



Performance Study

**Department of
Labor & Industries**

**Elevator Program
Performance Study**

Final Study Report

December 2016





December 30, 2016

Ernie LaPalm, Deputy Director
Department of Labor & Industries
PO Box 44000
Olympia, WA 98504-4000

**Elevator Program Performance Study
Final Report - December 2016**

Dear Mr. LaPalm:

At the request of four legislators, the Department of Labor & Industries contracted with Stellar Associates, LLC in May 2016 to conduct a study of the Elevator Program's current state processes, research best industry practices and other states' elevator programs, and provide findings and recommendations for potential program improvements to control customer costs and provide consistent inspections. We have been responsible for the day-to-day management of the study; conducting the research; and writing the detailed and mid-term work plans, and the draft and final reports.

The attached final report represents the study conclusions and recommendations, and is based upon a review of department documentation, research into other states, agencies, and program's processes and practices, staff and stakeholder interviews, stakeholder feedback forums, customer and stakeholder survey, and inspection observations from June through October 2016. We defined our general study methodology in the study kick-off that was held on May 25, 2016.

We conducted this study independently and it contains the conclusions and recommendations prepared after completion of the study. Our assessment of the Elevator Program is based on our professional experience, judgment, and performance review methodology. It is intended to provide valuable independent insight into how well program management processes, practices, and activities are performing, identifying corrections that are being made or might be needed, and ensuring business value is realized.

The Elevator Program Study contains 11 conclusions along with 37 recommendations offered as actionable ways to improve the overall program performance. Please see the executive summary for a brief description of the study conclusions and recommendations. Detailed information about the conclusions and recommendations is contained in the Final Report.

It has been an honor and a pleasure to work with all of the agency staff and stakeholders in preparing this report. Please contact us at 360.515.9200 or via email if you have any questions or comments. We will be available for any requested briefings until April 30, 2017.

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Sincerely,



Melanie Roberts and Julie Boyer, Principals
Stellar Associates, LLC



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EXECUTIVE SUMMARY: Elevator Program Performance Study



Purpose of the Elevator Program Performance Study

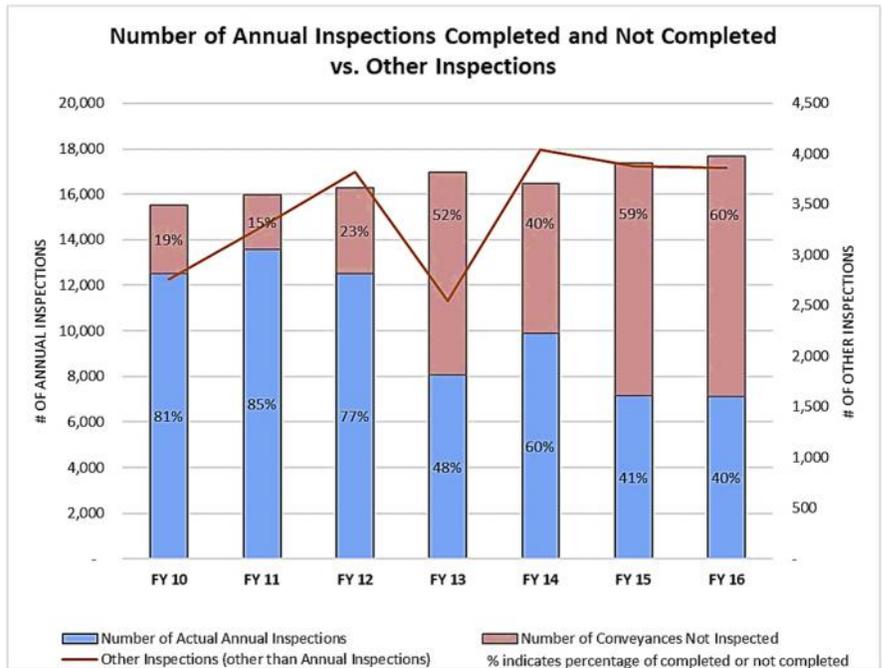
Four state representatives asked the Department of Labor & Industries (L&I) to conduct a performance study of the Elevator Program to identify potential program improvements to control customer costs and ensure consistent inspections. The performance study focused on three key areas: 1) the program’s rulemaking process; 2) the quality and consistency of elevator inspections and workload across the state; and 3) the effectiveness of business relationships between L&I and its customers and stakeholders.

Summary of Study Results

The Elevator Program customers and stakeholders share a common goal of elevator public safety. However, a punitive approach to enforcement and differing expectations about roles and responsibilities have created an antagonistic atmosphere between the program and its customers and stakeholders.

Only forty percent of all conveyances were inspected last year.

The Elevator Program is not meeting the statutory requirement to inspect each conveyance annually. Only forty percent of conveyances were inspected in the last year. Seventy percent of the overdue inspections, representing more than 7,100 permitted conveyances, were last inspected in 2014 or earlier.



State inspector workloads are 35 percent higher than their city counterparts.

A combination of factors, including a construction boom in Seattle and surrounding areas, inspector position vacancies, and lower salaries, contributed to higher workloads and recruitment and retention issues. State inspector workloads are least 35 percent higher than workloads for city elevator inspectors in Seattle and Spokane.

	Washington State L&I	Seattle	Spokane
Number of Conveyances	17,764	7,400	1,200
Number of Inspectors	27 with 2 supervisors, 8 vacancies	12 with 2 supervisors	2 – includes supervisor
Workload	658 units per inspector if fully staffed 935 units per inspector with current vacancies	616 units per inspector, currently fully staffed	600 per inspector, currently fully staffed
Frequency of Inspections	Annually	Annually tied to Operating Permit Issuance Date	Annually

The program has insufficient data and information to make informed decisions and to manage workload. For example, there is a lack of historical data within the system to perform trend analysis on the number of inspections or corrections over time.

The Elevator Program lacks the capacity and adequate resources to accomplish its work and meet its need for consistency and quality.

The Elevator Program also lacks the capacity - expertise, skills, and understanding of common management practices and tools as well as adequate resources - to accomplish its work and meet its needs for consistency and quality. For example, inspectors do not receive training to keep current on evolving industry technology. Although national standards include inspector certification requirements, the Program did not include this requirement in their rules.

Inspectors do not have updated written instruction or guidance for conducting inspections, which may contribute to concerns from customers and stakeholders about inconsistent inspections and subsequent corrections.

The Elevator Program lacks strong business relationships, both externally and internally. Less than half of customers and stakeholders surveyed said that Elevator Program staff consistently listen to their issues or concerns, work with them to resolve their issues or concerns, or understand how they impact the respondent's business. About 60 percent said that staff are always or usually courteous and respectful of their time.

The Elevator Program lacks strong business relationships, both externally and internally.

Many respondents complained about inspection reports that were not in plain language they could understand or that they only received answers to their questions verbally and not in writing.

Trade programs typically adopt national standards for their safety codes. Unlike their building and electrical program counterparts in Washington state, the Elevator Program does not follow a consistent rulemaking schedule that aligns with the release of new national standards. Washington adopted a modified version of the 2010 national standards in 2013 and did not have rulemaking scheduled for the 2013 or 2016 releases.

The Elevator Program does not follow a consistent rulemaking schedule that aligns with the release of new national standards.

Washington state's building and electrical trade programs adopt national standards and only make changes based on specific criteria, such as geologic conditions. The Elevator Program has made changes to the national standards that are controversial to stakeholders and not supported by formal criteria that explain why changes were made.

Official guidance to customers and stakeholders about the rulemaking schedule, process, and opportunities for participation is not consistently documented or clearly communicated. As a result, most customers and stakeholders do not feel that they have sufficient access to the rulemaking process, or that their input is considered by the program.

Although stakeholders voiced concerns about new costs resulting from rule changes, the Elevator Program did not adequately document the need for a small business economic impact statement or a quantifiable cost-benefit analysis as part of its rulemaking for standards adoption in 2013.

RECOMMENDATIONS IN BRIEF

The report provides 37 recommendations designed to ensure the Program's future success. The recommendations include:

- Adopting a more formal rulemaking process, similar to the building and electrical trades.
- Adopting a customer-centric approach to enforcement, emphasizing education, outreach, and helping customers resolve issues.
- Identifying options for addressing the workload and inspection backlog.
- Implementing a training program to increase technical knowledge and create a culture of respect.

The full report is available on the Department of Labor & Industries website at:

<http://www.lni.wa.gov/Main/AboutLNI/Legislature/Reports.asp>

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INTRODUCTION

Performance Study Objectives

The Department of Labor & Industries contracted with Stellar Associates, LLC to conduct a performance study of the Elevator Program, evaluating the following objectives:

1. Does the department's Elevator Program's rulemaking process align with best practices and standards to ensure public, worker, and building safety, and if there are areas where it does not, why?
2. How well does the department's Elevator Program's rulemaking process allow for sufficient stakeholder involvement, and what improvements could be made to their current approach?
3. How well does the department balance the customer cost of new regulations with ensuring public, worker, and building safety, and are there areas for improvement?
4. How well does the Elevator Program meet its statutory requirements, and are there areas for improvement?
5. Does the department's Elevator Program's inspections, processes, and workload align with industry best practices and standards to ensure public, worker, and building safety, and if there are areas where it does not, why?
6. How well does the Elevator Program ensure quality and consistent inspections, manage workload, and mitigate customer costs; and what improvements could be made to improve quality, increase consistency and performance, and mitigate customer costs?
7. How well does the Elevator Program manage its business relationships and what improvements could be made to their current approach?

Background

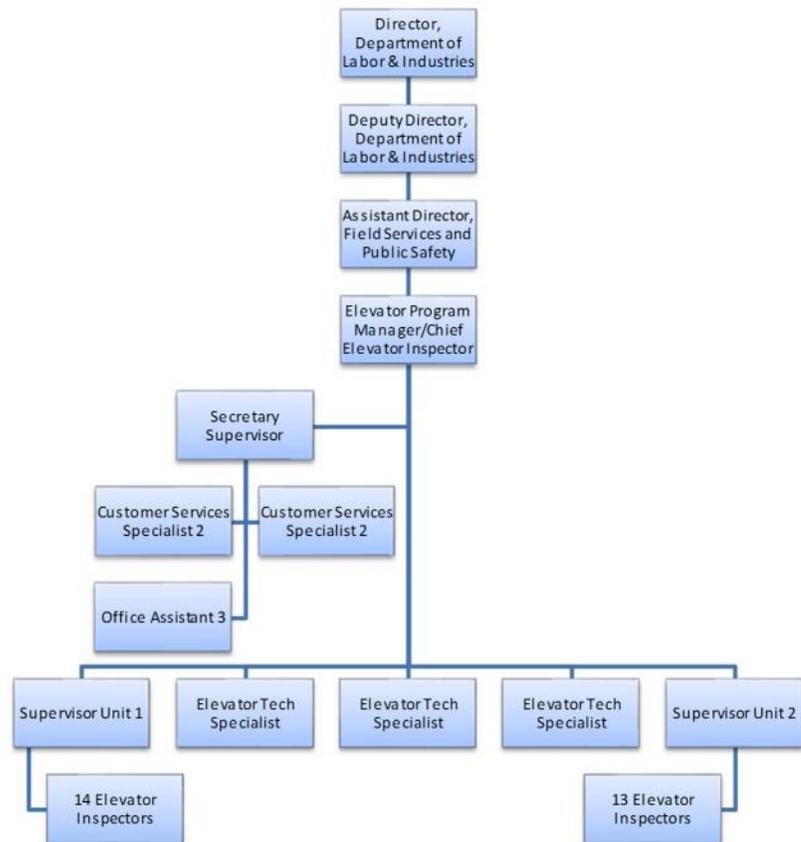
Program

The Washington State Elevator Program is a section within the Field Services and Public Safety Division in the Department of Labor & Industries (L&I). The Elevator Program is led by a Chief Elevator Inspector and helps to ensure public safety by conducting inspections of conveyances, licensing elevator contractors and mechanics, issuing permits, investigating accidents, and reviewing installation applications. Besides the Chief Elevator Inspector, Central Office program staff include three technical specialists and five administrative staff including a Secretary Supervisor, two Customer Service Specialists and one Office Assistant. The elevator inspection staff is organized into two units, each led by a supervisor. Region 1 and 2 are in unit 1 which covers King County and northwest Washington and is staffed with 14 inspector

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positions. Five positions are currently vacant. Region 3, 4, 5, and 6 are part of unit 2 which covers southwest Washington, the Olympic Peninsula, Pierce County, and all of eastern Washington and is staffed with 13 inspector positions. Three positions are currently vacant.



The Elevator Program is funded by the state's general fund, not its own dedicated fund, like many other specialty programs. The current annual budget is approximately \$3.5 million and has 35.2 authorized full time equivalents (FTEs). The annual revenue generated by fines and fees for inspections, permits, licenses, penalties and other services is approximately \$5 million a year which is deposited into the general fund.

Elevator Program Statute

The purpose of the Elevator Program as outlined in RCW 70.87.020 is to:

-) Provide for safety of life and limb,
-) Promote safety awareness, and
-) Ensure the safe design, mechanical and electrical operation, and inspection of conveyances, and performance of conveyance work, and all such operation, inspection, and conveyance work shall be reasonably safe to persons and property.

It further states that the use of unsafe and defective conveyances imposes a substantial probability of serious and preventable injury to

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employees and the public exposed to unsafe conditions. The prevention of these injuries and protection of employees and the public from unsafe conditions is in the best interest of the people of this state.

The Department of Labor & Industries is the authority having jurisdiction in the state of Washington.

The Department of Labor & Industries' Elevator Program is the authority having jurisdiction, commonly referred to as AHJs within the elevator industry, in the state of Washington. They are the organization responsible for the enforcement of the conveyance standards in the Revised Code of Washington (RCWs), the Washington Administrative Code (WACs), and the American Society of Mechanical Engineers (ASME) Code.

Two municipalities, the city of Seattle and the city of Spokane, have been granted jurisdiction over their conveyance work and may inspect, issue permits, collect fees, and prescribe minimum requirements for conveyance work and operation if the requirements are equal to the state requirements in the RCW and the WAC. However, some facilities within those cities are still within the jurisdiction of the state including the operation and inspection of any conveyance located in, or used in connection with, any building owned by the state, a county, or a political subdivision. In addition, the state has the responsibility for the permitting and inspection work of construction personnel hoists within the city of Seattle.

The Elevator Program uses an Elevator Safety Advisory Committee to advise the department.

The Elevator Program uses an Elevator Safety Advisory Committee (ESAC) whose purpose is to advise the department on the adoption of rules that apply to conveyances; methods of enforcing and administering the program statutes; and matters of concern to the conveyance industry and to the individual installers, owners, and users of conveyances. The advisory committee consists of seven persons. The Director of the department or his or her designee with the advice of the Chief Elevator Inspector appoints the committee members following the statutory guidelines.

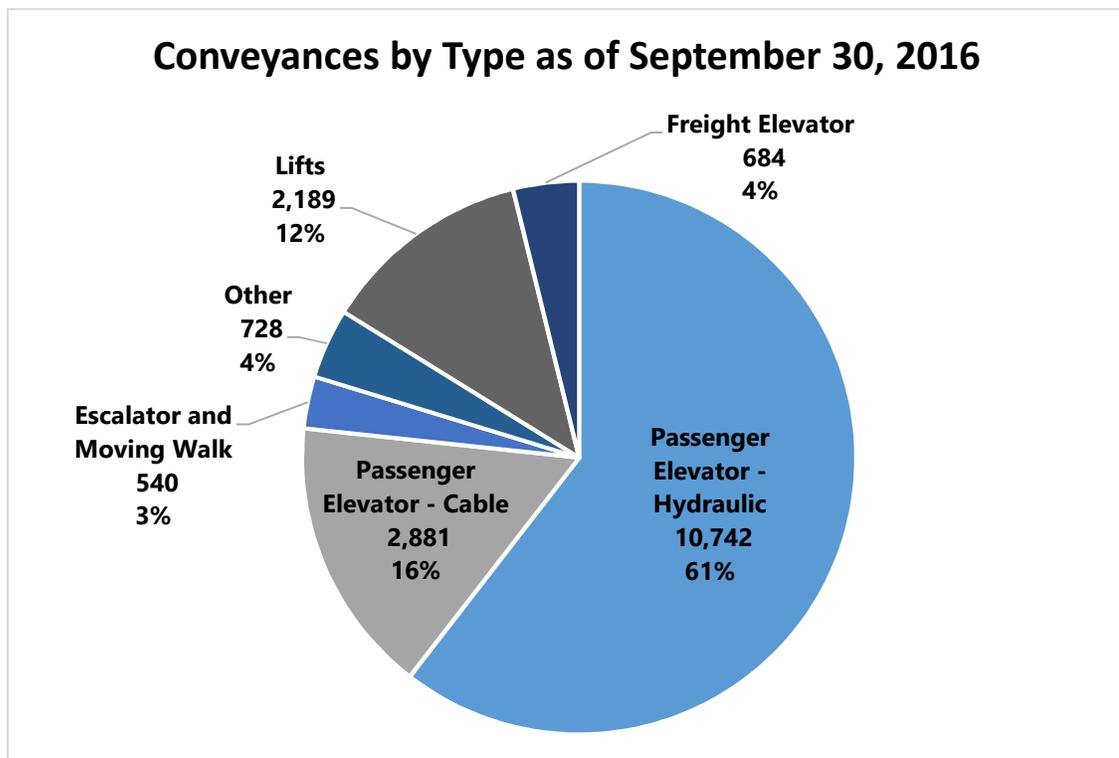
Types of Conveyances

Elevators and other conveyances must comply with the rules adopted by the department that were in effect at the time the conveyance was permitted unless any new rule specifically states that it applies to all conveyances. In addition to knowing the rules that were in effect at the time the conveyance was permitted, the inspectors must have knowledge of several different types of conveyances and all rules that apply retroactively. Most conveyances are used by the public, some are non-public conveyance, such as freight elevators and material lifts, and others are residential units, such as wheelchair lifts and dumbwaiters. As of September 30, 2016, there were 17,764 active, red-tagged, or temporary permitted conveyances within the Elevator Program

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Conveyance Management System (CMS). The breakout of the general types of conveyances is listed below.



Source: Conveyance Management System data as of 9/30/16 – 17,764 conveyances in active, red-tagged, and temporary status.

Type of Conveyances			
Hydraulic Elevators		Subtotal	
Passenger Elevator - Hydraulic	10,647		
Passenger Roped Hydraulic	95	10,742	
Electric Cable Elevators			
Passenger Elevator - Cable	2,881	2,881	
Lifts			
Wheelchair Lift	1,105		
Material Lift	350		
Grain Personnel Lift	343		
Stair Lift	184		
Inclined Wc Lift	157		
Belt Manlift	33		
Handpowered Manlift	6		
Incline Lift	4		
Electric Manlift	3		
Casket Lift	3		
Porch Lift	1	2,189	
Escalator and Moving Walks			
Escalator	534		
Moving Walk	6	540	
Freight			
Freight Hydraulic	404		
Freight Cable	247		
Hand Powered Freight	20		
Sidewalk Freight	9		
Freight	1		
Freight Roped Hydraulic	3		684
Other			
Dumbwaiter	375		
Special Purpose	132		
Passenger	74		
Limited Use/Application	57		
Construction Personnel Hoist	54		
Residence Incline Elevator	15		
Residence Elevator	9		
Inclined Elevator	5		
Boat Launch	4		
Residence Dumbwaiter	1		
Residence Vertical Lift	1		
Residence Incline Chair	1		728
Grand Total			17,764

RULEMAKING

Standards and Best Practices

In the United States, each state determines the level of oversight established for conveyances including elevators and escalators. Oversight may occur at the state or local level, or regulation may not occur at all. Over 80 percent of states (41) have a state inspection or oversight program. (See Appendix A-1.) Other authorities having jurisdiction include certain cities, such as New York City, Anchorage, Seattle, and Albuquerque. For several states, laws governing elevators are adopted at the state level and enforcement is done at the local level. Some states, like Delaware and Louisiana, have no state involvement in the oversight of conveyances.

Nearly all states use elevator model standards developed by the American Society of Mechanical Engineers.

Nearly all states that regulate conveyances use standards developed and issued by the American Society of Mechanical Engineers. (See Appendix A-1.) According to ASME, a standard is "defined as a set of technical definitions and guidelines, 'how to' instructions for designers, manufacturers and users. Standards promote safety, reliability, productivity, and efficiency."

ASME is an independent, not-for-profit, membership organization that began creating standards in the 1880s. Each ASME standard is developed and maintained by one or more volunteer committee comprised of subject matter experts. The committees are tasked with keeping the standards relevant by incorporating technology advancements and lessons learned from real world use.

Committees are required to maintain a balance of members so that no one interest dominates. Volunteers may include users, manufacturers, insurers, universities, testing laboratories, and government regulatory agencies.

ASME is accredited by the American National Standards Institute. To be accredited, ASME must meet the specific due process requirements including following procedures that ensure openness, transparency, balance of interest, and due process. The public may submit comments, decisions are made by consensus, and volunteers must abide by ASME's policy on conflict of interest and the Engineer's Code of Ethics.

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National standards establish a framework of accepted best practices.

Using the most recently-issued ASME standards gives manufacturers, service providers, procurement, building owners, and enforcement officials the same frame of reference and keeps all parties in alignment regarding public safety, interoperability, reliability, quality, and innovation. Adopting the latest national safety standards is particularly helpful for individuals and companies that perform elevator work in multiple states.

As of August 2016, 21 of 53 state and local entities, or 40 percent, had adopted the 2013 ASME A17.1 standards related to the safety codes for elevators and escalators. Of these 21, six of these entities automatically adopt ASME standards, four of these entities adopt ASME standards by reference, and 11 of these entities adopted the ASME standards with changes. (See Appendix A-1.)

In a sample review of the rules promulgated by 20 states, 90 percent, or 18 of 20 states, referenced the ASME national standards in their rules and listed any changes or amendments using the numbering system of the standards. Several states, such as Connecticut, Indiana, Maine, Minnesota, and Wisconsin, list any amendments in a separate rules section, while still referencing the ASME standards numbering.

Building and electrical specialties in Washington State have standardized code adoption.

The building and electrical specialties in Washington State have mandates or standardized procedures for updating code when new national or model standards are released. For example, state law requires the State Building Code Council to initiate rulemaking to update the state building code within 60 days of receiving the new edition of the model codes.

Since new model codes are issued every three years, the SBCC has a repeatable cycle of review and adoption that is familiar to its stakeholders. Currently, Washington State has adopted the most current (model codes of 2015, for Building, Residential, Mechanical, Gas, Fire, Plumbing, and Energy).

L&I's Electrical Program also begins the process of adopting new national standards as soon as they are released. The 2017 edition of the National Electrical Code was published in August 2016, and the Electrical Program filed their CR-101 in September. The draft rule is expected to be available for public comment in the spring, with final adoption scheduled for July 2017.

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Changes to model building and electrical code must meet certain criteria in Washington State.

The SBCC adopts the model code by reference in its entirety, without changes. However, an individual or organization may submit proposed amendments to the building code for council consideration. Statewide and emergency statewide proposed amendments must meet one of the following criteria to be considered:

-) The amendment is needed to address a critical life/safety need.
-) The amendment is needed to address a specific state policy or statute.
-) The amendment is needed for consistency with state or federal regulations.
-) The amendment is needed to address a unique character of the state.
-) The amendment corrects errors and omissions.

