*	24 May 2006
152	Roads and Traffic Authority	*The Cross City Tunnel Project*	31 May 2006
153	Performance Information	*Agency Use of Performance Information to Manage Services*	21 June 2006
154	Follow-up of 2002 Performance Audit	*Managing Sick Leave in NSW Police and the Department of Corrective Services*	29 June 2006
155	Follow-up of 2002 Performance Audit	*Regulating the Clearing of Native Vegetation*	19 July 2006
156*	Fraud Control	*Fraud Control Improvement Kit: Meeting Your Fraud Control Obligations*	20 July 2006
157	Roads and Traffic Authority	*Condition of State Roads*	16 August 2006
158	Department of Education and Training	*Educating Primary School Students with Disabilities*	6 September 2006
159	NSW Health	*Major Infectious Disease Outbreaks: Readiness to Respond*	22 November 2006
160	NSW Health	*Helping Older People Access a Residential Aged Care Facility*	5 December 2006
161	Follow-up of 2003 Performance Audit	*The Police Assistance Line*	6 December 2006
162	NSW Health	*Attracting, Retaining and Managing Nurses in Hospitals*	12 December 2006
163	Legal Aid Commission of NSW	*Distributing Legal Aid in New South Wales*	13 December 2006
164	Department of Juvenile Justice NSW Police Force	*Addressing the Needs of Young Offenders*	28 March 2007
165	Homelessness	*Responding to Homelessness*	2 May 2007
166	Follow-up of Performance Audit Department of Education and Training	*Using Computers in Schools for Teaching and Learning*	9 May 2007
167	Follow-up of 2001 Performance Audit: Ambulance Service of New South Wales	*Readiness to Respond*	6 June 2007
168	Ministry of Transport	*Connecting with Public Transport*	6 June 2007

* Better Practice Guides

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website www.audit.nsw.gov.au.