

Western Australian Auditor General's Report



Fitting and Maintaining Safety Devices in Public Housing – Follow-up



Report 7: May 2016

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WESTERN AUSTRALIAN AUDITOR GENERAL'S REPORT

Fitting and Maintaining Safety Devices in Public Housing – Follow-up

Report 7
May 2016



**THE PRESIDENT
LEGISLATIVE COUNCIL**

**THE SPEAKER
LEGISLATIVE ASSEMBLY**

FITTING AND MAINTAINING SAFETY DEVICES IN PUBLIC HOUSING – FOLLOW-UP

This report has been prepared for submission to Parliament under the provisions of section 25 of the *Auditor General Act 2006*.

Performance audits are an integral part of the overall audit program. They seek to provide Parliament with assessments of the effectiveness and efficiency of public sector programs and activities, and identify opportunities for improved performance.

This audit provides an assessment of whether the Housing Authority has improved the effectiveness of its management of electrical safety devices (residual current devices and smoke alarms) in its 36,600 public housing properties since our 2010 report, *Fitting and Maintaining Safety Devices in Public Housing*.

I wish to acknowledge the cooperation of the staff at the Housing Authority.

A handwritten signature in black ink, appearing to read 'C. Murphy'.

COLIN MURPHY
AUDITOR GENERAL
11 May 2016

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Auditor General's overview

The Housing Authority is responsible for the maintenance and upkeep of 36,600 properties located across the state. As a landlord, it is responsible under law for keeping properties safe, and specifically, for ensuring that its houses have the required number of working smoke alarms and residual current devices. This task is significant given the large number and spread of properties, but so too is the potential consequence of failing, especially when considering the vulnerability of many of Housing's tenants.



I first audited Housing's management of safety devices in 2010 following the tragic electrocution of a child in the Pilbara and a request from the then Minister. I found that Housing's management of safety devices was ineffective, putting tenants and properties at risk.

Six years later, I found some progress and improvement, but not enough.

Housing has put in place most of the tools it needs to manage safety devices effectively. But gaps in baseline information, weaknesses in inspection and maintenance processes, and inadequate oversight means that Housing remains unsure if all its properties have working safety devices.

In my 2010 report, I estimated that Housing had spent around \$12 million on retrofitting safety devices since 1997. In the last 4 years, it has spent a further \$12 million and it has just started a \$26 million, 3-year program to make sure its properties are electrically safe. It has already taken too long to address this important safety issue. Failure to deliver on this latest program would be unacceptable.

Executive summary

Introduction

This report provides an assessment of whether the Housing Authority (Housing) has improved the effectiveness of its management of electrical safety devices (residual current devices and smoke alarms) in its 36,600 public housing properties since our 2010 report, *Fitting and Maintaining Safety Devices in Public Housing*.

Our purpose in this follow-up audit was to assess how well Housing had addressed the issues we found in 2010. We focused on whether risks to tenants and properties have been minimised. We considered whether Housing had improved the reliability of its property information and addressed weaknesses in property inspections and its maintenance of safety devices.

Background

Housing is the largest rental property manager in Western Australia. It has a responsibility under the *Residential Tenancies Act 1987* to keep its 36,600 public housing properties safe. State legislation¹ also requires landlords to install residual current devices (RCDs) and hard-wired (mains powered) smoke alarms in all rental properties.

Australian Standard RCDs and smoke alarms are designed to reduce the risk of death by electrocution or from fire. RCDs detect current leakage, for instance caused by a faulty appliance or someone touching a live wire, and cuts the supply of electricity. Smoke alarms detect smoke and sound an alarm, giving an early warning of a fire. Smoke alarms have a guaranteed life of 10 years from date of manufacture, after which they should be replaced.

Housing's policy for ensuring RCDs and smoke alarms work and properties remain safe is to inspect properties every 365 days and on change of tenants. Housing advises and encourages tenants to test and maintain safety devices and to report any need for repairs. It uses 4 head contractors to conduct maintenance of properties in response to needs identified by inspections, or if a problem is brought to its attention. Fixing electrical safety devices is categorised as emergency maintenance and should be done within 8 hours.

In 2005, Housing commenced a \$9 million program to retrofit RCDs in its public housing properties to minimise risks to its tenants and properties. In August 2010, we reported that Housing managed the program poorly.

