



INDEPENDENT
TRANSPORT
SAFETY AND
RELIABILITY
REGULATOR

**INDEPENDENT TRANSPORT SAFETY AND
RELIABILITY REGULATOR**

**SUBMISSION TO INDEPENDENT PRICING AND
REGULATORY TRIBUNAL HEARINGS FOR
DETERMINATION OF BUS AND FERRY FARES FOR
2006**

Summary	3
Background.....	3
Bus Reform.....	3
ITSRR views on service quality	4
Other comments	5
Introduction	6
ITSRR	6
Constitution.....	6
Reliability	7
ITSRR's current focus.....	8
Bus Reform	9
Overview.....	9
Reform objectives	10
Bus fares.....	10
Bus public funding	11
Service quality	12
Current progress of Bus Reform	13
Service quality in the new bus contracts.....	13
Other service quality elements in Bus Reform	15
ITSRR's approach to monitoring Bus Reform	15
Current and recent metropolitan bus performance	16
Current performance results	16
State Transit Authority	16
Private bus operators.....	18
ITSRR views on this data	18
Ferries.....	20
New Government ferry arrangements.....	20
Current progress.....	20
More general comments	21
General approach	21
Customer Commitment.....	21
Recent commitments	21
Definitional issues.....	22
Elements of service quality	23
Service quality index for operators.....	24
Aggregate service quality index	25
Summary of service quality index issues	26
APPENDIX 1.....	27
2003 – 04 ANNUAL TRANSPORT RELIABILITY REPORT	27
APPENDIX 2: Status of Contracts	28
Table A2: Status of Contracts	28
APPENDIX 3: Mapping service quality elements in Bus Reform	30
Table A3: Treatment of aspects of service quality in Bus Reform.....	31
Source: ITSRR August 2005.APPENDIX 4: Classifying some Bus Reform initiatives	32
APPENDIX 4: Classifying some Bus Reform initiatives	33

Summary

Background

- ITSRR was established to regulate rail safety and advise on public transport *reliability*. Reliability in this sense includes service quality.
- ITSRR's primary focus is on rail. To the extent it covers other public transport such as bus and ferry, its interest at present is on aggregates and on service quality.
- ITSRR's reliability focus and needs differ from those of the Ministry. The Ministry's needs stem from its contractual relationship to individual transport operators. ITSRR's focus is at an aggregated level.
- ITSRR does not recommend service quality standards. It has no view as to fares in general or how these should relate to service quality. Nor is ITSRR involved in payments to operators – that is the Ministry's role.
- IPART is conducting hearings on bus and ferry fares. It sought a submission from ITSRR on *reliability* those modes.
- This submission is mainly about service quality for metropolitan route buses. This reflects the facts that
 - the bus system carries far more passengers than ferries
 - the Bus Reform program has commenced only in the metropolitan area
 - the review of fares would seem to exclude school transport.

Bus Reform

- There have been criticisms by IPART about the lack of data regarding bus services.

- The Government's program of Bus Reform recently commenced. The Ministry of Transport is leading the program.
- This program is aimed at improving service quality. It also should improve data availability.
- Given the newness of the program, and its current transitional phase, it is only to be expected that data is limited at this time.
- It would be reasonable to assume that most of the Reform program's service quality improvements will take full effect later.
- Nonetheless, the Ministry in its submission has pointed to some bus initiatives which are linked to improved service quality, and these will have effect prior to full implementation of Bus Reform.
- ITSRR also is aware of the information provided to IPART by the Ministry regarding STA's performance.

ITSRR views on service quality

- In ITSRR's view, service quality relates to the non-price (or non-fare) elements of public transport.
- The aim of improving service quality is to increase public transport patronage beyond what it otherwise would be.
- It is the delivery of benefits to, and perspectives of, passengers that are important to this aim.
- ITSRR's preference would be to have service quality initiatives described in terms of direct, tangible benefits to passengers.

- The main areas of service quality in public transport could be classed as relating to
 - timetable; eg. routes and frequency
 - performance; eg. on-time running and cancellations
 - amenity; eg. comfort, convenience, security, information.

- Various aspects of Bus Reform affect each of these areas.

- The Government's policy of fare harmonisation gives rise to aggregation issues.

- For aggregation, some index of service quality may be useful in two respects; for each operator and for all operators combined
 - the former is a contractual matter for the Ministry associated with payments. It is outside the scope of ITSRR
 - the latter is of interest to ITSRR, and it is discussing this with the Ministry.

- However, care may be needed in developing any (all operator) index, especially "timetable" elements, and possibly other measures such as passenger numbers may be useful.

- Surveys of customers, such as envisaged by the Ministry's contracts, might be important data sources for assessing service quality issues.

Other comments

- ITSRR also draws attention to a number of other matters:
 - the Customer Commitment on the 131500 website
 - previous commitments by State Transit to IPART
 - presented STA data did not include passenger numbers
 - joint work by the Ministry and ITSRR on bus on-time running.

Introduction

The present inquiry by the Independent Pricing and Regulatory Tribunal (IPART) is the annual review of bus and ferry fares. IPART has asked ITSRR for a submission to this review in relation to the reliability of the services provided by the State Transit Authority and Sydney Ferries. IPART also intimated it would welcome comments on private buses.

This submission outlines the role of ITSRR and its relationship to the organisations involved in the provision of bus or ferry services. It makes some comments on issues of service quality in buses and ferries in NSW, although at this time they necessarily are general. It also makes some particular points regarding information provided to IPART.

ITSRR does not advise on the level and structures of fares. As such, it has no views on these matters to present to IPART.

ITSRR

Constitution

The Independent Transport Safety and Reliability Regulator (ITSRR) is constituted under the *Transport Administration Act (1988)*. ITSRR commenced operations in January 2004. Essentially it has three roles:

- . to regulate rail safety;
- . to oversee the strategic coordination of rail and public transport safety in NSW; and
- . to advise the Minister for Transport and the public on aspects of public transport in NSW, including operational sustainability and conformance of transport services with standards set by the Government.

The last of these is the role most relevant to the present IPART review. It is known as the “reliability” role.

