Performance audit report

Housing New Zealand Corporation: Maintenance of state housing





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Zealand Corporation:
Maintenance of
state housing

This is an independent assurance report about a performance audit carried out under section 16 of the Public Audit Act 2001

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# **Auditor-General's overview**

State housing is the largest publicly owned property portfolio in the country, with an estimated value in 2008 of \$15.2 billion. Ensuring that the state housing stock is well-maintained is important for tenants and for protecting the value of these properties.

Housing New Zealand Corporation (the Corporation) is the agency responsible for maintaining state housing.

My staff carried out a performance audit to provide Parliament with assurance about the effectiveness of the systems and processes the Corporation uses to maintain state housing.

Overall, the systems for maintaining state housing properties are comprehensive and effective – apart from the system to assess the condition of the Corporation's properties, and the system it uses to measure its performance.

Almost all properties are inspected at least twice a year. Tenants can raise maintenance issues directly with the Corporation through a network of neighbourhood offices and a National Contact Centre. The Corporation has set clear standards for the quality of its responses to tenants and for the quality of its maintenance work. It monitors the performance of its contractors thoroughly. It also monitors how the standard of its properties compares with properties in the private sector rental market.

However, the inability of the Corporation's existing systems to provide detailed information about the condition of state housing properties has limited the effectiveness of its planning for maintenance. This means that it has lacked a reliable basis for measuring and managing its overall maintenance workload.

This would be a significant concern if the Corporation had not already identified and put in place a process to address the problem, and to renew its systems. It is working to complete a new Asset Management Framework by 2010. My staff will follow up the Corporation's progress with this in 2010/11.

I thank the staff of the Corporation and its maintenance contractors for providing my Office with a high level of help and co-operation during this audit.

K B Brady Controller and Auditor-General

# **Our recommendations**

- 1. We recommend that Housing New Zealand Corporation's new Asset Management Framework record detailed and specific information about the condition of state housing properties, and that the Corporation use this information to plan its maintenance work.
- 2. We recommend that Housing New Zealand Corporation's new Asset Management Framework include tools for accurately measuring and costing the overall maintenance workload.
- 3. We recommend that Housing New Zealand Corporation's new Asset Management Framework include systems to plan for effectively managing the overall maintenance workload.

#### Part 1

# Introduction

- 1.1 State housing is the largest publicly owned property portfolio in the country, with an estimated value in 2008 of \$15.2 billion. Ensuring that the state housing stock is well-maintained is important for tenants and for protecting the value of these properties.
- 1.2 Housing New Zealand Corporation (the Corporation) is the agency responsible for maintaining state housing. Maintaining 68,000 state houses is a substantial task. The Corporation carried out more than 1.7 million maintenance jobs in 2007/08.
- 1.3 We carried out a performance audit to provide Parliament with assurance about the effectiveness of the systems and processes the Corporation uses to maintain state housing.
- 1.4 The audit focused on the systems and processes the Corporation uses to:
  - plan for maintenance in the long term;
  - manage day-to-day maintenance work; and
  - monitor and evaluate that maintenance work.
- 1.5 The audit did not directly assess the current condition of state housing or look at other non-maintenance activities the Corporation carries out, including modernisations, capital improvements, energy efficiency retrofits, or the Healthy Housing, Community Renewal, and Rural Housing Projects.

#### Part 2

# Planning for maintenance

- 2.1 In this Part, we set out our findings about the Corporation's:
  - systems and processes for gathering information about state housing properties;
  - systems and processes for assessing the condition of state housing properties;
  - strategic positioning of long-term planning for state housing maintenance;
     and
  - systems and processes for planning and programming maintenance work.
- 2.2 This Part contains two recommendations. Our main concern with the Corporation's systems and processes for planning maintenance work is discussed in paragraph 2.8.

#### Information about the state housing asset

The Corporation has systems and processes that provide reliable information on the size, form, and value of the state housing asset.