Identified problems included unreliable property information, inadequate monitoring and oversight of retrofit programs, and weaknesses in property inspections and maintenance. Housing was therefore unable to give assurance that all its properties had the required number of RCDs. We identified similar weaknesses in Housing's programs to install and replace smoke alarms.

In both 2010 and 2013, the Coroner released a report² following a death in a Housing property. Both reports made recommendations that Housing needed to improve its management and oversight, performance management, data and information systems, staff training and regularity of property inspections.

¹ Electricity Regulations 1947
Building Regulations 2012

² WA Coroner's reports 31/10 and 41/13

Audit conclusion

Housing is still not managing electrical safety devices in public housing properties effectively, leaving tenants and properties at some risk. Housing has invested significant time and resources in replacing its property management system and has introduced an annual inspection regime, but information on safety devices is still unreliable. This is due to a lack of baseline information, persistent weaknesses in inspection and maintenance processes, and poor central and regional oversight.

Housing recognises that it cannot give assurance that each property has working electrical safety devices. In April 2016, it commenced a \$26 million, 3-year, electrical safety device inspection and testing program (ESD program).

If managed adequately, this new program should provide good baseline information. However, to keep this information up-to-date and provide ongoing assurance that properties are safe, Housing needs to address the systemic weaknesses we found in property inspections, collection of data and in management oversight.

Key findings

Safety device information is still unreliable and does not give assurance that each property has working electrical safety devices

Housing relies on its safety device information in its property management system, 'Habitat', to give assurance that it is meeting its safety obligations. However, this information is still unreliable due to a lack of baseline information and a failure to update property records properly after inspections and maintenance. None of our sample of 90 property records had complete and accurate electrical safety device information.

Information that was missing or incorrect included the installation dates (and where appropriate expiry dates), and the make, model and serial numbers of safety devices. This information is essential for confirming that RCDs and smoke alarms are installed, to manage the cyclical replacement of devices and to respond to product recalls. We found examples where poor records have stalled the replacement of potentially faulty devices:

- in 2014, Housing identified and replaced a smoke alarm that did not meet Australian Standards in 1 of its properties. Because the make and model of safety devices is not always recorded, Housing does not know if similar alarms are installed in other properties
- following product recalls of 2 models of RCDs in 2011 and 2012, Housing was also unable to identify which properties, if any, had these types of RCDs installed
- smoke alarms have a 10-year working life from the date of manufacture. Habitat has a field for expiry dates, however this field is often blank or has incorrect information. Housing needs this information to identify when a smoke alarm reaches the end of its working life and requires replacement.

The failure to get its information collection processes right, and a lack of baseline information, are the main reasons for Housing's \$26 million ESD program. However, identifying and replacing non-compliant RCDs and smoke alarms will take up to 3 years to complete.

There are weaknesses in property inspection processes

Some aspects of the property inspection process have improved since our 2010 audit. Housing has introduced a new target to inspect each property every 365 days. It has also

automated the recording of inspections using tablet devices and uses them to take photos as evidence that electrical safety devices are installed.

Housing advised that an inability to access properties was the reason for a lack of inspection of 737 (2%) of the 33,400 properties scheduled for inspection in 2015. These annual inspections assess property condition including the working order of RCDs and smoke alarms. Repeated inability to gain access has seen legal action commence against the tenants of 597 properties while inspections for the remaining 140 properties are currently rescheduled. Failed attempts to gain access is an expensive exercise for Housing and as time passes, there is an increasing risk that the property is unsafe.

Housing's inspectors do not always identify and/or report electrical safety devices requiring maintenance or replacement. In some cases, these failures are so serious as to warrant investigation by Housing. In our sample of 90 properties, 3 recent inspection reports recorded the properties' safety devices to be in working order and compliant even though there was clear evidence from photos taken by the inspector that the devices needed replacing. These included smoke alarms hanging off the ceiling in a property in Albany and another in Collie, and a melted RCD in a Bunbury property. In another case, we saw evidence of electrical shorting in a power outlet in a Meekatharra property. In each case, we advised the regions responsible who immediately issued work orders to replace the devices.

Housing relies on property inspections to monitor compliance with its legal obligations and for keeping its properties safe. Although competency based training for inspectors became available from August 2011 it only became mandatory in September 2015 which was after this audit commenced. At 4 November 2015, we found that 51% of property inspectors were untrained. Housing has since advised that all inspectors are now trained and its new processes will ensure that only competent staff inspect safety devices.

