AUDITOR-GENERAL'S REPORT PERFORMANCE AUDIT

Follow-up of Performance Audit: Bus Maintenance and Bus Contracts



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 Follow-up of Performance Audit: Bus Maintenance (State Transit Authority) and Bus Contracts (Ministry of Transport).

R J Sendt Auditor-General

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Sydney
June 2005

State Library of New South Wales cataloguing-in publication data

New South Wales. Audit Office.

Performance audit : bus maintenance : State Transit Authority ; bus contracts : Ministry of Transport / [The Audit Office of New South Wales]

07347 21765

1. Bus lines - New South Wales - Auditing. 2. Buses - New South Wales - Maintenance and repair - Auditing. 3. Transportation and state - New South Wales - Auditing. 4. State Transit (N.S.W.) - Auditing. 5. New South Wales. Ministry of Transport - Auditing. 1. Title: Bus maintenance: State Transit Authority; bus contracts: Ministry of Transport. II. Title: Auditor-General's report: follow-up of performance audit: bus maintenance: State Transit Authority; bus contracts: Ministry of Transport.

354.76932809944 388.4132209944

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Foreword

Periodically we review the extent to which agencies have implemented the recommendations they accepted from our earlier audits.

This gives Parliament and the public an update on the extent of progress made.

In this follow-up audit, we examine changes following our May 2002 report on how well the:

- State Transit Authority maintained its buses
- Ministry of Transport administered contracts for the provision of regular passenger bus services.

Bob Sendt Auditor-General

June 2005

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	Executive summary

The State Transit Authority (State Transit) is the largest bus operator in NSW and one of the few remaining government bus operators in Australia. In 2003-04, it had a fleet of 1,926 buses which travelled more than 90 million kilometres. Garages that operate as part of depots maintain this fleet. Garages are staffed by State Transit employees with most routine maintenance and repairs completed on site. State Transit had 419 maintenance staff and spent more than \$30 million on maintenance in 2003-04.

Our 2002 performance audit examined the efficiency and effectiveness of State Transit's approach to maintaining its bus fleet, finding that State Transit was not meeting its own maintenance standards. State Transit accepted only five of the nineteen recommendations in our 2002 performance audit report, *Bus maintenance and bus contracts*.

Audit opinion

This follow-up audit found that State Transit satisfactorily implemented those recommendations it accepted by:

- revising and improving its performance indicators, to better monitor garage performance
- implementing various initiatives to improve the quality of fleet records
- reporting quarterly to the Board on the results of fleet maintenance audits, and monthly to its executive committee on the number of outstanding work orders.

State Transit has also implemented other changes to address issues we raised in the 2002 report, including obtaining certification of its bus maintenance systems to the ISO 9001:2000 quality standard.

Following these changes, there was some improvement in reliability and outstanding work orders.

In October 2004, State Transit commenced an organisation-wide reform program. A review conducted by State Transit as part of this reform program concluded that further improvement to its garage operations and maintenance practices was needed.

State Transit is now consulting with trade unions to develop a Maintenance Improvement Program. It expects this to result in market testing of fleet maintenance audits, improved maintenance supervision, and a greater proportion of safety inspections being undertaken by a single person. These are consistent with the recommendations in our 2002 report.

Our 2002 audit

Key findings of 2002 audit

Although State Transit had appropriate maintenance standards in place, the 2002 audit found:

- practices that were inconsistent with these standards
- a 65 per cent increase in the number of repairs that had not been completed by garages and significant delays in rectification
- an increase in the number of buses breaking down in service, which was estimated to be costing State Transit over \$5 million each year
- a doubling of the number of defects identified during maintenance audits
- 48 per cent of buses inspected as part of the maintenance audit program immediately stopped and not returned to service as they failed to meet State Transit's standards for bus safety or reliability.

The 2002 audit also found that the average age of the State Transit fleet had increased in the previous decade from around seven years to nearly twelve years. While the increasing age of the State Transit bus fleet contributed to an overall increase in the volume of repair work, maintenance practices should have controlled the impact of ageing and prevented any overall deterioration in fleet condition.

Furthermore, in reviewing State Transit's approach to managing maintenance, our 2002 audit found:

- inadequate monitoring of garage performance and no targets against which to assess maintenance outcomes
- uncertainty as to whether or not maintenance by garages represented best value for money
- a lack of business planning for maintenance outcomes
- inadequate responses to issues raised in maintenance audits to prevent recurrence
- ineffective garage based quality control systems
- inaccurate records of the condition of the fleet.

2002 recommendations accepted by State Transit

In 2002, State Transit accepted recommendations to:

- develop definitions of performance indicators that identified the data source and how results were calculated
- improve the quality of fleet condition records
- monitor garage performance using a range of efficiency and effectiveness indicators and targets
- develop an annual audit program for approval by the Board or the Audit Committee
- report to the Board, or the Audit Committee, and executive management on the outcomes of maintenance audits.

Appendix 2 provides a summary of the status of accepted recommendations and changes since 2002. Appendix 3 lists the recommendations State Transit rejected and the reasons State Transit provided at the time.

Response from State Transit Authority

Thank you for your letter of 9 May 2005 providing a copy of the final report of the Follow up of 2002 Performance Audit - Bus Maintenance.