- 2.3 The Corporation's main information management system, Rentel, stores data about state housing properties, tenants, applicants, contractors, and payments. The system produces a basic description of every property and lists maintenance and other changes. The Corporation lists the properties by type, age, and location. It also records other information, including numbers of bedrooms, average floor areas, total floor areas, and valuation data.
- The Corporation has about 68,000 state housing properties, with 96% owned by the Crown and 4% leased from private owners. More than half the state housing properties were built in the 1940s, 1950s, and 1960s. About 44% of all state housing properties are located in and around Auckland.
- 2.5 The Corporation's freehold land and rental properties were revalued at 30 June 2008 for financial reporting purposes. The total gross amount of the revaluation, excluding properties intended for sale and selling and other costs, was \$15.2 billion.

#### Assessing the condition of state housing properties

The Corporation does not have enough detailed and specific information about the condition of state housing properties.

- 2.6 The Corporation's Property Maintenance Assessment Policy is to inspect each of its state housing properties at least once in a 12-month period.¹ This is done mainly through the annual Property Management Assessment System (PMAS) inspections. The Corporation introduced PMAS inspections in 1997 to monitor the condition of its properties against minimum standards set out in the Corporation's Maintenance Standards Manual. Since 2002, an external contractor (currently PQS Limited) has carried out these inspections for the Corporation.
- 2.7 The main purpose of these inspections is to identify for each property any components that do not meet the Corporation's standards, and to identify and address any health and safety issues.
- The PMAS does not produce an itemised assessment of the condition of each property. Accordingly, the PMAS does not provide a basis for estimating the cost of repairs and maintenance required to bring each property up to standard, or for developing a strategy for managing the overall maintenance workload. The PMAS inspector notes defects against the Corporation's Maintenance Standards Manual, but these are not weighted by scale, criticality, or cost. For example, a broken bedroom wardrobe latch counts as "a defect" equally with a bathroom damaged by leaking plumbing. If the total number of defects, regardless of scale, is nine or fewer, the property is deemed to meet the standard. If the total is 10 or more, again regardless of scale, the property fails to meet the standard.
- 2.9 Inspection results are aggregated to regional and national levels to measure overall maintenance performance against the Corporation's Property Condition Benchmark. The Property Condition Benchmark is that at least 85% of the state housing properties have fewer than 10 defects. The Corporation rated its national performance at 88.59% in 2007/08. This included ratings as low as 66.74% and 68.99% in South Auckland, and as high as 99.68% in Christchurch. In our view, this is not a satisfactory performance measure of the Corporation's effectiveness in maintaining its housing stock.
- 2.10 The PMAS generates a high-level or "broad brush" measure of the condition of the state housing properties. The Corporation cannot use the PMAS for accurately measuring, costing, and scheduling its maintenance workload. It does not have any other tools capable of providing detailed and reliable analysis of the condition of the properties. The Corporation's Board is aware of this deficiency and is developing a successor to the PMAS as part of an Asset Management Framework project.

<sup>1</sup> The Corporation's tenancy managers also carry out at least one inspection every 12 months under its Tenancy Management Policy.

- 2.11 The Corporation is preparing the new Asset Management Framework now, with detailed design and implementation to follow in 2009 and 2010. The Asset Management Framework project is intended to:
  - · define a new Property Quality Standard;
  - measure the condition of all the Corporation's state housing properties against this standard;
  - identify maintenance shortfalls and estimate costs to bring properties up to the standard;
  - generate high-quality information for preparing prioritised business plans, sound budget bids, and targeted maintenance programmes; and
  - replace the PMAS and the Property Condition Benchmark with a realistic basis for measuring and reporting on the condition of the properties.
- 2.12 In our view, the Corporation obtains some of the information it needs to manage the maintenance of state housing properties. However, the important exception is that its assessments of the condition of properties are not detailed or reliable enough to accurately measure the overall maintenance workload. This limits the effectiveness of its planning. The Corporation is aware of this deficiency and has set out to remedy it through its Asset Management Framework project.