Similarly, the SBCC bases their approval of proposed local government residential amendments on conditions unique to the jurisdiction including climatic; geologic/seismic; environmental impacts; life, health, or safety.

In October 2016, the SBCC proposed new rules to clarify the criteria and added a sentence to their purpose statement that one of the objectives of the council is to minimize state amendments to the model codes.

L&I's Electrical Program also allows their stakeholders to propose changes to the code. Their Technical Advisory Committee evaluates proposals based on the need to:

-) Address a critical life/safety need.
-) Address a specific state policy/statute.
-) Maintain a fair competitive environment.
-) Address a unique character of the State.
-) Correct errors and omissions.

Any proposed technical changes require evidence of a specific problem and evidence that the proposal provides an effective solution.

The federal government mandates open and transparent rulemaking processes for federal agencies.

Often, government agencies are authorized to issue rules or regulations that help to implement and enforce laws. The federal government has laws that outline the minimum requirements for rulemaking by federal agencies. These standards focus on transparency in rulemaking through repeatable processes, communication, public involvement, and appropriate impact analyses of the proposed rules.

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The federal Administrative Procedure Act (APA) governs the process used by federal agencies, boards, and commissions for rulemaking. Executive Order 13563 issued on January 18, 2011, underscored the need for predictability and certainty and directed agencies to “take into account benefits and costs, both quantitative and qualitative.” It introduced new principles for regulatory decision-making, including promoting public participation through transparency and comment, engaging the public prior to initiating rulemaking, and identifying and considering flexible approaches to regulatory problems, including warnings. It also specified that agencies “seek the views of those who are likely to be affected” before issuing a notice of proposed rulemaking.

For most new regulations, the APA requires agencies to “provide public notice and seek comment prior to enacting new regulations.” After it is determined that a rule is needed, the department issues a notice of proposed rulemaking that contains a request for public comments. Agencies also must prepare a variety of analyses, depending on the rule, such as economic impact, regulatory flexibility, unfunded mandates, tribal impact, and environmental.

Per executive order, 60 days is the standard comment period. A public hearing is held if required by statute or department policy. Agencies consider the public feedback, make changes where necessary, and publish the final rule in the *Federal Register* with a specific effective date that the rule becomes enforceable. Along with issuing the final rule, the department must describe and respond to all comments received. (See Appendix A-2 for Federal Rulemaking and Regulations Map.)

Washington State’s Administrative Procedure Act requires greater public access to administrative decision making.

Washington’s Administrative Procedure Act outlines detailed requirements for state department rulemaking that includes public involvement, notice, and comment. The Office for Regulatory Innovation and Assistance summarizes the APA process for rulemaking in three formal phases:

-) Notice of intent to change, adopt, or repeal a rule.
-) Proposed new or revised rule language.
-) Final adoption of the rule.

See Appendix A-2 for the state of Washington APA process flowchart and a description of the type of rules per the APA.

In the first phase, the department prepares a preproposal statement of inquiry on a CR-101 form and files the form with the Code Reviser’s Office. The Code Reviser then publishes the notice in the Washington State Register and the department solicits public comments. In the

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second phase, the department prepares a Small Business Economic Impact Statement and preliminary Cost-Benefit Analysis as required. Then, the department drafts the proposed rule and files it along with a notice of proposed rulemaking on a CR-102 form with the Code Reviser's Office. The Code Reviser publishes the notice in the Washington State Register and the department sends the notice to interested parties and holds a public hearing.

If public comments reflect the need for substantial changes, the draft rule is revised, another notice of proposed rulemaking on a CR-102 form is filed, and another public hearing is held. If the comments reflect only minor changes, the department makes the necessary changes and prepares a concise explanatory statement of public comments and how the final rule reflects department consideration of the comments or not.

In the third phase, the rule is finalized and adopted once the CR-103 form and package is filed with the Code Reviser. The Code Reviser publishes the final rule in the Washington State Register, and the department notifies its stakeholders of the final rule adoption.

Inspecting elevators of every age – like this one in the state capitol building.



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Conclusion 1: The Elevator Program does not follow a consistent rulemaking schedule that aligns with the release of new ASME standards.

Since 2004, ASME has issued new editions of national elevator standards every three years, with effective dates occurring six months after issuance. The most recent edition was issued in November 2016.

The latest version of the ASME standards adopted by Washington State is the 2010 edition. The department adopted a revised version of the 2010 ASME standards the same year that ASME issued its 2013 edition.

When ASME issued updated standards in 2010, the department cited the Governor’s moratorium on non-critical rulemaking for not pursuing new rules in 2011. In November 2011, the Assistant Director for Specialty Compliance Services sent a memo to request rule review, citing the exemptions available within the Governor’s moratorium for public safety and rules requested and supported by its stakeholders.

In January 2012, the department filed the CR-101 with the Code Reviser. In November 2012, the department withdrew the original proposal summarized on the CR-101 form and filed a new one. In July 2013, the department filed the proposed new rules detailed on the CR-102 form and adopted the new rules contained on the CR-103 form and package in November 2013.

ASME issued its most recent edition in November 2016, but there is no current schedule for updating Washington’s rules to this edition.

	2010	2011	2012	2013	2014-2015	2016
ASME	Issues 2010 edition			Issued 2013 edition		Issued 2016 edition
L&I	Discussion with stakeholders (unconfirmed)	Requests rule review in Nov 2011	Withdraws original CR-101; issues new CR-101 in Nov.	Adopts 2010 edition in Nov.	No rulemaking scheduled	No rulemaking scheduled

In its request in 2011 for a rule review and in the CR-101 filed in 2012, the department stated it is critical for the program to adopt national standards and for Washington to be consistent with other states to ensure the same safety standards are met by elevator mechanics, manufacturers, architects, and engineers who work in multiple states. Without a standardized adoption schedule for updated standards, the Elevator Program’s rulemaking is not consistent with its own objectives.

Model standards are reworded and reordered in a Q&A format in the WAC.

Although Washington uses ASME standards as the basis for its elevator code, the standards are not incorporated as-is or by reference into rule. Some changes, such as exclusions and exceptions, are listed under WAC 296-96-00650, which enumerates the national elevator codes and supplements the department has adopted. However, not all changes are reflected there. The rules are written in a Question & Answer format, and there are nearly 400 sections in the WAC that pertain to the



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technical requirements for conveyances. Some of the WACs mention the ASME numeric standard in the title of the section. However, not all section titles include a reference to an ASME standard, and not all ASME standards are referenced. Additionally, the WAC does not necessarily contain all information that is contained within the ASME standard.

Within this Q&A format, it is difficult to crosswalk the ASME standards to the WAC, or to know if standards have been changed without doing a side-by-side comparison and analysis of the content. Some sections have different requirements or omit portions of the ASME standards. For example, WAC 296-96-02466 is titled “ASME A17.1-8.9 Code data place location and material.” It covers two of the three subsections in the 2010 ASME standards, but omits any reference to 8.9.2 Location – even though “location” is included in the section title. In another example shown below, differences between the WAC and the ASME standards are **bolded**:

WAC 296-96-02557 Pit lighting and stop switch.	Related ASME 2010 Standards 2.2.5 Illumination of Pits and 2.2.6 Stop Switch in Pits
<p>(1) ASME A17.1-2.2.5.3 The light switch shall be so located as to be accessible from the pit access door on the ladder side and adjacent to the pit stop switch.</p> <p>(2) ASME A17.1-2.2.6.2 In elevators where access to the pit is through the lowest landing hoistway door, a stop switch shall be located between thirty-six inches and forty-eight inches above the floor level of the landing, within reach from the access floor and adjacent to the pit ladder, if provided. When the pit exceeds one thousand seven hundred millimeters (sixty-seven inches) in depth, an additional stop switch is required adjacent to the pit ladder and approximately one thousand two hundred millimeters (forty-seven inches) above the pit floor.</p>	<p>2.2.5.3 The light switch shall be so located as to be accessible from the pit access door.</p> <p>(Other language in 2.2.5, 2.2.5.1 and 2.2.5.2 not included in WAC.)</p> <p>2.2.6.2 In elevators where access to the pit is through the lowest landing hoistway door, a stop switch shall be located approximately 450 mm (18 in.) above the floor level of the landing, within reach from this access floor and adjacent to the pit ladder, if provided. When the pit exceeds 1 700 mm (67 in.) in depth, an additional stop switch is required adjacent to the pit ladder and approximately 1 200 mm (47 in.) above the pit floor.</p> <p>(Other language in 2.2.6, 2.2.6.1 and 2.2.6.3 not included in WAC.)</p>

The majority of states that we reviewed adopt the ASME standards directly in rule, have an itemized list showing any changes or amendments to the adopted ASME standards, and do not reiterate or reword the standards. The list of changes to the ASME standards is typically in a separate section of their rules and is often also listed on the program’s website.

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Agencies began placing rules in a Q&A format to help ensure clarity and understanding through plain language. However, this format can have the opposite effect for technical subject matter where users are already trained on and familiar with the underlying industry standards, like elevators. It should always be clear where the rules deviate or differ from the national or model standards.

Recommendations

- 1-1. Systematize the adoption of the current ASME standards by beginning rulemaking at the time that the latest national ASME standards are released and adopting new standards within a specific time period similar to the building and electrical specialties.
- 1-2. Itemize any and all changes to the standards either in a separate section in the WAC or specifically within the relevant standard. Omit the step of changing standards into a Question & Answer format.

Inspecting elevator cables, hoses, and belts in hoist ways.



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Conclusion 2: The Elevator Program does not have formal criteria for amending national standards.

Code adopted in 2013 deviated from national standards, including state inspector core responsibilities and required training.

The elevator code adopted by Washington State contains amendments to and exemptions from the national ASME standards. This practice is fairly common among other states for specific technical items. However, the Elevator Program does not have formalized criteria for recommending changes to the national standards. Due to conflicting documentation, it is unclear why certain national standards have been amended or excluded. Two non-technical amendments, in particular, seem to deviate from the intent of the standards. These changes significantly impacted state inspector responsibilities and were heavily criticized by stakeholders.

Certification. Although the ASME standards require inspectors and inspector supervisors to be certified by an organization accredited by ASME, all references to Qualification of Elevator Inspectors (QEI) certification were excluded from Washington's 2013 code adoption. These standards include requirements for the qualification, duties, and responsibilities of inspectors and inspection supervisors, and apply to any person inspecting for compliance with the ASME standards, including employees of AHJs; elevator consultants; equipment insurers; manufacturers, installers, and maintainers of the equipment; building owners and managers; and testing laboratories.

Prior to adopting this code, certification of Washington State inspectors was supported and they received ongoing training. The change in support for this certification coincided with budget cuts, but is unclear if that was the reason for eliminating this national standard. Currently, the program does not pay for inspector training and has no training curriculum for inspectors. New inspectors are provided with several binders of elevator standards to read before beginning to observe inspections being conducted by other inspectors, but there is not formal training. During rulemaking and after code adoption, stakeholders voiced concerns about the lack of ongoing training for inspectors, citing public safety risk and a lack of common understanding between inspectors and elevator mechanics on required maintenance and new technology. If inspectors want to receive training to maintain their national certification, they must pay for it themselves and take leave to attend it as the Elevator Program will not cover the training cost. (See related conclusion #10.)

Nature of Inspections. Section 8.11 of the ASME standards specify that inspectors be certified and that periodic inspections are made by these inspectors. In the CR-102 briefing to the department director for the 2013 code adoption, the Elevator Program said that "the department has chosen not to adopt this specific requirement...and will continue to require elevator mechanics to perform these examinations." The reason given was that if the standard was adopted, "the department would not

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have the resources to perform examinations to the detail required....”

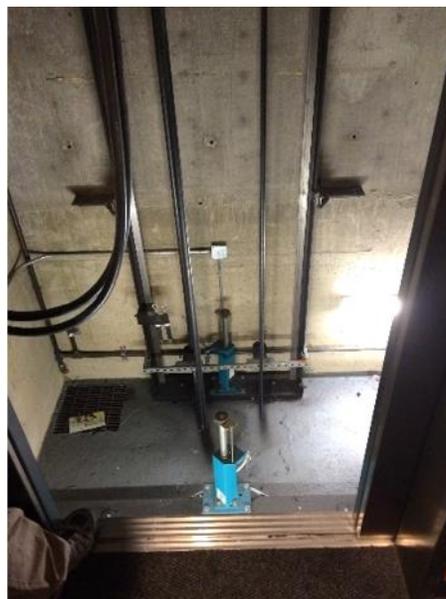
In addition, because the rules required elevator mechanics to “perform some of the same functions as inspectors,” the Elevator Program moved certain inspection items to maintenance items and required them as part of the owner’s Maintenance Control Program.

These changes fundamentally shifted the responsibility of performing some inspection responsibilities in the national standards from state inspectors to elevator mechanics and maintenance companies. In addition to shifting fundamental inspection responsibilities, the change also increased the workload of the elevator companies.

Recommendations

- 2-1. Develop specific criteria for amending the ASME standards prior to proposing or adopting any additional rules.
- 2-2. Establish a formal Elevator Safety Advisory Committee work group to use the new criteria to review current code and guidance.
 -) Identify rules, technical bulletins, clarifications, and other guidance that need to be abolished, changed, reformatted, or re-established in the WACs.
 -) Review the MCP requirements, roles, and responsibilities of all parties in Washington State against those in ASME and develop recommendations for changes.
 -) Set specific timelines for this body of work and develop a plan for implementing the updated rules and guidance. (See also Recommendation 4-3.)

Inspecting the elevator pit.



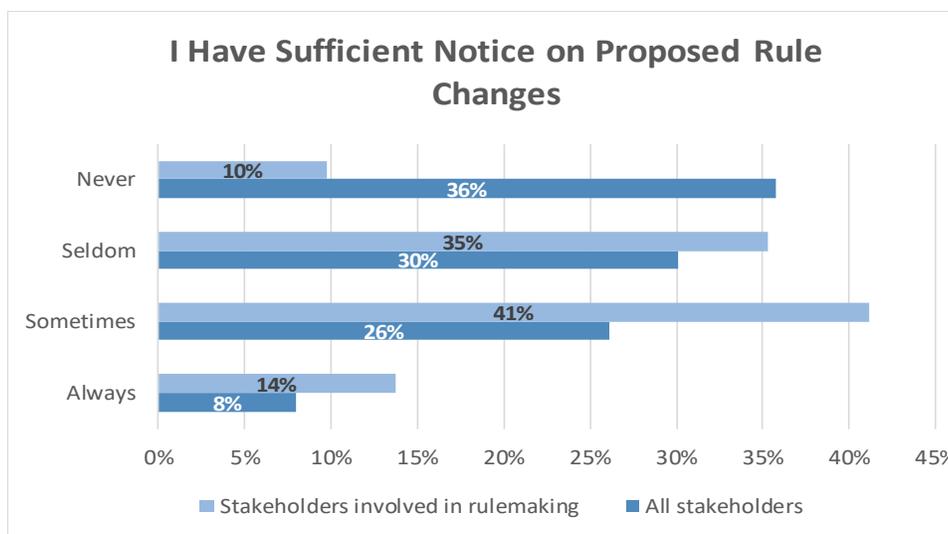
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Conclusion 3: Most customers and stakeholders do not feel that they have sufficient access to the rulemaking process, or that their input is considered.

In the customer and stakeholder survey, the majority of respondents voiced concerns about their lack of involvement in the rulemaking process; 86 percent had **never** been involved in the rulemaking process. Only 14 percent reported participating by serving on the Elevator Safety Advisory Committee or subcommittee, helping draft new rules, or providing comments on proposed rules. (See Appendix A-5 for the Customer and Stakeholder Survey Methodology.)

A majority of *all* respondents (66 percent, or 199 of 302 respondents) indicated they **seldom or never** receive sufficient notice on proposed rule or regulation changes. Forty-five percent (45 percent, or 23 of 51 respondents) of respondents who had been involved in rulemaking said they **seldom or never** receive sufficient notice on rule changes.

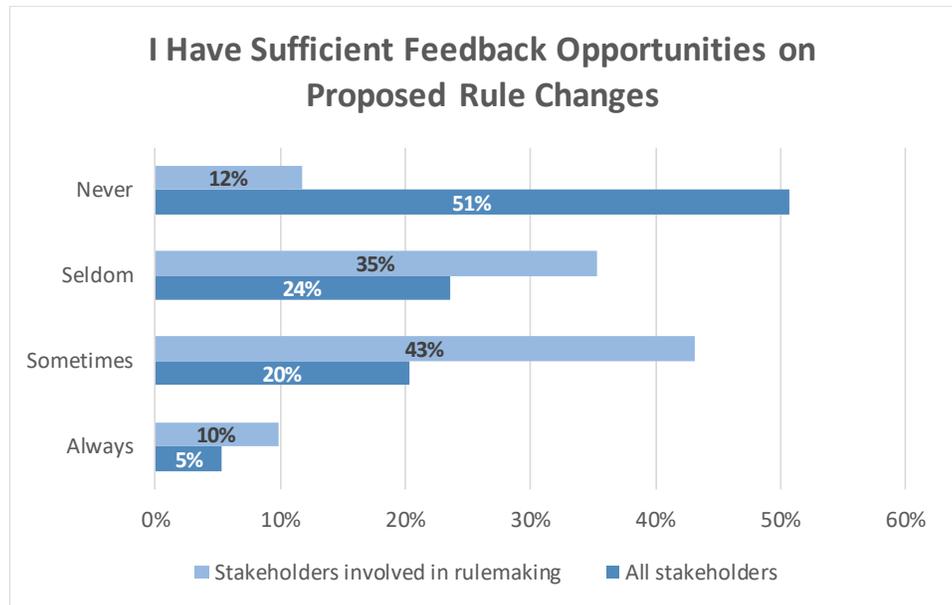


Source: Customer and stakeholder survey; A total of 302 respondents answered the question; 51 respondents who answered indicated they had been involved in rulemaking.

Similarly, three-quarters of *all* respondents (75 percent, or 208 of 280 respondents) indicated they **seldom or never** have sufficient opportunities for giving feedback on proposed rule changes. Forty-seven percent of the 51 respondents involved in rulemaking indicated the same.

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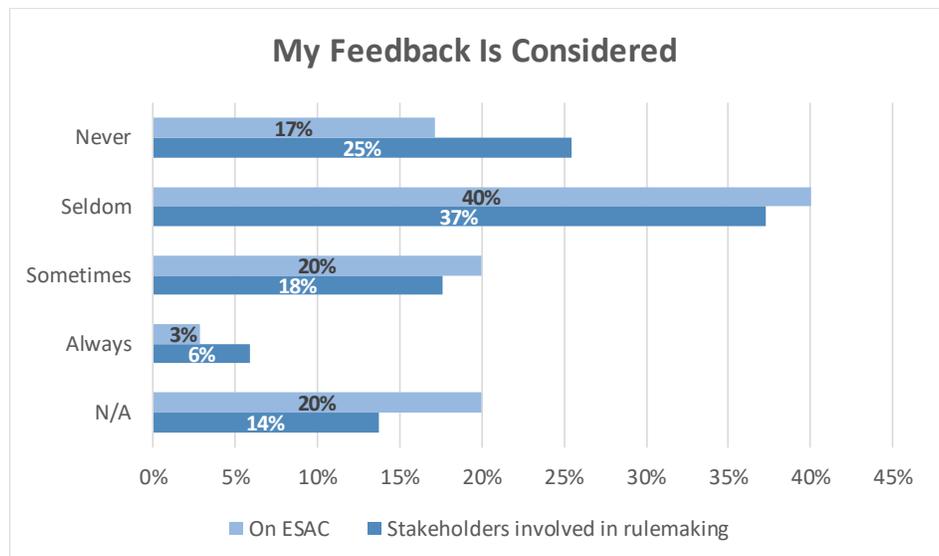
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Source: Customer and stakeholder survey; A total of 280 respondents answered the question; 51 respondents who answered indicated they had been involved in rulemaking.

Over sixty percent of survey respondents involved in rulemaking said their feedback is seldom or never considered.

For those 51 respondents involved in rulemaking, over sixty percent (62 percent) said their feedback was **seldom or never** considered. The majority of people who had served on the Elevator Safety Advisory Committee (35 respondents, or 57 percent) indicated the same, even though the law states that their purpose is to advise the department on the adoption of rules that apply to conveyances; methods of enforcing and administering the law; and matters of concern to customers and stakeholders.



Source: Customer and stakeholder survey; 51 respondents indicated they had been involved in rulemaking; 35 respondents indicated they had participated on the Elevator Safety Advisory Committee.

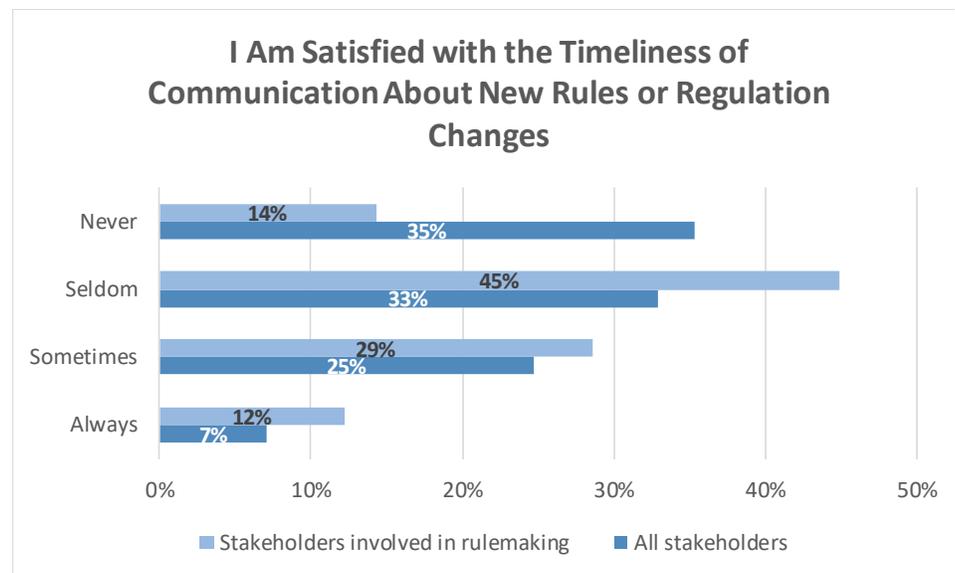
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Sixty-eight percent of survey respondents said they are seldom or never satisfied with the timeliness of communication about new rules or regulation changes.

The majority of respondents expressed similar dissatisfaction with the timeliness of communication. A combined 68 percent (193 of 283 respondents) said they are **seldom or never** satisfied with the timeliness of communication about new rules or regulation changes. Fifty-nine percent, or 29 of 49 respondents involved in rulemaking indicated the same.

Only 7 percent of all respondents and 12 percent of respondents involved in rulemaking said they were always satisfied with the timeliness of communication. Twenty-five percent of all respondents and 29 percent of those involved in rulemaking said they were sometimes satisfied with the timeliness.



Source: Customer and stakeholder survey; A total of 283 respondents answered the question; 49 respondents who answered indicated they had been involved in rulemaking.

Building owners were much less involved with rulemaking than elevator companies, even though many reported a desire to participate.

Only four percent of survey respondents who are building owners reported being involved in rulemaking, while almost half of employees of elevator companies had been involved.