Reliability

In the Act, *reliability* has a special meaning¹, extending beyond the punctuality or repeatability of services. It includes concepts of quality, effectiveness and efficiency. At this time, ITSRR intends to focus on the issues of quality and effectiveness of transport.

Only some forms of transport fall within ITSRR's remit². These are the transport forms that are owned by the NSW Government or in receipt of NSW Government funds. Of these, the legislation provides express coverage only for rail, bus and ferry.

The Government's announcements on bus and ferry arrangements, for example the new bus *contracts*, are to the effect that they will receive Government funding³. Consequently, buses and ferries, the focus of this review by IPART, are within the *reliability* scope of ITSRR.

ITSRR's reliability role essentially is to monitor performance and report to the Minister. An Annual Reliability Report is to be made publicly available, and a copy of the report for 2003-04 is at Appendix 1.

In undertaking this reliability role, ITSRR is to take note of the standards of transport service sought by the Government via contracts or via other arrangements with the Ministry of Transport⁴.

¹ *Transport Administration Act (1988) s.42A: reliability, in relation to a transport service, means the quality, effectiveness and efficiency of the service, having regard to the following matters:*

- (a) management and administration of infrastructure, assets, resources and liabilities,*
- (b) fulfilment of obligations under contracts and arrangements relating to the provision of services, including timeliness and quality of services,*
- (c) any other matters prescribed by the regulations.*

² s.42E(3) refers to *funded* transport services. These are transport services that are operated by a statutory authority (including a State owned corporation) or a transport service that receives Government funding. s.42A of the *Act* restricts transport service to those that are:

- (a) a railway operation within the meaning of the Rail Safety Act 2002, or*
- (b) a public passenger service, within the meaning of the Passenger Transport Act 1990, carried on by means of a bus or ferry.*

³ See: Ministry of Transport submission to this review at p.12.

⁴ See: *Transport Administration Act (1988) s.42(E)4.*

The explanation for this is in the 2nd Reading Speech by the Minister for Transport Services for the legislation. ITSRR is not to set standards for, or provide funds to transport services. Rather, ITSRR's primary focus is on whether transport services are meeting the standards set by the Government through the Ministry of Transport⁵.

Just as ITSRR does not advise on the level or structure of Government funding for transport, it does not advise on the level or structure of fares. As such, it has no views to put to this review on what fares should be. However, this submission does mention some issues about fares to shed light on what might be the more important aspects of service quality.

ITSRR's current focus

While ITSRR has an interest in bus and ferry forms of public transport, its primary focus is on rail⁶. This is because of the potential synergy between aspects of rail reliability and rail safety regulation.

ITSRR has been monitoring, and intends to pursue developments with, the Government's changes to bus contracting and to the ferry sector⁷. At this time bus monitoring is restricted to aggregate levels for regular route services as distinct from monitoring of specific routes, areas or of school buses⁸. The discussion below relates mainly to **metropolitan route buses** which have been the prime focus of bus Reform attention to date.

⁵ See: NSW Legislative Council Hansard, 11 November 2003, at p.4305: "The Government recognises that conflicts between performance and safety functions can arise when the same organisation has the same responsibility for setting and funding performance and regulating safety. To avoid this conflict the regulator will not set service standards or control funding to service providers. Funding and standard setting responsibilities will remain with the Minister through the Ministry of Transport's contracts with service providers. The regulator's role will be to provide independent expert advice on whether operators are meeting the performance standards Government has set." However, ITSRR will be undertaking some research on the types of standards that are set by governments.

⁶ ITSRR has published a study: *On-Time Running of CityRail Services* June 2004. It is currently undertaking a number of other rail studies including: *Impacts of freight incidents on CityRail passenger service reliability*, and *CityRail communications* – a follow up to the NSW Audit Office's report.

⁷ Referred to respectively as *Bus Reform*: See Ministry of Transport Website - "Bus Reform in NSW", and as *corporatisation* of Sydney Ferries.

⁸ Eligible students do not pay fares for bus travel to and from school. As such the relation between fares and service quality for school buses is beyond the scope of this review.

The reasons and some implications of this in the context of this IPART review are briefly raised below.

As indicated in its 2003-04 Annual Report, ITSRR has an interest in the methodology and process by which the Ministry collects information regarding the operational performance, service quality and patronage of the bus sector.

Bus Reform

Overview

Metropolitan buses are reported to convey around 900,000 passengers per weekday of which around 300,000 are school students⁹.

The basic approach to bus service provision in NSW is by statutory contract. These grant exclusive rights for an operator to provide bus services on a route or in an area.¹⁰

In mid 2004, the Government announced its intention to introduce new arrangements for buses in NSW. The main elements of these flowed from a review of buses by Mr Barrie Unsworth¹¹. The Government's response to the review is on the Ministry's website.

The *Passenger Transport Act (1990)* has been amended to affect the Government's response. The Ministry and bus operators are entering into new contracts which together embody a new approach. The basic mechanism, of exclusive rights to an area, remains. However, there is a

⁹ Bus use data is somewhat dated. It refers to the year 2000. However, it is expected that the Bus Reform process will considerably improve the accuracy and currency of data. The data cited is sourced: *Bus Users in Sydney* Transport Data Centre December 2002.

¹⁰ Prior to the recent changes, these were referred to as "commercial contracts". There also were "non-commercial" contracts which related to school buses and provided bus operators with payments for such. Provision of services from a single operator in these non-commercial areas arose from subsidisation under the School Student Transport Scheme (SSTS) rather than restrictions on the introduction of competition. There was a view that SSTS funds were being used to support operations under "commercial" as well as "non-commercial" contracts.

¹¹ *Ministerial Review of Bus Services in NSW – Final Report* (Unsworth) February 2004.

reduction in the number of contract regions in the metropolitan area, introduction of some cross-area routes, changes in the arrangements for subsidisation of bus operations, and the introduction of new performance measures and reporting systems¹².

The new approach, involving new bus contracts, is to apply equally to the privately owned bus operators and to the Government's State Transit Authority (STA). Community Service Obligations (CSO) payments will no longer be provided to STA.

As at 9 August 2005, new bus contracts had been signed for most of the metropolitan area¹³.

