# ERFORMANCE EVALUATION & RESEARCH DIVISION

**Sunrise Report** 

# **Elevator Workers**

The Lack of Regulations of Elevator Workers Poses a Potential Risk to the Public

**Elevator Workers Should be Licensed by the State** 



## JOINT COMMITTEE ON GOVERNMENT OPERATIONS

## Senate House Of Delegates Citizen Members

Edwin J. Bowman Chair Billy Wayne Bailey, Jr. Vice Chair Walt Helmick Donna J. Boley Clark S. Barnes

Jim Morgan Chair Dale Martin Vice Chair Sam J. Argento Ruth Rowan Patti E. Schoen Craig P. Blair Non-Voting Member Scott G. Varner Non-Voting Member Dwight Calhoun John Canfield W. Joseph McCoy Kenneth Queen James Willison

## JOINT COMMITTEE ON GOVERNMENT ORGANIZATION

#### **Senate**

## **House Of Delegates**

Edwin J. Bowman Chair Billy Wayne Bailey, Jr. Vice Chair **Dan Foster** Evan H. Jenkins Jeffrey V. Kessler **Brooks McCabe** Joseph M. Minard Robert H. Plymale **Ron Stollings** Randy White Clark Š. Barnes Donna J. Boley **Dave Sypolt** John Yoder

Jim Morgan
Chair
Dale Martin
Vice Chair
Sam J. Argento
Robert D. Beach
Mike Caputo
Samuel J. Cann, Sr.
Joe Delong
Jeff Eldridge
William G. Hartman
Barbara Hatfield
David Higgins

Tal Hutchins
Harold Michael
Corey L. Palumbo
Daniel Poling
Margaret A. Staggers
Randy Swartzmiller
Joe Talbott
Troy Andes
Ray Canterbury
Daryl E. Cowles
Carol Miller
Thomas Porter
Ruth Rowan
Patti E. Schoen



## OFFICE OF THE LEGISLATIVE AUDITOR

Aaron Allred Legislative Auditor

> John Sylvia Director

Brian Armentrout Research Manager

Megan Kueck Research Analyst

Performance Evaluation and Research Division
Building 1, Room W-314
State Capitol Complex
Charleston, West Virginia 25305
(304) 347-4890

# **Contents**

<b>Executive Sur</b>	mmary	3
Finding 1:	The Lack of Regulations of Elevator Workers Poses a Potential Risk to the Public.	7
Finding 2:	Elevator Workers Should Be Licensed by the State	13
List Of Figur	es	
Figure 1:	Elevator Worker Licensing in the United States	14
Figure 2:	Arkansas Elevator Compliance	17
Figure 3:	West Virginia Elevator Compliance.	18
List Of Appe	ndices	
Appendix A:	Transmittal Letter to Agency.	21
Appendix B:	Agency Response.	23

# **Executive Summary**

# Finding 1: The Lack of Regulations of Elevator Workers Poses a Potential Risk to the Public

The occupational duties of elevator workers are the following: assembling, installing and replacing elevators, escalators, dumbwaiters, moving walkways and similar equipment in new and old buildings.

A group of individuals in conjunction with the National Coordinator for the Elevator Industry Work Preservation Fund has submitted a Sunrise applications to license elevator workers in the state of West Virginia. According to the applicant, the occupational duties of elevator workers are the following: assembling, installing and replacing elevators, escalators, dumbwaiters, moving walkways and similar equipment in new and old buildings.

The applicant believes that the unregulated occupation of elevator workers poses a discernable risk to the public and should be regulated. There have been numerous studies of documented harm to individuals throughout the United States caused by elevators and escalators. The average elevator or escalator accident costs the general public on average \$12,000 in a 2000 survey by the Consumer Product Safety Commission. The death rate among elevator workers is the fifth highest in the construction trade.

Currently, there are no minimum requirements for individuals to work as elevator workers and there are no laws that prevent unskilled laborers from working on elevators in West Virginia.

Over the last five years West Virginia has had one incident of public harm caused by elevators, as reported by the Division of Labor. There have been safety concerns over elevators at the West Virginia Capitol Complex in Building 5 and Building 6. The Division's main concern is that there have been instances of unskilled laborers working on elevators in the state. Currently, there are no minimum requirements for individuals to work as elevator workers and there are no laws that prevent unskilled laborers from working on elevators in West Virginia.

The Division states that there are approximately 60 elevator workers in the state. The Legislative Auditor determines that this number is not sufficient to support a free standing board. Therefore, the Division suggest that licensure come under the auspices of the Division of Labor.

West Virginia has been fortunate to have few injuries and deaths related to elevators and escalators. However, the parties involved support licensure of elevator workers. There is a risk for financial, emotional and physical harm to the public when elevators, escalators and lifts are not properly maintained by individuals with proper experience and knowledge of the equipment.