Are you or have you been involved with rulemaking?		
	Yes	No
Building owners	4% (11)	96% (238)
Elevator companies	47% (35)	53% (40)

The survey asked respondents to indicate all the ways they learn about proposed rule changes. The communication channel cited most often by elevator companies (44 percent) was the Elevator Safety Advisory Committee, while the committee was cited by only 5 percent of

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building owners. The communication channel cited most often by building owners (76 percent) was their elevator company or mechanic.

How do you learn about <i>proposed</i> rule/regulation changes?		
	Building owners	Elevator companies
Elevator Safety Advisory Committee	5% (9)	44% (31)
State listserv	5% (9)	19% (13)
State email	14% (27)	29% (20)
State website	11% (21)	14% (10)
State inspector	29% (55)	33% (23)
Elevator company/mechanic	76% (145)	31% (22)

Similarly, the communication channel cited most often by building owners for learning about *new* rules was their elevator company or mechanic. Elevator companies were spread more evenly between their company and state communication channels via listserv, email, website, and state inspector.

How do you learn about <i>new</i> rule/regulation changes?		
	Building owners	Elevator companies
State listserv	5% (11)	26% (16)
State email	12% (24)	32% (20)
State website	10% (21)	24% (15)
Technical bulletin	3% (7)	10% (6)
State inspector	32% (65)	37% (23)
Elevator company/mechanic	79% (160)	37% (23)

In an open-ended question about suggestions for improving rules development, nearly 50 percent of respondents recommended better communication to stakeholders, particularly related to notification of proposed rule changes, and more stakeholder involvement during the rulemaking process. Below are examples of survey comments:

- J "Send property managers notice of proposed rulemaking like the federal government does."

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J “Hold advisory committee meetings in central and Eastern WA in addition to the ones held in [Tukwila]. Create a system where feedback from stakeholders can be gathered without committee meeting attendance.”

Evidence of stakeholder involvement during the last rule change is either not well-documented or was not retained for review.

We tried to evaluate stakeholder involvement based on official rulemaking documentation from the last rules update. However, documentation related to public comments was limited. For example, according to the Elevator Program, it had been working with stakeholders on new rules since either 2009 or 2010. In the CR-102 proposal filed with the Code Reviser’s Office in July 2013, the Elevator Program said the department had been “developing and stakeholding the proposed rules since 2009.” A letter to the National Elevator Industry, Inc. (NEII) on November 25, 2013, said the department had worked with stakeholders since 2010.

We did not receive any documentation showing rulemaking activity for 2009-2010. The earliest documentation we received dated to 2011. This documentation included a draft letter to NEII dated September 21, 2011, a formal letter to NEII dated October 4, 2011, about their concerns with the inspection process, and a memo from the Assistant Director of Specialty Compliance Services to Legislative and Governmental Affairs dated November 21, 2011, asking for rule review.

In November 2011, the program initiated the rulemaking process to adopt the ASME standards, although the ASME edition to be adopted was not named. In August 2012, the program sent an email to their listserv containing two updates. The first update directed stakeholders to review the draft rule proposal and contained a proposed timeline of filing the CR-102 in November 2012. The second update contained “a more detailed version” of the WAC reflecting updates. At the November 2012 meeting of the Elevator Safety Advisory Committee, the Chief Elevator Inspector said that he had received and addressed comments from “about a dozen different entities”; however, there was no available correspondence or documentation regarding meetings with stakeholders or public comments.

In November 2012, the department rescinded the original proposal in order to “expand the scope of rulemaking” and filed a new CR-101 with the Code Reviser. The program filed the proposed rules via a CR-102 in July 2013. In August 2013, the program notified their listserv recipients of the proposed rules. On October 7, the program sent their listserv recipients notification of the public hearing on October 14. The Concise Explanatory Statement responded to concerns from multiple stakeholders who appeared to have been at the public hearing. However, the names of the stakeholders and/or who they represented were not identified on the document and the rulemaking file we initially

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Both the Elevator Safety Advisory Committee and customers and stakeholders voiced concerns about lack of stakeholder input to possible rule changes.

received contained only one stakeholder letter with detailed comments about the rules. Additional documentation of stakeholder input, including public comments from the hearing, was received from the department just prior to finalizing this report.

According to feedback from the stakeholder forums, survey, and Elevator Safety Advisory Committee members, stakeholders were directed to submit their request or suggestion for changes to the committee, both during and outside of open rulemaking. However, both stakeholders and committee members lamented the lack of planned communication allowed between the two groups.

Some stakeholders who were interviewed or participated in the stakeholder forums reported a reluctance to participate in the Elevator Safety Advisory Committee meetings. These meetings are broken into two parts. The first two hours are considered the formal meeting. A court reporter records the proceedings and a verbatim transcript is produced. The last hour is considered the informal meeting. No minutes are produced and the court reporter leaves the room. Stakeholders reported that oftentimes important issues were held for discussion until the formal meeting had ended and the court reporter had left. Many of these stakeholders regard the last hour of the meeting as the most important even though it is undocumented.

In the meeting transcripts, committee members voiced concerns about the lack of responses or input from the stakeholder community on possible rule changes. Likewise, as stated above, the majority of stakeholders indicated they did not receive notice about proposed or new rule changes or felt that their feedback was not considered.

Recommendations

- 3-1. Develop and post a charter for the Elevator Safety Advisory Committee that contains, at a minimum, its purpose, members, responsibilities, and meeting expectations.
- 3-2. Allow the Elevator Safety Advisory Committee to fulfill its responsibilities by actively soliciting and considering their formal recommendations throughout the entire rulemaking process, including rule development, interpretations, and clarifications.
- 3-3. Add capacity for rulemaking and Elevator Safety Advisory Committee support by:
 -) Using existing work groups or subcommittees or establishing new work groups or subcommittees to delve deeply into issues of concern and to propose resolution and clarification.

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- J Requesting funding and authorization for an additional position that is the lead for the rulemaking process within the Elevator Program.
- 3-4. Adopt common meeting management practices for the Elevator Safety Advisory Committee and workgroups or subcommittees, including developing and issuing agendas in advance of meetings, documenting outcomes for each agenda item with action steps and due dates, and eliminating a court reporter transcript of the meeting.
- 3-5. Encourage greater public involvement in rulemaking by doing the following:
 - J Communicating regularly about rulemaking via email, social media, or newsletter to all elevator companies, building owners, property managers, and other interested stakeholders. Use additional communication channels, such as the Building Owners and Managers Association, to share information.
 - J Expanding the use of technology in the rulemaking process such as online meetings and webinars.
 - J Formalizing and standardizing stakeholder involvement in the rulemaking process by holding official preliminary stakeholder meetings to discuss the proposed rules prior to conducting at least two public hearings.
 - J Providing more rulemaking information on the Elevator Program website that includes:
 - o An explanation of the rulemaking process, including petitioning for new, amended, or appealed rules.
 - o All current rules and guidance in effect. (See related recommendations under conclusion #4.)
 - o Rules proposed or under consideration.
 - o Rules adopted within the last 12 months.
 - o A fact sheet with FAQs about the rulemaking process.
- 3-6. Formally document and retain stakeholder communication and other rulemaking documentation either in the official rulemaking file or within the Elevator Program.

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**Conclusion 4:
Official guidance
about rules is not
consistently
documented or
clearly
communicated.**

Federal government agencies distinguish between rules that implement statute (legislative rules) and those that are for guidance (non-interpretive rules). Guidance takes the form of 1) interpretive rules, which say what the department thinks the statute and the rules mean, and 2) policy statements, which say how the department plans to exercise a discretionary power like enforcement. The non-legislative rules are exempt from the rulemaking process.

In Washington State, the Administrative Procedure Act states that current interpretive and policy statements are advisory, and that agencies are encouraged to convert long-standing interpretive and policy statements into rules.

The Department of Labor & Industries uses similar guidance in the form of 1) administrative policies that are "intended as a guide in the interpretation and application of relevant statutes, regulations, and policies....," and 2) interpretive statements that are "a written announcement by the department concerning the meaning of one of its orders, a statute or a court decision." Divisions and programs have additional guidance. For example, the Division of Occupational Safety and Health also provides 1) interim operations and interpretive memoranda, and 2) regional directives. The memoranda provide interim guidance until a more formal directive can be issued.

The trades, or specialties, have technical bulletins in addition to policies. According to interviews with Elevator Program staff, the program issues guidance and interpretations to stakeholders through letters, memorandums, guidelines, emails, and phone calls in addition to technical bulletins.

Under the Trades & Licensing tab on the L&I website, elevator laws, rules, and policies are listed, but do not contain a reference or link to technical bulletins on the Elevator Program webpage. There are three policies on the rules page: an Elevator Education Policy with an effective date of 2012, a broken link to "Draft MRL Code Compliance" dated February 2011, and a "Vertical Platform Lifts" policy that is undated on the document, but dated August 2010 on the website.

On the Elevator Program's webpage, there is a tab for "News and Information" that includes technical bulletins, technical clarifications and technical requirements, as well as other information including letters to elevator mechanics, elevator professionals, and owners, memos, and a safety alert.

Inconsistency in how the guidance is categorized and in the content and formatting (e.g., letterhead, dates, context or explanatory information) make it difficult for customers and stakeholders to know the purpose of the document or how long it is in effect. Although new

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rules were adopted in 2013, most of the posted policies, technical bulletins, clarifications, and letters were issued prior to the date of adoption, raising the question of whether they are still valid.

It is also unclear whether all guidance issued has been posted, or all interpretations have been documented. For example, the Chief Elevator Inspector told the Elevator Safety Advisory Committee in February 2015, that a technical bulletin would be forthcoming on underrated shut-off valves. However, the bulletin is not posted on the website, and we could find no mention of it or the valves in subsequent ESAC meeting minutes.

Recommendations

- 4-1. Standardize terminology and content for policies and technical bulletins and ensure all guidance actively used for rules interpretation is appropriately documented and communicated to customers and stakeholders via email and the program's website. (See related recommendation 10-6.)
- 4-2. Ensure descriptions of each interpretive and policy statement issued are submitted to the Code Reviser per APA requirements.
- 4-3. Review all written guidance to identify which should be abolished, changed, reformatted, or re-established in WAC, and change accordingly. Convert long-standing interpretive and policy statements into rules per APA requirements.

Inspecting the pressure level of elevator doors.



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Conclusion 5: The Elevator Program did not adequately document the need for a small business economic impact statement or a quantifiable cost-benefit analysis as part of its rulemaking for standards adoption in 2013.

The Elevator Program shifted work from the state to the private sector with no evidence of conducting a small business impact or cost benefit analysis.

Under the Washington APA, departments must prepare a Small Business Economic Impact Statement (SBEIS) and preliminary Cost-Benefit Analysis (CBA) for proposed new or revised rule language if needed.

Preliminary CBAs are required for “significant legislative rules” of several departments, including Labor & Industries.

The law defines a significant legislative rule as one that:

-) Adopts substantive provisions of law and a violation of that law results in a penalty or sanction.
-) Establishes, alters, or revokes any qualification or standard for the issuance, suspension, or revocation of a license or permit.
-) Adopts a new, or makes significant amendments to a, policy or regulatory program.

The law further specifies the analysis must take into account both the qualitative and quantitative benefits and costs.

As part of its adoption in 2013 of the 2010 ASME A17.1 standards, L&I prepared a Rule Review Criteria Analysis stating that “this rule is exempt from the small business economic impact statement requirement because the proposed changes will impose no more than minor costs on businesses in the affected industry and the department was not requested to do so by the joint administrative rules review committee.”

Additionally, the director’s CR-102 briefing states that “Most of the rule changes do not represent new or increased requirements from the baseline standards. There are a few rules that may impose some new costs, but these are expected to be insignificant and no more than minor cost to affected businesses.”

However, both the Building Owners and Managers Association (BOMA) and NEII submitted numerous comments, including comments about the nature of inspections and increased costs. For example, BOMA was concerned about the shift to elevator contractors examining their own work, effectively changing the role of L&I from inspectors to auditors. Likewise, NEII raised concerns in September and October 2013 about moving work traditionally performed by inspectors to elevator contractors.

The internal briefing said “the department received concerns from a few stakeholders” about requiring elevator mechanics to perform certain inspection functions. The briefing confirmed that the rules allow elevator mechanics to perform inspections and the department to audit that work. Although the new national standards require the inspections to be performed only by inspectors, the briefing stated the department is not adopting that specific requirement because “the department would not have the resources to perform [inspections] to the detail required....” We

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concluded based on these statements and feedback from building owners, NEII, and elevator mechanics in the forums and survey that some inspection work traditionally performed by L&I had been transferred to elevator contractors in the private sector.

According to the briefing, the department began requiring mechanics to perform certain examination functions with “the 2005 and previous national safety standards.” It is unclear whether a small business economic business impact statement or cost-benefit analysis was done at that time and there was no reference to such analysis in the 2013 rulemaking documentation.

Shifting the responsibility and work for certain inspection or examination activity from the Elevator Program to private sector elevator contractors would have impacted not only the workload of elevator companies, but also costs to building owners for the contractors to perform that work.

In their comments during rulemaking, BOMA estimated cost increases of between \$800 and \$1,500 per unit per year under the proposed rules, while NEII enumerated multiple rule changes that would increase costs to owners without an apparent improvement to safety.

Although numerous specific concerns about cost increases were submitted during rulemaking, a small business economic impact statement was not conducted. In comparison, an extensive small business economic impact statement and cost-benefit analysis were conducted for the 2013 fee increases. Fiscal analyses were conducted when there were changes in the direct charges to customers and stakeholders (e.g., fees or penalties), but not for other rule changes.

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The majority of customers and stakeholders indicated that costs to them are not considered during rulemaking.

Customers and stakeholders voiced concerns about the consideration of costs during the rulemaking process. In the customer and stakeholder survey, over 80 percent of respondents indicated that costs to owners and strategies for mitigating the costs are **seldom or never** considered during the rulemaking process.

Survey Question: Please indicate your experience with proposed rule or regulation changes:

Costs to owners and strategies for mitigating those costs are considered during the rulemaking process.				
	Always	Sometimes	Seldom	Never
Building owners	4%	15%	33%	49%
Elevator companies	0%	12%	28%	60%

By not conducting the economic impact analysis and not quantifying the cost-benefit analysis, the Elevator Program cannot demonstrate that the possible internal and external costs were identified, evaluated, or considered in the rulemaking process. Without conducting and sharing these analyses, the program has eroded the trust and support of its customers and stakeholders by not acknowledging or being fully transparent about the possible cost impacts of rule changes.

Recommendations

- 5-1. Similar to the state's Electrical Program, establish an Elevator Safety Advisory Committee workgroup to identify and review rule proposals that could have an economic impact on other specialties, small businesses, construction costs, or the cost of enforcement and make a recommendation to the ESAC regarding their adoption.
- 5-2. Formalize the roles, responsibilities, and processes for conducting a small business economic impact and a cost-benefit analysis for proposed rules, including ASME standards.
- 5-3. Perform a quantifiable cost-benefit analysis of the impact of any proposed rules on the Elevator Program, building owners, and elevator companies and present the analysis plus any required small business economic impact statements to the ESAC work group along with the proposed rules.

ELEVATOR PROGRAM – QUALITY AND CONSISTENCY

Standards and Best Practices

Strategic planning is a best practice and requirement for Washington State agencies.

Washington State law directs each department to define its mission and to establish measurable goals to achieve desirable results for customers, and to develop clear strategies and time lines for achieving these goals. Agencies must establish expected results for each major activity in its budget. The Elevator Program is part of major activity A023 Licensing and Regulation of Construction Professionals and Installations within the Department of Labor & Industries' budget. This activity is linked to the following statewide results:

-) Statewide Result Area: Prosperous Economy
-) Statewide Strategy: Regulate the economy to ensure fairness, security and efficiency
-) Expected Results: Protect public safety and property by ensuring licensing requirements are met and reduce safety hazards through industry education and compliance inspections.

Once high-level direction is set through the strategic plan, some agencies ask divisions or business units to prepare operational business plans or action plans. These provide concrete steps to implement the department's selected strategies and can help management track program effectiveness and success.

Washington State uses enterprise risk management to help reach goals.

In addition to operational business plans, the Governor's Executive Order 16-06 requires agencies to adopt Enterprise Risk Management (ERM) best practices for identifying and assessing risks that could prevent a department or a program from reaching important goals. It requires a department to look beyond injury and accident rates to underlying goals and to evaluate anything that could affect achieving goals. Successfully assessing and mitigating risk this way requires collaboration. Only the people who understand how a program or process works can realistically and practically know what factors are likely to affect reaching the goal.

Many organizations successfully use a customer-centric approach to increase compliance.

Given the focus on customers by the private sector, it is becoming more and more common for state agencies to use a customer-centric approach to effectively help them meet their compliance goals. For example, Washington's Department of Revenue auditors focus on strong taxpayer outreach and education to reach a voluntary compliance rate of over 97 percent of all registered taxpayers. Likewise, L&I's Division of Occupational Safety and Health provides free training and on-site consultations to help employers create safe and healthy workplaces.

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In another example, Colorado's Conveyance Program issues quarterly bulletins, provides training on "hot items" and new requirements, and participates in free outreach sessions annually along with other public safety programs to help customers remain in compliance.

Colorado also employs an "enforcement coordinator" who works with each of the programs within the Division of Oil and Public Safety to ensure that regulated parties and facilities remain in compliance. The enforcement coordinator actively works with regulated parties to resolve compliance issues, answer questions, offer guidance, and assist with getting them and the facilities back into compliance before penalties are issued.

The program only issues a notice of violation or enforcement order if an owner has not been responsive to the program's request for issues to be corrected. If the program does not receive documentation that the issues are being addressed, then it will issue a notice of violation. The owner then may request an informal conference with the division director where a settlement agreement is issued. Only when the terms or schedule of the agreement are not met will the program issue an enforcement order or seek judicial enforcement.

Other authorities with jurisdiction in Washington (Seattle and Spokane) also actively work with owners to maintain compliance. In Seattle, owners are typically given 60 days to make corrections, but the amount of time given to comply can be extended depending on the specific situation. Owners can receive more time if they submit their plan to make necessary corrections. Owners in Spokane have 90 days to make corrections. That timeframe may be extended if the owner shares their plan for correction with the inspector.

Washington State and the Elevator Program have established customer service expectations.

There are a number of customer service expectations established within the state of Washington, the Department of Labor & Industries, and the Elevator Program including the Governor's Executive Order 03-01 on customer service delivery, Results Washington Goal 5 Customer Satisfaction, the Labor & Industries strategic plan goal 3 – Make it Easy to do Business with L&I, and the Elevator Program customer rights. Those rights posted to the Elevator Program website include the following:

-) Be treated with courtesy and respect.
-) Timely service when seeking service in person and by phone.
-) Receive service from knowledgeable, competent and cooperative staff.
-) Complete, accurate, reliable information and feedback.
-) Consistent and fair application of codes, and rules.

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-) Request second opinions and to formally appeal staff decisions.
-) Communicate their dissatisfaction about staff, department policies, procedures or requirements.

L&I has established core competencies for staff and supervisors.

In addition to the customer service expectations, L&I has established core competencies for every supervisor and employee that is included in their Performance and Development Plan (PDP). The PDP becomes the tool to facilitate communication between a supervisor and an employee about the linkage between the employee's expected results and the organization's goals and performance measures. Core competencies for staff include safety, customer-centered actions, treating others with respect and courtesy, accountability and dependability, and judgment and problem-solving.

In addition, supervisors have the additional core competencies of managing for results, leadership, communication, relationship building, and managing employees.

Staff interact with many individuals across the state.



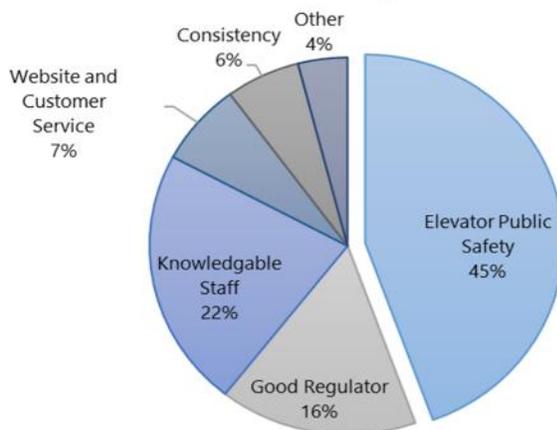
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Conclusion 6: The Elevator Program, customers, and stakeholders share a common goal of elevator public safety.

The Elevator Program staff, customers, stakeholders, and the legislature share a common goal of public safety in the administration of this program. When asked to name the program's strengths, the majority of survey respondents named the program's focus on public safety. Most staff interviewed also reported public safety as a strength of the program.

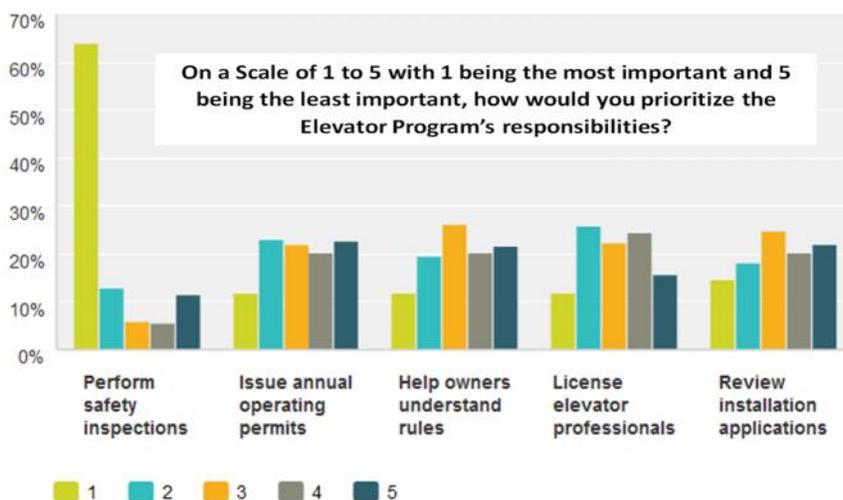
What do you think are strengths of the Elevator Program?



Source: Customer and stakeholder survey - 99 participants responded to this question.

Performing safety inspections was identified as the highest priority by the majority of survey respondents.

Over 60 percent of survey respondents also chose performing safety inspections as the number #1 responsibility for the program. Respondents rated the other key responsibilities of issuing annual operating permits, helping owners understand rules, licensing elevator professionals, and reviewing installation applications relatively close as the #2 priority as shown below.



Source: Customer and stakeholder survey - 367 participants answered this question.

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Conclusion 7: A non-customer centric approach to enforcement and differing expectations have created an antagonistic atmosphere.

Building owners are required to wait before inspections and re-inspections can occur.

In this study we defined the customer as the initial recipient or primary user of the Elevator Program's products or services. While the general public is the ultimate beneficiary of services of the Elevator Program, the building owners and elevator contractors are the customers who directly receive inspections, investigations, technical assistance, and other services of the program. These entities use the results of these services to improve the overall safety of conveyances in the state.

Many customers and stakeholders reported a more punitive approach to enforcement, often stating that the program did not actively work with them and often assumed they were willfully non-compliant. Recent decisions and current practices around mandated delays in scheduling, fines and penalties, the appeals process, and lack of technical assistance present a hardship for customers and contribute to an antagonistic atmosphere.

Scheduling new installation and alteration inspections. All installations, alterations, and relocation of conveyances require permitting and inspection. (See Appendix A-3 for current process.) The installer of the conveyance submits an application for the permit and posts the permit issued by the department at the site of installation. All new, altered, or relocated conveyances for which a permit has been issued are inspected for compliance by an inspector who also witnesses any specified tests.