Not all emergency maintenance is completed within the required time

In 2015, Housing paid contractors for 13,400 emergency work orders, which included 5,704 to maintain and replace electrical safety devices. After excluding delays caused by an inability to access properties, we found that 82% of all emergency work orders were addressed within the required 8 hours, 6% took between 8 and 24 hours and 12% took more than 24 hours. Data in recent months indicates that timeliness is improving. Nevertheless, any failure to meet the required timeframe for emergency work orders increases risk.

Process failure contributes to delays in undertaking electrical safety device work orders. Contractors prevented from accessing a property will still submit a payment claim for travelling to the property. In 51 instances between September and November 2015, the payment of travel claims led to the closure of the work orders. Raising a new work order to complete the work is not automatic. Review of a small sample of closed work orders showed that new work orders were not raised in almost half the cases.

Housing needs a more strategic approach to the management of safety devices and to exercise better oversight

Housing needs to establish a more strategic approach to the management of electrical safety devices. Within central office and between regional operations, there is limited corporate oversight, no formal risk management process and responsibilities for safety devices are not well defined. There were also no reports between regions, central office and executive management detailing properties without safety devices, properties overdue for an inspection, maintenance expenditure, and the number of trained inspectors.

Housing is not analysing expenditure on, and numbers of, RCDs and smoke alarms being installed and replaced. Housing has spent \$12.3 million over the last 4 years installing and replacing 19,237 RCDs and 34,424 smoke alarms without any analysis of why or whether the

numbers were expected and reasonable. Contractors are able to identify the need to replace devices, undertake the work and then update Housing's Habitat property management system. Without suitable monitoring and analysis, Housing risks over-servicing by contractors.

Housing has started a program to improve the management of safety devices

Housing has started a program to improve the management of safety devices but recognises to address the concerns raised in our 2010 audit the work needed is far from finished. It believes its ESD program, enhancements to Habitat, and process and management improvements should address the issues. At the end of the ESD program Housing should have electrical safety certificates for each of the properties inspected. This should provide detailed information on safety devices that is not currently available or correct in Habitat.

The ESD program should provide good baseline information and assurance; however, it will take 3 years to complete and is only a point in time exercise. To ensure this is not wasted effort Housing needs to address the systemic weaknesses we found in the quality of data, property inspections and management oversight. This is important because it is business as usual activities that should provide Housing with ongoing assurance that properties are safe.

Recommendations

1. Housing should, immediately ensure that it captures all required electrical safety device information from its annual property inspections and maintenance and the ESD program and fully record the information in the Habitat system.
2. Housing should by April 2017:
 - a) Establish a more strategic approach for the management of safety devices in public housing properties that includes adequate review and management oversight.
 - b) Formally assess the risks associated with maintaining its properties in a safe condition and use this information to manage properties and set priorities.
 - c) Establish a robust and timely process to improve visibility and follow-up of overdue property inspections and emergency work orders.
 - d) Modify processes to ensure that receipt of a travel claim from a contractor who was unable to gain entry to a property to carry out electrical safety device work does not lead to the closure of the work order.

Response from the Housing Authority

The Authority accepts the recommendations contained within the report and accordingly has either adopted or commenced implementing actions to address each recommendation.

In relation to the Auditor General's conclusions, it is noted in the report that the Authority is currently undertaking a \$26 million 3 year Electrical Safety Device (ESD) Program. This is a comprehensive Program designed to check and collect detailed property level information on safety devices fitted to public housing properties. The ESD Program is the culmination of a number of initiatives required to ensure the Authority is able to provide a high level of assurance about safety devices in its public housing properties. The Authority has invested significantly over the past five years in improving its management of safety devices and has made substantial progress towards its goal of achieving a best practice approach to managing safety devices.

In managing the largest and most geographically diverse property portfolio in the State, the Authority recognises that it must remain vigilant and continue to raise assurance levels and take further steps to help mitigate safety risks. The report findings and recommendations reinforce the need for ongoing commitment to the initiatives and actions currently in train by the Authority to improve its management of safety devices in public housing. The report also provides valuable insights into opportunities for the Authority to implement immediate and longer term actions to further enhance its strategic management of risk.

The Authority has a clear plan and priority actions in place for the management of safety devices in its dwellings. Since 2010 it has taken significant investment, time and resources to progress a number of the foundational elements required to address the issue. Given the systems and oversight now in place and adjustments made as a result of the audit findings and recommendations, the Authority will be able to provide necessary assurance that each property has working safety devices consistent with the time frame indicated in the audit.