As your letter acknowledges, there has been considerable liaison between our offices regarding both the conduct of the audit and the content of the report.

As your report notes, the State Transit Authority has commenced an organisation wide reform program which includes the development of a maintenance improvement program. Whilst this program still has some way to go to achieve the desired levels of reliability and performance, the initial signs are encouraging.

Following the consultation between our staff, I have no further detailed comment on the report.

(signed)

Roger Wilson Acting Chief Executive

Dated: 17 May 2005

What has	happened	d since tl	ne 2002 ai	udit?
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What has been achieved following our 2002 recommendations?

Assurance that the fleet complies with maximum average age requirement

In 2002, the average age of the State Transit bus fleet had increased over the previous decade from around seven years to nearly twelve years. We found that there was a risk that State Transit did not comply with the twelve year maximum average fleet age requirement of the Ministry of Transport because the Ministry's requirement applied to each separate regional contract, not on a whole of fleet or depot basis which was the approach used by State Transit.

We recommended State Transit determine, in consultation with the Ministry of Transport, the appropriate fleet profile in order to comply with contractual obligations for maximum average fleet age.

At the time, State Transit disagreed with our assessment and considered that it complied with the Ministry's fleet age requirement. In August 2003, State Transit advised the Ministry that it had exceeded its average fleet age obligation. It subsequently advised the Ministry of its plans to acquire new buses in order to comply. The Ministry accepted these plans.

Introduce mechanisms to better determine fleet size In 2002, we found that State Transit provided bus services that exceeded its contractual obligations yet did not receive compensation from the NSW Government through specific payments for providing these services. We concluded that it might have been possible to improve the efficiency of services through redesigning or reducing services on unprofitable routes.

We recommended that State Transit review the fleet growth target to take account of opportunities to redeploy buses from areas where services exceeded contract requirements and were difficult to justify. State Transit did not consider this recommendation to be relevant to bus maintenance. It has, however, continued its program to redeploy buses from over-serviced routes to meet excess demand elsewhere. Overall, the fleet size has remained stable.

Better information on performance

In 2002, we found that despite a high frequency of safety inspections and a focus on repairing immediately safety-related defects, the number of defects per bus was increasing and there was no improvement in service reliability.

We also found that State Transit did not adequately monitor all aspects of garage performance and had not developed targets against which garage performance could be judged. We recommended that State Transit monitor garage performance using a range of efficiency and effectiveness indicators and develop targets to judge garage performance.

In response, State Transit reviewed and revised its fleet performance indicators. The number of indicators has been reduced from 34 to 20, five of which are new, and data is now stored on a single database for monitoring maintenance (see Exhibit 1).

State Transit has also documented definitions and methods of calculating these indicators to promote consistency across garages.

Exhibit 1: Current performance indicators for each garage (*indicates new since 2002)			
Indicators	Performance issues		
Changeovers per 100,000km Changeovers by trade groups Failed in service - Changeovers Damaged in service - Changeovers Changeovers by Failure Type	Indicates fleet reliability. Maintenance is an important contributor to reliability, but some changeovers result from 'traffic' issues such as collisions.		
Open Work Orders Work Orders Closed* Open Work Orders Per Bus*	Indicates fleet condition, workload, turnover and efficiency.		
Number of collisions	Indicates the effect collision damage may be having on depot workload.		
Repeat Changeovers Driver Bookups per month* Repeat Work Orders Buses Stopped with Category 4 Defects* Buses Stopped with Category 5+ Defects	Indicates the effectiveness of maintenance.		
Maintenance Compliance Review (ie fleet maintenance audit) - Defects per Bus Proportion of Buses Stopped during Maintenance Compliance Review	Indicates the effectiveness of safety inspections and subsequent follow up of work.		
Peak Buses Not Supplied	Indicates the effectiveness of maintenance, but is affected also by bus operational issues (eg collisions) and fleet availability.		
Maintenance Cost Per Km Maintenance Cost Per Bus Breakdown v Total Core Maintenance Costs*	Indicates the efficiency and cost-effectiveness of maintenance.		

Source: State Transit 2004

We also recommended in 2002 that State Transit report on key performance indicators and targets for maintenance in the annual report and, in particular, highlight performance in terms of the safety and reliability of buses.

We found that the 2002-03 and 2003-04 State Transit Annual reports separated changeovers attributable to 'mechanical' issues and therefore related to maintenance, from those attributable to 'traffic' issues (such as a collision).

Improving fleet reliability

Bus changeovers are used as an indicator of fleet reliability. Bus changeovers impact on passengers when a bus breaks down during a run or a trip is missed. In 2002, we found that the number of bus changeovers had declined in preceding years, but was still high by industry standards.

We also found that consultants State Transit had engaged in 1999 to review maintenance practices identified that 85 per cent of all changeovers were the result of maintenance issues. We found in 2002 that a number of improvement strategies had been introduced, but that not all the recommendations of the 1999 consultant review had been implemented. State Transit advises that it has since implemented those recommendations of the 1999 review which it accepted.