#### **Recommendation 1**

We recommend that Housing New Zealand Corporation's new Asset Management Framework record detailed and specific information about the condition of state housing properties, and that the Corporation use this information to plan its maintenance work.

# Strategic position of long-term planning for maintenance

Long-term planning for maintenance is set within the Corporation's overall asset management strategy, which is based on legislative requirements and the Government's high-level strategic goals.

- 2.13 The Housing Corporation Act 1974 (as amended in 2001) set up the Corporation to administer the Crown's housing operations. Under the Act, the objectives of the Corporation include:
  - ... to give effect to the Crown's social objectives by providing housing, and services relating to housing, in a businesslike manner, and to that end to be an organisation that ... operates with good financial oversight and stewardship, and efficiently and effectively manages its assets and liabilities and the Crown's investment ...

- 2.14 The Corporation's outcomes framework for managing its state housing properties is based on the Government's transformational goal relating to "Families Young and Old". The Corporation states in its asset management strategy for 2007 to 2010 that "state housing directly contributes to strengthening families through providing decent housing in strong stable communities that match their needs". Its mission statement in support of the Government's goal is that the Corporation "provides access to decent homes, helping New Zealanders manage their own circumstances and contribute to community life".
- 2.15 The Corporation's state housing properties form a major part of the Government's response to social housing needs. In our view, the maintenance of these properties is appropriately a component of the Corporation's overarching asset management strategy, which is a framework for managing, developing, and using the Corporation's housing asset in the short and long term.

#### Planning and programming

The Corporation's plans, programmes, and budgets for maintenance take into account important factors that cause maintenance to be required, but do not measure the overall maintenance workload.

- 2.16 The Corporation's maintenance planning and programming is based on its Maintenance Management Model. This has a schedule of 27 major building components, and the Corporation has a detailed understanding of the cost structure for each of these 27 components.
- 2.17 The Model extracts historical maintenance and capital expenditure information for each property from Rentel, and adds assumptions about the likely timing and cost of component replacements during the next 30 years. Examples include planning to replace hot water cylinders on the basis of set lifecycles and to paint exteriors on 10-year cycles. Further assumptions take into account projected growth of the housing asset, allowances for wear and tear and damage, a general allowance for the maintenance backlog, and allowances for other risks and variables. In our view, this approach covers the important factors that cause maintenance to be required, as a basis for the Corporation's long-term annual forecasts.
- 2.18 The Corporation expects maintenance volumes and resource requirements to increase for three main reasons:
  - the increasing number of state housing properties;
  - increasing external costs, particularly for labour and materials; and
  - continuing physical deterioration of the properties because of their age, and wear and tear.

- 2.19 The Corporation also forecasts a three-year expenditure increase from 2011/12 as components from a substantial investment in the mid-1990s begin to wear out.
- 2.20 The Corporation does not have a detailed and reliable basis for measuring, costing, and scheduling its overall maintenance workload. Its Regional Asset Management Plans indicate an increase in deferred maintenance from factors including the increasing age of the properties, increasingly hard wear and tear, the effects of dampness and poor ventilation, the poor quality of components in some cases (such as fibrolite cladding, particle board floors, and lath and plaster interior walls and ceilings), and limitations on planned maintenance (see paragraphs 3.16-3.19).
- 2.21 In our view, the new Asset Management Framework will enable the Corporation to measure and manage its deferred maintenance workload.
- 2.22 The Corporation's long-term annual forecasts incorporate calculations to cover component replacement, responsive maintenance, and some aspects of planned maintenance. However, the forecasts include only a general provision to cover the maintenance backlog. The lack of detailed information and tools to accurately measure and cost the overall maintenance workload limits the value of the Corporation's forecasting work, and its overall maintenance planning and programming.
- 2.23 Maintenance funding is allocated by the Corporation's Board from its revenue. Allocations have increased during the last four years, from \$149.1 million in 2004/05 to \$187.7 million in 2007/08. In recent years, the Board has allocated additional funds for maintenance from revenue during the year.
- 2.24 The Corporation has an established process for preparing and approving its operating budgets, including the maintenance budget. The Board is able to base its funding decisions on sound information about major maintenance components and costs. However, it does not currently receive a clear picture of the amount of the overall maintenance workload, nor of how important it is.
- 2.25 In our view, the new Asset Management Framework will enable the Corporation to make accurate provisions to cover its maintenance backlog in its annual forecasts. It will also enable the Corporation to give the Board all the information about the overall maintenance workload it needs when it considers funding decisions.