# Finding 2: Elevator Workers Should be Licensed by the State.

The West Virginia Division of Labor understands the importance of safety within the elevator industry and supports the proposal for elevator workers to be licensed. The Division states that there are approximately 60 elevator workers in the state. The Legislative Auditor determined to the control of the c

mines that this number is not sufficient to support a free standing board. Therefore, the Division suggests that to assume the responsibility of licensure. This process could be implemented cost effectively without the creation of a free standing board.

Currently, there are 25 states that require licensing of elevator workers.

Currently, there are 25 states that require licensing of elevator workers. According to the Elevator Industry Work Preservation Fund the following states license elevator workers: Alabama, Arkansas, Arizona, California, Connecticut, Florida, Hawaii, Illinois, Indiana, Massachusetts, Maine, Maryland, Michigan, Minnesota (only electrical), Montana, Nevada, New Hampshire, Oklahoma, Oregon (only electrical), Rhode Island (only electrical), Vermont, Virginia, Washington, Wisconsin and Wyoming (only electrical). Of the states surveyed, only one licenses individuals through a licensing board while the rest license through a state agency. The majority of these agencies licensing the profession reside within the states' Department of Labor.

The applicant did not include specific fee amounts for licensing.

The Sunrise application was complete with the exception of creating specific fee amounts for licensing elevator workers and having a proposal for continuing education. In states where individuals are licensed, fees vary. Since the number to be licensed is expected to be relatively small, the resulting fee revenue may not be sufficient to support a separate board. The Divison of Labor was contacted to see if it would be interested in licensing this profession. The Division is willing to assume the licensure process.

The applicant does not have a proposal for continuing education in this field.

The applicant does not have a proposal for continuing education in this field. The applicant suggests that West Virginia approve an apprenticeship program that is registered with the United States Department of Labor, but does not have a contingent plan for continuing education. The applicant further suggests that individuals who meet minimum standards of documented education and training be grandfathered into the field. The Legislative Auditor recommends the specific minimum education and experience standards be established in order to become licensed and that continuing education be required for individuals to maintain licensure.

The Legislative Auditor had questions regarding the impact on wages and safety. The Legislative Auditor found that licensure of elevator workers may have little or no impact on wages in West Virginia. Representatives from other states have not seen an impact on wages after licensure of elevator workers. The Legislative Auditor found, after reviewing data collected from Arkansas that licensing elevator workers prove to have an inconclusive affect on safety.

# **Recommendations:**

- 1. The Legislature should consider licensing elevator workers.
- 2. The Legislative Auditor recommends that elevator workers be regulated under the West Virginia Division of Labor.
- 3. The Legislature should require the licensing agency to create a specific fee structure for licensing elevator and escalator workers.
- 4. The Legislature should require the licensing agency to create specific, minimum educational and experience requirements in order for individuals to be licensed as well as continuing education to maintain one's license.
- 5. The Legislature should allow individuals who are already working in this occupational field to be given one calendar year to meet licensure requirements while still being allowed to work in the field.

# Finding 1

# The Lack of Regulations of Elevator Workers Poses a Potential Risk to the Public

In accordance with WV Code §30-1A-3, a group of individuals in conjunction with the National Coordinator for the Elevator Industry Work Preservation Fund, submitted a Sunrise application to license elevator constructors, lift mechanics, escalator mechanics, elevator installers, elevator repairers which collectively will be called elevator workers. The applicant also requested that elevator inspectors be licensed.

At the time of application WV Code §30-1A-3 required that Sunrise applications meet the following criteria:

• Whether the unregulated practice of the occupation or profession clearly harms or endangers the health, safety or

- welfare of the public, and whether the potential for harm is easily recognizable and not remote or dependent upon tenuous argument;
- Whether the public needs, and can reasonably be expected to benefit from, an assurance of initial and continuing professional or occupational competence; and
- Whether the public can be adequately protected by other means in a more cost-effective manner.

# West Virginia Currently Only Licenses Elevator Inspectors

Currently, West Virginia, through the Division of Labor, licenses elevator inspectors. Elevator inspectors report on conditions of elevators and make suggestions of possible repairs or changes that are needed to make the elevator safe. Under WV Code §21-3C-2 elevator inspectors are required to successfully complete an examination and hold a certificate before becoming licensed in the state of West Virginia. Elevator inspectors first became licensed by the state in September 2004.

West Virginia requires that elevators and escalators used by the general public be inspected annually after they have been in service for five years or more. Statistics regarding elevator inspections have varied in the last five years in West Virginia. Out of the total number inspections, the compliancy percentage varies from 35 percent to 58 percent. Elevators and escalators are inspected under the supervision of a county or a municipality and they may hire their own inspector or contract with

A group of individuals in conjunction with the National Coordinator for the Elevator Industry Work Preservation Fund, submitted a Sunrise application to license elevator constructors, lift mechanics, escalator mechanics, elevator installers, elevator repairers which collectively will be called elevator workers.