Current rules require the person or firm installing, relocating, or altering a conveyance to notify the department in writing at least seven days before requesting any inspection of the work. According to the program, this requirement was placed in rule to prevent unreasonable scheduling expectations by the elevator contractors and to give inspectors more control to schedule new installation and alteration work while they are out doing annual inspections. While the rule allows exceptions to be granted, it is not clear how those exceptions are approved.

If any corrections are found during the initial inspection of the new install or altered conveyance, another rule requires an additional waiting period of 7 days to schedule the re-inspection. It is unclear why this requirement was placed into rule.

In addition, elevator companies are rated on how many times it takes for them to pass an inspection for a new installation, or to achieve a rating of 70 percent or higher on the inspection results. Instead of being a performance measure for the program to see how well they have helped prepare the elevator companies for passing an inspection through education, outreach, or technical assistance, this practice penalizes both the owners and the elevator companies who do not meet the threshold. Elevator companies who do not achieve the 70 percent target are placed

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on a 10-day waiting list for re-inspection, which is even longer than what is in rule.

The rationale given by the program for the 10 days is that this practice is an incentive for the elevator company to pass the initial inspection and it helps ensure department resources are used effectively. However, the practice does not allow for scheduling flexibility. Moreover, it does not take into account that it is already not in the owner's best interest to have a conveyance out of service. It is not clear how the 10 day waiting period is communicated to customers since the practice is not formalized in rule or guidance and only appears as a note on the scorecard.

Making customers wait can also impact their project schedule and increase costs. Since a licensed mechanic must be on-site for these inspections and re-inspections, scheduling a mechanic to return to the site is an additional cost. Even though it is in conflict with the rule, some inspectors reported that they will work with the elevator company to perform the re-inspection sooner, sometimes that same day, to reduce the overall costs for the building owner.

Building owners can be fined for all types of corrections not completed within 90 days, even if they are minor and they are actively working on addressing them.

Penalties. The department has the statutory authority to levy civil penalties (fines) against any person for violating the conveyance permit and operation requirements of the statute. One of the recurring themes from building owners was that they can receive penalties for minor issues and that they are penalized even when they are actively trying to make corrections.

Although inspectors categorize corrections in CMS as "red tag," "serious," "minor," or "maintenance," no differentiation is made between those categories when the owners are issued a notice to make corrections within 90 days. If all corrections have not been made at the end of 90 days, owners report being assessed penalties regardless of the level of public safety risk associated with the correction. Many owners and elevator companies requested a tiered approach to corrections that prioritizes critical or urgent issues over minor ones.

Likewise, owners report not being able to easily work with the department to secure more time to have corrections completed. Many owners cited the need for additional time given the shortage of available elevator mechanics to make corrections and the length of time to order and receive parts. Exceptions can be granted to the 90-day correction period, but they must be approved by the Chief Elevator Inspector.

Even though they are actively trying to make the corrections, many owners reported still being penalized. We tried to evaluate the number

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Eighty percent of corrections issued in the first six months of 2016 were rated as minor or maintenance corrections.

Approximately 82 percent of the May 2016 annual inspections included corrections in the inspection report.

There is great variation in the number of corrections issued per inspector.

Appeals are screened by the Chief Elevator Inspector prior to being sent for a hearing.

of penalties assessed by correction type. The program was unable to provide data for penalties that had been paid.

However, by using the categories in CMS to assess the corrections issued between January and June 2016, we found that 20 percent of corrections rated as "serious", .1 percent were "red tag", 8 percent were "minor", and 72 percent were rated as "maintenance." Moreover, the top reason for corrections was related to MCP's. This data lends support to customer and stakeholder claims that they are being penalized for corrections not considered to be a serious public safety risk by the program. In addition, since the change in CMS to automate fines and penalties every 90 days, the amount of revenue for fines and penalties has doubled.

Because of the lack of the historical trend data in CMS, it is not possible to determine the percentage of inspections that result in a correction over the last year. However, data extracted in July 2016 that contained May 2016 correction data indicates there were 659 annual inspections completed of which 539 had 3,136 corrections issued. Approximately 82 percent of the May 2016 annual inspections included corrections in the inspection report. Eighteen percent of the inspections did not have any corrections.

There is also great variation between the number of corrections issued by inspectors from a high of 529 corrections (16.8 percent of all corrections or an average of over 9 corrections per inspection) to a low of 24 corrections (0.7 percent of all corrections or an average of 3 corrections per inspection) in May 2016. (See conclusion #9.)

Appeals. Many, if not all states, have an independent process in place for customer appeals of decisions or penalties. In many cases the appeals go to a board or hearings officer. Washington has a similar appeals process in place; the law states that if a hearing is requested, the department shall ask an administrative law judge to preside.

According to the program's documented appeal process, when the program receives a customer's appeal, the Chief Elevator Inspector reviews the request to "determine whether or not the issues are appealable and whether or not they are issues caused by the department." If the Chief Elevator Inspector determines the appeal should move forward, it is then sent to the Attorney General's Office (not the Office of Administrative Hearings). Nothing is documented about what happens if the Chief Elevator Inspector determines it should not move forward.

There is no justification for this additional step in law or rule, and it appears to violate the independent nature of the appeal process since

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an impartial judge at the hearing would determine whether the appeal had merit.

In the customer and stakeholder survey, some participants stated that the program should have an appeals process that is arms-length from the Chief Elevator Inspector. It is unclear whether the participants did not know there was an appeals process available to them or whether they were referring to the program's practice of screening appeals before sending them for a hearing. Regardless, this practice undermines customer confidence in an independent process for appealing program decisions.

The Elevator Program does not provide technical assistance and consultation services desired by their customers.

Technical assistance. Department rules allow building owners to request elevator field technical services from the program. These services include code evaluation, code consultation, plan examination, code interpretation and clarification of technical data relating to the application of the department's conveyance rules.

In the customer and stakeholder survey, building owners expressed a need for more education and interaction with the Elevator Program. They wanted to be able to discuss issues and options with inspectors and become more knowledgeable about their responsibilities.

Currently, the program does not have the capacity to provide these services due to staff vacancies and other program priorities.

The Elevator Program and its customers and stakeholders have different expectations about the acceptable level of public safety risk and responsibilities.

While there is agreement on public safety as the ultimate goal of the program, expectations of the legislature, the Elevator Program, the building owners, and the elevator companies about the acceptable level of public safety risk and the state's role and responsibilities are not in alignment.

As mentioned in conclusion 5, customers and stakeholders are concerned about the costs incurred in the pursuit of public safety and would like to see more balance between the actual level of risk and the cost to eliminate all risk. The lack of shared understanding about the accepted level of risk and balance between public safety and costs can lead to conflicts when goals, rules, policies, and action plans are under consideration. Resolving this conflict is easier when participants understand that their own and others' tolerance for risk may be different.

Customers and stakeholders also reported confusion about the appropriate role of the state program. For example, several building owners complained about elevator companies not performing maintenance in accordance with their contracts and thought the state should penalize the companies. As mentioned in conclusion 2, owners

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and elevator company employees also were concerned about using the Maintenance Control Program to increase responsibilities for mechanics.

Documentation of the accepted level of risk and roles and responsibilities is typically found in an organization's strategic or business plan; however, we could not find any evidence of strategic or business planning specific to the Elevator Program or other documentation about acceptable risk levels. (See conclusion 10.) We did not see explanations of the state's role and responsibilities beyond what is in statute or regulation.

The absence of a common understanding about risk is demonstrated in stakeholder concerns about the lack of the program's differentiation between corrections that are urgent or critical versus those that are minor. Similarly, without clear roles and responsibilities confusion will persist about the state's role in situations such as approving Maintenance Control Programs between building owners and elevator companies.

The examples of delayed scheduling, fining customers, not following the appeals process, not providing technical assistance, and lack of a shared understanding about acceptable levels of risk and responsibilities all contribute to a strained relationship between the program and its customers and stakeholders.

Recommendations

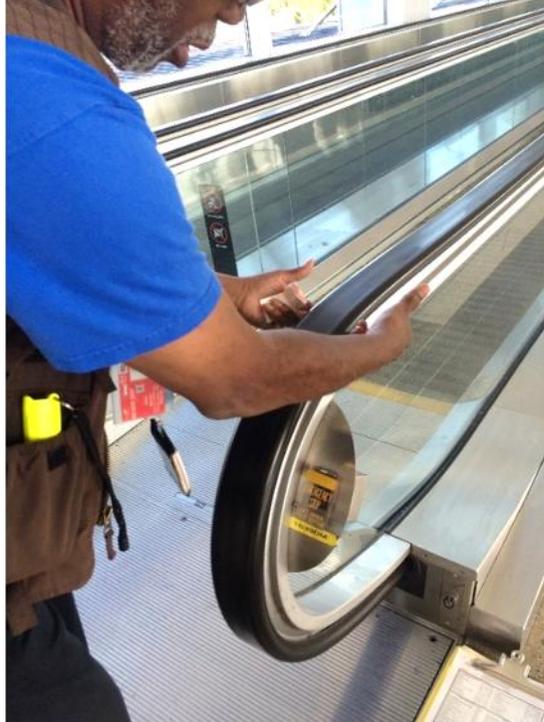
- 7-1. Adopt a program-wide, customer-centric approach to enforcement that emphasizes education, outreach, and working with customers to improve public safety. As part of this recommendation:
-) Evaluate the purpose and cost/benefit of the 7-day rules for scheduling inspections and re-inspections (WAC 296-96-02400 and 296.96.02405) and the informal 10-day waiting period during the review of current requirements. (See Recommendation 2-2.)
 -) Cease penalties for owners who are actively trying to maintain compliance. Use penalties as a last resort for willful non-compliance, instead of an initial course of action for enforcement.
 -) Immediately forward appeals or requests for hearings to an administrative law judge.
 -) See Recommendations 10-3 and 10-4 regarding adding capacity for providing requested technical assistance and consulting services.

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- 7-2. Establish an agreed-upon acceptable level of risk along with roles and responsibilities that articulate the balance between public safety and department and customer costs and concerns. (See Recommendation 10-1 for strategic and business planning.)

Inspecting moving walkway at SeaTac International airport.



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Conclusion 8: The Elevator Program is not meeting the statutory requirement to inspect each conveyance annually.

The department is required by statute to inspect and test all conveyances at least once each year. If an inspection shows a conveyance to be in an unsafe condition, the department issues a written inspection report itemizing the repairs or alterations needed to render it safe. The report may also suspend or revoke a permit or discontinue the operation of a conveyance by “red tagging” it. (See Appendix A-3 for the current inspection process.)

A penalty is assessed for failure to correct a violation within ninety days. The owner is also assessed a penalty for failure to submit official notification in writing to the department that all corrections have been completed. These penalties are issued automatically through the Elevator Conveyance Management System (CMS) and accrue every 90 days until all of the corrections have been completed and the inspection report has been signed and returned to the department.

Nearly 60 percent of conveyances, more than 10,600, have not been inspected in the last year.

Inspections are conducted by the state Elevator Program with the exceptions of the cities of Seattle and Spokane that have authority to inspect conveyances within their borders. As of September 30, 2016, there were 17,764 permitted conveyances in Washington that required an annual inspection. Only 40 percent of those conveyances were inspected last year. Almost 60 percent of those conveyances, representing more than 10,600 permitted conveyances, have not had an annual inspection since August 31, 2015, or their first annual inspection is overdue. Seventy percent of the overdue inspections, representing more than 7,100 permitted conveyances, were last inspected in 2014 or earlier.

Annual operating permits are issued without conveyances being inspected.

In the state of Washington Elevator Program, the issuance of the annual operating permit is not tied to the annual inspection. In several jurisdictions including the city of Seattle and the states of California, Colorado, Tennessee, Illinois, and Minnesota, conveyances must pass an annual inspection to receive an operating permit. The Washington State process is automated within the Elevator Program’s information system (CMS) and invoices are mailed out based on the expiration date of the annual operating permit and issued without the conveyance being inspected.

The current assigned workload for each inspector averages about 658 conveyances.

There are currently 27 inspector positions within the Elevator Program, eight of which are vacant. Five of those vacancies are within Unit 1. The supervisor of each unit reassigns the vacant position workload to existing staff which further increases the backlog for each inspector. The current assigned workload per inspector averages about 658 active, temporary, and red-tagged conveyances. With the current vacancies and the reassignment of workload, the workload increases to an average of about 935 conveyances per inspector. The assigned workload in Washington State is higher than other AHJ’s in the state as shown below

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even if the program was fully staffed.

With the vacancies, the workload increases to about 935 conveyances per inspector.

	Washington State L&I	Seattle	Spokane
Number of Conveyances	17,764	7,400	1,200
Number of Inspectors	27 with 2 supervisors, 8 vacancies	12 with 2 supervisors	2 – includes supervisor
Workload	658 units per inspector if fully staffed 935 units per inspector with current vacancies	616 units per inspector, currently fully staffed	600 per inspector, currently fully staffed
Frequency of Inspections	Annually	Annually tied to Operating Permit Issuance Date	Annually

Source: Elevator Program data; Interviews with cities of Seattle and Spokane staff.

Both the cities of Seattle and Spokane staff have a smaller geographical area to cover than state inspectors. The demand for travel is much greater for the state staff. In FY 2016, state inspectors logged over 250,000 miles. Travel time and traffic negatively impact the amount of time available for inspections. In addition, with the vacancies, the remaining inspectors must traverse larger territories to cover those required inspections.

The city of Seattle has a dedicated fund that includes a budget process for increasing staff once the workload exceeds 600 units per inspector. The city expects to receive authority for an additional position in January 2017 that will allow them to have 12 inspectors plus one floater position to assist with vacation and sick leave fill-ins and jobs that require two people.

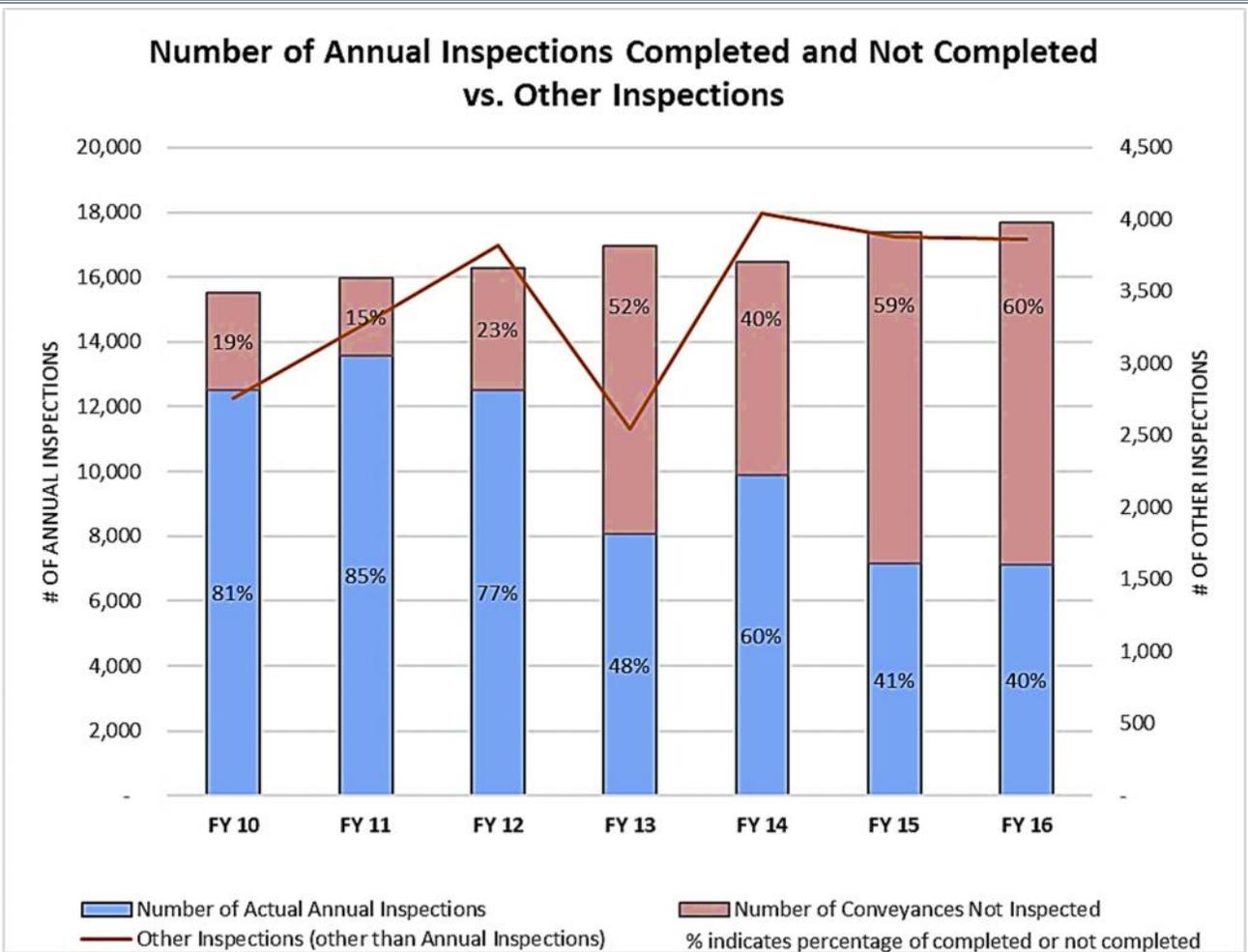
The Elevator Program’s resources do not match the statutory requirement for annual inspections.

The number of active, red-tagged, and temporary conveyances has grown over 14 percent since FY 2010, but the number of inspectors has remained constant even though an increase of staff was authorized by the Legislature in the 2013-15 biennium. The average number of annual inspections per inspector per year has also declined from 643 annual inspections per inspector in FY 2011 to 362 per inspector in FY 2016. The decline could be due to a combination of staff turnover, an increase in inspections for both annual and other types of inspections, on-the-job injuries, and limited capacity within the program to handle projects such as rulemaking, project management, training development, implementation of the Maintenance Control Program, and process improvements.



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Source: Elevator Program 2010-2016 Scorecards

There was also a change in how the scorecard performance was measured in FY 2013. In fiscal years 2010-12, the number of inspections were self-reported by inspectors through the monthly activity report. In 2013 to the present, the Elevator Program information system is used for most of the performance measures. There are some inconsistencies in CMS which will be addressed in conclusion #9.

Recruitment and retention of staff continues to be a problem for the program.

As the economy has improved and the job market has tightened, the Elevator Program continues to have difficulty hiring and retaining qualified inspection staff. According to the program, it takes about three years of on-the-job experience in the state of Washington before an elevator inspector can cover a full workload. The Legislature authorized five additional elevator inspector positions in the 2013-15 biennium, bringing the total number of funded positions to 27. However, despite considerable effort, the program has been unable to fill all of the vacancies and has been reluctant to request additional inspectors until it can fill the existing authorized positions.

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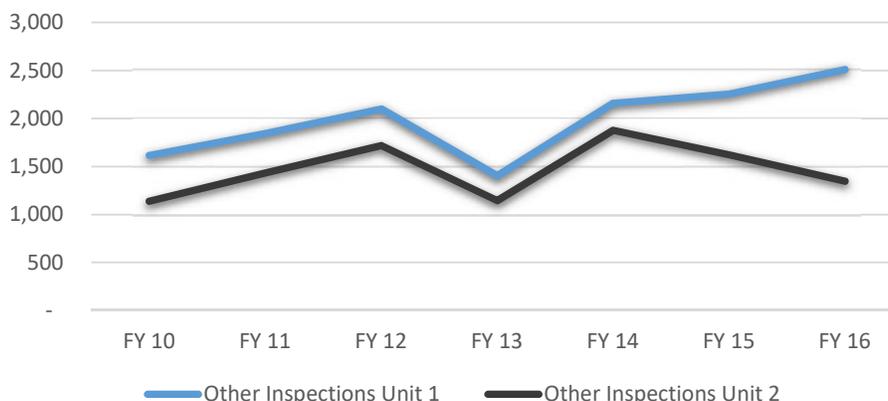
There are several issues that contribute to the recruitment and retention problem the program faces:

-) Elevator Inspector 1 salary tops out at \$66,684 annually. The cities of Seattle and Spokane pay their elevator inspectors at the top annual salary of approximately \$89,000 and \$73,000 respectively. The median annual Elevator Installer/Repairer in the Seattle area according to Salary.com is \$74,161 with some mechanics making over \$106,000 without bonuses and benefits. With the construction boom and the elevator contractors hiring, the state Elevator Program is finding it difficult to attract a qualified candidate pool and has no training program in place to develop additional well-qualified candidates.
-) The recent candidate pools for inspector positions has largely consisted of retired elevator mechanics who are looking to supplement their pensions and can afford to work at the lower state salary. They're usually not looking to start a long-term career, and may not stay in state service for a long duration.
-) The culture and excessive workload within the Elevator Program causes stress and strain on the state inspectors. When asked what the program did not do well this year and what could have been done differently, the top three responses were:
 - o Lack of staff to deal with the excessive workload.
 - o Lack of communication between program leadership, staff, building owners, and elevator companies.
 - o Low morale due to the low salary when compared to the elevator mechanics in the industry.

New installations, alterations, and other inspections add to the inspector workload.

Inspectors in the Elevator Program report their annual inspection workload becomes a lower priority as they work with elevator contractors to inspect new installations, alterations to existing conveyances, accident investigations, and other inspections. The recent building boom in the Puget Sound area has not only added new installation and alteration inspections in Unit 1, but has also increased the inspection of temporary construction personnel hoists used in new multi-story buildings to transport materials, tools, and personnel. These conveyances require an inspector to approve each floor that is added as the building is constructed.

Other Inspections by Unit (other than Annual Inspections)



Source: Elevator Program 2010-2016 Scorecards

Generally, inspections are conducted in the following priority order:

1. **Accident investigations**, as mandated by law, to immediately investigate the cause, followed by a written report.
2. **Annual inspections**, as required by law, of existing conveyances. Informally, inspectors try to prioritize schools, hospitals, and nursing homes.
3. **Inspections of new installations, alterations, temporary construction personnel hoist inspections, and re-inspections if required.** The department requires elevator contractors and building owners to contact the inspector seven days before the inspection is needed. Most of these inspections require coordination with the elevator mechanic who must be on-site for the inspection. Once the inspection is scheduled, the inspector places a priority on inspecting newly installed or altered conveyances, since they cannot be operated without an L&I permit.
4. **Supplemental inspections, field technical inspections, after-hours inspections, and decommissioned conveyances.** Most of these inspections are not encouraged in light of the current workload.
5. **Plan reviews.** These reviews are handled mostly in central office and do not impact the workload of the inspector until the plan review is approved and the inspection is scheduled.