Reform objectives

Mr Unsworth's Review, the Government's response, and the Ministry's submission to this review by IPART, highlighted two basic concerns with buses in NSW that the Reform program seeks to address. The first concern was a decline in patronage in areas served by privately owned bus companies. The second was a perceived risk of "financial collapse" of some of those companies¹⁴.

Mr Unsworth indicated that the principal objective of his Review was to create a metropolitan bus transport system with common standards of fares and service levels¹⁵.

Bus fares

A review of the sustainability of public transport in NSW was conducted by Dr Parry during 2003¹⁶. This dealt with the likely future revenue needs of STA,

¹² The cross regional routes are referred to as "strategic routes". The new contracts include requirements for certain non-financial performance indicators, an Operational Performance Regime (OPR) and a Service Quality Incentive (SQI).

¹³ See: *Sydney Bus Reforms 97% Complete* News Release by the Minister for Transport, Minister for State Development August 7 2005.

¹⁴ See: *Submission to the Independent Pricing and Regulatory Tribunal on Bus Fares For 2006* Ministry of Transport July 2005.

¹⁵ See: *Foreword Ministerial Review of Bus Services in NSW – Final Report* February 2004.

¹⁶ *Ministerial inquiry into sustainable transport in New South Wales A framework for the future* (Parry report) Interim Report August 2003, Final Report December 2003

funding options, and possible mechanisms to better link fares and service standards.

While the Parry Report did not deal with the revenue needs of private bus operations, it did discuss “fair fares”. This discussion noted Unsworth’s recommended aligning of private and STA fares for the same journey length. While not specifically endorsing the concept of such alignment, Parry proposed a principle that concessions should apply consistently across transport modes, and recommended that pensioner excursion tickets be made available on the CityRail, STA and metropolitan private bus networks.

In August 2004, the Premier announced the Government’s support for “equal access to fares and concessions”. He noted a Ministry of Transport submission to IPART’s review of fares to apply from 2005 that recommended “passengers across the Sydney metropolitan area paying the same fare to travel the same distance - regardless of destination or operator”¹⁷. The submission also referred to a new “funding model”. IPART accepted, “in general”, this principle in its determination¹⁸.

Bus public funding

Under the new bus contracts, operators receive all of their bus service income from the Ministry of Transport. That is, all fare revenue is remitted to the Ministry. Together with contributions from the Consolidated Fund¹⁹, fare revenue forms a pool of funds from which the Ministry can provide payments to bus operators.

¹⁷ See: Media Release Tuesday, 31 August 2004 - *CARR ANNOUNCES "FARE GO" FOR WESTERN SYDNEY BUS COMMUTERS*, Ministry of Transport website. The concept of equal fares etc. is referred to as fare harmonisation.

¹⁸ The IPART report stated: “It also accepts that, in general, buses of the same quality, travelling the same distance, should charge the same full fare”. See: p.11 *Report on Fares for Private Buses From 4 January 2005 Report to the NSW Minister for Transport Services* Independent Pricing and Regulatory Tribunal of New South Wales, December 2004.

¹⁹ Government funding for all bus services and concessional travel on buses is estimated to total around \$770m in 2005-06 – see *Budget Paper No. 3*.

The Ministry has indicated it intends to make payments to the operators in several parts. One relates to fixed costs, another variable costs, and another to patronage. Also there is to be an incentive payment for service quality²⁰.

Service quality

IPART's report for the 2005 fares indicated that it is required to consider service standards and service quality in its fare-setting process. It noted that in the past effective measurement of these standards has often been lacking. IPART made similar comments in its report on fares for Sydney Ferries²¹.

The Parry report looked at the relationship between service quality, fares and regulation. It argued that the then bus contracts, their administration, and subsidisation of the privately owned bus sector through the School Student Transport Scheme were not conducive to improving service quality. It suggested that contracts could be structured around explicit payments from the public purse for the achievement of performance linked to the delivery of social and environmental benefits²².

The Ministry's submission to that IPART review argued that the new Government funding arrangements would encourage service quality. The aspects of service quality referred to were customer satisfaction and complaints, load standards, vehicle presentation, punctuality, and "reliability"²³. A service quality index would be developed for each operator, with an initial benchmark.

²⁰ See: p.9 *Ministry of Transport submission*.

²¹ See: *Report on the Determination of Fares for Sydney Ferries From 12 December 2003* Independent Pricing and Regulatory Tribunal of New South Wales, November 2004.

²² See: Chapter 7 and p.107 *Parry Report* (Interim).

²³ See: p.12 *Report on Fares for Private Buses From 4 January 2005 Report to the NSW Minister for Transport Services* Independent Pricing and Regulatory Tribunal of New South Wales December 2004. Note that reliability here has a meaning different to that in the legislation establishing ITSRR.

Current progress of Bus Reform

The Ministry has established 15 regions in the metropolitan area, each of which will be covered by a single contract covering both regular route and school buses²⁴. Most contracts have already been signed and activated.

STA is contracted for 4 of these regions, which account for around 36% of the population of the metropolitan contract areas. It carries around 60% of metropolitan bus passengers, and operates around 60% of the metropolitan bus fleet²⁵.

In addition to the contract areas, there will be some 43 strategic routes, some spanning more than one area. An “electronic” bus priority program, PTIPs will be operating on all of these by 2008, and infrastructure works for bus priority will be undertaken on 10 of the most important corridors by that time²⁶.

There are a number of stages in implementing the Bus Reforms. Among these are the contracts between the Ministry and operators, activation of the contracts, community consultation, the setting of routes and service frequencies, implementation of reporting arrangements and changes to the basis of payments. A summary of progress is in Appendix 2 to this submission. The Appendix shows that while the program has commenced for nearly all of the metropolitan area, the changes are at their initial stage. However, the data reporting provision of the contracts come into effect on signing.

Service quality in the new bus contracts

The Ministry’s pro-forma new metropolitan bus contract²⁷ includes explicit references to service quality issues and indicators. It requires operators to regularly provide data to the Ministry about these matters under three broad

²⁴ These are called “contract areas”. In contrast, under previous arrangements there were some 87 contract areas.