#### **Recommendation 2**

We recommend that Housing New Zealand Corporation's new Asset Management Framework include tools for accurately measuring and costing the overall maintenance workload.

# Part 3

# Managing maintenance work

- 3.1 In this Part, we discuss the Corporation's systems and processes for:
  - carrying out maintenance;
  - setting priorities for maintenance;
  - · involving tenants and contractors; and
  - ensuring that staffing levels are adequate and that staff can access the information they need.
- There is one recommendation in this Part. Overall, we are satisfied with the Corporation's systems and processes for managing maintenance work. The exception is discussed in paragraphs 3.19 and 3.20.

#### The system for carrying out maintenance

The Corporation delivers day-to-day maintenance through an effective performance-based contracting system.

- 3.3 The Corporation operates a national maintenance system featuring:
  - a single or head contractor to serve each region (except for South Auckland, which needs two contractors because of the number of state housing properties there);
  - nationally consistent job-letting systems and performance standards;
  - · set charge-out rates and major component costs; and
  - performance-based contracts.
- 3.4 The system is comprehensive. It specifies performance requirements clearly, monitors performance thoroughly, and applies motivational rewards and sanctions.
- 3.5 Each head contractor employs the staff and/or subcontractors needed to supply the wide range of maintenance trades and services for efficient property maintenance in their region or sub-region. This arrangement enables the Corporation to deal directly with only 12 contractors, and to set and enforce national performance standards through them. The contractors deliver maintenance services at rates that include everything needed to complete the work covered by their contracts. The Corporation has negotiated supply arrangements for major items such as paint, building supplies, hardware, flooring, plumbing and electrical supplies, and appliances.
- The first 12 head contractors were selected through a tender process in 2004/05. The process required contenders to submit prices for 1200 itemised job lines set out in the Corporation's comprehensive Schedule of Rates, and

- to also demonstrate that they could meet and sustain the standards of performance required by the Corporation. We did not review the process in detail. Contractors we interviewed reported that they consider the tender system to be comprehensive, rigorous, and fair.
- 3.7 The Corporation's nationally consistent systems and standards are set out in its schedule of maintenance specifications, MasterSpec, and in its Maintenance Standards Manual. The Manual shows, using photographs and text, what is and what is not acceptable. We consider MasterSpec and the Manual to be sound and accessible ways of notifying these types of standards to those who need them.
- The Corporation's performance-based contracts require a proportion of contractors' remuneration to be paid according to their performance against specified Key Performance Indicators (KPIs). These KPIs cover compliance management, response times, completion times, quality standards, accuracy and timing of invoicing, customer satisfaction, and community contribution. Contractors we interviewed found compliance with the KPIs exacting in scope and detail.
- 3.9 The Corporation's Property Improvement Team audits the performance of contractors every eight weeks, or every 12 weeks if they consider that the contractors are performing well. Where points of difference about detail cannot be resolved between contractors and auditors, Maintenance Contract Managers based in the regions have the authority to adjudicate. We discuss the quality audit process further in paragraph 4.5.
- 3.10 Property Improvement Team staff we interviewed considered that the performance regime had brought about improvements. They reported that the Corporation pays about 80% of the performance remuneration potential to its contractors. Contractors we interviewed confirmed that failing to meet KPIs has resulted in significant financial penalties.
- 3.11 We consider that the KPIs, quality audit, and significant financial penalties combine to make this an effective performance-based contracting system.

#### Setting priorities for maintenance work

Day-to-day maintenance work is appropriately focused on urgent and responsive maintenance, exterior painting, and upgrading vacant properties, but the Corporation needs to better prioritise and manage other maintenance work.