Currently, West Virginia, through the Division of Labor, licenses elevator inspectors.

individuals who possess a West Virginia elevator inspectors certificate of competency issued by the Division of Labor.

## **General Duties of Elevator Workers**

As defined by the United States Department of Labor elevator workers assemble, install, and replace elevators, escalators, dumbwaiters, moving walkways and similar equipment in new and old buildings. Once the equipment is in service, they maintain and repair it as well. They also are responsible for modernizing older equipment.

Elevator workers must have a thorough knowledge of electronics, electricity, hydraulics and mechanics to install, repair, and maintain modern elevators, which are almost all electronically controlled.

The practice of this occupation requires specialized skill and training. Elevator workers must have a thorough knowledge of electronics, electricity, hydraulics and mechanics to install, repair, and maintain modern elevators, which are almost all electronically controlled. Such skill and training can be readily measurable through examination and the meeting of training requirements that would assure initial and continuing occupational competence.

When installing a new elevator, elevator workers begin by studying blueprints to determine the equipment needed to install rails, machinery, car enclosures, motors, pumps, cylinders, and plunger foundations. Once this has been done, they begin equipment installation. Working on scaffolding or platforms, installers bolt or weld steel rails to the walls of the shaft to guide the elevator.

Elevator workers also put in electrical wires and controls by running tubing, called conduit, along a shaft's walls from floor to floor. Once the conduit is in place, mechanics pull plastic-covered electrical wires through it. They then install electrical components and related devices required at each floor and at the main control panel in the machine room.

Elevator workers bolt or weld together the steel frame of an elevator car at the bottom of the shaft; install the car's platform, walls, and doors; and attach guide shoes and rollers to minimize the lateral motion of the car as it travels through the shaft. They also install the outer doors and door frames at the elevator entrances on each floor.

For cabled elevators, these workers install geared or gearless machines with a traction drive wheel that guides and moves heavy steel cables connected to the elevator car and counterweight. Elevator workers also install elevators in which a car sits on a hydraulic plunger that is driven by a pump. The plunger pushes the elevator car up from underneath, similar to a lift in an auto service station

Elevator workers also install escalators. They put in place the steel framework, the electrically powered stairs and the tracks, and install associated motors and electrical wiring. In addition to elevators and escalators, workers may install devices such as dumbwaiters and material lifts, which are similar to elevators in design, as well as moving walkways, stair lifts, and wheelchair lifts.

Elevator workers usually specialize in installation, maintenance, or repair work. Individuals who work on elevator maintenance and repair generally need greater knowledge of electricity and electronics than do individuals who work on installing elevators and escalators, because a large part of maintenance and repair work is troubleshooting.

The equipment used by elevator workers can be dangerous to the general public and those who work on elevators, escalators and lifts. The nature of the work, according to the United States Department of Labor, can be hazardous as well. The potential hazards the department cites, that may occur on the job site are: falls, electrical shock and other injuries related to heavy equipment.

## **Documented Harm to Individuals**

The Legislative Auditor drew upon numerous studies of documented harm to individuals in the United States. The numbers may vary by study and they are summarized below. A 2001 report by the United States Centers for Disease Control and Prevention states that elevators and escalators are potential sources of serious injuries and death to the general public. In 1994 the Consumer Product Safety Commission (the Commission) reported that there were an estimated 7,300 injuries related to escalators in that year alone. In 1999 the Commission reported there were 91 reported elevator accidents and 229 escalator accidents in the United States. The following year, in 2000, the Commission reported there were 85 elevator accidents and 234 escalator accidents nationally. In a 2001 study compiled by the same commission, it estimated that there were 6,000 hospital emergency room visits associate with escalators. Furthermore, in a 2004 survey, the United States Centers for Disease Control and Prevention estimated annually there were 17,000 people seriously injured and 30 people killed each year by escalators and elevators in the United States. Half of the deaths noted were to workers and the other half were to the riding public.

A 2001 report by the Census of Fatal Occupational Injuries reported that from the years 1992 to 2001 there were 207 reported deaths, or roughly

The equipment used by elevator workers can be dangerous to the general public and those who work on elevators, escalators and lifts. The nature of the work, according to the United States Department of Labor, can be hazardous as well. The potential hazards the department cites, that may occur on the job site are: falls, electrical shock and other injuries related to heavy equipment.

A 2001 report by the United States Centers for Disease Control and Prevention states that elevators and escalators are potential sources of serious injuries and death to the general public.

21 per year, due to elevators and escalators in the occupational setting. Of the 207 reported deaths, 61 of them were passengers, while the other 146 were workers who worked in or around elevators. The death rate of elevator workers is the fifth highest of any construction trade, but has a lower injury rate. These accidents are often fatal because of the significant weight of elevator equipment and falls may occur from great heights.

The main concern of the Division is that there have been some instances of unskilled laborers working on elevators throughout the state. Recently, the Division reported that an electrician broke the Division's seal on a closed elevator without the agency's permission and worked on the elevator allowing it to operate

with its doors open.