²⁵ Sources: *Bus Users in Sydney* Transport Data Centre – December 2002, and Table in *Sydney Bus Reforms 97% Complete* News Release by the Minister for Transport, Minister for State Development August 7 2005.

²⁶ Source: Communication from Ministry of Transport August 2005.

²⁷ A pro-forma has been provided to ITSRR on a commercial-in-confidence basis.

headings; Non-financial performance, Operational Performance Regime, and a Service Quality Incentive.

Non-financial performance indicators include revenue km, fleet age profile, and passengers carried. Revenue km might be seen as a proxy for coverage of bus services in the contract area in terms of frequency and routes²⁸.

The **Operational Performance Regime** is intended to measure the punctuality and “reliability” of bus services²⁹. This will focus on disruptions to scheduled regular route bus services through cancellations, early running, late running and incomplete services. Each of these items will be measured for every metropolitan bus contract region. What may differ among the regions is the calibration of standards eg. of on-time running, and monitoring points.

Benchmarks are to be set with reference to performance in an initial period. The Ministry will compare actual performance with the benchmarks.

It is intended that the regime start in a contract area once there is a robust and reliable data system, and once meaningful benchmarks are set. The contract notes that it may take until early 2007 for this to be fully realised. In the interim, the contract requires the operator to record and report to the Ministry relevant data from the date of service commencement.

A **Service Quality Incentive** also is to be included. This is to deal with a number of matters relating to services including passenger complaints, stakeholder views of the operator and its approach to services, bus loads, bus cleanliness, performance against environmental plans and customer perceptions. These factors are assigned weights totalling 100% ie. an index.

Customer perceptions are to be gauged by 6 monthly surveys covering issues such as staff helpfulness, provision of information, security, where

²⁸ Transport Data Centres *Bus Users in Sydney* – December 2002 refers to the number of routes, number of bus stops and bus route road coverage.

²⁹ In this context, “reliability” is measured by (the absence of) service cancellations.

services go and when, ticket machine availability and overcrowding. These perceptions are to account for 50 percentage points of the index.

Other service quality elements in Bus Reform

A key new element in service quality for the bus Reforms involves **community consultation**. The Reform process includes the establishment of community forums. The forums are to be used to advise the Ministry and the Government on the basic elements of service levels; the routes to be served and the frequency of buses on these routes which are to be included in operator service plans. Service planning guidelines, issued in mid 2004, would be relevant to these. The forums are to meet at least annually³⁰.

The Director General of the Ministry determines whether to accept the operator service plans. ITSRR's understanding is that these elements of the plans will be written into the contracts and bind the operators. While the contracts might not be publicly disclosed, bus timetables will provide evidence to the public of the important elements of the plans.

The expectation is that service levels, routes and frequencies, will remain largely unchanged in each contract area until the forums are conducted and the Director General considers the new service plans.

ITSRR's approach to monitoring Bus Reform

ITSRR's approach to the monitoring of bus services is essentially at an aggregate level. That is, ITSRR does not intend at this time to monitor performance of individual operators against their individual contracts. The monitoring of individual performance is to be undertaken by the Ministry in its roles of ensuring compliance with contracts and of distributing to operators the funds gained from fares and from Government. ITSRR intends to source its information on buses largely from the Ministry.

³⁰ More generally, the Unsworth review recommended, and the Government supported, regional service planning forums. Unsworth's view was that the forums should advise operators and the Ministry on service planning issues, frequency requirements and proposed changes that impact on passengers ie. assist in identifying and serving local demand. See Ministry of Transport Bus Reform website. See also: *Service Planning Guidelines, Sydney Contract Regions – 14 July 2004*, Ministry of Transport.

ITSRR's interest is at the more aggregate level. Given this, its interest will be with indicators most relevant to the system as a whole. These will include indicators of passenger numbers and of customer perceptions, as well as some other matters mentioned below.

Current and recent metropolitan bus performance

Current performance results

Bus Reform is being progressively rolled out. To date, this has concentrated on the metropolitan area. Reflecting the current progress with implementation of the new arrangements, little information is at present available from performance under the new contracts. The information available to ITSRR is summarised below.

State Transit Authority

ITSRR has only the information provided to IPART from the Ministry or that which is publicly available³¹. While STA is now under the new bus contracts, it is expected that State Transit will continue during the transitional stages of Bus Reform to provide performance information as it has before.

The STA indicators that relate most directly to aspects of service quality are service kilometres, on-time running, reliability, average bus age and safety and security.

Service kilometres increased by 2.8 per cent in 2004-05. Some of this increase was attributable to the provision of Harris Park services by STA.

The **on-time running** result for the financial year to date is reported at 95%. This is consistent with the target. This figure does appear high compared

³¹ See: *Appendix A Submission to the Independent Pricing and Regulatory Tribunal on Bus Fares For 2006* Ministry of Transport July 2005. The information presented there by the Ministry is more up to date than that on STA's website. STA is aware of this and has advised ITSRR it is updating the website to reflect performance indicators relevant to the new contracts. ITSRR it is updating the website to reflect performance indicators relevant to the new contracts.

with, say, CityRail, and given comments such as the impact of a “significant increase in traffic congestion”. Part of the explanation may lie in exactly what this figure represents. The figure does not show on-time running at any particular bus stop on a route. Rather it is measured with reference to terminus points.

Bus **reliability** relates to service cancellations. It can be seen from the Ministry’s submissions that these remain low. However, given the definition of on-time running, this does not capture issues regarding “bus bunching” at particular stops.

In 2003, STA had put to IPART’s fare determination review an offer of an independent review of the on-time running figures among other things³². ITSRR’s understanding is that the figures reported by STA to the Ministry are based on pre-existing methodology eg. measured at the terminus, rather than the outcomes of such a review. ITSRR and the Ministry undertook some preliminary work on on-time running measured at points other than terminus. This work covered both STA and some private operators and one purpose was to assist the Ministry in contract monitoring.

The Ministry’s Operational Performance Regime, and the proposed technological improvements to monitoring may result in a “change of series” for on-time running and reliability figures eg. on-time running measured at a number of en-route locations. The effect of this at any given level of delays may be to reduce the *reported* on-time running figure, as distinct from that experienced by passengers.