- 3.12 The scheduling of maintenance work is based on priorities that are set nationally. At a strategic level, all state housing properties are assigned a future use code. The main factor in the code is whether an asset is determined to be *core* (in demand from the Corporation's urgent housing need applicants) or *non-core* (not in such demand). The Corporation aims to prioritise effort and expenditure on its core properties, which are those most capable (because of their location, condition, and form) of contributing to housing outcomes.
- 3.13 At operational levels, maintenance is prioritised in *responsive* and *planned* categories. The Corporation gives first priority to urgent responsive maintenance, which is where components break or wear out and place occupants at immediate risk, where reinstating essential services or security is considered critical, or where health and safety is not at immediate risk but remedy is nevertheless an urgent need. We consider the priority given to urgent responsive maintenance to be appropriate.
- 3.14 Other (non-urgent) responsive maintenance jobs receive lower priority. These include redecorating tenanted properties and upgrades resulting from tenancy management inspections. These jobs may be written off altogether if funds are not available or if scheduling within a reasonable time frame proves impossible.
- 3.15 We understand that the demand for maintenance is likely to outweigh the resources available in any year and that a number of deferrals and write-offs are inevitable. The new Asset Management Framework is intended to enable the Corporation to identify maintenance shortfalls and estimate costs to bring properties up to its standard. This should enable the Corporation to generate high quality information for prioritised business plans, budget bids, and maintenance programmes (see paragraph 2.11).
- The Corporation has two important national policies for planned maintenance.

  These are:
  - that the exterior of every property will be maintained to high standards; and
  - that vacated properties will be upgraded to meet minimum standards as quickly as possible to permit prompt re-letting.

- 3.17 In our view, these policies are consistent with the Corporation's legislative objectives to provide housing in a business-like manner and to effectively manage its assets. Its priorities in planned maintenance are exterior painting on a 10-year cycle (for which it spent \$25.2 million in 2007/08) and upgrading vacant properties as required (\$46.8 million in 2007/08). These priorities absorb about half of planned maintenance funds (\$133.6 million in 2007/08).
- 3.18 The balance of planned maintenance funds (\$61.6 million in 2007/08) is mainly used for "other planned maintenance": upgrading interiors, exteriors, appliances, services, and grounds. In our view, this category is not "planned" in the sense of prioritised programmes agreed for implementation within specified time frames. The Corporation's Property Improvement Team decides where and to what purposes these sums are spent in each region. The team bases its decisions on factors including:
  - Regional Asset Management Plans and the views of regional managers;
  - · deferred maintenance;
  - the condition of the state housing properties;
  - value for money (which investments will produce the best results); and
  - the capacity of contractors to supply labour and material when and where required.
- 3.19 The Corporation does not prepare overall maintenance plans. Its high-level plan is to meet the demand for urgent responsive maintenance and to keep up the high quality of the exterior repainting programme and the vacant upgrade programme. The Corporation's systems and efforts are focused on implementing this high-level plan. Its third main maintenance activity, "other planned maintenance", addresses a range of regional priorities and requirements as funds and opportunities permit but is not formally "planned".
- 3.20 We consider that the Corporation needs to put in place a system that will enable it to plan expenditure and effort, including its main maintenance activities (that is, responsive maintenance, exterior repainting, and vacant upgrades) in the context of a clear understanding of the overall maintenance workload. We understand that the Asset Management Framework project, which will provide accurate information about the scale, criticality, and cost of the backlog, will form the basis for such a planning system.

#### **Recommendation 3**

We recommend that Housing New Zealand Corporation's new Asset Management Framework include systems to plan for effectively managing the overall maintenance workload.

# Involving tenants and contractors in addressing maintenance issues

The Corporation has adequate systems and processes in place to involve contractors and tenants in addressing maintenance issues.

- 3.21 The Corporation has systems and processes to assure positive relationships between the different parties with an interest in maintenance operations.