Audit focus and scope

This follow-up audit examined whether Housing is managing safety devices in its public housing properties effectively and focused on 3 lines of inquiry:

1. Has Housing effectively made changes to meet the recommendations of the 2010 audit report?
2. Does Housing meet its safety obligations as the state's largest rental property manager?
3. Does Housing's inspection process provide sufficient monitoring and testing of safety devices?

The scope included the actions taken by Housing to address the issues raised in our 2010 report. We assessed if Housing had improved the reliability of its property information and addressed weaknesses in property inspections and its maintenance of safety devices.

We met Housing staff responsible for managing and conducting safety device training, inspections and maintenance at head office and 1 metropolitan region office and reviewed related policies and information systems.

We also reviewed property inspection reports from 2011 to 2015, and property maintenance data for a randomly selected sample of 90 public housing properties within metropolitan and country regions.

This was a broad scope performance audit, conducted under section 18 of the *Auditor General Act 2006* and in accordance with Australian Auditing and Assurance Standards. Performance audits primarily focus on the effective management and operation of agency programs and activities. The approximate cost of tabling this report is \$301,548.

Audit findings

Housing is still not managing safety devices effectively to minimise risks to tenants and properties

Housing is unable to demonstrate that it is fully meeting its safety obligations and has not addressed all of the issues identified in our 2010 audit. Despite implementing its new property information system, 'Habitat', inspecting properties and conducting maintenance, information on safety devices is still unreliable and does not provide assurance that all properties have working safety devices.

Contributing to this is persistent weaknesses in inspection and maintenance processes, a lack of baseline data, and poor central and regional oversight.



Safety device information is not complete and accurate

Housing relies on the safety device information in its property management system, to give assurance that it is meeting its safety obligations. However, we found that information is still unreliable due to a failure to update property records properly after inspections and maintenance. None of our sample of 90 property records had complete and accurate electrical safety device information.

Information that was missing or incorrect included the installation dates (and where appropriate expiry dates), and the make, model and serial numbers of safety devices. This information is essential for confirming that RCDs and smoke alarms are installed, to manage the cyclical replacement of devices and respond to product recalls. Figure 1 shows examples of property records with missing and inaccurate data.

The information captured in Habitat comes from property inspections recorded on tablet devices that upload automatically into Habitat and from contractors updating the system when they maintain and install safety devices.

We found 16 properties with inconsistent information about the number and type of safety devices installed between Habitat and the inspection reports. We also found 7 inspection reports where no photo was taken of RCDs and another 7 with no photos of smoke alarms to provide evidence that safety devices were installed.

		SAP	YES	Smoke Alarm Passage	E	09/12/2010	PASSAGE1	<input type="text" value="Please Select"/>
Attribute Description	Yes	Attribute Date	Attribute Value					
Further Attribute	ELECTRIC	Start Date	09/12/2010	Element Group	KEYD,SAFETY			
Location	Passage 1	Repair Status	Repair Condition					
Quantity	<input type="text"/>	End Date						
Comments								
Created By	HOU	Created Date	26/10/2014	Modified By	Modified Date			
Serial Number	<input type="text"/>	Model/Model Number	Unknown	Smoke Alarm Manufacturer	Migrated			
Purchase Date	<input type="text"/>	Install Date	09/12/2010	Inspection Date	23/09/2015			
Expiry Date	<input type="text"/>							



		RCDPOWER	YES	RCD Power Circuit Protected	-	01/10/2015	VERFRONT	<input type="text" value="Please Select"/>
Attribute Description	YES	Attribute Date	Attribute Value					
Further Attribute		Start Date	01/10/2015	Element Group	KEYD,SAFETY			
Location	Verandah Front	Repair Status	Repair Condition					
Quantity		End Date						
Comments	Created by INT1812							
Created By	INT1812	Created Date	01/10/2015	Modified By	Modified Date			
Serial Number	<input type="text"/>	Quantity	2	Purchase Date	<input type="text"/>			
Model/Model Number	<input type="text"/>	Install Date	<input type="text"/>	Inspection Date	01/10/2015			

Figure 1: Smoke alarm and RCD records from Habitat showing missing and inaccurate information (highlighted in blue)

We also found examples where poor records have stalled the replacement of potentially faulty devices:

- in 2014, Housing identified and replaced a smoke alarm that did not meet Australian Standards in 1 of its properties. Because the make and model of safety devices is not always recorded, Housing does not know if similar smoke alarms have been installed in other properties
- following product recalls of 2 models of RCDs in 2011 and 2012, Housing was also unable to identify which properties, if any, had these types of RCDs installed
- smoke alarms have a 10-year working life from the date of manufacture. Habitat has a field for expiry dates, however we found it is often blank or has incorrect information. Housing needs this information to identify when a smoke alarm reaches the end of its working life and requires replacement.