STA reported **average fleet age** increased in 2003-04 before declining somewhat in 2004-05. With a fleet of around 1700 buses, significant reductions in fleet age may require substantial bus acquisition programs. The Ministry advises that under the 505 bus acquisition plan, the average age of

³² See: p.20 *Report on the Determination of NSW Public Transport Fares CityRail and State Transit Authority From 31 August 2003*, IPART August 2003

STA buses will reduce to 11.9 years by June 2006 and will remain below the 12 year benchmark for the duration of its contract.

ITSRR also is seeking advice on what is included in ***safety and security incidents*** figures reported for STA, as well as on the targets.

Private bus operators

ITSRR has requested advice from the Ministry on the reports made under the new bus contracts. It is understood that at this time the Ministry has not collected detailed reports on performance of private buses. This reflects the current status of the Bus Reform program.

As shown in the ITSRR 2003-04 Annual Reliability Report, the Ministry is collecting some bus self-reporting data on matters such as passenger numbers. Again, however, this is not assessed by the Ministry or ITSRR as being of sufficient quality to present to IPART.

ITSRR views on this data

Submissions to IPART for this review have referred to various service quality initiatives, beyond those for STA (above). For example, the Ministry's submission to this review does point to a number of improvements in private buses such as an increase in the number of accessible air conditioned buses, and the bus priority program with infrastructure works in 2005-06 programmed for the Miranda-Hurstville, Parramatta-Ryde-City, and Liverpool-Bankstown corridors.³³

They also have referred to proposed benefits and measures of these benefits.

ITSRR has reviewed these and does agree with the proposition that in principle the initiatives will result in improved service quality. For example, bus priority measures such as PTIPs are expected to show a reduced

³³ Source: Communication from Ministry of Transport August 2005.

variance in running time, making punctuality more reliable for any given timetable³⁴.

ITSRR does note, however, that this data in general has been collected and presented from an operational or “input” perspective. Given the Government’s objectives for Bus Reform, to increase – or at least arrest the decline in - patronage, such data may usefully be supplemented by passenger numbers and by the half yearly customer satisfaction surveys which the Ministry is initiating as an integral part of Bus Reform.

Appendix 3, discussed further below, shows an alignment of the Bus Reform measures with an independent classification of bus service quality characteristics. Again, it can be seen that the program covers most of the service quality dimensions. Further, again, the importance of the half yearly customer satisfaction surveys in ascertaining the effectiveness of the measures can be seen.

³⁴ Evaluation of PTIPS on Route 400, Traffic Systems Integration Section, Traffic System branch, Roads and Traffic Authority, 2004. This evaluation of the trial indicated that PTIPS produced reductions in the lateness and variation of travel times of buses. These results appear to vary by the time of day and the trip direction.

Ferries

New Government ferry arrangements

The change in ferry arrangements relates to the separation of Sydney Ferries from the STA in July 2004. Sydney Ferries was created as a Statutory State Owned Corporation. Legislation establishes a requirement for a Performance Agreement with the Minister for Transport setting out performance benchmarks for the ferry services it provides. Government funding will continue³⁵

Later legislation clarified that the safety regulator for passenger ferry services would be the NSW Maritime Authority and not ITSRR³⁶.

Current progress

At this stage, the ferries performance agreement has been drafted but ITSRR's understanding is that it is not yet concluded. ITSRR understands that it is intended to include outcomes such as meeting customer needs, being an integrated part of the public transport system and cost effectiveness. Indicators would likely include on-time running, cancellations and customer complaints. Sydney Ferries submission to this inquiry provides some information on these.

³⁵ See: s.35O Transport Administration Act (1988). For 2005-06 Government funding for Sydney Ferries services and concessional travel is estimated at around \$33m – see *Budget Paper No. 3*.

³⁶ See: Explanatory notes for the *Transport Legislation Amendment (Waterfall Rail Inquiry Recommendations)* Bill (2005)

More general comments

General approach

As indicated earlier, ITSRR's role is to advise on reliability taking into account the terms of contracts.

The process of bedding down the Bus and Ferry Reforms, including changes in the roles of the Ministry and of ITSRR, commenced only recently. Given the newness of the metropolitan bus contracts, and the Government's policy of bus fare harmonisation, there is an opportunity to consider some contextual issues in transport service quality. These include the customer commitment, prior commitments to service quality improvements, definitional issues, elements of service quality, and a service quality index.

Customer Commitment

ITSRR's Annual Reliability Report 2003-04 highlighted the existence of a Customer Commitment for metropolitan transport operations³⁷. This is published on the 131500 website and from this passengers can develop expectations as to what the transport system is to deliver to them. The Commitment sets for transport operators punctuality targets, for example for on-time running, and some standards for vehicles such as average fleet age, and that they be cleaned daily.

Data on conformance with the existing Customer Commitment, as current public performance reporting, is available for STA. However, the Customer Commitment is likely to change to reflect the Bus Reform program, measures and contracts.

Recent commitments

ITSRR has reviewed previous IPART reports to ascertain the status of commitments made by transport operators in fare determinations.

³⁷ See: p.62 *Reliability Report 2004*. These types of Commitments of Passenger Charters also exist in some other jurisdictions eg. Victoria.

Two commitments relating to service quality were found, both made by STA³⁸. The first, in 2003, was an offer of an independent review of the on-time running figures; this was discussed earlier (p.17). The second, also in 2003, was for independent customer satisfaction assessments undertaken. ITSRR understands that these have not yet been undertaken; however the Bus Reform program includes customer surveys which will supercede this commitment.

Definitional issues

In ITSRR's view, the issue of service quality relates to the non-price, or non-fare, attributes of public transport. The non-price attributes come as a package and there may be trade-offs among elements.

Both price and non-price attributes of public transport impact on demand³⁹. The Government's objectives for both bus and ferries appear to be demand related; they both aim to increase public transport usage. Better service quality would be expected to increase customer satisfaction and grow demand. Thus changes in customer sentiment and in patronage may be important indicators of the totality of the service quality package.