  Maintenance delivery involves three important sets of relationships: between contractors and tenants, between the Corporation and contractors, and between the Corporation and tenants. The Corporation stated in its 2007/08 Corporate Business Plan that it seeks to become an organisation that people experience as "customer-oriented and inclusive of communities".
- 3.22 The Corporation states that customer service is of vital importance in maintenance delivery. Standards are set out in the Corporation's Maintenance Contractor Code of Conduct and are reinforced by customer satisfaction and community contribution KPIs. Performance is tested in the quality audit process, and also in separate quarterly surveys designed to obtain feedback from tenants about the quality of contractors' responses to maintenance jobs (see paragraph 3.26).
- 3.23 Tenants raise maintenance requests through the Corporation's 24-hour National Contact Centre or through local tenancy managers. Contact Centre and tenancy staff can authorise urgent health and safety jobs immediately (all other jobs are authorised by regional contract management staff). Urgent health and safety jobs include continuity of the means of cooking, hot or cold water supply, gas supply, power supply, rainwater leaks, broken glazing, and faults to sanitary appliances. The Corporation aims to respond to such urgent health and safety requests within four hours, 24 hours a day and seven days a week. In our view, this is reasonable for tenants and realistic and practical for contractors.
- 3.24 The Corporation's relationships with contractors are managed by the Property Improvement Team at three levels: daily by regional contract management staff, every eight or 12 weeks by quality auditors in connection with formal audits, and every six months by the National Property Improvement Manager and Operations Manager as members of a formal bilateral Alliance Board with each contractor. Alliance Boards are intended to guide relationships and resolve high-level issues and risks. The Corporation's staff and contractors report frank and constructive relationships. Regional variations relate to some degree to the Corporation's rating of the contractor's performance.

- 3.25 Regional tenancy staff are responsible for the Corporation's relationship with tenants about maintenance matters. We noted that tensions exist in some regions between the roles of tenancy staff, with their focus on the interests of tenants, and regional Property Improvement Team staff responsible for managing maintenance resources. Where this tension is well managed, Property Improvement Team staff ensure that tenancy staff are informed about what can and cannot be accomplished with the resources that are available, while tenancy staff try to manage tenants' expectations realistically.
- The Corporation runs quarterly surveys of tenants' ratings of contractors' performance, covering matters including work completion standards, communication, clean-up, and consideration and respect. The December 2007 survey resulted in an average overall satisfaction rate of 79%, with a high of 88% and a low of 68%. Results were similar in March 2008. The Corporation uses this information to help it judge contractors' performance against the customer satisfaction KPI referred to in paragraph 3.8.
- 3.27 The Corporation has monitored and analysed the subject matter of Ministerial and chief executive correspondence since 2004/05. The total number of letters in 2006/07 was 995.<sup>2</sup> Of these, 29 (2.9%) were about justified complaints to do with maintenance. This compares with 38 justified complaints in 2005/06 (6.9% of the letters), and 32 justified complaints in 2004/05 (4.1% of the letters).

# Staffing for maintenance functions

The Corporation has systems and processes to ensure that its staffing for maintenance functions meets current and longer-term requirements, and to ensure that staff who need information about maintenance can access it.

3.28 The Corporation has standard systems for recruiting, training, and managing its workforce. It expects managers to have formal workforce plans. Managers are required to review their staffing as part of the annual budget process, to confirm existing positions and produce business cases for any new positions. They are also required to review and confirm the need to fill vacancies as these arise. At the same time, they must review and revise as necessary position descriptions, including person specifications covering qualifications, skills, knowledge, experience, and competencies. The Corporation operates a formal annual performance management process to assess and build skills. It runs a central learning and development function responsible for national training programmes. New recruits for the Auckland regions attend a five-week technical training school before starting their jobs.