Accident investigations and inspections of new installations, alterations, and temporary construction personnel hoists make-up the majority of

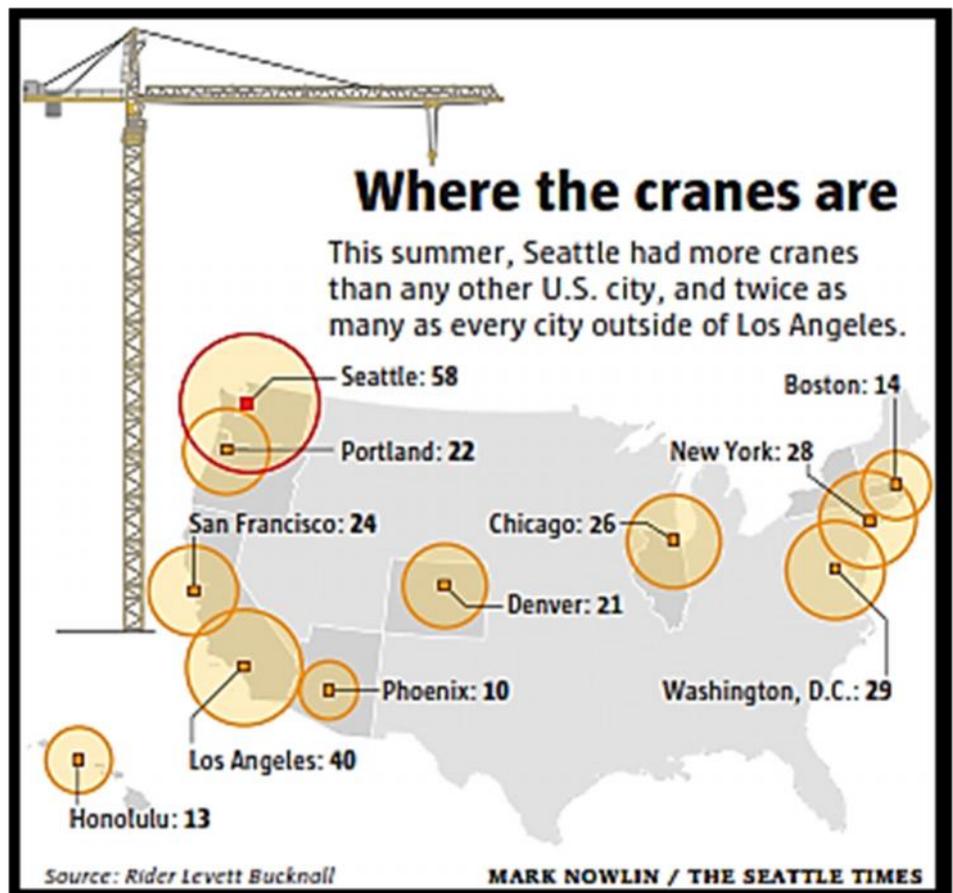
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Seattle had more cranes than any other city in the United States in the summer of 2016.

inspections that are not annual inspections.

The construction industry across the state is robust. As the Seattle Times reported in October 2016, Seattle had more cranes in use this summer than any other city in the United States, as shown below. The article notes that the construction boom extends well beyond Seattle. This represents an increased workload for the program as well as increased competition for skilled elevator staff. The Seattle Times article reported that Local 86 has developed an extensive training program for many specialties to provide locally available candidates to replace soon to retire tradesmen.



No distinction is made between inspection cycles, violations, and fines based on conveyance type.

Although some public conveyances or safety concerns are more critical than others, the current system does not distinguish between inspection cycles, violations, and fines depending on the conveyance and correction type. Therefore, frequently-used public conveyances may not be prioritized over freight conveyances or immediate safety concerns over minor corrections. For example, a limited-use elevator that is used only a few times per year is on the same inspection schedule as a passenger escalator at a shopping mall.

Many of the stakeholders from the customer and stakeholder survey didn't understand why they would be written up for small, non-safety-

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related issues. Others commented they needed more time to respond to some of the bigger issues identified in an inspection report than 90 days. Establishing a risk-based system to evaluate the various inspection cycles depending on the conveyance and correction type could save state, business owner, and elevator company resources while still maintaining the focus on overall public safety. It would also allow for more effective collaboration with the building owners to resolve the most important safety issues.

There are a number of options that other states employ to handle their annual inspections including using third party inspectors for all or part of their workload or extending the inspection cycle to longer than one year. For example, the state of Colorado uses third party inspectors to perform their annual inspections. All inspections must be completed and passed before the expiration date of the Certificate of Operation. The state of Connecticut uses state inspectors, but they only inspect every 18 months. The state of California uses a mix of state and third party inspectors. They allow the issuance of an operating permit for up to two years if the conveyance has a full maintenance contract in place.

Re-distributing and making administrative tasks more efficient could also allow for more inspection work.

According to the feedback we received from the inspectors, there are a number of activities in the inspection process that are more administrative in nature and take away from time the inspectors could spend performing inspections. Inspectors come into the office weekly to schedule their inspections, plan their routes, call building owners, print out their inspection worksheets, and enter their previous inspection reports into CMS. Some of these duties could be performed by administrative staff in support of all inspectors in each unit. The unit supervisors could also use these positions to assist in the monitoring and reporting of performance measures for the program scorecard.

The interviews with the inspectors also highlighted the need for a number of system improvements that could be made to make the inspection process more efficient such as online routing applications, developing standard operating procedures, and adding resources to provide guidance and increase communication on technical issues. See conclusion #10.

Recommendations

- 8-1. Identify, invest, and use resources and approaches to eliminate the backlog of annual inspections. Options for eliminating the backlog include:
 -) Requesting funding for additional inspectors to lower assigned workload level including options such as floater positions or third party inspectors to handle some of the lower risk workload.

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-) Seeking approval for salary increases for inspectors, inspection leads, and supervisors to be competitive with inspectors in the other AHJ's and the private sector in the state of Washington.
 -) Obtaining authority for a dedicated fund for the Elevator Program. (See conclusion #10.)
 -) Establishing a floater position for each unit to cover staff on leave or in training, jobs that need two inspectors, or specialized inspections and investigations. This role could potentially be added to the lead inspector positions which are currently under consideration. The leads in each unit can also address inspection questions regarding applicable rules and code and can coordinate communication of issues and decisions across the program.
 -) Using temporary third party inspectors for inspecting lower risk or lower use conveyances as determined by the risk assessment in recommendation 8.2.
 -) Re-assigning administrative work and establishing statewide standards for scheduling such as the use of online routing applications. Consider using administrative staff for scheduling inspections, contacting building owners, updating owner contact information, printing of reports, and other administrative functions related to inspections.
 -) In the long term, consider addressing the shortage of elevator specialists by working with the State Board of Community and Technical Colleges and the L&I Apprenticeship Program.
- 8-2. Establish an Elevator Safety Advisory Committee work group to perform a risk assessment of each type of conveyance to determine if there could be different inspection cycles and resource options.
- 8-3. Meet with building owners to develop an individualized plan to inspect multiple conveyances in the same building and to reset the expiration date of the operating permit to align with that plan. Audit any outstanding corrections, align them with the risk assessment categories, and incorporate the results into the individualized plan.

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Conclusion 9: The Elevator Program has insufficient data and information to make informed decisions and to manage workload.

The Elevator Program information system, CMS, was implemented approximately ten years ago and is shared with the Crane Safety Program within the Division of Occupational Safety and Health within L&I. The application was built in-house rather than purchased because of the need to integrate the application with other department business applications and the ability to provide maintenance and enhancements to the application using L&I information technology resources. However, the project was underfunded, and, as a result, the application was implemented before full functionality was developed. Since implementation, the application has been in a constant state of finish, maintain, and fix. The primary issues with this application are:

-) The way the system was developed makes maintenance of the system hard to perform.
-) There is no workflow in the system, which means that processes are duplicated and very tightly coupled. For example, when changes were made to the code for a new worksheet for inspections of new installation and alterations, the ability for inspectors to print multiple inspection reports was broken. This change added considerable office time for the inspector to prepare for the annual inspections as each individual worksheet must be printed one at a time.
-) There is a lack of historical trend data within the system. For example, a user is unable to download trend data for the number of inspections or corrections by month or by year. Data is downloaded on one day for the end of the month for scorecard purposes. But if the data is downloaded the next day for the same time period, it is very likely to be different.
-) There are currently 5,300 hours of estimated IT work outstanding in documented service requests.
-) There is only 1 FTE supporting the existing application. This resource also supports two other applications. Progress is hard to make given the lack of resources.

As a result of these issues, the program is unable to, for example, produce a report of the prioritized inventory of conveyances due for annual inspections and their associated routes. Even simple data integrity issues have taken months or years to address which makes the data that is downloaded from CMS open to interpretation and challenges of its validity.

Processing in the program's central office including invoicing and correction tracking is largely manual and inefficient due to the limitations of the system functionality. Inspectors in the field and central

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office staff report they spend significant time entering inspection results due to the complexity of the user interface.

The department has requested funding for an interim solution in the Governor's budget for a software-as-a-service (SaaS) product that has capabilities for customer-relationship management, administration (reports, customer accounts, payments, and correspondence) and compliance (inspections, corrections, certifications, laws and regulations, event scheduling, and location routing). While a SaaS solution would have limited ability to be customized, the program believes a product with the described "out of the box" features would be a significant improvement over the current system.

The program scorecard is not accurately measuring the workload of the program.

The Elevator Program scorecard is not accurately measuring the workload of the program. Issues with the CMS and data integrity are part of the issue, but there are also issues with how the number of conveyances are counted and how inspectors' performance is measured. The program scorecard measures an inspection as timely if the inspection was done within a 60- to 90-day window regardless of the year. For example, if it is July 2016, the scorecard measures timely inspections as those due in June, July and August regardless of the year. Once the calendar turns to August, any remaining June inspection due dates drop off until June 2017. Some inspectors do not use the scorecard method for timeliness and focus on the annual inspections that are the most overdue.

The number of conveyances shown in the scorecard does not include all of the workload for the vacant positions. It appears nearly 1,800 conveyances are missing from the scorecard calculations for the total conveyances that are due for an annual inspection. The data is not readily available to identify which conveyances are missing from the scorecard, but some appear to be connected with conveyances assigned to vacant positions.

The scorecard uses a calculation for "complexity hours" that was derived by the Chief Elevator Inspector and a couple of inspectors several years ago. The complexity is the average hourly inspection value assigned to each conveyance. This measure is intended to demonstrate the hours necessary to perform various types of inspections. Prior to this, the measurement of inspections did not distinguish between the amount of time it would take to inspect, for example, a 22-story high-rise elevator (four hours) versus an incline chair (20 minutes). There is no documentation available to verify the validity of this calculation.

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It is difficult to measure individual inspector performance due to the complexity hour calculation.

Each inspector tracks their activity on a daily activity report that rolls up to a monthly activity report that feeds into a portion of the program scorecard. The inspectors are asked to track travel time, phone time, leave, training, miles driven, and other activities that are considered non-inspection time. Many inspectors reported that this is one of the administrative activities that takes away from their inspection time. In addition to the daily activity tracking, the inspector is also expected to track their time in their Outlook calendar, their paper pocket calendar, their time sheet, and schedule inspections in CMS. The scorecard compares the number of hours spent on the non-inspection time reported on their monthly report plus the number of actual inspections against the complexity hour calculation. Some inspectors are then shown as having either a positive or negative number of unaccounted for hours. It makes it difficult to measure individual performance with the inspectors when their performance is compared against a complexity hour calculation that has not been updated or validated.

Recommendations

- 9-1. Re-examine current performance measures and complexity hours and adjust to accurately depict the workload that's being accomplished and to establish workload benchmarks based on Elevator Safety Advisory Committee recommendations for risk assessment by conveyance type. (See Recommendation 8-2.)
- 9-2. Establish standard inspection performance measures for the Elevator Program with clear data definitions.
- 9-3. Establish expectations and goals for each individual inspector with adjustments based on geographic or local conditions. Incorporate established measures into individual employee Performance Development Plans and inspector operational dashboards to increase accountability and consistency statewide.
- 9-4. For a long-term solution, evaluate available commercial options for a system to avoid building or maintaining the business system in-house. Add capacity within the Elevator Program to support the requirements gathering and project support (see Governor's budget decision package request for funding).

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Conclusion 10: The Elevator Program lacks expertise, skills, and understanding of common management practices and tools as well as adequate resources.

CAPACITY

Stakeholders and staff expressed confusion about program priorities and goals.

The capacity and management capability of program managers is ineffective.

To be efficient and effective, programs need appropriate technical and management expertise and skills, plus sufficient resources. According to our analysis of program data, staff interviews, and observations, the Elevator Program is unable to accomplish its work and is not able to efficiently meet its needs for consistency and desired work quality. Moreover, many staff express dissatisfaction with the working environment. Factors contributing to this are detailed below.

Stakeholders and staff expressed confusion about the priorities of the program and the lack of a plan to address the backlog of annual inspections. The Elevator Program does not have an established business plan or other comprehensive approach to guide the strategic, operational, and tactical use of available resources – requiring each supervisor to make individual decisions about how to use the staff and resources they manage. There are no recurring managerial meetings to discuss priorities, coordinate current issues, or collaborate on long-term goals. There is also no evidence of program planning activities at the managerial level or having a business plan to guide the use of available resources to work on priorities and goals within the program.

Executive management expressed their concerns with the size of the inspection backlog, the inability to fill vacant inspector positions that contributes to the growing backlog, the lack of engagement with stakeholders, the increasing difficulty in resolving issues with customers, and the pursuit of actions that diminish the likelihood of long-term success for the program.

Staff perceive that executive management does not support decisions made within the program, interfering with the services being provided. Staff expressed confusion and frustration with interference by executive management that they believe damages the program. Staff reported they are reluctant to seek input from executive management and do not value or appreciate the input received about program policies, customer concerns, and their strategic direction and goals.

Without an agreed-upon business plan, the Elevator Program will continue to suffer from lack of alignment with executive management. They will be unable to articulate their priorities and approach to addressing business challenges, and to obtain the active support of staff and stakeholders in achieving their goals. (See also conclusion 7.)

As the Elevator Program develops its business plan, the program also must consider how to organize themselves to best support the business plan and to operate more efficiently. Stakeholders and staff expressed concerns about the capacity and capability of managers to effectively lead the Elevator Program. The Elevator Program has one Washington Management Services (WMS) position, the Chief Elevator Inspector. The Chief Elevator Inspector has six direct reports including two Compliance



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Specialist Supervisors, one Secretary Supervisor, and three Elevator Technical Specialist positions. Informally, one of the Technical Specialists is used by the Chief Elevator Inspector in a deputy role and is given broad discretion in making operational decisions, interpreting applicable regulations, and setting program standards. All of the positions within the Elevator Program except the Chief Elevator Inspector are Washington General Service (WGS).

In addition to the single management position, there are three first-line supervisory positions in the Elevator Program, two Compliance Specialist Supervisors and one Secretary Supervisor. The Secretary Supervisor position requires office and computer experience, while the other positions require extensive experience working in the elevator industry. Collectively, these positions along with one of the Technical Specialists, direct all programmatic, fiduciary, and organizational aspects of the elevator program.

None of the positions require any experience or training in business, human resource management, organizational management, communications, marketing, finance, information technology systems, rulemaking, public policy, stakeholder management, or public administration. Nevertheless, these positions are expected to efficiently manage and effectively lead the strategic, operational, and tactical activities that occur for this complex, regulatory program.

Inspectors are told not to contact each other.

Inspectors report that they have been directed not to contact other inspectors to ask questions about a process, procedure, or applicable standard or to ask for advice about conditions found during a specific inspection. Inspectors have been directed to contact their supervisor or one of the technical specialists in the Central Office to obtain advice or ask questions. Questions of a programmatic nature posed to the supervisors are usually referred to the technical specialists to respond. Accessing the technical specialists and getting a response while conducting an inspection can be difficult for the inspectors and can delay the completion of an inspection. When the technical specialists are unavailable, the inspectors resort to contacting each other for advice or answers.

Inspectors expressed confusion about who to contact with questions related to their work.

Staff expressed confusion about who to contact with questions related to their work. Depending on the question, the inspectors may contact another inspector, their supervisor, one of the technical specialists, or the Chief Elevator Inspector to obtain an answer.

Both of the Compliance Specialist Supervisors spend the majority of their time performing non-technical, management duties, and have little time to actually supervise the inspectors, address any inconsistencies in the way inspections are being conducted, or increase the quality of the work being produced. The supervisors prioritize the work to be done

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differently and have different performance standards and expectations for their staff. Directly supervising that number of employees is detrimental to the program, to the inspectors, and to the supervisors themselves given the condition of their systems, tools, and processes used to manage the program.

Staff in the Elevator Program report that they use the support services provided to all of the programs within L&I, such as accounting, budgeting, personnel, technology, rulemaking, risk management, internal controls, stakeholder relations, and communications. Program staff reported that support services staff in the agency are not always available in the time frame or quantity needed by the Elevator Program, which causes delays in fixing a problem or finding reasonable solutions instead of proceeding with the advice or counsel of staff with expertise needed by the program. Some of the examples cited by program staff include the limited availability of information technology staff to address the work needed within the CMS system, the lack of help to address the immediate need for more inspection staff from human resource specialists, and the consultative services from rulemaking specialists to help improve the rulemaking process within the program.

The operations manual has been updated, but has not been approved.

The Elevator Program has an operations manual for inspectors to use, but it is out of date. Revisions to the operations manual were made and provided to the Chief Elevator Inspector in 2014; however, it has not yet been approved. It is unknown when the revised operations manual will be distributed to inspectors. In the meantime, inspectors have outdated instructions or no instructions to follow as they conduct inspections. This lack of written guidance may be contributing to the concerns expressed by stakeholders about inconsistencies between inspectors or technical specialists and the concerns expressed by inspectors about the direction they receive when asking questions of supervisors or technical specialists.

Many projects are initiated, but few are finished and have identifiable results that are shared with the staff.

The Elevator Program has a history of starting projects and not finishing them, leaving the staff to feel that their work on projects rarely produces tangible results although it takes significant time. Updating the operations manual, which is noted above, is an example of an unfinished project. Work on the project was started by staff assigned to work together reviewing and updating the old operations manual. Significant work and effort was expended on this project. The updated manual was provided to the Chief Elevator Inspector for approval, but remains unapproved. The operations manual project remains unfinished.

Similarly, many other projects are started, but fail to achieve any results or are formally finished. At least a year ago, the Elevator Program established a project to identify all of its active projects, determine the status of each project, and identify what action should be taken next for

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Staff meetings to discuss business processes, changing standards, new technology, or emerging issues have been suspended.

each project. Known as the project on projects, there were reportedly more than two dozen projects identified in various states occurring within the program. We were not able to verify the results as the materials were not provided for review.

Staff within the Elevator Program report that regular meetings held with the inspectors to discuss inspection processes, interpretation of codes, and emerging industry issues were suspended about two years ago. The meetings were held in western Washington and required many inspectors to travel long distances to attend during regular work hours, and reportedly caused conflict when inspectors asked questions that managers were unable to answer. Meetings that could address inconsistencies in inspection processes would benefit the program and every inspector. The program has had no experience using readily available technology tools to conduct meetings.

Regular meetings held with inspectors with their supervisor were also suspended. Instead, the unit supervisors hold one-on-one meetings with inspectors or within a region with a handful of inspectors. Inspectors usually work independently conducting inspections and are geographically disbursed across the state with small groups working out of metropolitan offices. In some cases, an inspector may be the only one located in that geographic area and have very little interaction with other inspectors. Supervisors report they do not have the authority to authorize overtime for the inspectors, so they avoid holding group meetings to discuss inconsistencies or quality or work that would require travel or take inspectors away from conducting as many inspections as possible during regular work hours.

Absent clear direction from the program, inspectors seek answers to questions from each other.

Inspectors report that they receive conflicting direction about how their work should be accomplished, including what work has priority and how to report their findings, and have limited ways to bring these issues up and obtain clarification.

Inspectors report they have experienced unexpected reactions from supervisors, technical specialists, and the Chief Elevator Inspector when they raise issues that need clarification or point out inconsistent direction. Direction is often provided verbally and sometimes is followed by an email confirming the direction from the supervisor, technical specialist, or Chief Elevator Inspector. It is a best practice to have written direction of some sort to avoid misunderstanding what they are being instructed to do. This may be contributing to the inconsistencies and lack of quality in work products.

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The program does not provide or support technical training to inspectors on a regular basis.

Although program positions require knowledge about evolving technology in the elevator industry, the program lacks an on-the-job training plan for inspectors and elevator technical specialists, potentially posing a risk to public safety. Stakeholders and inspectors report concerns with the elimination of ongoing technical training and the lack of support to attend technical training requested by staff. As mentioned in conclusion #2, support for QEI certification and training was eliminated a few years ago. At least with this support in place, some inspectors were able to learn about new and emerging technologies and gave them an opportunity to network with other inspectors to discuss issues and challenges.

Inspectors are required to spend two hours a week independently reading department policies or doing code review. Inspectors are also required to spend a week each year to become more familiar with the processes and work performed in central office.

The program does not provide easy tools for customers.

Commonly used tools are not available for customers to use to do business with the Elevator Program. Stakeholders report difficulty being able to submit information, like an address change or application for a permit, to the program by email or on the website, making communication with the program more difficult than it needs to be.

Dissatisfaction with the working environment exists among inspectors.

Inspectors report serious dissatisfaction with the working environment in the Elevator Program. Inspectors cite many conditions in the staff interviews that contribute to their dissatisfaction including:

-) the heavy workload and stress associated with the backlog of inspections that threaten public safety.
-) the low salary level provided for these highly skilled, specialty trades positions.
-) the inability to attract and retain well qualified candidates to fill vacant inspector positions.
-) the inability to offer comparable salary levels provided by other organizations in the state.
-) the inequitable application of workload standards by supervisors.
-) the lack of training needed to understand evolving technology within the industry.
-) the lack of useful automated tools that support program business needs.,
-) the inconsistent direction, usually provided verbally, about priorities or interpretation of standards.
-) the inequitable use of flex time.

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-) the inflexible approach to work locations.
-) the lack of executive management support.
-) the lack of written procedures or direction to follow.
-) the lack of answers to operational questions.
-) the lack of respect for inspectors' expertise.
-) the time associated with working in the central office for a week when there is a backlog of inspections to be performed.
-) the inability to perform light-duty assignments at their regular work location.

RESOURCES

In addition to limited capacity and use of common management practices, the Elevator Program is also constrained by its available resources.

Inspectors carry binders full of regulations needed to conduct inspections.

Inspectors maintain binders full of regulations needed as reference materials to conduct inspections because conveyances are subject to the regulations that were in effect on their date of installation. As regulations continue to evolve, the amount of reference materials needed by inspectors continues to grow. It is difficult for inspectors to maintain these paper-based records and keep them well-organized in the trunk or back seat of their vehicles. Some reference materials are available online and can be accessed electronically by inspectors only when they are at their desks. This method of providing basic work information is inefficient and time-consuming for the inspectors.

Inspectors are issued incompatible equipment that does not meet their business needs.

The Elevator Program does not have a standard list of electronic equipment that is issued to inspectors to conduct their assignments. All inspectors have a desktop computer that is on the department-wide network. Most inspectors also have laptop computers that they can take with them when away from the office. A few have requested laptop computers, but haven't been given one. Inspectors have more than one type of smart phone. Some of the phones are Apple products and do not work seamlessly with the Microsoft Office products on their desktops, specifically with their schedule on Outlook. Changes made on one device are not reliably recorded on another device. This incompatibility causes not only an inconvenience for inspectors when their schedule is shown inconsistently on their desktop and on their smart phone, but also creates additional work for the inspectors and adds unnecessary frustration.

Inspectors lack training on electronic equipment.

New electronic equipment is issued to the inspectors without an explanation or training session on how the equipment works. This lack of training requires each of the inspectors to learn how to use the equipment on their own. Some inspectors quickly find on-line explanations for how to use the generic version of the equipment.

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Lack of a dedicated fund contributes to program deficiencies.