The Division believes if West Virginia does not follow the current trend of regulating elevator workers, individuals who do not meet the minimum requirements in states that regulate could migrate to West Virginia.

The Consumer Product Safety Commission reported in 2000 that the average cost to society per elevator or escalator accident was \$12,000. They stated that this cost included medical cost, work losses, quality of life and pain and suffering cost and product liability insurance administration and litigation cost.

# **Documented and Potential Harm to West Virginians**

The West Virginia Division of Labor has had no reported deaths or serious injuries in the last 10 years from elevators or escalators. The main concern of the Division is that there have been some instances of unskilled laborers working on elevators throughout the state. Recently, the Division reported that an electrician broke the Division's seal on a closed elevator without the agency's permission and worked on the elevator allowing it to operate with its doors open. Fortunately, the Division was notified of this incident and was able to stop the electrician from continuing working on the elevator and averting further possible harm to the public. Currently, there are no minimum requirements to work as an elevator worker and no laws to prevent unskilled or incompetent individuals from working on elevators in West Virginia.

Another concern the Division has is that many of the surrounding states are starting to require elevator workers to be regulated. The Division believes if West Virginia does not follow the current trend of regulating elevator workers, individuals who do not meet the minimum requirements in states that regulate could migrate to West Virginia. The Division of Labor cites this potential harm as to why elevator workers should be regulated in West Virginia.

In February 2006, a female resident of an assisted living facility in Huntington was injured when a faulty elevator was not level when the doors opened and a staff member tried to push the individual on the elevator. The West Virginia Division of Labor's elevator accident investigation

report notes that if staff members already on the elevator had not tried to catch the individual from falling it could have caused serious injury or death. Upon further investigation by the Division, it found that there were daily problems with the elevator according to staff members of the assisted living facility. According to the Division, the elevator in this facility had been sealed off and the building had been vacated due to renovations.

Most of the parties involved support the measure to license elevator workers.

In March 2006, workers in Building 6 on the West Virginia Capitol Complex were having safety concerns since two of their four elevators had not worked in a number of years. The final two of their four elevators were put out of commission until further notice during that month. Workers were afraid if someone needed medical attention on the top floor how long it would take emergency services to reach an individual. In April 2006, Buildings 5 and 6 of the Capitol Complex, which are the two tallest buildings on the complex, were with the service of only one elevator. It was later noted that the reason these elevators were shut down was because they did not meet standard fire safety codes.

# Conclusion

West Virginia has been fortunate to have few injuries and deaths related to elevators and escalators. However, most of the parties involved support the measure to license elevator workers. The current lack of regulation of elevator workers does pose a risk to the public. When elevators, escalators and lifts are not properly maintained and repaired by individuals with experience and knowledge of the equipment, there is the potential for physical, emotional and financial harm to the public. The Legislative Auditor recommends that elevator workers be licensed by the State.

#### Recommendations

1. The Legislature should consider licensing elevator workers.

# **Elevator Workers Should Be Licensed by the State.**

# The West Virginia Division of Labor Supports Licensure

The West Virginia Division of Labor understands the importance of safety within the elevator industry and supports the proposal for elevator workers to be licensed. The Division realizes that the industry is constantly changing as technology advances and elevator workers must have knowledge of the latest safety codes and the varied components involved in working on elevators. These components include electrical, electronic, hydraulic and mechanical. Therefore, there needs to be minimum requirements that must be met by elevators workers in the state in order to prevent unskilled, unknowledgeable and/or incompetent individuals from working on elevators in West Virginia.

The West Virginia Division of Labor understands the importance of safety within the elevator industry and supports the proposal for elevator workers to be licensed.

The Division further states that since there are approximately 60 elevator workers operating in the state, the population is not sufficient to support a free standing board. Therefore, the Division suggests that the licensure process come under the auspices of the Division of Labor as the process could be implemented more quickly and cost effectively without the creation of a new board.

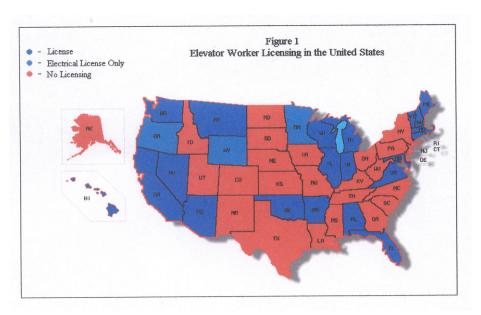
# Disagreement on How Many Elevator Workers Are in the State

It is estimated by the Elevator Industry Work Preservation Fund, a lobbying and educational group for elevator workers, that there are 200 elevator workers in West Virginia. However, the West Virginia Division of Labor identified approximately 60 elevator workers in the state. The Legislative Auditor has concern to which number is actually correct. If the larger number is correct, the creation of a separate licensing board may be financially feasible. If the smaller number is correct, then it is the recommendation of the Legislative Auditor to license these individuals under the West Virginia Division of Labor.