Housing's inspection and maintenance processes should provide this information. Failure to get the information collection processes right is a reason for Housing's \$26 million ESD program. However, identifying and replacing non-compliant RCDs and smoke alarms will take up to 3 years to complete.

In 2015, 737 properties were not inspected

In 2010, we recommended that Housing should review, improve and monitor inspection and testing regimes for safety devices. Some aspects of the property inspection process have improved. We found that Housing has introduced a new target to inspect each property every 365 days. It has also automated the recording of inspections using tablet devices and uses them to take photos as evidence of the installation of electrical safety devices.

Housing advised that it inspected 98% of the 33,400 properties due for an inspection in 2015. It also advised that an inability to access properties was the reason for no inspection of 737 properties. These annual inspections assess property condition including the working order of RCDs and smoke alarms. Repeated inability to gain access has seen legal action commence against tenants of 597 properties. While inspections for the remaining 140 properties have been rescheduled. Failed attempts to gain access is an expensive exercise for Housing and as time passes, there is an increasing risk that the property is unsafe.

We recognise that gaining access to some properties can be difficult and time consuming especially if legal action is needed. Although the number of properties not inspected is relatively small, the potential risk is high. Housing therefore needs to improve its oversight and follow-up of overdue property inspections. Housing currently follows up overdue inspections at the end of the calendar year but we are of the view that this should occur on a more regular basis.

Housing policy states that scheduling of annual inspections is only required 25 days prior to the due date. However, advice letters to tenants requesting access are not sent until 14 days before the scheduled inspection date. Housing advised that it is going to change this timeframe, notifying tenants earlier of inspection dates. This should reduce the number of properties that miss inspections and the number of inspections done late.

Inspections vary in quality so unsafe devices are not always identified and immediately reported

Housing's property inspections do not provide assurance that each property has working electrical safety devices

Housing's inspectors do not always identify and/or report electrical safety devices requiring maintenance or replacement. In some cases, these failures are so serious as to warrant investigation by Housing. In our sample of 90 properties, 3 recent inspection reports recorded the properties' safety devices to be in working order and compliant even though there was clear evidence from photos taken by the inspectors that the devices needed replacing.

These included smoke alarms hanging off the ceiling in a property in Albany and another in Collie, and a melted RCD in a Bunbury property. In another case, we saw evidence of electrical shorting in a power outlet in a Meekatharra property (Figure 2). In each case, we advised the regions responsible who immediately issued work orders to replace the devices.



Figure 2: Photos of devices certified by inspectors as working and compliant yet clearly in need of emergency maintenance

Although our sample of 90 out of 36,600 public housing properties does not identify exactly how many properties are not compliant, it does show there are serious weaknesses in information reliability that undermine assurance about safety. This concern is supported by the findings of Housing's 2014 ESD program scoping exercise in 2 metropolitan suburbs that found 7% of properties were RCD non-compliant and 25% of properties were smoke alarm non-compliant.

Formal training for property inspectors was introduced in 2011 and became mandatory in September 2015

In 2010, we recommended that Housing inspectors receive induction and ongoing training, so they understand the importance of Housing's procedures to manage safety devices and record property information accurately in Housing's information systems. A similar recommendation was included in the Coroner's report into the investigation of the death of a child in a public housing property in Roebourne³ in 2009.

Housing relies on property inspections to monitor compliance with its legal obligations and for keeping its tenants safe. Although Housing has provided competency based training since August 2011, it only became mandatory in September 2015 which was after this audit commenced. At 4 November 2015, 51% of 186 property inspectors were untrained. We spoke to an inspector who had worked in that role for 5 years without any formal induction or

³ WA Coroner's report 31/10

follow-up training. Casual and contract staff also conduct annual inspections, though it was unclear whether they received training.

Housing has since advised that all inspectors are now trained and they have established new processes to ensure that only competent staff inspect electrical safety devices.