Effects of changes in the attributes, on demand and patronage, may be greater in the long run compared with the short run⁴⁰. Farebox revenue would be expected to rise as a result of improvements in service quality, reflecting an increase in travel. An increase in fares would be expected to have some contra effect. The net result would hinge on the scale of changes and on the respective elasticities. Again, the effect in the long run may be greater than the initial impact.

³⁸ A further commitment was made by the Ministry of Transport in the hearings for the determination of 2005, however, this related to fares eg. concessions and discounts rather than service quality: see *Hearing Transcript* at pp47-48.

³⁹ It is worth noting that Hensher's service quality index has fares as a component; recognising the potential impact of fares on demand. Note also that demand may also be affected by prices of substitutes eg. motoring, and by general inflation.

⁴⁰ See for example: *Transportation Elasticities – How prices and other factors affect Travel behaviour* TDM Encyclopaedia - Victorian Transport Policy Institute, 2005. And: Dargar, J and Hanley (2002) *The demand for local bus services- Journal of Transport Economics and Policy* n 36:1 on the effects of UK transit bus fare changes; for rising fares -0.4 in the short run and -0.7 in the long run and for falling fares -0.3 in the short run and -0.6 in the long run.

Propositions for (real) increases in fares for service quality, such as in the Parry report, implicitly argue that the use of the generated funds for maintaining or improving service quality will increase patronage above what it might otherwise be. There may be varying impacts among groups of transport users, however, ITSRR's focus on aggregates will not show these effects.

Elements of service quality

There has been some research into the non-price or service quality attributes of bus services that influence demand. A number of references, including by Hensher⁴¹, provide lists of bus service quality elements for buses from a users perspective. Generally, these can be grouped as timetable, performance, and amenity.

Timetable elements include routes, coverage, stopping patterns, frequency and speeds of services. As noted above, the Bus Reforms see these matters being determined by the Ministry through consultation in forums with operators and the relevant communities. Some of the bus Reform initiatives are expected to reduce travel time eg. low floor buses.

Performance elements include on-time running and cancellations. These were discussed earlier.

Issues relating to **amenity** include bus shelters, air conditioning, ease of ticketing, modernity and cleanliness of buses, availability of seats, provision of information, safety and security etc. Some of these elements are picked up in the Ministry's submission.

⁴¹ See for example: *Measuring Service Quality and Evaluating its Influence on the Cost of Service Provision* Professor David A Hensher Institute of Transport Studies University of Sydney (on website) and *Service Quality- Developing a Service Quality Index in the Provision of Commercial Bus Contracts* David A Hensher, Peter Stopher, Phillip Bullock, Institute of Transport Studies Faculty of Economics and Business University of Sydney, September 2001.

All of these elements are covered, in principle, in the new bus contracts. Appendix 3 shows a mapping of these elements to Bus Reform. The approach of Bus Reform is to tailor some of these elements to specific circumstances in the regions. It is anticipated that there will be differences in “standards” for some of these matters among the bus contract areas. The forums may be a mechanism to communicate this to the public.

Appendix 3 also shows that there are some elements of service quality which were not “claimed” by the Ministry’s submission to the present review.

Service quality index for operators

Hensher originally proposed a service quality index for NSW as part of a mechanism of providing incentives to bus operators to improve services.

The service quality index as originally envisaged may be most relevant to the Ministry’s relation with the bus operators. This is because the Ministry is the organisation that can reward operators who improve service quality. The issue Hensher addressed was aggregation of the various aspects of service quality within a single contract area to determine incentive rewards for the operator. Such aggregation needs an assessment of the importance of each characteristic of service quality. This degree of importance is represented as a weight in a service quality index eg. service frequency x%, air-conditioning y%. The weight given to a particular service quality aspect may vary among contract areas.

The Ministry’s Service Quality Incentive, part of its payments to operators, is to be based on an index covering a number of service quality aspects. In the bus contracts this is separated from the Operational Performance Regime. As such, most elements of that regime, such as on-time running and cancellations will not be directly picked up in the index. However, these matters may indirectly influence the index results through the half yearly survey of customer satisfaction.

Aggregate service quality index

Given the Government's position on fare harmonisation, and the seeking of uniform increases for bus fares across the metropolitan area, IPART is not be in a position to reward individual operators, and thus the service quality index for an individual operator might not be highly relevant. Rather, with a focus on across the board fares IPART may wish to consider aggregation of service quality across all metropolitan contract areas.

Such aggregation may go beyond the summing of operator results for the Service Quality Incentive and include other elements of service quality such as included in the Operational Performance Regime or in the non-financial performance indicators.

There are a number of ways in which service quality weights for such a metropolitan index could be assessed ex ante⁴². These include operator specific surveys with contract area weights determined by ridership or population, more general surveys such as ITSRR conducted for CityRail customers in 2004⁴³, or stated preference technique surveys such as undertaken for CityRail in the mid 1990s to ascertain monetary values for various aspects of CityRail services⁴⁴. Each of these techniques is based on customer perceptions.

ITSRR is currently exploring this with the Ministry, however, at this stage a position has not been determined.

⁴² Ex post could be measured by patronage response.

⁴³ *ITSRR Survey of CityRail Customers 2004*, February 2005.

Summary of service quality index issues

An index might be useful for an industry wide assessment of service quality improvements. This would be in addition to the Ministry's Service Quality Incentives which is developed on an operator by operator, or area by area, basis. An aggregate index may need to deal with:

- timetable;
- performance; and
- amenity.

The purpose of improving service quality is to increase patronage – or at least arrest the decline in patronage experienced by the private bus sector, and this would occur through increased customer satisfaction. Tracking customer satisfaction via surveys, possibly supplemented by complaints data, therefore would appear to be an important potential data source. The Ministry's Bus Reform program intends to conduct surveys of customer satisfaction in each contract area twice yearly. Developing weights for results of the different areas will need further research and discussion with the Ministry.

⁴⁴ *Value of Rail Service Quality for CityRail Planning and Business Development* Dr Neil Douglas, Pacific Consulting Infrastructure Economists Ltd October 1995 (unpublished)

APPENDIX 1

2003 – 04 ANNUAL TRANSPORT RELIABILITY REPORT

APPENDIX 2: Status of Contracts

New contracts are in place for 13 of the 15 Sydney contract regions. The remaining regions (Region 1 and Region 3) are affected by the voluntary administration of Westbus and are expected by the Ministry to be in place by 1 October 2005.