## **Licensure in Other States**

There are 25 states that require licensing of these professions. According to the Elevator Industry Work Preservation Fund, the following states license elevator and escalator mechanics: Alabama, Arkansas, Arizona, California, Connecticut, Florida, Hawaii, Illinois, Indiana,

Massachusetts, Maine, Maryland, Michigan, Minnesota (only electrical), Montana, Nevada, New Hampshire, Oklahoma, Oregon (only electrical), Rhode Island (only electrical), Vermont, Virginia, Washington, Wisconsin and Wyoming (only electrical). Of the states surveyed, only one licenses individuals through a licensing board while the rest license through a state agency. The majority of these agencies licensing the profession reside within the states' Department of Labor.



The Sunrise application was complete with the exception of creating specific fee amounts for licensing elevator workers and having a proposal for continuing education in the field.

# **Deficiencies in the Sunrise Application**

The Sunrise application was complete with the exception of creating specific fee amounts for licensing elevator workers and having a proposal for continuing education in the field. Below are recommendations based on information collected from the West Virginia Division of Labor, the applicant and other states.

The applicant failed to include specific fee amounts for licensing. However, they describe a method of how to calculate fees and who would be charged to be licensed in the state. Fees for licensing in other states vary and are paid to the agency in which they are licensed. Since the numbers expected to be licensed are relatively small, the resulting fee revenue may be insufficient to support a separate board. Therefore, it may be best to license this profession through the West Virginia Division of Labor. The Division of Labor was contacted to determine if it would be interested in licensing this profession. The agency agreed and stated that the licensure process come under the auspices of the Division of Labor as the process could be implemented more cost

effectively without the creation of a new licensing board.

The applicant does not have any proposal for continuing education in this field. The applicant wishes to adopt minimum standards of education to ensure individuals who work in this field are qualified as well as protect riders from dangerous situations. The applicant does not have a specific education plan but does offer some suggested educational standards. The applicant suggests that West Virginia approve an apprenticeship program registered with the United States Department of Labor. This would include the National Elevator Industry Education Program. According to the applicant, it is the industry standard for education. Furthermore, the applicant states that 90 percent of all elevator mechanics in the United States have enrolled and completed the National Elevator Industry Education Program standards. Education is also available to non-union workers through the National Association of Elevator Contractors through the Certified Elevator Technician Educational Certificate Program.

Many states that license these occupations require minimum educational standards, which include, but are not limited to the following: a three year apprenticeship, followed by passing a standardized test and completing an application with references. States that require licensing of this occupational field also require continuing education for professionals.

The applicant suggests that individuals currently working as elevator workers who meet minimum standards of documented education and training can be grandfathered into the field. Many of the states surveyed require continuing education to maintain one's elevator or escalator worker license. The Legislative Auditor recommends that specific minimum education and experience standards be established in order to become licensed and that continuing education be required for individuals to maintain their license.

# **Other States' Education Requirements**

Many states that license these occupations require minimum educational standards, which include, but are not limited to the following: a three year apprenticeship, followed by passing a standardized test and completing an application with references. States that require licensing of this occupational field also require continuing education for professionals. Arkansas, a state that requires licensing, requires individuals to complete a minimum of eight hours of continuing education every two years to maintain one's license. Individuals in states that require licensing are allowed to be grandfathered into this occupation. States that grandfather individuals into the system require individuals to complete an application and pass a standardized examination covering material regarding this occupational field.

# Licensure May Have Little or No Impact on Wages

The Legislative Auditor had questions regarding the impact on wages and safety if individuals were licensed in the state. A survey of licensing agencies and elevator companies from surrounding states was conducted with the majority of respondents stating that wages have not been affected by licensure. Representatives from the Alabama Department of Labor, the Arkansas Department of Labor and the Virginia Department of Professional and Occupational Regulation, which currently license elevator workers, have not seen an increase in wages after the states required licensure. Virginia and Arkansas have only licensed elevator workers since 2005, thus they have not been able to accurately gauge the effects that licensing individuals has had on wages. Alabama has not seen an increase in wages because many of the elevator workers are union and their wages are set via five year labor contracts.

A survey of licensing agencies and elevator companies from surrounding states was conducted with the majority of respondents stating that wages have not been affected by licensure.

A representative from Industrial/Commercial Elevator based in Pennsylvania believes that wages will not increase with licensure because many elevator workers are already unionized in the state. A representative from Landmark Elevator Incorporated, a Maryland based non-union company, which does business in West Virginia believes when individuals are licensed their wages increase. A representative from Industrial/Commercial Elevator, which is a union company in Pennsylvania, disagrees and believes that wages will not increase for elevator workers with licensure. A representative for non-union, West Virginia based EMAR Corporation, also believes that licensing individuals would not increase wages in the state.