Not all emergency maintenance is completed within the required time

New head contracts for maintaining public housing properties commenced in November 2014. Fixing electrical safety devices is categorised as emergency maintenance and is required within 8 hours. However, this timeframe is not always met.

In 2015, Housing paid contractors for 13,400 emergency work orders, which included 5,704 to maintain and replace electrical safety devices. After excluding delays caused by an inability to access properties, we found that 82% of all emergency work orders were addressed within the required 8 hours, 6% took between 8 and 24 hours and 12% took more than 24 hours. Data in recent months indicates that timeliness is improving. Nevertheless, any failure to meet the required timeframe for emergency work orders increases risk.

We looked at the 14 emergency work orders that took the longest to complete between November 2014 and December 2015 and found 3 included safety device maintenance. One work order to replace a smoke alarm raised in November 2014 was not completed until April 2015.

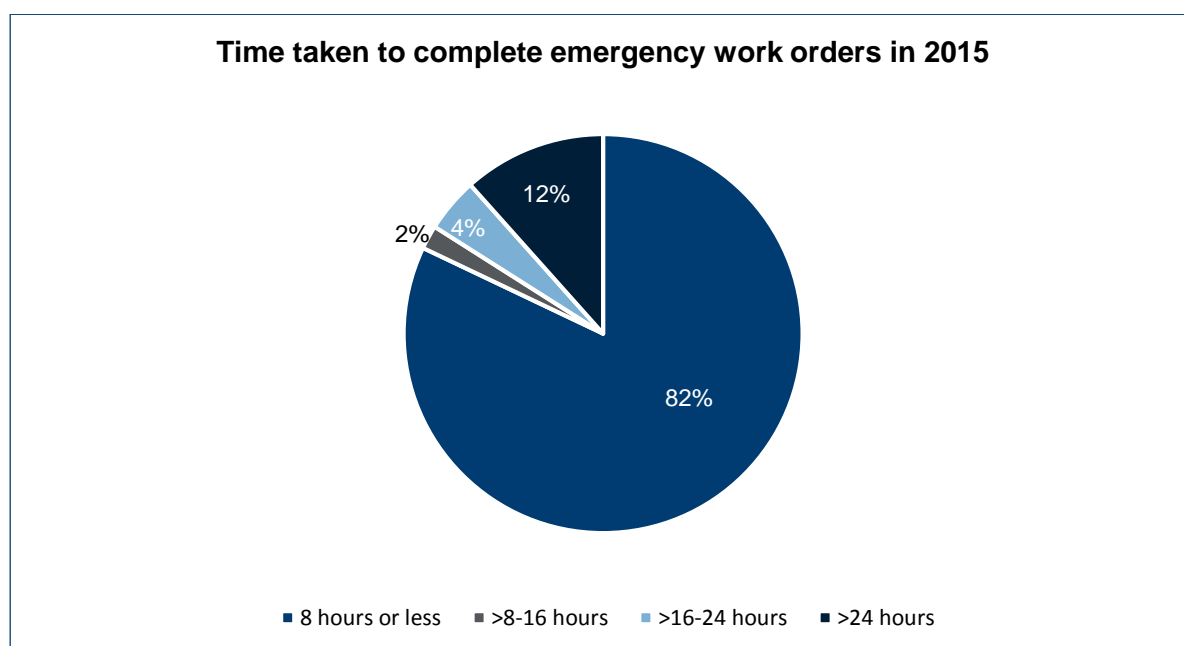


Figure 3: Time taken to complete emergency work orders based on paid work order data, does not include those work orders issued but not yet completed

Process failure contributes to delays in undertaking electrical safety device work orders. Contractors prevented from accessing a property will still submit a payment claim for travelling to the property. In 51 instances between September and November 2015, the payment of travel claims led to the closure of the work orders. Raising a new work order to complete the work is not automatic. Contractors are required to advise Housing of the lack of access. Housing should then arrange for the regional office to contact the tenant to organise access and then issue a new work order.

We looked at a sample of the 51 closed work orders and found almost half did not have new work orders raised.

There is a lack of adequate coordination, oversight, analysis and reporting of safety devices

Housing needs to establish a more strategic approach to the management of electrical safety devices. Responsibility for safety devices continues to reside within 4 separate areas (Service Delivery, Central Maintenance, Housing Direct and Regional Offices), each with its own individual priorities. Within central office and between regional operations there is still limited corporate oversight, no formal risk management process and responsibilities for safety devices are not well defined.