However, the equipment is usually configured by department staff and the generic settings often have been changed. Confusion about how to use the equipment creates inefficiencies and frustration for the inspectors.

Like other programs that use general fund state dollars, the program reports that general fund state budget reductions have been imposed on the program numerous times over the last 10 years as state revenues fluctuated and mandated services increased. The program implemented budget reductions while workloads increased, eliminating much needed investments in technology and analytical capability that could help streamline business processes and offset the growing workload. The erosion of adequate funding to support this complex program has contributed to the challenging conditions that exist in the program today.

The department requested establishment of a dedicated fund in the last biennium that would fund the Elevator Program rather than using general fund state resources. Like other programs that use a dedicated fund, the change would allow the Elevator Program to more easily expand or contract based on the mandated workload and the rapidly growing number of conveyances in the state. The change was not approved by the legislature, but has been resubmitted as part of the Governor's Request Budget for next biennium.

Moving to a dedicated fund would be an advantage for the Elevator Program.

There are several advantages available to the Elevator Program from transitioning from the general fund to a dedicated fund. Stakeholders and staff who participated in the interviews, survey, and forums also suggested that the Elevator Program be funded through a dedicated fund. Even though the dedicated fund would require a legislative appropriation, the use of a dedicated fund would lessen the impact of:

-) The ever-increasing demand for general fund state dollars primarily generated primarily by the state sales tax.
-) The inability of the program to compete with the priorities to fully fund education and provide basic health services.
-) The inability to use fees collected by the Elevator Program to support program operations. (Fees generated by the program are returned to the general fund, and do not increase the spending authority given to the Elevator Program without seeking a general fund appropriation.)

A request for inspection of the conveyances from a building owner is often received after construction is completed in a new building, asking to have the inspection conducted as quickly as possible in order to open for business. While the owner may offer to pay an additional fee, the program would not receive the revenue to cover the cost. The program

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would be covering the cost of the specifically requested inspection with the funding provided for routine inspections and any additional fee would simply be credited to the general fund.

Additionally, because of the backlog in annual inspections, delaying an inspection that is already scheduled with another building owner is rarely a viable option. The program tries to provide requested services to customers, whenever possible, knowing that it takes them away from scheduled annual inspections and reduces their remaining budget. Having a dedicated fund source could eliminate some of the concerns currently associated with the use of general fund state resources.

Program deficiencies have resulted in the Elevator Program having a poor reputation as an employer.

Stakeholders and staff report that the Elevator Program has a poor reputation in the industry as an employer based on the low salary levels, heavy workloads, and general work environment. Without addressing some of these difficult issues, the program will continue to struggle to fill their many long-vacant, inspector positions.

Recommendations

We offer the following recommendations to improve program outcomes, address current issues, and effectively manage program resources.

- 10-1. Develop, implement, and communicate the Elevator Program business plan including articulating the mission, goals, and performance measures.
 -) Include an agreed-upon, acceptable level of program risk from the department and stakeholders. (See Recommendation 7-2.)
 -) Address the inherent tension that exists when balancing regulatory activities, excessive customer compliance costs, and the impact on public safety.
 -) Ensure there is adequate capacity and expertise to effectively manage program, administrative, and regulatory activities.
 -) Establish, monitor, and report on performance measures at the strategic, tactical, and operational level to increase performance and accountability. (See Recommendation 9-3.)
 -) Provide sufficient training to staff to meet expectations.
- 10-2. Update the organizational structure to position the program for success and infuse management expertise with well-defined roles and responsibilities and proven skills and abilities. A sample of an updated organizational structure for the program is in Appendix A-4.

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- 10-3. Improve the timeliness, quality, and consistency of the inspections conducted by establishing a technical and regulatory management position within the program with responsibility to:
-) Lead the implementation of a business plan for the program, the implementation of updated policies, the implementation of the communications and stakeholder plan, and the implementation of the performance management plan.
 -) As part of the performance management plan, establish inspection priorities, eliminate conflicting direction to inspectors, improve timeliness of inspections, and eliminate the inspection backlog.
 -) Follow the rulemaking strategy for the program and manage the rulemaking activities.
 -) Approve and maintain the revised Operations Manual.
 -) Review the Operations Manual with staff to explain how it applies to inspections and any changes to expectations regarding inspections.
 -) Communicate with owners and mechanics what to expect from an inspection following revision of the Operations Manual.
 -) Lead the implementation of the revised flex time policy that is equitably applied to all staff and shifts interest from where the work is performed to how well the work is performed.
 -) Suspend the requirement to have the inspectors work in the central office one week a year.
 -) Schedule and conduct regular meetings for inspectors and technical specialists to improve the consistency and quality of permitting and inspections by listening to concerns, setting priorities, discussing issues, responding to concerns expressed by staff, and answering questions raised by staff.
 -) With the assistance of Human Resources, develop and document appropriate, locally-based, light duty assignments.
- 10-4. Increase management expertise and capability by establishing a senior management position within the program with responsibility to:
-) Lead the development of a business plan for the program, a policy on policies, communications and stakeholder plan, and performance management plan. (See related recommendations 7-2 and 10-1.)

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-) Lead the development of a technology catch-up plan to improve the use of technology to support current business needs and improve the quality and consistency of inspections.
 -) Lead the development of a policy and procedure on flex-time, consistent with department policy, the Governor's directives, and expansion of mobile computing.
 -) Lead the development and implementation of the rulemaking strategy in close coordination with the other managers and the technical specialists.
 -) Lead the procurement processes to obtain the short and long-term business system solutions to replace CRS.
 -) Provide analytical expertise within the program to analyze issues, identify trends, and develop data driven options for decision makers to consider.
- 10-5. Increase technology expertise and capability by establishing a technology specialist position within the program with responsibility to:
-) Implement the technology catch-up plan to quickly improve the use of technology to support current business needs, improve the inspection process, provide electronic access to all applicable inspection standards and current forms on the desktop and in the field, obtain tools to allow for electronic submission of plans and permits, support implementation any new business systems procured for the Elevator Program, standardize the equipment issued to program staff while eliminating any incompatibilities between tools, provide or coordinate training on all equipment to ensure staff understand how to use its functionality, and introduce technologies already used within L&I, such as webinars for statewide meetings and use of printers in state vehicles, to quickly improve efficiencies within the program.
- 10-6. Establish and implement a training curriculum for inspectors.
-) Develop definitions for inspectors to use the same terminology for common violations, and Plain Talk inspection reports. (See Recommendation 11-3.)
- 10-7. Adopt QEI certification requirements and develop and implement a plan to have inspectors, leads, and technical specialists, supervisors, regulatory manager, and Chief Inspector certified, and incorporate into their individual PDPs.

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- 10-8. Provide all staff training to build commonly needed skills in customer service, interpersonal communication, leadership development, managing change, building teams, and meeting facilitation.

Inspecting the machine room in high rise building with multiple conveyances.



Inspecting the top of the elevator.



BUSINESS RELATIONSHIPS

Conclusion 11: The Elevator Program lacks strong business relationships, both externally and internally.

Customers and stakeholders want to see improvements in leadership/culture and customer service within the program.

The issues discussed in previous sections of the report indicate strained business relationships between the program and its customers, stakeholders, and staff. Further evidence of the quality of the program's business relationships is seen in information from the customer and stakeholder survey and forums.

The themes of leadership, culture, customer service, and communication within the program were prevalent throughout the survey and forums, whether customers and stakeholders were recommending how to improve their business relationships, identifying the program's biggest challenges and opportunities, or suggesting one change that would improve the program.

In the customer and stakeholder survey, the majority of participants said that changes in leadership/culture and customer service within the program would most improve their relationship with the Elevator Program. Participants said they wanted a change in the "tone at the top," which they felt was not inclusive or willing to listen to their questions and concerns about the program. They also wanted to see improvements in customer service, mainly around increased communication within the program.

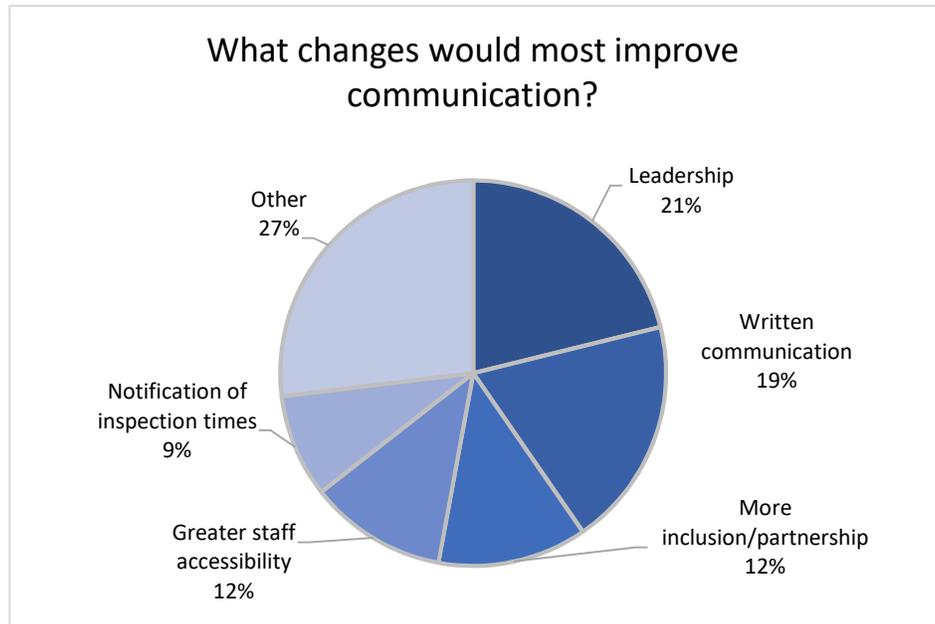
Likewise, the challenge cited most frequently in the stakeholder forums related to program leadership, while the opportunity cited most often was better stakeholder management within the program.

When asked what customers and stakeholders would suggest if the Elevator Program could make just one change, the most common survey answers involved changes in culture or leadership and better communication and partnership within the program.

The same theme of the program's leadership and culture emerged when customers and stakeholders listed changes that would most improve communication:

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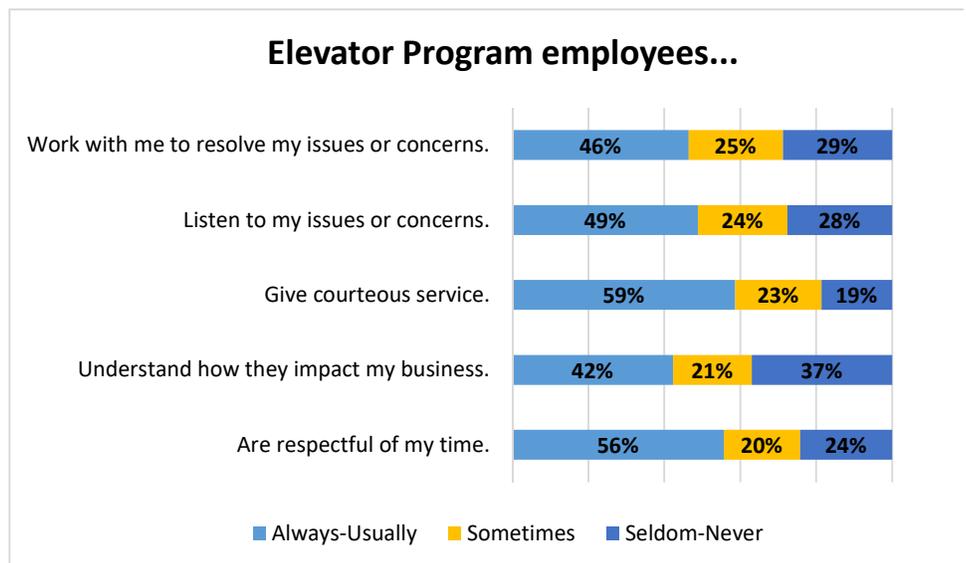
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Source: Customer and stakeholder survey. 104 respondents answered this open-ended question.

The Elevator Program’s level of customer service does not meet the department’s or program’s published standards or expectations.

Less than half of stakeholders surveyed said that Elevator Program staff consistently listen to their issues or concerns, work with them to resolve their issues or concerns, or understand how they impact the respondent’s business. A slightly larger percentage (nearly 60 percent) said that staff are always or usually courteous and respectful of their time.

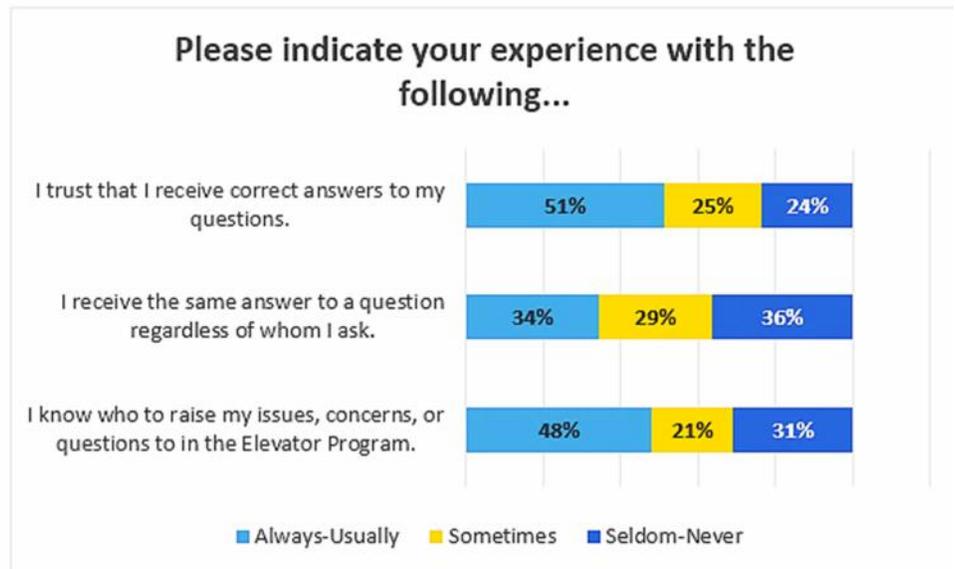


Source: Customer and stakeholder survey. Between 305 and 322 participants responded to the questions above. Questions modified in report to accommodate formatting.

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Half of the survey respondents said they always or usually trust they receive correct answers, but only about one-third felt they received consistent answers regardless of who they ask. Nearly half said they knew where to raise their issues, concerns, or questions.



Source: Customer and stakeholder survey. 323 participants answered the first question, 274 answered the second, and 329 answered the last questions.

In addition to leadership, respondents said that improved written documentation would most improve communication. Many respondents complained about inspection reports that were not in plain language they could understand, or that they only received answers to their questions verbally and not in writing.

Fifty-seven survey respondents offered comments following the specific questions about Elevator Program staff:

- ⌋ Thirty respondents (53 percent) complained about the program's leadership approach and lack of customer service focus. For example:
 - Comment: "Once again, a culture of cooperation and collaboration, instead of being intolerant and using position power would be extremely helpful."
 - Comment: "When decisions need to be made by 'upper level, elevator program employees' there is never anything documented in writing or in an e-mail. Way too much confusion on what decisions are being made."
- ⌋ Fourteen respondents (25 percent) said they had had little to no interaction with Elevator Program staff. Of these, the majority

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were building owners or property managers with less than two years of experience with the Elevator Program.

- J Ten respondents (18 percent) spoke positively about the program, citing specific positions including some inspectors, technical specialists, customer service specialists, and office assistants for being helpful and courteous.

Some stakeholders who questioned decisions within the program did not receive help in resolving issues.

Some stakeholders who participated in the forums perceived certain actions as retaliatory from the program after voicing their disagreement with something the program had done. These stakeholders expressed their hesitancy in participating in the forum because it could adversely impact their business and had to be reassured that it was safe to participate in the study.

As an example, stakeholders interpreted certain actions regarding permits, applications, or inquiries as retaliatory. Stakeholders often had difficulty getting questions answered about the interpretation of a standard or getting clarification of an issue. As issues were escalated, stakeholders tried unsuccessfully to make contact with program decision makers and reported that they encountered increased tension and anger. These stakeholders perceived the non-responsiveness as retaliatory and believed these type of actions would increase if they continued to point out gaps, discrepancies, or conflicts in program information.

One stakeholder described repeated phone calls made to the Chief Elevator Inspector over a six-week period to follow-up on resolving an inspection issue. The stakeholder didn't receive any communication back to acknowledge the phone call or a response to resolve the issue but continued to receive additional fines every 90 days. Similar experiences were shared by many participants with enforcement questions who were trying to resolve open issues, obtaining little if any response, and creating growing dissatisfaction and distrust in the program.

Some staff who questioned program decisions perceived that changes were made to their working conditions.

Some staff described subtle, and occasionally overt, retaliatory actions against customers and inspectors that they had observed or experienced themselves within the program. These actions often occurred after raising issues about the interpretation of standards to decision makers within the program. Sometimes staff members perceived they were publicly rebuked in front of other staff or customers. Sometimes staff perceived angry outbursts by decision makers occurred with a verbal, personal attack. Sometimes staff who questioned decisions or direction within the program believed that changes were made in their working conditions such as denied career development opportunities, changes in assignments and flex time schedules, and limited access to basic equipment and tools.

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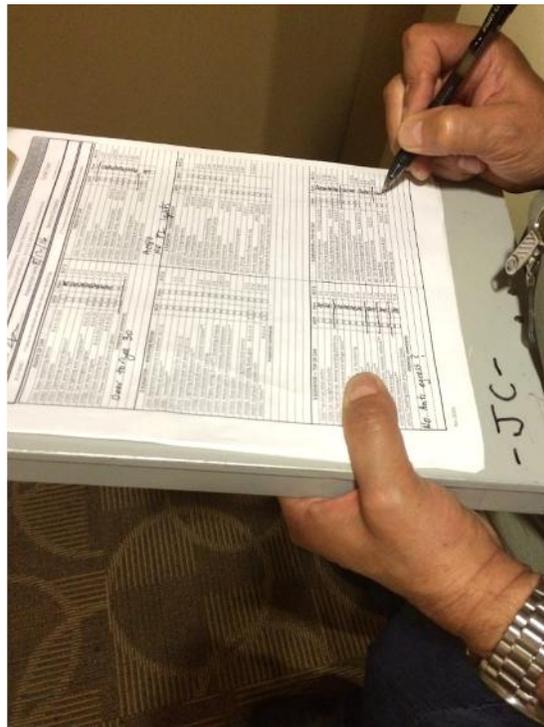
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Recommendations

In addition to other recommendations throughout the report that address customer and stakeholder relationships:

- 11-1. Assess how well individual Elevator Program staff meet expectations for core competencies and customer rights.
 - J Develop a plan to address any gaps for individual staff in their professional development plan and evaluate their progress against that plan at least annually.
- 11-2. Develop a customer service policy, tool, and performance measures to track the level of customer satisfaction and report on progress periodically with executive management.
- 11-3. Improve inspection reports for customer use by ensuring they are written in plain language.
- 11-4. With the help of Human Resources, involve all program staff in developing a plan to change the culture within the program to increase respect for customers and staff and to eliminate any real or perceived retaliation.

Inspectors record the results on the inspection checklist for each conveyance.



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Scope and Methodology

The scope of this performance study included three key areas: the rulemaking process; the quality and consistency of inspections and workload across the state; and the effectiveness of business relationships between L&I, the large and small building owners/property owners, the elevator companies, the International Union of Elevator Contractors (IUEC Local 19), and the general contractors/property developers.

To conduct this review, we:

-) Researched related laws, rules, standards, and best and leading Elevator Program practices in other states and authorities with jurisdiction.
-) Reviewed and assessed related laws, rules, code, policies, and program practices in Washington State.
-) Conducted individual interviews and stakeholder forums with 94 Elevator Program staff, department leadership, and external stakeholders.
-) Conducted interview with a representative from IUEC Local 19 who represent hundreds of elevator mechanics in the state.
-) Held three structured forums for customers and stakeholders: two for building owners and one for elevator companies, including non-union elevator mechanics.
-) Led sessions to develop environmental map of business relationships between the Elevator Program, customers, and stakeholders.
-) Distributed surveys to all customers and stakeholders in the Elevator Program's Building Owners and Managers Association list, CMS database, and listserv. (See Appendix A-5 for detailed survey methodology.)
-) Reviewed and analyzed department and program data, resources, budget, staffing levels, performance measures, salaries, information systems, program operations, processes, and management controls.
-) Documented and assessed the process flows for rulemaking, inspections, and accident investigations.
-) Observed and assessed operational practices of staff during the regular performance of duties, including inspections.
-) Assessed any differences or gaps between best, leading, or expected practices and procedures and observed practices and procedures.
-) Analyzed options for efficiencies, process improvements, and addressing customer costs.

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Appendices

APPENDIX A-1 – State Comparison

State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
Alabama	ASME A17.1 (2013) ASME A17.7 (2007)	Auto		X	X	X	X	QEI
Alaska	ASME A17.1 (2013) ASME A17.7 (2007)	Changes made	X	considering		X	X	QEI
Arkansas	ASME A17.1 (2007) ASME A17.7 (2007)	–	X	X	X	X	X	QEI
Arizona	ASME A17.1 (2007)	–	X	X			X	QEI
California	ASME A17.1 (2004)	–	X	X	X		X	CCCI
Colorado	ASME A17.1 (2013)	By reference		X	X	X	X	QEI

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State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
	ASME A17.7 (2007)							
Connecticut	ASME A17.1 (1996) w/ 1997 and 1998 addenda	–	X		X		X	
Delaware	No state building code or elevator code	–						
Florida	ASME A17.1 (2007) ASME A17.7 (2007)	–	X	X	X	X	X	QEI
Georgia	ASME A17.1 (2013) ASME A17.7 (2007)	Changes made	X	X	X	X	X	QEI
Hawaii	ASME A17.1 (2010) ASME A17.7 (2007)	–	X		X	X	X	QEI
Idaho	ASME A17.1 (2010) ASME A17.7 (2007)	–	X		X	X		QEI

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State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
Illinois	ASME A17.1 (2013) ASME A17.7 (2007)	Changes made	X	X	X	X	X	QEI
Indiana	ASME A17.1 (2007) ASME A17.7 (2007)	–	X		X	X	X	QEI
Iowa	ASME A17.1 (2013) ASME A17.7 (2007)	By reference	X	X			X	CEI or CEIS, plus state exam
Kansas	No state program							
Kentucky	ASME A17.1 (2007) ASME A17.7 (2007)	–	X		X		X	Certified
Louisiana	No state program							
Maine	ASME A17.1 (2013) ASME A17.7 (excluded)	Changes made	X	X	X	X		QEI

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State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
Maryland	ASME A17.1 (2013) ASME A17.7 (2007)	Auto-adopt	X	X	X		X	QEI
Massachusetts	ASME A17.1 (2004)	Auto-adopt	X		X		X	
Michigan	ASME A17.1 (2010) ASME A17.7 (2007)	–	X		X		X	
Minnesota	ASME A17.1 (2010) ASME A17.7 (2007)	–	X		X		X	QEI
Mississippi	ASME A17.1 (2013) ASME A17.7 (2007)	Auto-adopt	X	X	X	X	X	QEI
Missouri	ASME A17.1 (2004)	–	X	X	X	X	X	QEI
Montana	ASME A17.1 (2004)	–	X		X	X	X	
Nebraska	ASME A17.1 (2013)	Changes made	X		X	X	X	

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Elevator Program Performance Study

State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
	ASME A17.7 (2007)							
Nevada	ASME A17.1 (2013) ASME A17.7 (2007)	–	X	X	X		X	QEI
New Hampshire	ASME A17.1 (2013) ASME A17.7 (2007)	Auto-adopt	X	X	X	X		
New Jersey	ASME A17.1 (2013)	By reference	X	X	Yes, not enforced yet			
New Mexico	No state program							
New York	ASME A17.1 (2007) ASME A17.7 (2007)	–	?	n/a	No			
North Carolina	ASME A17.1 (2013) ASME A17.7 (2007)	Auto-adopt	X		No			QEI
North Dakota	No state program							

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State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
Ohio	ASME A17.1 (2010) ASME A17.7 (2007)	–	X		No			QEI
Oklahoma	ASME A17.1 (2013) ASME A17.7 (2007)	Auto-adopt	X	X	X	X	X	QEI
Oregon	ASME A17.1 (2010) ASME A17.7 (2007)	–	X	allowed	X	X	X	
Pennsylvania	ASME A17.1 (2000) ASME A17.1a (2002)	–	X	X	No			
Rhode Island	ASME A17.1 (2013) ASME A17.7 (2007)	Changes made	X	X	X		X	QEI
South Carolina	ASME A17.1 (2013) ASME A17.7 (2007)	Changes made	X	X	X		X	

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Elevator Program Performance Study

State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
South Dakota	No state program							
Tennessee	ASME A17.1 (2010) ASME A17.7 (2007)	–	X		No			QEI
Texas	ASME A17.1 (2007)	–		X			X	QEI
Utah	ASME A17.1 (2013) ASME A17.7 (2007)	Changes made			X		X	QEI
Vermont	ASME A17.1 (2013)	Changes made		X	X	X		QEI
Virginia	ASME A17.1 (2010) ASME A17.7 (2007)	–	X	n/a	X	X	X	QEI or ICC
Washington	ASME A17.1 (2010) ASME A17.7 (application limited to variance)	–	X		X		X	

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State	Elevator Codes Used ¹	If Using 2013, How Adopted?	State Inspectors?	Third Party Inspectors?	Licensing Required?			Certification requirement?
					Mechanics	Inspectors	Contractors	
West Virginia	ASME A17.1 (2013) ASME A17.7 (2007)	Changes made		X (2004)	X	X	X	
Wisconsin	ASME A17.1 (2013) ASME A17.7 (2007)	By reference	X	X	X	X	X	
Wyoming	No state program							
Seattle, WA	ASME A17.1 (2010) ASME A17.7 (application limited to variance)	N/A	City employees only; state and CPH's done by state	No	X		X	
Spokane, WA	ASME A17.1 (2010) ASME A17.7 (application limited to variance)	N/A	City employees only; state and county facilities done by state	No	X		X	

Sources: State websites, state laws, National Elevator Industry, Inc., Elevator Industry Work Preservation Fund, interviews.