Problems with the accuracy and completeness of changeover data

In addition, in 2002 we found that due to different definitions being used by garages to measure changeovers, results varied depending on the data source and we estimated that changeovers could have been understated by as much as 40 per cent.

We recommended that State Transit develop definitions of performance indicators which it has since done to improve the accuracy and completeness of data.

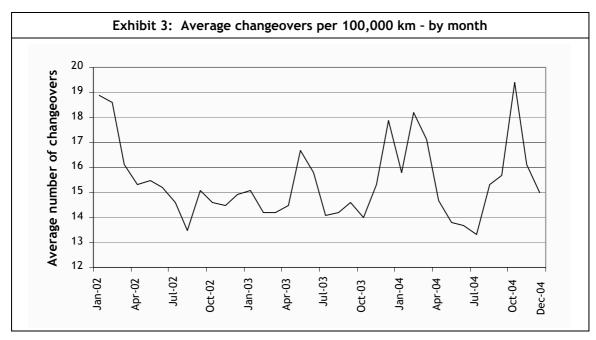
Between 2001-02 and 2003-04, there was some improvement in bus changeovers.

Exhibit 2: Annual average bus changeovers					
	2001-02	2002-03	2003-04		
Average changeovers per bus					
Mechanical	7.7	7.0	7.1		
Traffic	2.1	2.0	1.9		
Total	9.8	9.0	9.0		
Average changeovers per 100,000 km					
Mechanical	16.7	15.2	15.1		
Traffic	4.4	4.2	4.2		
Total	21.1	19.4	19.3		

Source: State Transit Annual Report 2003-04

However, as illustrated in Exhibit 3, average changeovers per 100,000 km month-by-month show:

- a decline (improvement) from January 2002 to August 2002
- an upward trend (deterioration) since then.



Source: State Transit 2005

Ensuring compliance with maintenance standards

In 2002, we found that while State Transit's maintenance standards for both safety inspections and services met or exceeded regulatory requirements, there were numerous examples of garages not complying with these standards. Problems included incomplete safety inspections, incomplete services, no indication whether the bus was roadworthy following a safety inspection or service, buses not receiving services when due and inconsistent grading and recording of defects.

At the time, there were no targets established against which the performance of a garage could be judged and the performance indicators used to monitor a garage were inadequate.

State Transit advised in 2002 that garages would be captured under ISO 9001 Certification. State Transit achieved ISO certification in July 2002, and was the first bus operator in NSW to be certified. It has also implemented a comprehensive set of performance indicators to monitor garage performance (see Exhibit 1).

Opportunities to improve the efficiency and effectiveness of bus maintenance now being considered

To enhance the efficiency and effectiveness of bus maintenance, we also recommended in 2002 that State Transit:

- examine options for introducing one-person safety inspections
- market test garage maintenance tasks to see if best value for money is achieved from current arrangements.

At the time, State Transit did not accept these recommendations, and continued its practice of inspections by a team of three comprising a mechanic, electrician and body repairer. However, in 2002 State Transit introduced one-person safety inspections in two depots, replacing the three-person team, and intends to extend this to all depots as part of its current organisation-wide reform program.

In regard to market testing, State Transit indicated in 2002 that outsourcing of bus maintenance in its entirety was not consistent with Government policy. State Transit advises that it outsources a number of specific maintenance tasks (as it did in 2002) and continues to review regularly processes and functions to achieve best value. For example, it is currently considering outsourcing fleet maintenance audits.

Need to improve maintenance records

In 2002, we found that State Transit used a computerised maintenance management system to forecast and schedule maintenance activities and record repairs that needed to be completed, but that not all depots followed the same procedures for recording defects identified during safety inspections.

We found inconsistencies in practices for recording repairs including not all defects being recorded in the maintenance management system and defects recorded with incorrect priority ratings.

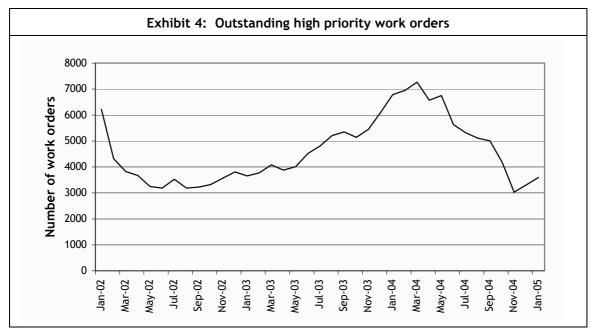
We also found that State Transit did not have an accurate and reliable picture of the amount of rectification work needed for the fleet, and that instead it relied on an estimate using the number of defects identified in maintenance audits. We recommended that State Transit improve the quality of its fleet condition records.

In response, State Transit has:

- revised its guidance material on maintenance, including better defining how work orders should be prioritised
- standardised documentation and work practices at depots, including safety inspections and scheduled maintenance services
- trained all garage staff to promote consistency in interpretation of inspection standards
- placed its fleet maintenance auditors at depots on two separate occasions to work with staff to validate outstanding work orders.

Initial improvements were achieved, but not sustained

There were some improvements in the number of high priority open work orders following our audit but the improvements have not been sustained.