Only the Arkansas Department of Labor was able to provide data that show the effects before and after licensing elevator workers. After licensure, Arkansas did not see a dramatic increase in compliancy of elevator safety inspections.

# **Inconclusive Affect on Safety**

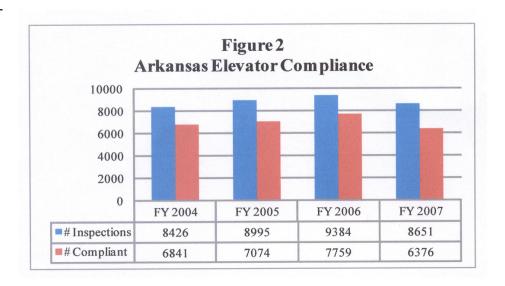
The Legislative Auditor had additional questions regarding the effects on safety that states had seen after licensure of elevator workers. The Legislative Auditor contacted the departments of labor of surrounding states that license elevator workers. Only the Arkansas Department of Labor was able to provide data that show the effects before and after licensing elevator workers. Figure 2 below shows that after licensure, Arkansas did not see a dramatic increase in compliancy of elevator safety inspections. Figure 3 shows the elevator safety inspection compliancy data for West Virginia during the same years. West Virginia's elevator compliance ranges from 35 percent compliant to 58 percent compliant with West Virginia elevator inspection code. Arkansas, on the other hand, averages between 73 percent to 82 percent compliant with Arkansas

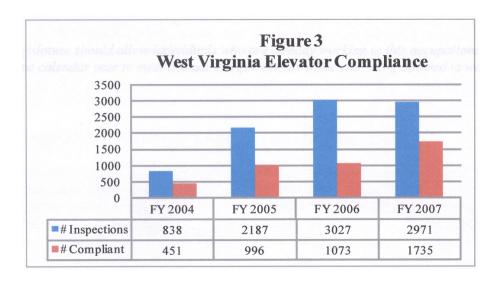
elevator inspection code.

Overall, Arkansas elevators have proven to be more compliant with Arkansas state inspection codes than West Virginia elevators with state elevator inspection codes. Yet, on further review of the inspection data the Legislative Auditor found that West Virginia's elevator inspections may be more thorough than Arkansas', which may account for the compliancy issues shown in Figure 2 and Figure 3.

Representatives from EMAR Corporation and Landmark Elevator Incorporated, believe that safety would increase with the licensing of elevator workers in West Virginia. The representative from EMAR Corporation, located in West Virginia, believes the state should require licensure of elevator workers and that this licensure would increase safety in the state.

Two elevator companies that were surveyed responded on the issue of safety. Representatives from EMAR Corporation and Landmark Elevator Incorporated, believe that safety would increase with the licensing of elevator workers in West Virginia. The representative from EMAR Corporation, located in West Virginia, believes the state should require licensure of elevator workers and that this licensure would increase safety in the state. A representative from Industrial/Commercial Elevator in Pennsylvania, believes that safety would not increase in his state because many of the workers are already unionized, thus they were required to maintain certain educational standards.





# Conclusion

The Legislative Auditor recommends that elevator workers be regulated by the West Virginia Division of Labor. A specific fee structure for licensing these individuals needs to be determined. There should also be specific minimum educational and experience requirements to obtain licensing through the state as well as continuing education to maintain one's license. Individuals who are already working in this occupational field should be required to gain licensing within a given period of time and must also follow through with continuing education. These recommendations would enhance the public safety of elevators, escalators and other lift equipment.

## Recommendations

- 2. The Legislative Auditor recommends that elevator workers be regulated under the West Virginia Division of Labor.
- 3. The Legislature should require the licensing agency to create a specific fee structure for licensing elevator and escalator workers.
- 4. The Legislature should require the licensing agency to create specific, minimum educational and experience requirements in order for individuals to be licensed as well as continuing education to maintain one's license.

5. The Legislature should allow individuals who are already working in this occupational field to be given one calendar year to meet licensure requirements while still being allowed to work in the field.

# **Appendix A: Transmittal Letter**

# WEST VIRGINIA LEGISLATURE

Performance Evaluation and Research Division

Building 1, Room W-314 1900 Kanawha Boulevard, East Charleston, West Virginia 25305-0610 (304) 347-4890 (304) 347-4939 FAX



John Sylvia Director

August 2, 2007

Mark Mullins 108 Mulberry Drive Hurricane, West Virginia 25526

Dear Mr. Mullins:

This is a transmit draft copy of the preliminary Sunrise report for elevator workers. This report is scheduled to be presented during the August 19<sup>th</sup> to 21<sup>st</sup> interim meeting of the Joint Committee on Government Operations. We will inform you of the exact time and location once the information becomes available. It is expected that a representative from you organization be present at the meeting to orally respond to the report and answer any questions the committee may have.