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¹States may also use other codes such as the National Electric or other ASME code such as A17.3 Safety Code for Existing Elevators and Escalators. This chart only shows ASME A17.1 Safety Code for Elevators and Escalators and ASME A17.7 Performance-Based Safety Code for Elevators and Escalators.

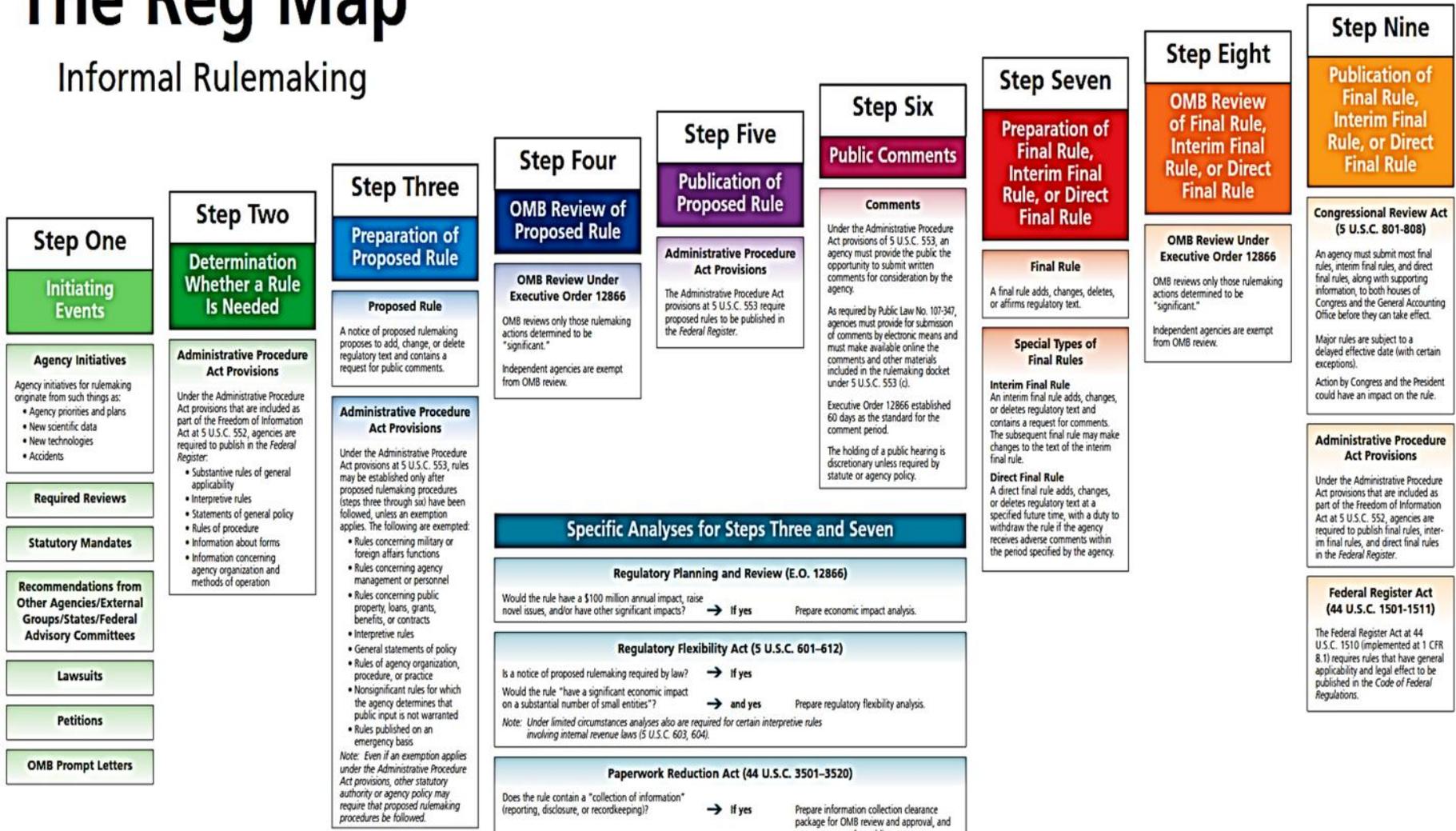
Note: The 2016 ASME Code was released in November 2016. Code information on this chart is current as of August 2016. Other information verified by Elevator Industry Work Preservation Fund between October 2014 and March 2016.

APPENDIX A-2 – Federal and State Rulemaking Processes

Excerpt from the Federal Rulemaking and Regulation Process Map

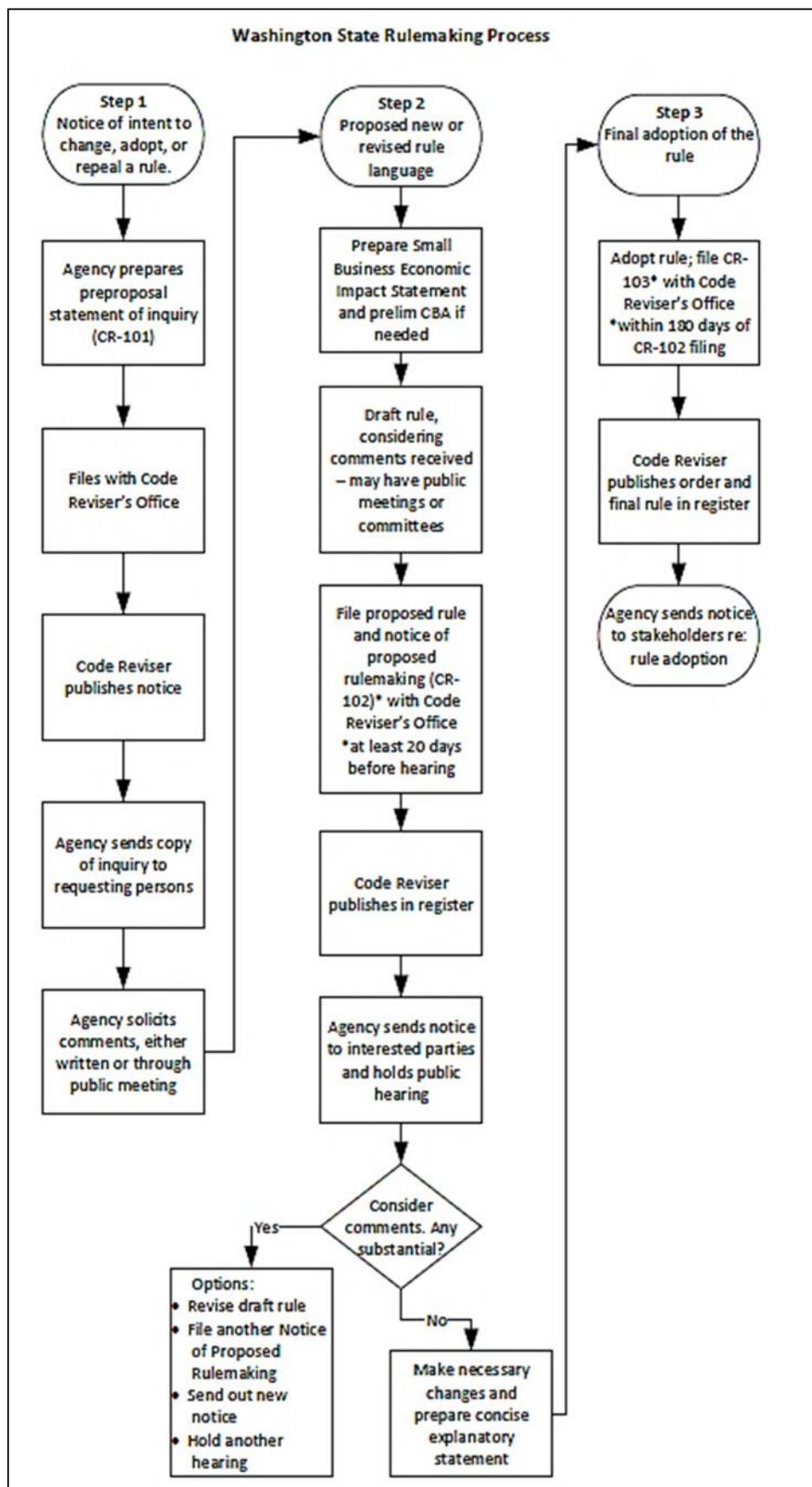
The Reg Map

Informal Rulemaking



Department of Labor & Industries

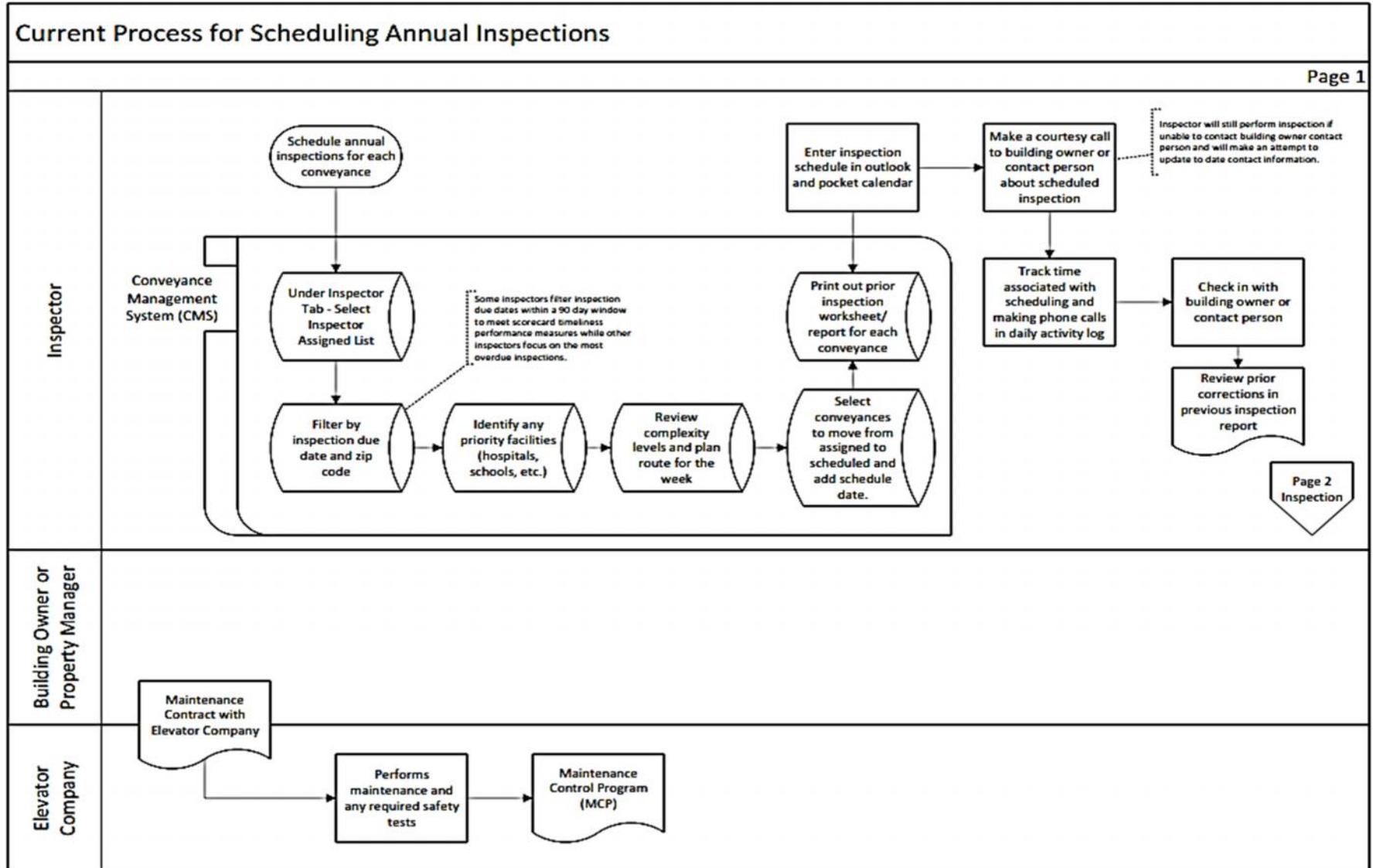
Elevator Program Performance Study



RCW 34.05.328(5)(c) describes the following type of rules per the APA:

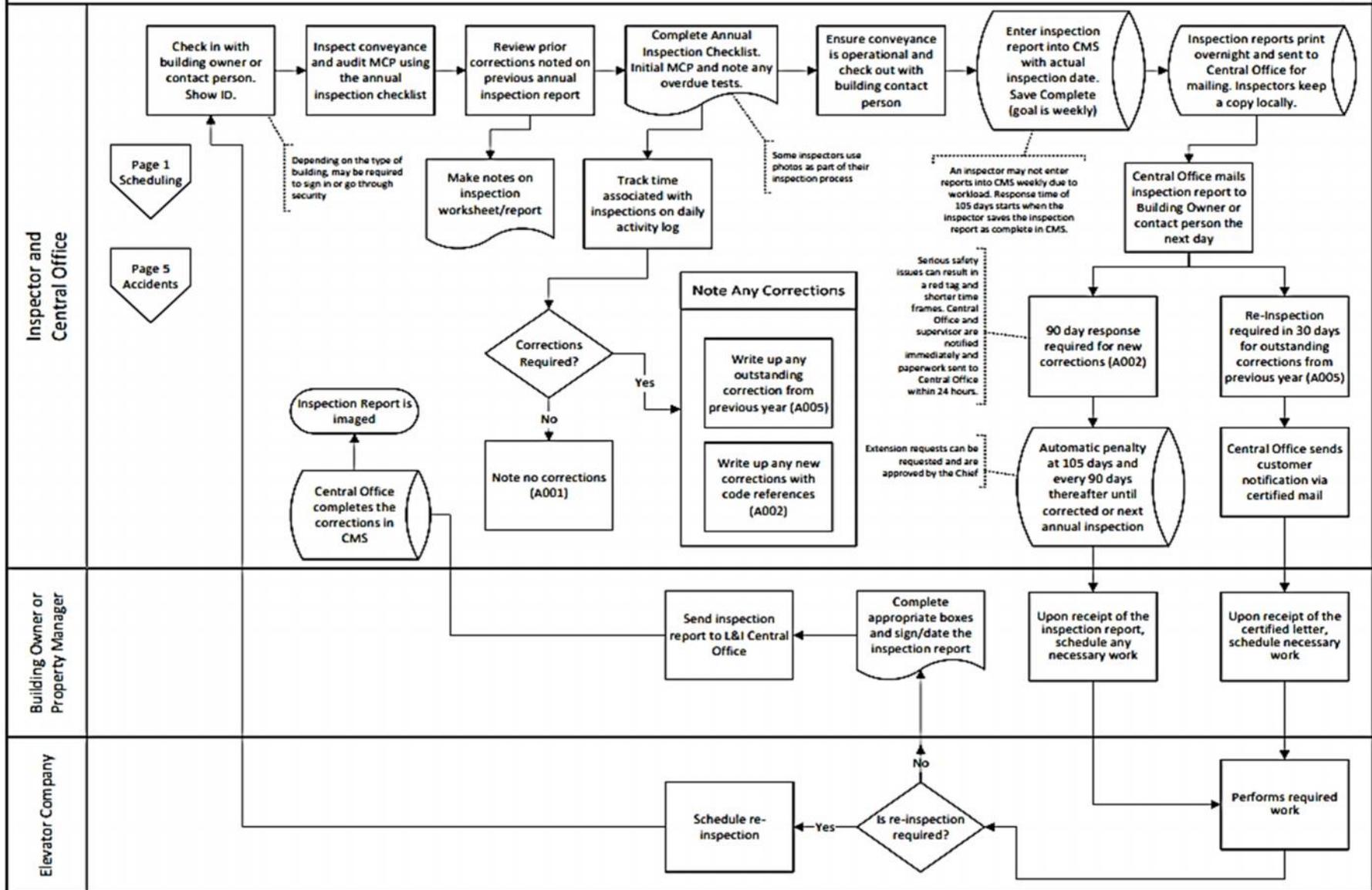
-) A "procedural rule" is a rule that adopts, amends, or repeals (A) any procedure, practice, or requirement relating to any agency hearings; (B) any filing or related process requirement for making application to an agency for a license or permit; or (C) any policy statement pertaining to the consistent internal operations of an agency.
-) An "interpretive rule" is a rule, the violation of which does not subject a person to a penalty or sanction, that sets forth the agency's interpretation of statutory provisions it administers.
-) A "significant legislative rule" is a rule other than a procedural or interpretive rule that (A) adopts substantive provisions of law pursuant to delegated legislative authority, the violation of which subjects a violator of such rule to a penalty or sanction; (B) establishes, alters, or revokes any qualification or standard for the issuance, suspension, or revocation of a license or permit; or (C) adopts a new, or makes significant amendments to, a policy or regulatory program.

APPENDIX A-3 – Elevator Program Inspection Process



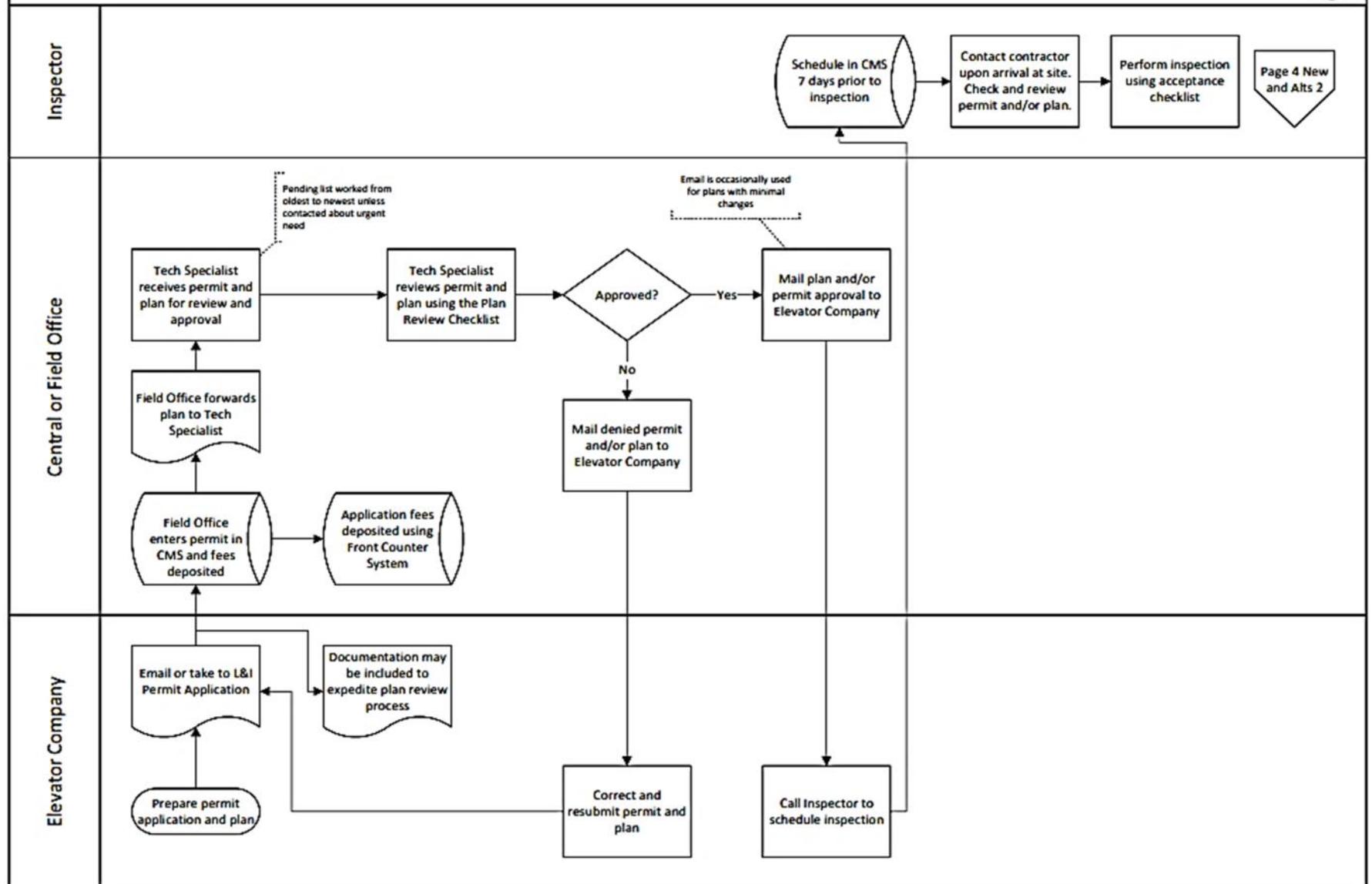
Department of Labor & Industries Elevator Program Performance Study