- 3.29 The Corporation's staff turnover rate in 2007/08 was 16%. Both the Property Improvement Team (at 14%), which is responsible for delivering the maintenance service, and the Strategic Asset Planning Team (at 9%), which is responsible for planning and budgeting for maintenance, had lower turnover rates than the Corporation nationally. The National Contact Centre, which is in the front line of tenant relationships including urgent maintenance matters, experienced a high turnover rate (34%), which we understand to be characteristic of the contact centre industry. The regions, where tenancy staff are also in the front line, varied, with three regions close to or above the national turnover rate. In our view, retention levels (other than that for the National Contact Centre) are satisfactory, and consistent with the numbers of experienced and positively motivated staff we saw in the Property Improvement Team and the Strategic Asset Planning Team.
- 3.30 In our view, Maintenance Contract Managers and Maintenance Account Managers in the regions perform particularly important roles in the system for maintaining state housing properties. These managers are expected to balance the Corporation's interests in high standards of performance and value for money with maintaining harmonious and constructive relationships with contractors. We expect that the Corporation will ensure that its workforce plans provide for continuity of good quality staffing.
- 3.31 The Corporation documents its maintenance-related processes in three main ways:
  - the Quality System instructions, processes, and forms series;
  - a maintenance tender and contract management document set; and
  - the Maintenance Standards Manual and Rentel system.
- In our view, these systems are comprehensive and accessible to those who use them. The Corporation's staff indicated that they were supplied with, or had access to, the information about maintenance systems and processes they need to do their jobs well.

#### Part 4

# Monitoring and evaluating maintenance work

- 4.1 In this Part, we discuss the Corporation's systems and processes for:
  - monitoring maintenance work;
  - comparing the quality of its housing with the quality of properties in the private sector; and
  - improving its maintenance performance and processes.
- 4.2 There are no recommendations in this Part. Overall, we are satisfied with the Corporation's systems and processes for monitoring and evaluating its maintenance work.

#### Monitoring maintenance work

The Corporation monitors the maintenance work that contractors carry out through a quality audit process and through contract management staff.

- 4.3 The Corporation monitors how maintenance work is carried out through:
  - formal quality audits;
  - · measuring job response times; and
  - · day-to-day contract management.
- The Property Improvement Team's quality auditors assess whether maintenance contractors and the Corporation's staff comply with contract requirements and related procedures. This quality audit process is intended to continuously improve the condition of state housing properties, and to ensure that the Corporation delivers excellent customer service to tenants and receives value for the money it spends on maintenance.
- 4.5 Each quality audit covers a sample of the contractor's work, including at least 70 urgent jobs, 15 exterior paint jobs, and five estimates of the work required on a vacant property (job scoping). Each quality audit also covers selected currently critical job lines, such as the quality of job scoping, hot-water cylinder safety fittings, glazing, or invoicing. The Property Improvement Team reports the results to contractors promptly, to remedy unsatisfactory work and to improve future performance. The team also reports the results to the local Maintenance Contract Manager, for calculating at-risk performance payments. The audit team checks on remedial work in follow-up "mini-audits".
- 4.6 Contractors we interviewed told us that they found the quality audit processes to be rigorous. While variations in auditing style resulted in some perceptions of excessive fault-finding and "by the book" rulings lacking reasonable regard for operational or commercial realities, contractors also viewed audits in constructive terms, as aids to their own performance improvement.

4.7 The Corporation has routinely monitored contractors' job response and completion times since 2005/06 for performance management purposes. KPIs require responses to urgent health and safety jobs within four hours, to urgent responsive jobs within an average of 1.02 working days, and to general responsive jobs within 10 working days. Average response times for urgent health and safety and general responsive jobs have been well within the target times, while non-health and safety urgent responsive jobs are marginally outside (see Figure 1).

Figure 1

Average response times for urgent health and safety and general responsive maintenance

	Target	2005/06	2006/07	2007/08
Urgent health and safety jobs	Less than 4 hours	2.10 hrs	1.79 hrs	2.00 hrs
Urgent responsive jobs	Less than 1.02 days	1.06 days	1.07 days	1.10 days
General responsive jobs	Less than 10 days	4.13 days	4.75 days	4.81 days

Source: Housing New Zealand Corporation

- 4.8 The Corporation's regional Maintenance Contract Managers and Maintenance Account Managers provide effective day-to-day monitoring of contractors. This includes:
  - monitoring the progress of current jobs;
  - negotiating and resolving differences about priorities, components, standards, and costs;
  - · managing work flows; and
  - · delivering constructive feedback.