Table A2: Status of Contracts

Region	Description	Service Commencement
1	Penrith, Kurrajong, Warragamba & Blacktown	<i>Expected 1 Oct 05</i>
2	Badgerys Creek, Bringelly, South West Sector	1 July 2005
3	Wetherill Park, Bosley Park & Liverpool	Expected 1 Oct 05
4	Glenorie, Castle Hill, Blacktown & Parramatta	1 August 2005
5	Strathfield, Bankstown, Hurstville & Lugarno	1 July 2005
6	Sydney CBD, Parramatta, Strathfield & Kingsgrove	1 July 2005
7	North Sydney, Chatswood, Epping & Parramatta	1 July 2005
8	Palm Beach, Frenchs Forest & North Sydney	1 July 2005
9	Sydney's Eastern Suburbs & CBD	1 July 2005
10	Bankstown, Sutherland & Engadine	1 January 2005
11	Cronulla, Kurnell, Miranda & Bundeena	1 April 2005
12	Berowra, Hornsby, Chatswood & St Ives	1 June 2005
13	Parramatta, Fairfield, Bankstown & Liverpool	1 May 2005
14	Chatswood, Frenchs Forest, Terrey Hills & Gordon	1 April 2005
15	Campbelltown, Camden & Appin	1 June 2005

Source: Ministry of Transport August 2005

Activation of Provisions

All provisions of the contract start at the commencement date. From that point, the regular monthly, quarterly, 6 monthly and annual reporting provisions come into effect.

The contract makes provision for the penalty and incentives provisions of the Operational Performance Regime (OPR) to come into effect once a valid method of monitoring reliability is in place. The OPR will be piloted and trialled prior to its full implementation. It is expected that this process will take 2 years to develop.

Community Consultation

Under the contracts, significant network changes and regular service reviews may be implemented after community consultation.

The Ministry advises that in 2005-06, significant network changes to support the development of strategic corridors are proposed in Regions 10 (Southern Sydney) and 13 (Bankstown/Liverpool).

Network development is also being undertaken in significant parts of Region 1 (Penrith etc) and Region 4 (Glenorie etc) to support the introduction of the North West Transitway.

Key dates in these processes are:

Bus Reform Processes	Region 10	Region 13	Region 1 & 4 (NW TWAY)
Regional Planning Forum	July 2005	Sept 2005	Feb 2005
Community Consultation	Oct 2005	Nov 2005	April 2005
Network Approval	Late 2005	Early 2006	Mid 2006
Implementation	Mar 2006	June 2006	Dec 2006

Source: Ministry of Transport August 2005

The Ministry proposes that Region 14 (Northern Sydney) be used as the pilot Annual Service Review process. This will commence in November 2005. Following assessment of this approach, services in each region will be reviewed during 2006, either through the development of a network plan or through the annual service review process.

APPENDIX 3: Mapping service quality elements in Bus Reform

Table A3 outlines how various service quality attributes are treated in the Bus Reform program:

- . Column 1 identifies dimensions of service quality, drawing from Hensher's work on passenger perceptions;
- . Column 2 sets out how the Bus Reforms deals with or affects the various service quality dimensions;
- . Column 3 shows how it is intended that the Bus Reform initiatives will be measured in relation to service quality.

The Table shows that Bus Reform aims to address most of the service quality attributes identified by Hensher. ITSRR has categorized each of these in terms of 3 broad service quality areas; timetable, performance and amenity.

The importance of passenger views, through complaints or through customer surveys, which are to be conducted twice yearly by the Ministry for each operator, is shown in this Table.

Table A3: Treatment of aspects of service quality in Bus Reform

Service quality aspect⁴⁵	Bus Reform aspects⁴⁶	Comment
Punctuality (<i>performance</i>)	Items to be measured ie. data type will be the same. Standard to be achieved and monitoring points may differ among areas. There will be explicit incentives and penalties.	At present only STA data is available. However, the Ministry and ITSRR did conduct a survey in 2004. The Ministry will need data on current performance to estimate a baseline for each contract area. See also travel time comments below.
Walking distance to bus stop (<i>timetable</i>)	Route (changes) will be set following community consultation. Until community consultation takes place - in principle - current routes remain unchanged.	This relates to routes, location of stops and stopping patterns. Customer satisfaction surveys ⁴⁷ may highlight this.
Waiting safely (<i>amenity</i>)	Not explicitly covered.	This relates to bus stops. Customer satisfaction surveys may highlight this.
Travel time (<i>timetable</i>)	Bus priority measures, strategic corridors etc.	A number of other initiatives may impact on this eg. those that reduce stopping or dwell time such as T-Card.
Seating (<i>amenity</i>)	Capacity (standing) standards are to be set in contracts.	This may be related to frequency. Some guidance is provided in Service Planning Guidelines. Customer satisfaction surveys may highlight overcrowding issues.
Bus stop facilities (<i>amenity</i>)	Not explicitly covered.	This relates to bus stops which may not be owned by the operator.
Air conditioning (<i>amenity</i>)	All new buses are to be air-conditioned.	
Information at the bus stop (<i>amenity</i>)	There are to be Passenger Relations Plans that deal with arrangements for the provision of information	This is not covered in the Ministry's submission. Customer satisfaction surveys may identify issues.
Frequency (<i>timetable</i>)	Route (changes) will be set following community consultation. Until community consultation takes place - in principle - current routes remain unchanged.	Some guidance is provided in Service Planning Guidelines. Customer satisfaction surveys may highlight issues with frequency.
Safety on board (<i>amenity</i>)	CCTV cameras on all buses.	CCTVs are in place. Beyond CCTV, customer satisfaction

⁴⁵ Adapted from Hensher, with italics being ITSRR's classification by timetable, performance or amenity

⁴⁶ From bus contracts and Reform process

⁴⁷ Independent survey of each operator is to be conducted by the Ministry dealing with customer satisfaction issues each half year.

		surveys may identify issues.
Cleanliness of seats (<i>amenity</i>)	Contract specifies that each bus interior must be clean at the start of operations each day. If it the bus becomes dirty so as to cause discomfort it is to be cleaned. Presentation is an explicit element of the Service Quality Incentive regime.	Consistent with Customer Commitment. Issues may show up in complaints or customer satisfaction surveys.
Access to the bus (<i>timetable</i>)	Low floor buses.	Legislative requirement.
Driver attitude (<i>amenity</i>)	Not specifically addressed but there are rules for uniforms, training knowledge etc.	Issues of staff helpfulness may show up in complaints or customer satisfaction surveys.