Source: State Transit 2005

The improvement in early 2002 coincided with State Transit placing fleet maintenance auditors in depots to oversight safety inspections and validate data on outstanding work orders. The improvement from March 2004 coincided with the issue being specifically raised at the Executive Committee, the conduct of a review of bus maintenance, and fleet maintenance auditors again being placed in depots.

State Transit has enhanced the maintenance audit program In 2002, we found that State Transit conducted fleet maintenance audits to examine vehicles for safety and reliability problems and to ensure that garages complied with maintenance policies, procedures and standards.

In reviewing the results of these audits, we also found that the average number of defects identified had nearly doubled in all garages between 1999 and 2002, indicating a decline in the quality of maintenance.

We recommended that State Transit develop an annual fleet maintenance audit program for approval by the Board or the Audit Committee; and report to the Board, or the Audit Committee, and executive management on the outcomes of maintenance audits.

We also recommended that State Transit increase the coverage of maintenance audits until the number of defects identified by audit reached an acceptable level.

State Transit developed a fleet maintenance audit program for 2003-04 which was approved by the Audit Committee. This program resulted in all buses being audited in that year. The Committee received a report on the first quarter's results. Since then the State Transit Board has received quarterly reports, and the Board Safety Committee will receive these reports in the future.

Between September 2004 and February 2005, State Transit stopped undertaking fleet maintenance audits in order to place its fleet maintenance auditors in depots to work with garage staff (as discussed above).

State Transit advises it is currently developing a new, comprehensive program of internal and external maintenance audits and technical inspections as part of its organisation-wide reform program.

Recent initiatives

In October 2004, State Transit's Chief Executive announced a two-year, organisation-wide reform program to meet the challenges of the new bus contract regime being implemented by the Ministry of Transport. Key objectives of the reform program include:

- developing a business approach for State Transit
- reducing corporate overheads by consolidating support services and reducing duplication and overlap
- achieving efficiencies in order to redirect resources to front line services
- training staff to meet the new challenges.

As part of this reform program, State Transit reviewed its bus maintenance practices, and found it needed to:

- reduce the number of bus changeovers
- improve maintenance productivity
- increase consistency between depots in applying maintenance standards
- reduce recording of unnecessary high priority work orders.

State Transit is developing a maintenance improvement program

State Transit advises that since early 2005 it has been consulting with relevant trade unions to develop a maintenance improvement program. It expects the program will result in:

- improved maintenance supervision
- market testing of its annual fleet maintenance auditing program
- a greater proportion of safety inspections being undertaken by a single person.

Monitoring the implementation of our recommendations

State Transit's approach to monitoring the implementation of recommendations represents good practice in that it:

- prepared an implementation plan which outlined the tasks required to meet the accepted recommendations, and allocated responsibilities and accountabilities for these tasks
- used its Internal Audit Branch to monitor progress and confirm that all tasks were complete and that accepted recommendations were fully implemented
- reported progress to the Board
- commented in each annual report since the audit on its progress with implementation.

Ministry of		_
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Millistry Oi	Iransport -	Bus contracts

	Executive summary

Bus operators in New South Wales can only provide regular passenger services under contract with the Ministry of Transport in accordance with the *Passenger Transport Act 1990*. Contracts entered into prior to 2004 gave operators the exclusive right to provide services in a designated area or on certain routes.

The Act also requires all bus operators to be accredited to ensure they meet the NSW Government's standards of financial viability, safety and vehicle maintenance.

Audit opinion

In 2002, we concluded there was no guarantee that:

- value for money was being achieved because contracts were not contestable and did not provide incentives for operators to optimise service levels
- operators were complying with contract conditions because of the lack of reliable data on operator performance
- operators were complying with accreditation standards because of limited auditing of operator compliance.

The Ministry of Transport accepted all the recommendations of our 2002 audit and has made progress in addressing the issues raised.

The Ministry has overseen changes to the *Passenger Transport Act 1990* which enable the phased introduction of contestability, provision of incentives for good performance, and enhanced performance reporting. It is currently in the process of negotiating new, performance-based contracts with bus operators and finalising a framework to strengthen auditing of operator compliance with accreditation requirements.

Our 2002 audit

Key findings of 2002 audit

In 2002, we found that the existing legislative framework and contracts limited the Ministry's ability to negotiate changes and gave bus operators statutory rights to contract renewal on existing terms and conditions. As a result, contract renewal was not contested, best practice standards for bus services were not included in contracts and operators were not required to provide detailed performance reports to the Ministry.

We also found that:

- the minimum service levels in contracts were based in part on population discounted by the number of cars and proximity to other forms of public transport, presenting a risk that the level of service in some contract areas was poorly or inconsistently related to demand
- the Ministry did not have adequate assurance that operators were complying with accreditation standards and contractual obligations due to limited audit coverage and the lack of valid and reliable data on operator performance
- the methodology used to calculate age meant that a new bus could operate for 23 months before being deemed to be one year old, and that there was no maximum age limit for any vehicle across the fleet.

The Ministry of Transport accepted and has made progress in implementing the recommendations of our 2002 audit. Appendix 4 provides a summary of changes since our 2002 audit.

Response from the Ministry of Transport

Thank you for your letter of 27 April 2005 concerning the follow-up of the 2002 Performance Audit of Bus Contracts.