If you would like to schedule a meeting to discuss any concerns you have with the report, please notify us by August 1, 2007 to August 8, 2007. If your organization intends to distribute additional material to committee members at the meeting, please contact the House Government Organization staff at 340-3192 by Friday, July 27, 2007 to make arrangements.

We request that your personnel not disclose the report to anyone not affiliated with your organization. Thank you for your cooperation.

Sincerely,

John Sylvia

Joint Committee on Government and Finance

Page	22

# **Appendix B: Agency Response**





# PERFORMANCE EVALUATION AND Elevator Industry Work Preservation Fund RESEARCH DIVISION

7154 Columbia Gateway Drive Columbia, Maryland 21046

Telephone: 410-312-1474

Toll Free: 888-511-3113

Fax: 410-312-1473

Report Response by Gregg Rogers
National Coordinator for the Elevator Industry Work Preservation Fund

#### Finding #1

Under WV Code §21-3C-02 the Report indicates that elevators and escalators in the state are inspected annually after they have been in service for five years or more. This brings to mind a question as to why the state does not inspect the equipment upon completion of the installation or modernization to ensure code compliance at that point in time. Within the Safety Codes for Elevator and Escalators ASME A17.1, there are recommended schedules for inspections that should be adopted that would help in the overall safety of the riding public.

With regard to Documented and Potential Harm to West Virginian's Unless there are minimum standards adopted by the Authority Having Jurisdiction (AHJ) there are no guarantees those who install, maintain, repair, and test the equipment will be qualified to do so. By having minimum standards the AHJ would have the authority to suspend, revoke, discipline, or deny an applicant who is not qualified. Currently, under the present standards anyone can work on the equipment whether qualified or not.

We agree with the findings of the report on licensing mechanics.

#### Finding #2

There are questions as to how many mechanics are working in the state. This same question comes up in each state we introduce the Model Elevator Bill in. History has shown us is there are more people working on the equipment then believed. When considering the growing market of residential clevators combined with the in-house maintenance being done at colleges, factories, department stores, etc. the numbers tend to be higher then thought. Then add companies and workers coming across the state lines from Pennsylvania, Kentucky, Virginia, and Washington DC. The number of mechanics will be much higher then thought. Unless there is a certification or license requirement the state will never know. There are approximately 60 in the Charleston area alone.

#### Licensing Fees

The applicant would advocate a mechanics licensing fee structure somewhere between \$50.00-\$75.00 per year, based on a two year license cycle. The revenue produced from license fees should be combined with a one time registration fees and annual operating permit fees for each elevator in the state along with the application fee for new construction, alteration and modernization project. In addition the Contractors Registration Fee and the Inspector License Fee should be combined with all fees and all earmarked for the operation of the department (Dedicated Funding)

#### Continuing Education

The applicant agrees it is very important to require Continuing Education prior to renewal of any mechanics license. The reason behind this is that as the code or state regulations change the mechanics will need to be updated on those changes. In addition the technology changes in the elevator industry is changing rapidly. Those who are going to be working on this equipment need to continually up grade their skill level. The Inspector is required to obtain Continuing Education in order to maintain their Certification as a Qualified Inspector on an annual basis.

#### Wages

The applicant agrees that a license or certification program will have a minimal effect on wages. The reason for this is that the majority of those who are performing the work are bound by a Collective Bargaining Agreement that presets their wages for a period of five years.

#### On Safety

The applicant believes that through education, training and continuing education requirements those who intend to work on conveyances in the State of West Virginia would have a better understanding and knowledge of the equipment. This knowledge will be applied in better installations, maintenance, repair and testing of the equipment. The end result of this will be safer equipment the end user the general public.

In conclusion the applicant agrees with the majority of the Legislative Auditors recommendations.

- The elevator workers in the State of West Virginia should be licenses.
- Minimum education and training requirements should be met prior to an applicant receiving a license.
- Continuing Education should be required of each licensee prior to renew of their license
- Those who currently are working at the level of a mechanic and have the
  documentation to prove they are qualified should be grandfathered in as a
  mechanic without a test. This should be a one year grandfathering period at
  which time anyone wishing to work at the mechanic level would need to meet
  the legislative requirements as adopted.
- The applicant feels there should be a voluntary Elevator Safety Board of knowledgeable persons who understand the elevator business. This board should fall under the Department of Labor. I would submit the following language as a guideline to establish this board.

#### **Elevator Safety Review Board**

There is hereby created the Elevator Safety Review Board, herein referred to as the "Board" consisting of nine members, one of whom shall be the Commissioner of Labor or his/her delegate, one of whom shall be the Chief Elevator Inspector or his/her delegate. The Governor shall appoint the remaining seven members of the Board as follows; one

representative from a major elevator manufacturing company or it's authorized representative; one representative from an elevator servicing company; one representative of the architectural design or elevator consulting profession; one representative of the general public; one representative of a municipality in this state; one representative of a building owner or manager; and one representative of Labor involved in the installation, maintenance and repair of elevators.