Current Process for Annual Inspections



Department of Labor & Industries Elevator Program Performance Study

Current Process for New Installations and Modifications/Alterations Permits and Plan Reviews

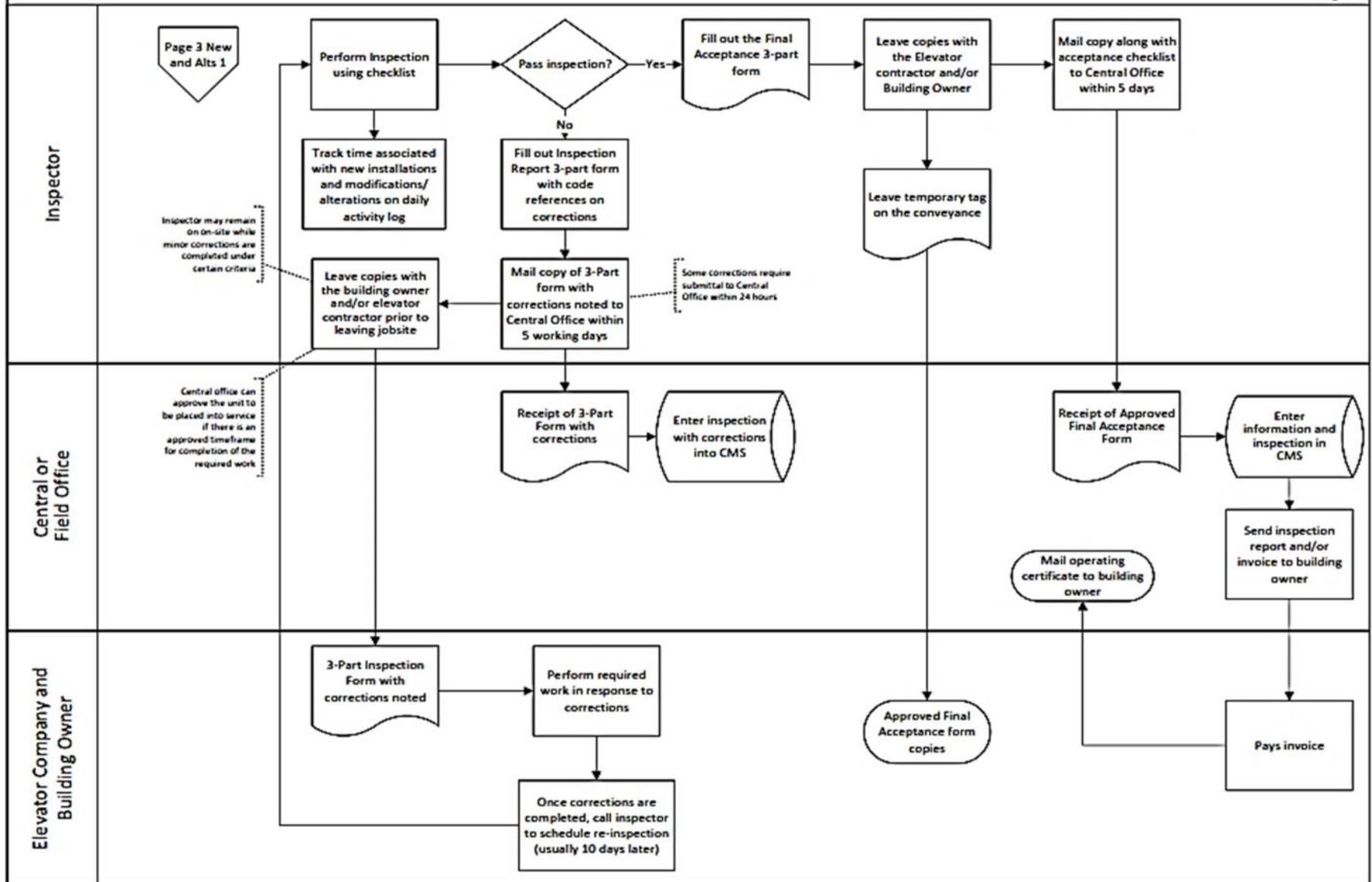


Department of Labor & Industries

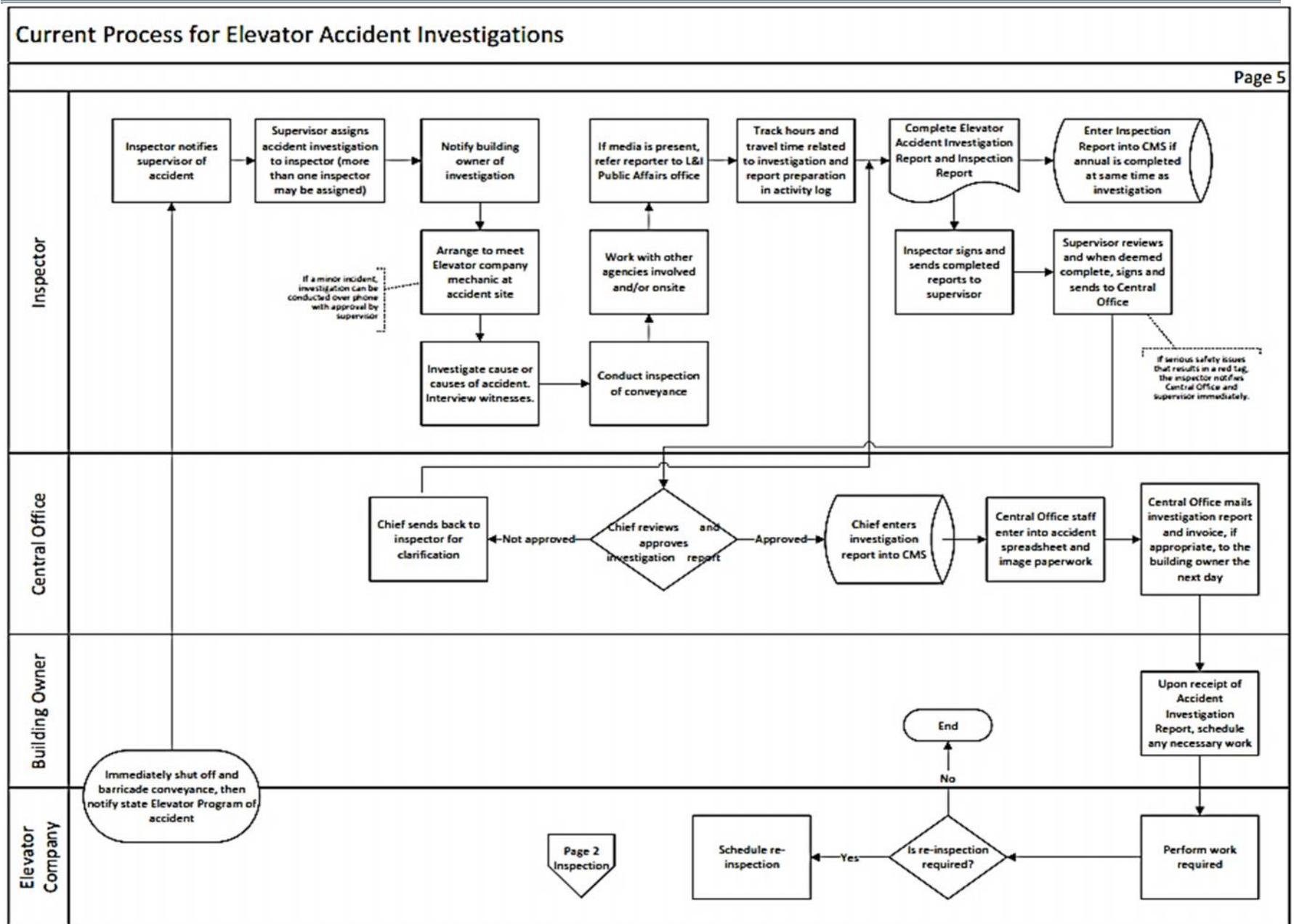
Elevator Program Performance Study

Current Process for New Installations and Modifications/Alterations Inspections

Page 4



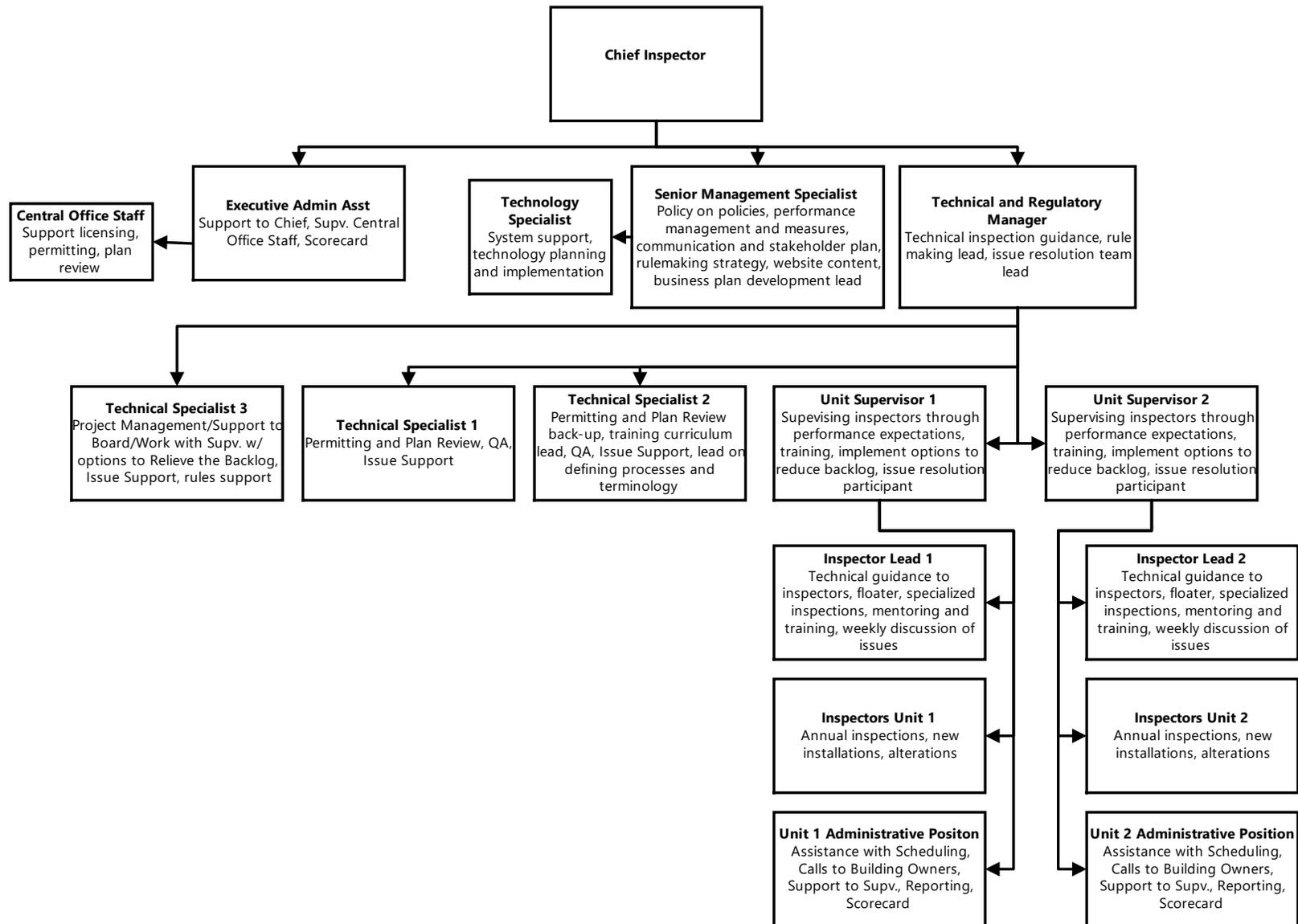
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Elevator Program Performance Study

APPENDIX A-4 – Sample Update Elevator Program Organizational Chart



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APPENDIX A-5 – Customer and Stakeholder Survey Methodology

We used the online survey tool, SurveyMonkey to survey customers and stakeholders of the Washington State Elevator Program. The survey consisted of a mix of 40 matrix and open-ended questions and covered the following major categories as defined the study's scope:

-) Inspections (quality, timeliness, consistency, knowledge).
-) Rulemaking process (involvement and input, notification).
-) Business relationships (trust, respect, courtesy, professionalism).

The survey also contained questions related to containing and managing customer costs and customer priorities for the Elevator Program.

Stakeholders

We tried to reach as many State Elevator Program customers and stakeholders as possible. Major customer and stakeholder categories included:

-) Building owner
-) Property manager
-) General contractor
-) Property developer
-) Elevator mechanics and installers
-) Other elevator employees
-) Industry representatives
-) Other Washington State AHJs (Authorities Having Jurisdiction)

We sent the survey to email addresses obtained from the following sources:

-) Contacts in the Elevator Program's Building Owners and Managers Association (BOMA) list.
-) Contacts in the Elevator Program's CMS database.
-) Contacts in the Elevator Program's listserv.
-) Participants in this study's stakeholder forums (two for building owners and one for elevator companies).

We also sent the survey to the other customers and stakeholders, including:

-) Representative(s) for the International Union of Elevator Constructors (IUEC) Local 19.
-) Representative(s) for the non-unionized elevator contractors.
-) Interested elected officials at the state and local level.

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We emailed the survey directly to all 3,133 customers and stakeholders identified above. Of these surveys, 1,305 (42 percent) were opened and 320 surveys were completed (25 percent of surveys opened, 10 percent of all surveys sent). In addition, we sent the survey link to both unionized and non-unionized elevator contractors to be distributed to their members, and to several customers and stakeholders who contacted us who had heard of the survey, but not received one to complete. Fifty-four people from this group completed the survey, totaling **374 completed surveys** overall.

The total 374 surveys completed equates to survey results with a 95 percent confidence level and a 5 percent margin of error.

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Elevator Program Performance Study

Department Response



STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES

December 28, 2016

Melanie Roberts and Julie Boyer
Stellar Associates
700 Sleater Kinney Road Southeast, Suite B-321
Lacey, Washington 98503

Dear Ms. Roberts and Ms. Boyer,

Thank you for the opportunity to review and respond to Stellar Associates' "Elevator Program Performance Study." We value Stellar Associates' thorough review and analysis of the Elevator Program and appreciate their open communication and willingness to listen to our feedback during the review phase.

The Department of Labor & Industries (L&I) Elevator program works to provide conveyances that are safe and well-maintained for use by the public, workers, and building owners throughout Washington State. The program performs safety inspections, issues annual operating permits, reviews installation applications and plans, inspects and approves alterations to existing elevators, and licenses elevator mechanics.

The objectives of Stellar Associates' review were to conduct a performance audit of L&I's elevator program to identify potential program improvements. The study focused on three key areas of concern: the rule-making process, the quality and consistency of inspections and workload, and the effectiveness of business relationships between L&I, building owners, and elevator companies.

L&I welcomes the opportunity to explore and implement many of the recommendations offered by Stellar Associates. Although there are many areas where the program is currently making improvements, this study provides a valuable stakeholder perspective that will assist us in identifying and prioritizing changes and improvements that are valued by the customers we serve.

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Elevator Program Performance Study

Stellar Associates
December 28, 2016
Page 2

We recognize the high level of trust the public, workers, and building owners place in the Elevator Program to protect the people of Washington from injury, death, or economic loss caused by unsafe conditions in elevators and other lifting devices or conveyances. This study, and other methods available, enable us to continuously improve our ability to work with the elevator industry, elevator mechanics' union, and building owners to provide conveyances that are reasonably safe to persons and property in conformity with the statutes of the state of Washington.

Sincerely,



Ernie LaPalm
Deputy Director
Department of Labor & Industries

Enclosure

cc: Joel Sacks, Director, L&I
Randi Warick, Deputy Director, L&I
Jose Rodriguez, Assistant Director, Field Services and Public Safety, L&I
Tammy Fellin, Legislative Director, L&I

Department of Labor & Industries

Elevator Program Performance Study

AGENCY RESPONSE TO STELLAR ASSOCIATES' PERFORMANCE STUDY ON
DEPARTMENT OF LABOR & INDUSTRIES' ELEVATOR PROGRAM
December 28, 2016

Performance Study Objectives:

The objectives of Stellar Associates' review were to identify potential program improvements. The study focused on three key areas of concern:

- The rule-making process
 - The quality and consistency of inspections and workload
 - The effectiveness of business relationships between L&I, building owners; and elevator companies
-

The information provided below is a summary of the work that has been completed, is in process, or is a plan to improve the Elevator Program. With the recommendations provided in Stellar Associates' study, there is much more work to consider.

Stellar Conclusion 1: The Elevator Program does not follow a consistent rulemaking schedule that aligns with the release of new ASME standards.

AGENCY RESPONSE:

- The Elevator Program will work with Elevator Safety Advisory Committee, the elevator industry, and building owners to develop a code adoption cycle (frequency) and process (steps within a cycle leading up to code adoption) that will be consistent and predictable and significantly increase stakeholder involvement in the process.
-

Stellar Conclusion 2: The Elevator Program does not have formal criteria for amending national standards.

AGENCY RESPONSE:

- The Elevator Program will develop criteria for review of national standards and amending Washington's Elevator Safety Regulations to ensure transparency and common understanding.
- The Elevator Program will continue discussions with representatives of the elevator industry, other stakeholders, and the Elevator Safety Advisory Committee about the code adoption process and identification of areas where Washington's rule deviates from the national standards. Past efforts of the Elevator Safety Advisory Committee code review sub-committee to compare Washington Elevator Safety Regulations and national standards can be used to inform the discussions.
 - A new Elevator Safety Advisory Committee sub-committee is kicking off January 10, 2017 to review Maintenance Control Program (MCP) requirements, identify opportunities for streamlining, and achieving greater consistency across the industry.

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Elevator Program Performance Study

Stellar Conclusion 3: Most customers and stakeholders do not feel that they have sufficient access to the rulemaking process, or that their input is considered.

AGENCY RESPONSE:

- The Elevator Safety Advisory Committee includes building owner representatives, elevator company representatives, and L&I representatives. A set of by-laws for the Elevator Safety Advisory Committee, including purpose, members, responsibilities, and expectations, has been drafted. These by-laws are expected to be adopted and communicated in 2017.
- The Elevator Program will review and implement best practices for more effective and productive advisory committee meetings. Check ins will be done with the committee to evaluate the efforts and make changes as needed.
- The Elevator Program will review and implement best practices for stakeholder communication and involvement in the rulemaking process.
 - There are currently two sub-committees in place as part of the Elevator Safety Advisory Committee. Sub-committees will continue to be used to for rulemaking efforts and to advise on other issues of concern.
 - As discussed below, efforts are underway at an agency wide level to improve rulemaking activities.

Stellar Conclusion 4: Official guidance about rules is not consistently documented or clearly communicated.

AGENCY RESPONSE:

- The Elevator Program has been discussing this issue with representatives from the elevator industry. The program is researching and will adopt best practices.
- The Elevator Program will continue to work with the Elevator Safety Advisory Committee and other stakeholders on developing a process for transparent communication of policies and interpretations.
- Long-standing interpretive and policy statements will be converted into rules.
- Revise the Elevator Program web page to reflect current interpretive and policy statements and information on rules and rule proposals.

Stellar Conclusion 5: The Elevator Program did not adequately document the need for a small business economic impact statement or quantifiable cost-benefit analysis as part of its rulemaking for standards adoption in 2013.

Agency Response:

- At an agency wide level, the department is working on rulemaking process improvements including: updating procedures; training of staff; developing best practices and resources to improve stakeholder notice, participation, and input throughout the rulemaking process; developing tools to document proposed rule changes to assist with the development of cost

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Elevator Program Performance Study

benefit analysis and small business economic statements and improve transparency. These efforts will improve rulemaking activities across all agency programs including the Elevator Program. These efforts are expected to improve compliance with the Administrative Procedures Act and Regulatory Fairness Act requirements across all agency programs including the Elevator Program.

Stellar Conclusion 6: The Elevator Program, customers, and stakeholders share a common goal of elevator public safety.

AGENCY RESPONSE:

- The report had no recommendations for this conclusions. L&I will continue to have a goal of public safety on all conveyances we inspect.

Stellar Conclusion 7: A non-customer centric approach to enforcement and differing expectations have created an antagonistic atmosphere.

AGENCY RESPONSE:

- Stellar Associates worked with staff to develop a stakeholder analysis worksheet as part of their study. This information will assist the program in determining how best to work with all of the customers impacted by their work.
- Review and revise our current penalty process. Explore and implement compliance methods that promote voluntary compliance and/or focus on willful non-compliance.
- Explore providing additional technical or consultative services to our customers within our limited resources.
- Develop a process to assess the risks to safety when making decisions that increase costs to our customers.

Stellar Conclusion 8: The Elevator Program is not meeting the statutory requirement to inspect each conveyance annually.

AGENCY RESPONSE:

- The Elevator Program has prioritized elevators in critical facilities for annual inspections and will continue to do so. Due to the current shortage of resources, the Elevator Program will work closely with its stakeholders to assess and focus resources on the highest safety risks to the public, workers, and building owners.
- A current legislative proposal pending Governor's approval to create a Class B elevator permit which would allow inspector resources to focus on higher priority inspections.
- A current legislative proposal has been approved by the Governor to create a dedicated account to separate program fees from the State General Fund.
- A class and compensation proposal was developed and submitted to State HR and was bargained. This increase in compensation is included in the Governor's budget proposal.

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- The Elevator Program will continue to implement recruitment and retention measures identified in a lean event (Kaizen) in 2015, to include an inspector training program and extensive personnel recruitment.
- Research authority and options to use third party inspectors if resources continue to be insufficient to meet program mandates.

Stellar Conclusion 9: The Elevator Program has insufficient data and information to make informed decisions and to manage workload.

AGENCY RESPONSE:

- A current budget proposal is in place to replace the computer system that tracks permits, inspections and required corrections to enhance support of inspectors. A new system may reduce the administrative workload, produce better reports, and affords the program the opportunity to customize some features and to provide our customers with immediate inspection feedback. This proposal is included in the Governor's budget.

Stellar Conclusion 10: The Elevator Program lacks expertise, skills, and understanding of common management practices and tools as well as adequate resources.

AGENCY RESPONSE:

- In February 2016, an additional Technical Specialist was hired to do outreach, education, and plan review.
- Electronic plan review for elevators has been piloted and deemed successful. Electronic plan review will reduce customer wait times and costs.
- A training program for Elevator Assistants is being developed. Elevator Assistants will be a resource for Elevator Inspectors until they can become fully trained inspectors.
- Current business plans will be updated to reflect the development and implementation of recommendations from the Elevator Program study. Business plans will include updated performance measures on service delivery and customer service.
- Develop an organizational structure that delivers services in a timely, consistent, and cost effective manner. Explore requirements for a Program Manager and/or an Operations Manager to assist the Chief Elevator Inspector in managing the program and delivering services.
- Develop and implement Elevator Inspector training and forums (formal training, meetings, ride-along, etc.) that promote professional and technical development, consistent inspections and services, and improve customer service.

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Stellar Conclusion 11: The Elevator Program lacks strong business relationships, both externally and internally.

AGENCY RESPONSE:

- A Respectful Workplace Initiative began at L&I in 2016. This is an ongoing group that meets to promote agency values that we are a community who cares about each other and the people we serve. These efforts will improve business relationships across all agency programs including the Elevator Program.
- Update business plans and performance measures to include individual inspector professional development plans.