There were no reports between regions, central office and executive management detailing properties without safety devices, properties overdue for an inspection, maintenance expenditure, and the number of trained inspectors. These findings are similar to those from an internal audit by Housing in 2015, and our 2010 report.

Providing safe accommodation is a critical activity, given that on average Housing deals with 4 fires and 18 electrical incidents each month. Adequate oversight, risk management and reporting at both a regional and executive level is therefore essential. But even with adequate controls, residual risk will remain high.

We found no evidence that Housing has formally assessed the risk of electrocution and fire in its public housing properties. We would expect Housing to have a business level, safety risk register and treatment action plans that document the requirement to have RCDs and smoke alarms in each property, and conduct inspections and complete work orders within the required time.

Safety device inspection and maintenance information is stored on a number of information systems (Habitat, intranet and records management system), but these are not integrated. We asked Housing how many properties due an inspection in 2015 had not been inspected. At the start of the audit, we found this information was not centrally available but recorded in spreadsheets at each of the regions. Housing was still developing basic reports about late and overdue annual inspections. These will provide Housing with improved management oversight of inspections due.

Housing is not analysing expenditure on, and numbers of RCDs and smoke alarms installed and replaced. Housing has spent \$12.3 million over the last 4 years installing and replacing 19,237 RCDs and 34,424 smoke alarms without any analysis of why or whether the numbers were expected and reasonable. Housing does not know whether this level of installation and replacement is warranted, given previous RCD and smoke alarm programs and how often devices fail tests or are damaged and need to be replaced.

As a result, Housing is not able to identify if a device was replaced because it reached the end of its working life, had a manufacture fault or is unsuitable in some properties due to environmental issues such as heat, dust, humidity or pests.

Contractors are also able to identify the need to replace devices, undertake the work and then update Housing's Habitat property management system. Without suitable monitoring and analysis, Housing risks over-servicing by contractors.

Housing advised that it will not be able to analyse the numbers and associated cost of replacing RCDs and smoke alarms until the ESD program is complete in 2019. This should enable Housing to determine if over servicing is occurring, improve device make or model management and identify unexpected replacement rates.

Regions	Numbers of properties	RCDs		Smoke alarms		Total
		Number fitted	\$	Number fitted	\$	\$
East Kimberley	578	905	512,577	1,068	312,405	824,982
Goldfields	1,108	396	106,135	1,689	339,402	445,537
Great Southern	1,141	182	54,912	962	213,882	268,794
Midwest/Gascoyne	1,719	627	215,699	2,211	478,770	694,469
North Metro	11,745	5,541	1,239,765	8,233	1,218,032	2,457,797
Pilbara	1,470	832	427,450	2,673	941,626	1,369,076
South East Metro	7,012	4,018	958,567	6,462	941,477	1,900,044
South Metro	6,995	2,697	637,312	5,543	799,678	1,436,990
Southwest	2,570	672	179,318	2,300	469,346	648,664
West Kimberley	1,190	2,760	1,315,482	1,678	396,328	1,711,810
Wheatbelt	1,111	607	214,149	1,605	327,712	541,861
Total	36,639	19,237	\$5,861,366	34,424	\$6,438,658	12,300,024

Table 1: Number fitted and amount spent on installation and replacement of electrical safety devices 2011-12 to 2014-15

Housing has started a program to improve the management of safety devices

Housing has started a program to improve the management of electrical safety devices to address the concerns raised in our 2010 audit but recognises the work needed is far from finished (see progress against our recommendations at Appendix 1). It believes its ESD program, enhancements to Habitat to improve data capture and reporting, training and inspection process and management improvements should address the issues.

In 2014-15, Housing received \$26 million to plan and implement an ESD inspection and testing program that started in April 2016. Contract electricians are responsible for inspecting and testing the electrical safety in properties, including smoke alarms and RCDs. Housing will then raise work orders to address any issues found. At the end of the process, an electrical safety certificate will be issued for each property inspected and include detailed information on safety devices that is currently missing or inaccurate in Habitat, including:

- make and model
- expiry date of smoke alarms based on manufacture date
- serial numbers.

Although, the ESD program should provide good baseline information and greater assurance, it will take 3 years to complete and is only a point in time exercise. Without effective ongoing inspection and maintenance processes, there is a risk that the baseline data collected and updated in Habitat during the ESD will not be kept up-to-date.