As the follow-up audit notes, the Ministry has accepted all the recommendations of your 2002 audit. Major changes are now being made in the way the Ministry procures bus services and manages bus contracts to improve operators' accountability, ensure transparency in payments and most importantly, develop a real bus network which reflects actual travel patterns.

The Ministry appreciates the constructive approach shown by The Audit Office in undertaking the follow-up audit. In light of the cooperative relationship developed by the Ministry and The Audit Office in this process, I have no further comments on your report.

(signed)

John Lee Director General

Dated: 4 May 2005

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What has	happened	I since the	2002 audit	?
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What has been achieved following our 2002 recommendations?

Establish contestability for NSW bus services

In 2002, we found that the Ministry of Transport had encountered difficulties in effectively contracting for the provision of bus services in NSW due to limitations posed by the *Passenger Transport Act 1990* and contractual arrangements.

Under commercial contracts, the operator had a right of contract renewal for a further period of five years if the operator met the objectives and standards prescribed in the performance assessment regime. The regime was not in place, so the operator was arguably entitled to contract renewal under existing terms and conditions (subject to minimum service levels and certain other contract requirements being met). These arrangements limited the ability of the Ministry to negotiate changes to the contract. Even minor or insignificant variations could be opposed by the operator.

Under the arrangements at the time, contract renewal was not contested, best practice standards for bus services were not included in contracts and operators were not required to provide detailed performance reports to the Ministry.

We recommended that the Ministry introduce the necessary reforms, both legislative and contractual, to establish contestability for NSW bus services.

Following our audit:

- Booz Allen Hamilton (on behalf of the Ministry) undertook a review of regulatory options for bus reform in NSW which assessed international and interstate practices
- Professor Tom Parry undertook a major inquiry into sustainable transport for NSW, which assessed options for improving funding and delivery of public transport
- The Hon Barrie Unsworth undertook a major review of bus services in NSW.

Change to legislation completed

Following our audit and these reviews, the *Passenger Transport Act 1990* was amended in 2004. These amendments allow the Ministry to:

- declare new bus contract regions and strategic bus corridors
- limit the term of bus contracts for regular bus services
- preclude the awarding of contracts in perpetuity
- include performance standards in contracts, which the Ministry must enforce
- terminate bus contracts which were in place when the Act commenced.

The Act also requires the Independent Pricing and Regulatory Tribunal to set maximum fares for regular bus services provided by State Transit and private operators.

New bus contracts have been developed

In line with the amendments to the Act, the Ministry:

- divided the Sydney metropolitan area into 15 regions, down from the previous 87, after consultation with the Bus and Coach Association of NSW
- sought expressions of interest for the provision of bus services in each region from the existing bus operators
- developed a model bus contract as the basis for negotiations with operators
- set a target date of 1 January 2005 to have all new contracts in place.

The Ministry did not achieve this target date, with only one new bus contract signed by 1 January 2005. Some of the issues raised by operators concerned the model contract and its possible impact on commercial viability. To address these concerns the new Minister for Transport on 10 February 2005 established the Bus Reform Contract Steering Committee. This Committee comprises senior representatives of The Cabinet Office, Treasury, the Ministry and ministerial advisors. Consistent with a suggestion of the Bus and Coach Association of NSW (BCA), the Minister also appointed an expert to provide him with independent advice on the commercial viability of the new contracts and funding models. Following these initiatives, in April 2005 three more contracts were signed. The remaining seven private operators and State Transit are scheduled to sign contracts for the other Sydney regions by 30 June 2005.

Better process to match service to demand

In 2002, we identified a risk that the level of service in some contract areas was poorly or inconsistently related to demand. Commercial contracts between the Ministry and bus operators included minimum service levels to ensure bus services were provided to the community. These levels were based, in part, on the total population in the contract area discounted by the number of cars and proximity to other forms of public transport, whereas the most reliable and consistent method for measuring demand for bus services is patronage data. We recommended that the Ministry progress its review of the minimum service level policy.

The Ministry has developed new Service Planning Guidelines for the Sydney bus contract regions. The objectives of these guidelines include the delivery of bus services that reflect travel demand and meet a broad range of community needs. They promote continual review of service levels with a passenger focus, and ensure community involvement in planning and review of bus services.

The guidelines require community and passenger consultation to be incorporated into service planning. They propose the establishment of clear patronage and viability benchmarks which will trigger a review of whether services are appropriate. The Ministry's model contract requires operators to follow the guidelines.

New performance reporting requirements introduced

In 2002, we found that the Ministry did not have adequate assurance that operators were complying with contractual obligations due to the lack of valid and reliable data on operator performance. We recommended that the Ministry expand the reporting requirements for all bus operators to include data on performance outcomes and service quality.

As discussed above, the 2004 amendments to the *Passenger Transport Act* 1990 allows the Ministry to include enforceable performance standards in new bus contracts.

The Ministry's model contract:

- includes a range of key performance indicators covering matters such as punctuality, reliability, service quality, and financial viability
- requires the operator to report regularly its performance against these indicators to the Ministry and the public
- provides for penalties and the payment of incentives based on operator performance.

The indicators will be common to all contracts, however, the model contract includes a process to establish region-specific punctuality and reliability benchmarks, incentives and penalties.