Source: ITSRR August 2005.

APPENDIX 4: Classifying some Bus Reform initiatives

Table A.4 classifies some of the Bus Reform initiatives into 3 groups:

- . service quality – defined as in the body of this submission as non-price attributes
- . measurement of service quality;
- . fare and cost issues.

It lists the initiative and indicates the potential effect on passengers. It refers to independent work that comment on the initiative as a matter of improving service quality and shows how it is, or might be, measured.

Current measured results are in the final column. Reflecting the newness of Bus Reform, the table shows that at this stage most of the measurement of improvements relate to inputs, rather than effects on passengers.

Table A.4: Proposed bus service quality elements

Proposed element of service quality	Potential benefit for passengers	How might this benefit be measured	Current results
1. Initiatives for service quality			
1a: Air-conditioning.	Greater comfort.	Air-conditioned buses: number or % of fleet.	102 new STA buses

Proposed element of service quality	Potential benefit for passengers	How might this benefit be measured	Current results
1b: Low floor buses.	Faster entry to buses resulting in faster trips and greater punctuality ⁴⁸ .	Low-floor buses: number or % of fleet. Changes to timetable or on-time running.	
1c: High capacity buses.	Reduced crowding and seating availability on the bus	Articulated buses: number or % of fleet. Crowding measures.	80 new STA articulated buses.
1d: Average bus age.	Greater comfort.	Average fleet age.	
1d: Increased maintenance.	Reduced mechanical breakdowns Improved cleanliness.	Defect rates eg. per 10,000km. Bus changeover rates eg. per 100,000kms. Cleanliness inspections or specific passenger complaints.	14.92 ⁴⁹
1e: Bus priority measures.	Faster trips. Improved punctuality.	Installation of devices or infrastructure. Changes to timetable. Changes to on-time running.	NA Available for STA
1f: PTIPS.	This is a form of bus priority measure (as above).	As for 1e.	NA
1g: Cashless fares.	Faster entry to buses resulting in faster trips and greater punctuality.	Changes to timetable or on-time running.	NA

Notes

a. Hensher, Stopher, Bullock

b. IPART

⁴⁸ The Ministry of Transport submission suggests that loading times are improved by 10% in Sydney's CBD. All passengers on the bus /route benefit from this if stopping (dwell) time is reduced *provided* this is included in schedules which show reduced transit times. Reductions in stopping time that are not reflected in reduced transit times eg. due to buses travelling more slowly, would not seem to be of benefit. Similarly reduced transit times not reflected in schedules could result in early departures from some bus stops.

⁴⁹ STA figures for earlier years have been updated from those previously submitted to IPART.

Proposed element of service quality	Potential benefit for passengers	How might this benefit be measured	Current results
1h: Smart Card (T-Card).	This is a type of cashless fare (as above).	As above.	NA
1i: Availability of Pensioner Excursion Ticket (PET) in metro region ⁵⁰ .	This may reduce the number of fare transactions with results similar to cashless fare.	As above.	Availability
1j: Integrated Transport Information Service (ITIS) (funding for private operators to fully participate).	Convenience – up to date and accurate travel information available from a single source.	Change in the number of bus operations covered in ITIS. Accuracy of ITIS information compared with published timetable ⁵¹ .	NA
1k: Environment and passenger relations plans.	Changes service routes and frequency.	Changes in timetable. Increase in patronage ⁵² .	NA
2. Measurement of current service quality			
2a. On time running.	Punctuality.	For STA, this is measured at the terminus ⁵³ .	95.6%
2b. New technologies and management systems for measuring OPR	Improved accuracy of measured performance ⁵⁴ .	Installation of devices.	NA
2c: Passenger safety incidents.	Safe travel.	Number of incidents reported.	STA only: 1.91 incidents per million

⁵⁰ While the major benefit of PET may be cheaper fares for certain concession holders, ie. a price/concession benefit, a single PET ticket is able to be used on multiple buses/rail journeys and this may result in faster entry to buses.

⁵¹ A number of private bus operators already have been participating in ITIS. However, work undertaken by the Ministry and ITSRR indicated some shortcomings in the bus information available from ITIS. It is understood that this program will remedy those shortcomings.

⁵² It would be expected that the plans and consultation with the community will result in targeting bus services to demand. A change in this would be evidenced by changes in the timetable that aim to increase passenger numbers.

⁵³ See STA web site. This is not the same as, and is likely to be higher than, on-time running measured at bus stops. STA has informally undertaken to update its website to accord with the figures provided in the Ministry's submission.

⁵⁴ Improved technology may contribute to identification of problems eg. to location of congestion that reduces on-time running or increases transit time. Thus it may be capable of increasing the effectiveness of other measures to improve operational performance.

Proposed element of service quality	Potential benefit for passengers	How might this benefit be measured	Current results
			passengers, which is better than the target of 2.00.
2d: Passenger security incidents below target.	Safe personal travel.	Number of incidents reported.	STA only: 0.60 incidents per million passengers which is higher than the target less than 0.50.
3. Price and cost attributes			
3a: Reduction in fares for private buses.	Cheaper fare.		
3b. Availability of Pensioner Excursion Ticket (PET) in metro region.	Cheaper fare.		
3c. Wage increase for drivers	Increased cost.		
3d. Introduction of TCard in SSTS ⁵⁵	N/A		

Source: ITSRR August 2005.

⁵⁵ This relates to school bus services as distinct from route bus services and thus is beyond scope. However, when extended to route bus services used by school students it may have the same type of effects similar to 1h.