To ensure this is not wasted effort, Housing needs to address the systemic weaknesses we found in the quality of data, property inspections, and management oversight. This is important because it is business as usual activities that should provide Housing with ongoing assurance that properties are safe.

Appendix 1: Housing's progress against the 2010 audit recommendations

The Housing Authority should:

- **Formally assess the risks associated with maintaining its rental properties in a safe condition and use this information to manage its properties and set priorities.**

Housing has not completed a risk assessment of its public housing properties. However as part of the ESD program, a risk assessment of electrical safety devices has been completed but not yet formally approved by Housing.

- **Ensure that all its properties have the required number of RCDs and smoke alarms and that safety device information is accurately recorded in its information systems.**

Housing information systems still do not record accurately all the necessary safety device information. Housing advised that it will use the ESD program to baseline all of the electrical safety device data for each property.

- **Review, improve and monitor inspection and testing regimes for safety devices, including setting of appropriate timeframes for maintenance of safety devices.**

Housing has introduced a new target to inspect each property every 365 days. The recording of property inspections has been automated using a custom built tablet device application. Photos of safety devices are now required to be taken at each inspection.

Monitoring of annual inspections by supervisors, regional management and central office is still inconsistent and formal reporting of inspection regularity was only available from February 2016.

Timeframes for the maintenance of electrical safety devices has been changed from 3 hours (4 in regional areas) to 8 hours.

- **Ensure all maintenance and property services staff receive induction and ongoing training, so they understand the importance of Housing's procedures to manage safety devices and record property information accurately in Housing's information systems.**

Housing has provided competency based training since August 2011. It became mandatory in September 2015. Housing advised that all relevant staff have now been trained and they have established management processes to ensure that only competent staff inspect electrical safety devices.

- **Review its other safety maintenance policies, programs and procedures to ensure they are implemented, managed and monitored according to the level of risk.**

Maintenance policies have been reviewed, and many of the maintenance programs and procedures either changed or are being enhanced, primarily in response to the new head contracting arrangements.

- **Incorporate lessons learned from its RCD retrofit and verification programs into future safety related programs.**

Although we did not specifically review the ESD program, it appears to be better planned and structured than the RCD retrofit program. Housing's Issues Learned Register has also been used to plan the ESD program.

- **Introduce a structured project management and reporting framework for each safety device program:**
 - **ensure programs are clearly defined and communicated to all relevant staff, including a formal close-out and review at the end of each project**
 - **establish formal oversight by senior and regional management**
 - **strengthen financial controls of programs to enable accurate management and acquittal of program funds**
 - **document programs, including recording corporate decisions on official files.**

Since 2010, Housing has managed its maintenance of safety devices under routine maintenance, rather than specific programs for installation and replacement. There is still poor central and regional oversight and Housing is not analysing expenditure on, and numbers of, RCD and smoke alarms being installed and replaced.

Housing has established a project management team to oversee the ESD program. The ESD Program Manager advised that robust processes will be implemented that include clear communication, financial control and formal oversight by senior management.

Adoption of the recommendations in this report will strengthen the management and reporting framework for maintenance of safety devices for business as usual activities.

- **Fast-track proposed enhancements to Caretaker and other property information systems so that these systems link, are easier to use and contain the information Housing needs to manage its safety devices.**

In November 2014, Housing replaced Caretaker with a new property information system 'Habitat'. We found the information within Habitat is still unreliable.

- **Monitor and analyse program expenditure to identify where devices are not installed during a retrofit, replaced unnecessarily, or fail prematurely.**

Housing advised that until the ESD program has been completed it will be unable to analyse numbers of electrical safety devices replaced and costs associated. The program will provide a baseline of devices installed and collect important data about the devices which will be uploaded into Housing's property information system.

This should enable Housing to determine if over servicing is occurring, improve device make or model management and identify unexpected replacement rates.

Auditor General's Reports

Report No.	Reports 2016	Date Tabled
6	Auditing of Payroll and other Expenditure using Data Analytic Procedures	10 May 2016
5	Audit Results Report – Annual 2015 Financial Audits – Universities and state training providers – Other audits completed since 1 November 2015; and Opinion on Ministerial Notification	10 May 2016
4	Land Asset Sales Program	6 April 2016
3	Management of Government Concessions	16 March 2016
2	Consumable Stock Management in Hospitals	24 February 2016
1	Health Department's Procurement and Management of its Centralised Computing Services Contract	17 February 2016

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