The Ministry intends to use various methods to validate operator information, including:

- conducting passenger satisfaction surveys
- conducting independent surveys of punctuality and reliability
- its inspectors monitoring punctuality and reliability
- analysis of customer complaints
- an enhanced framework of audits and inspections (see below).

In addition, the Ministry and the Roads and Traffic Authority are jointly developing a Bus Monitoring and Priority System (BMPS) which will track bus punctuality and reliability and provide reliable data to judge performance. Penalties and incentives will not apply until the BMPS is in operation in 2007.

In the interim, since March 2004 the Ministry has required Sydney bus operators to report to it monthly on patronage, punctuality, reliability and complaints.

Improved assurance and compliance practices

In 2002, we also found that the Ministry did not have adequate assurance that operators were complying with accreditation standards due to limited audit coverage. We recommended that the Ministry consider alternative compliance arrangements to complement audit activities and the use of operator risk profiles to target investigations.

In response, the Ministry has developed a framework for audits and inspections to provide greater assurance that operators comply with accreditation standards. Key elements of the proposed framework include:

- independent compliance audits every three years, funded by the bus operator
- operator self-assessment each other year
- random and targeted inspections and audits by the Ministry.

The new system is due to start in June 2005. The Ministry has also advised it will use operator risk profiles to target investigations.

There is now a maximum age for buses in service and a better method of calculating fleet age

Bus age impacts on both reliability and passenger safety. In 2002, we found that each commercial contract required the average age of vehicles not to exceed 12 years, but the methodology used to calculate age meant that a new bus could operate for 23 months before being deemed to be one year old. The average age calculation also did not establish a maximum age limit for any vehicle across the fleet. We recommended the Ministry review the method used to calculate the average age of buses to provide a sound and transparent basis for the regulation of fleet age.

The Ministry's model new bus contract includes:

- a simplified method for calculating the average fleet age, which better reflects the true age of buses
- a maximum age for individual buses.

Monitoring the implementation of our recommendations

Since our audit, the Ministry has given bus reform high priority. It has been one of its major programs. The Ministry's senior management has closely monitored progress. The Ministry's annual reports have consistently included detailed commentary on progress with the bus reform agenda to allow us to monitor implementation.

	Appendices

Appendix 1 About the audit

Audit objective

The objective of this follow-up performance audit was to determine whether or not the State Transit Authority and the Ministry of Transport had implemented recommendations they accepted from our 2002 report, *Bus maintenance and bus contracts*.

Audit criteria

We judged changes in practice or performance based on whether:

- the agency had assessed the impact of the recommendations, determined the course of action, and implemented accepted recommendations
- the implementation plan was monitored and progress reported (eg through an Audit Committee or other monitoring mechanisms)
- the agency had reported its progress in subsequent annual reports.

Audit scope and focus

We examined the extent to which the State Transit Authority and the Ministry of Transport implemented the recommendations of our 2002 report; the impact and magnitude of any change; and if not fully implemented, what action was taken to address the issue.

Audit approach

We obtained sufficient specific evidence to show what the State Transit Authority and the Ministry of Transport did to progress accepted recommendations, and what changes had occurred as a result of implementation. Findings were based on the evidence collected through document analysis, interviews with staff, and the formal response of the agencies to our 2002 recommendations.

Cost of the audit

Including printing and overheads, the estimated cost of this audit is \$96,000.

Acknowledgement

The Audit Office gratefully acknowledges the cooperation and assistance provided by representatives of the State Transit Authority and the Ministry of Transport.

Audit Team

Our team leader for this performance audit was Rod Longford who was assisted by Bettina Ocias. Jane Tebbatt provided direction and quality assurance.

Appendix 2 State Transit Authority: Bus maintenance Status of implementation of accepted recommendations

	Recommendation	Status	Changes in practice
6.	Develop definitions of performance indicators that identify the data source and how results are calculated	Implemented	State Transit revised its performance indicators. From the 34 performance indicators used, 20 were identified and consolidated into a single database for monitoring maintenance. Definitions and methods of calculating performance indicators have been documented.
10.	Improve the quality of fleet condition records	Implemented	 State Transit: revised inspection standards and manuals, including introduction of a maintenance manual which defines how work orders should be prioritised increased the coverage of fleet maintenance audits deployed fleet maintenance auditors to depots trained garage staff to promote consistency in interpretation of inspection standards standardised documentation and work practices at depots, including six-weekly safety inspections and scheduled maintenance services enhanced the functionality of the maintenance database.
13.	Monitor garage performance using a range of efficiency and effectiveness indicators and targets to judge garage performance	Implemented	State Transit reviews performance levels of garages against the revised performance indicators. State Transit's executive receives monthly reports on the amount of planned work outstanding and the amount of open and closed work orders in that month.
17.	Develop an annual audit program for approval by the Board or the Audit Committee	Implemented	State Transit developed a fleet maintenance audit program for 2003-04 which was approved by the Audit Committee. There is no plan at present, and audits were discontinued between September 2004 and February 2005 so that State Transit could place its fleet maintenance auditors in depots to oversight safety inspections and validate data on outstanding work orders. State Transit advises that it is currently developing a new, comprehensive program of internal and external maintenance audits and technical inspections.