# Comparisons with the private sector

The Corporation monitors its maintenance standards and performance through regular comparisons with the private sector.

4.9 The Corporation commissioned Opus International Consultants Limited to conduct independent annual reviews in 2006 to 2008 of the standard of maintenance and level of amenities in state housing properties compared to the private sector. These reviews, which give the Corporation an external perspective on the relevance and appropriateness of its standards, involve surveys of samples (different each year) of about 300 Corporation properties and 100 private sector properties in Auckland, Hamilton, Wellington, and Christchurch.

4.10 The 2006 report concluded that the Corporation's properties were generally maintained better than rental properties in the private sector market. However, the 2007 report found the private sector rental properties were maintained better, except for the quality of appliances, structure, and exterior painting. The Corporation's Property Improvement Team uses this information to adjust and set its maintenance standards.

#### Improving maintenance performance and processes

The Corporation works to continuously improve its maintenance performance and processes.

- 4.11 The Corporation uses information obtained in its monitoring to improve performance. The quality audit system is the main instrument for this. It enforces standards, and identifies and exemplifies good practices. It motivates contractors, through feedback and ultimately through rewards and sanctions, to meet the performance standards. Surveys of response times (see paragraph 4.7) and surveys of tenants (see paragraph 3.26) also inform how the Corporation manages the performance of contractors. The Corporation feeds information it acquires through its Maintenance Management Model (see paragraph 2.16), and about other future maintenance commitments it is able to identify (such as local authority services upgrades), into its planning processes.
- 4.12 The Corporation's Property Improvement Team reviews its processes and practices to improve effectiveness and efficiency. Recent results include introducing new technologies to improve efficiency in quality audits, and to streamline communications with contractors about job letting, job management and completion, and invoicing and payment. The team communicates and consults internally as a matter of practice, using scheduled formal meetings (of the Maintenance Contract Managers, and of the Quality Auditors, for example), and informal systems to share advice and information and to solve practical problems.
- 4.13 The Corporation has implemented changes in the maintenance of state housing with the move to a performance-based contract system in 2005. The changes involved a suite of new contract documents, a schedule of rates, a tendering system, and a quality audit regime. As stated in paragraph 3.11, we consider that the KPIs, quality audit, and significant financial penalties form an effective performance-based contract system.
- 4.14 The Corporation is now putting in place its next set of changes through the Asset Management Framework project referred to in paragraph 2.11. We emphasise our expectation that this project will meet its stated objectives and put in place by 2010/11 a new framework incorporating the elements covered in our recommendations.

# Publications by the Auditor-General

Other publications issued by the Auditor-General recently have been:

- Ministry of Health: Monitoring the progress of the Primary Health Care Strategy
- Annual Report 2007/08
- Ministry of Education: Supporting professional development for teachers
- Inquiry into the West Coast Development Trust
- Maintaining and renewing the rail network
- Reporting the progress of defence acquisition projects
- Ministry of Education: Monitoring and supporting school boards of trustees
- Charging fees for public sector goods and services
- The Auditor-General's observations on the quality of performance reporting
- Local government: Results of the 2006/07 audits
- Procurement guidance for public entities
- Public sector purchases, grants, and gifts: Managing funding arrangements with external parties
- The Accident Compensation Corporation's leadership in the implementation of the national falls prevention strategy
- Ministry of Social Development: Preventing, detecting, and investigating benefit fraud
- Guardians of New Zealand Superannuation: Governance and management of the New Zealand Superannuation Fund
- Annual Plan 2008/09
- Central government: Results of the 2006/07 audits
- The Auditor-General's Auditing Standards
- Responses to the Coroner's recommendations on the June 2003 Air Adventures crash

#### Website

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