Recommendation		Status	Changes in practice	
19.	Report to the Board, or the Audit Committee, and executive management on the outcomes of maintenance audits	Implemented	The Audit Committee, and more recently the Board, have received quarterly reports on the results of audits.	

Appendix 3 State Transit Authority: Bus maintenance Recommendations not accepted and the Authority's response

Recommendation		Response	
1.	Consider expanding use of external providers as a means of achieving best value from its investment in bus maintenance	State Transit advised that it did not consider this recommendation to be consistent with the Government's policy, nor a practice employed by other bus operators. It also advised that it had a good understanding of the costs of maintenance in the market place, and was well equipped to assess value.	
2	Determine in consultation with the Ministry of Transport, the appropriate fleet profile in order to comply with contractual obligations for average fleet age	State Transit advised that no response was necessary as it considered that it complied with the average fleet age requirement.	
3.	Review the fleet growth target to take account of opportunities to redeploy buses from areas where services exceed contract requirements and are difficult to justify	State Transit advised that it did not consider this recommendation to be relevant to bus maintenance.	
4.	Further progress the implementation of strategies recommended in the 1999 review of bus changeovers	State Transit advised that it was implementing those recommendations of the 1999 review that it had accepted, and that the audit recommendation was unnecessary.	
5.	Examine opportunities to outsource roadside service	State Transit advised that it had already examined outsourced road service and found it unacceptable.	
7.	Adopt a financial year framework for reporting fleet performance data to align with data published in the annual report	State Transit advised that this recommendation was not necessary.	
8.	Report on key performance indicators and targets for maintenance in the annual report and highlight performance in terms of safety and reliability of buses	State Transit advised that no response was necessary as it already reported performance indicators and targets for maintenance, safety and reliability of buses.	
9.	Include in the 2002 annual report correct data on changeovers, fleet age and fleet size for 2002	State Transit advised that it did not accept that the data on fleet age and fleet size in the 2001 Annual Report was incorrect.	
11.	Develop business plans that include strategies, performance indicators and targets for garages	State Transit advised that strategies, performance indicators and targets were part of its ISO 9001 Management Review process.	

	Recommendation	Response	
12.	Implement formal agreements with garages that outline garage performance standards and operational requirements	State Transit advised that it did not consider garages to be independent businesses; and that they had direct line accountability to depot managers.	
14.	Obtain AS/ISO 9001 certification as a mechanism for ensuring consistency of maintenance practices	State Transit advised that it considered the recommendation unnecessary.	
15.	Examine options for introducing one man six-weekly safety inspections	State Transit advised that it would assign such specialised staff as necessary for this function.	
16.	Market test garage maintenance tasks to see if best value for money is achieved from current arrangements	State Transit advised that it did not consider this recommendation to be consistent with the Government's policy, nor a practice employed by other bus operators. It also advised that it had a good understanding of the costs of maintenance in the market place, and was well equipped to assess value.	
18.	Increase the coverage of maintenance audits until the number of defects identified by audit reaches an acceptable level	State Transit advised that vehicle condition would be improved by application of the ISO 9001 system and by increased effort from maintenance managers.	

Source: Letter from the Chief Executive, State Transit to the Audit Office, 21 June 2002

Appendix 4 Ministry of Transport: Bus contracts
Status of implementation of accepted recommendations

	Recommendation	Status	Changes in practice
1.	Introduce the necessary reforms, both legislative and contractual to ensure contestability for NSW bus services	Partially implemented	The Passenger Transport Act 1990 has been amended to remove the statutory right of contract renewal and enable the introduction of performance-based contracts, more robust performance monitoring and reporting, and performance incentives. The Ministry has developed a model bus contract to effect these changes and is using this to negotiate with operators. The Ministry's original deadline to have contracts let for the fifteen new Sydney bus contract regions was 1 January 2005. In February 2005, with only one contract let, the Minister established the Bus Reform Steering Committee to review and approve contract details for the Sydney metropolitan area and appointed an expert to advise him on the commercial viability of the contracts. Following these initiatives, in April 2005 three more contracts were signed.
2.	Progress the review of the minimum service level policy	Partially implemented	The Ministry has developed service planning guidelines to replace the minimum service level policy. The guidelines aim to move from a prescriptive formula and static policy to a process that promotes continual review with a passenger focus, and ensure community involvement in planning and review of bus services. These will commence operation when the new contracts are signed.
3.	Expand the reporting requirements for all bus operators to include data on performance outcomes and service quality	Partially implemented	 The model contract: includes a range of key performance indicators requires the operator to report on performance to the Ministry and the public includes provision for penalties and the payment of incentives based on performance.

	Recommendation	Status	Changes in practice
4.	Consider alternative compliance arrangements to complement audit activities and the use of operator risk profiles to target interventions	Partially implemented	The Ministry has developed an enhanced framework of audits and inspections to provide assurance that operators comply with accreditation standards. The key elements of the framework include: • independent compliance audits every three years • operator self-assessment each other year • targeted inspections and audits by the Ministry. This framework is due to start in June 2005.
5.	Review the method used for calculating the average age of buses to provide a more sound and transparent basis for the regulation of fleet age	Partially implemented	 The model contract includes: a simplified method for calculating the age of the fleet a maximum age for buses.

Performance Audits by th	ıe
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Performance Auditing

What are performance audits?

Performance audits are reviews designed to determine how efficiently and effectively an agency is carrying out its functions.

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 relating to those functions.

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

They seek to improve the efficiency and effectiveness of government agencies and ensure that the community receives value for money from government services.

Performance audits also assist the accountability process by holding agencies accountable for their performance.

What is the legislative basis for Performance Audits?

The legislative basis for performance audits is contained within the *Public Finance and Audit Act 1983*, *Part 3 Division 2A*, (the Act) which differentiates such work from the Office's financial statements audit function.

Performance audits are not entitled to question the merits of policy objectives of the Government.

What conducts performance audits?

Performance audits are conducted by specialist performance auditors who are drawn from a wide range of professional disciplines.

How do we choose our topics?

Topics for performance audits are chosen from a variety of sources including:

- our own research on emerging issues
- suggestions from Parliamentarians, agency Chief Executive Officers (CEO) and members of the public
- complaints about waste of pubic money
- referrals from Parliament.

Each potential audit topic is considered and evaluated in terms of possible benefits including cost savings, impact and improvements in public administration.

The Audit Office has no jurisdiction over local government and cannot review issues relating to council activities.

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

How do we conduct performance audits?

Performance audits are conducted in compliance with relevant Australian standards for performance auditing and operate under a quality management system certified under international quality standard ISO 9001.

Our policy is to conduct these audits on a "no surprise" basis.

Operational managers, and where necessary executive officers, are informed of the progress with the audit on a continuous basis.

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 an exit interview is held with agency management to discuss all significant matters arising out of the audit. The basis for the exit interview is generally a draft performance audit report.

The exit interview serves to ensure that facts presented I in the report are accurate and that recommendations are appropriate. Following the exit interview, a format draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the draft 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 of an audit, performance audits can take from several months to a year to complete.

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

How do we measure an agency's performance?

During the planning stage of an audit the team develops the audit criteria. These are standards of performance against which an agency is assessed. Criteria may be based on government targets or benchmarks, comparative data, published guidelines, agencies corporate objectives or examples of best practice.

Performance audits look at:

- processes
- results
- costs
- due process and accountability.

Do we check to see if recommendations have been implemented?

Every few years we conduct a follow-up audit of past performance audit reports. These follow-up audits look at the extent to which recommendations have been implemented and whether problems have been addressed.

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

To assist agencies to monitor and report on the implementation of recommendations, the Audit Office has prepared a Guide for that purpose. The Guide, Monitoring and Reporting on Performance Audits Recommendations, is on the Internet at www.audit.nsw.gov.au/guides-bp/bpglist.htm

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 Adit Office and conducts reviews 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.

For further information relating to performance auditing contact:

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email: stephen.horne@audit.nsw.gov.au

Performance Audit Reports

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
65	Attorney General's Department	Management of Court Waiting Times	3 September 1999
66	Office of the Protective Commissioner Office of the Public Guardian	Complaints and Review Processes	28 September 1999
67	University of Western Sydney	Administrative Arrangements	17 November 1999
68	NSW Police Service	Enforcement of Street Parking	24 November 1999
69	Roads and Traffic Authority of NSW	Planning for Road Maintenance	1 December 1999
70	NSW Police Service	Staff Rostering, Tasking and Allocation	31 January 2000
71*	Academics' Paid Outside Work	Administrative Procedures Protection of Intellectual Property Minimum Standard Checklists Better Practice Examples	7 February 2000
72	Hospital Emergency Departments	Delivering Services to Patients	15 March 2000
73	Department of Education and Training	Using Computers in Schools for Teaching and Learning	7 June 2000
74	Ageing and Disability Department	Group Homes for People with Disabilities in NSW	27 June 2000
75	NSW Department of Transport	Management of Road Passenger Transport Regulation	6 September 2000
76	Judging Performance from Annual Reports	Review of Eight Agencies' Annual Reports	29 November 2000
77*	Reporting Performance	Better Practice Guide A guide to preparing performance information for annual reports	29 November 2000
78	State Rail Authority (CityRail) State Transit Authority	Fare Evasion on Public Transport	6 December 2000
79	TAFE NSW	Review of Administration	6 February 2001
80	Ambulance Service of New South Wales	Readiness to Respond	7 March 2001
81	Department of Housing	Maintenance of Public Housing	11 April 2001
82	Environment Protection Authority	Controlling and Reducing Pollution from Industry	18 April 2001
83	Department of Corrective Services	NSW Correctional Industries	13 June 2001
84	Follow-up of Performance Audits	Police Response to Calls for Assistance The Levying and Collection of Land Tax Coordination of Bushfire Fighting Activities	20 June 2001

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

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
105	Department of Health Including Area Health Services and Hospitals	Managing Hospital Waste	10 December 2002
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

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
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
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)	June 2005

^{*} Better Practice Guides

Performance Audits on our website

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>

If you have any problems accessing these Reports, or are seeking older Reports, please contact our Executive Officer on 9275 7220.