The members constituting such Board shall serve for terms of three years, excluding the Commissioner of Labor, and the Chief Elevator Inspector who shall serve continuously. The members shall serve without salary. The board member shall receive from the state expenses necessarily incurred by them in performance of their duties. The Governor shall appoint one of the members to serve as Chairman; the Chairman shall be the deciding vote in the event of a tie vote.

## Meeting of Board

The Board shall meet and organize within ten days after the appointment of its members and at such meeting shall elect one Secretary of the Board to serve during the term to be fixed by the rules and regulations to be adopted by the Board. The Board shall meet regularly once in each month at a time and place to be fixed by it and at such times as it is deemed necessary for the consideration of code regulations, appeals, variances and for the transaction of such other business as properly may come before it. Special meetings shall be called as provided in the rules and regulations. Any appointed Board Member absent from three consecutive meetings shall be dismissed.

#### **Powers of Board**

The Board shall be authorized to consult with engineering authorities and organizations concerned with standard safety codes; rules and regulations governing the operation, maintenance, servicing, construction, alteration, installation, and/or inspection of elevators, dumbwaiters, escalators etc, and the qualifications which are adequate, reasonable and necessary for the elevator mechanic, contractor and inspector. Therefore, the Board shall be authorized to recommend the amendments of applicable legislation, when appropriate, to legislators.

The Board shall establish the State regulations for the equipment regulated by this Chapter. Said regulations shall include the Safety Code for Elevators and Escalators, ASME A17.1; the Safety Code for Existing Elevators and Escalators, ASME A17.3; the Safety Standards for Platform Lifts and Stainway Chairlifts, ASME A18.1; Standard for the Qualification of Elevator Inspectors, ASME QEI-1; and Automated People Mover Standards, ASCE 21 and others as recognized by the Board. The Board shall adopt the latest editions of said standards with six months of their effective date. Any modifications to said standards, that the Board deems necessary, shall be justified in writing by the Board.

The Board shall also have the authority to grant exceptions and variances from the literal

requirements of applicable code and standards, regulations, and/or local legislation in cases where such variances would not jeopardize the public safety and welfare. The Board shall have the authority to hear appeals, hold hearings and decide upon such within 30 days of the appeal.

The Board shall establish fee schedules for licenses, permits, certificates and inspections. The fees shall reflect the actual costs and expenses to operate this department and to conduct the duties as described in this chapter.

 The Applicant would submit the following language to address the issue of licensing and would advocate the allowance of an Emergency License and a Temporary License in the event of a shortage of licensed mechanics using language similar to the following.

### Qualifications of Elevator Mechanic

No license shall be granted to any person who has not demonstrated their qualifications and abilities. Applicants for a mechanic license must demonstrate one of the following qualifications:

- (a) An acceptable combination of documented experience and education credits: not less than three years work experience in the elevator industry, in construction, maintenance or service/repair or any combination thereof, as verified by current and previous employers licensed to do business in this state. Satisfactory completion of a written examination administered by the Elevator Safety Review Board on the most recent referenced codes and standards.
- (b) Any person who furnishes the commissioner with acceptable proof that they have worked as an elevator constructor, maintenance, or repair person shall upon making application for a license and paying the license fee shall be entitled to receive a license without an examination. They shall have worked without direct and immediate supervision for an elevator contractor licensed to do business in this state. This employment shall not be less than three years immediately prior to the effective date of this document. The person must make application within one year of the effective date of this document.
- (c) Certificates of completion and successfully passing the mechanic examination of a nationally recognized training program for the elevator industry such as the National Elevator Industry Educational Program or its equivalent; or
- (d) Certificates of completion of an apprenticeship program for elevator mechanic, having standards substantially equal to those of this chapter, and registered with the Bureau of Apprenticeship and Training, U.S. Department of Labor or a state apprenticeship council.

(e) A license shall be issued to an individual holding a valid license from a state having standards substantially equal to those of this chapter, upon application and without examination.

Upon approval of an application by the administrator, the Director of Licenses may issue a license [s], all of which shall be renewable biennially. The fee for such license [s] for any renewal thereafter shall be set by the Board.

- (A) When ever an emergency exists in the state due to disaster, act of God or work stoppage and the number of persons in the state holding licenses granted by the board is insufficient to cope with the emergency, Elevator Contractors shall respond as necessary to assure the safety of the public. Any person certified by a licensed Elevator Contractor to have an acceptable combination of documented experience and education to perform elevator work without direct and immediate supervision shall seek an Emergency Elevator Mechanic license from the Director of Licenses within five business days after commencing work requiring a license. The administrator shall issue Emergency Elevator Mechanic licenses. The Elevator Contractor shall furnish proof of competency as the administrator may require. Each such license shall recite that it is valid for a period of forty five days from the date thereof and for such particular elevators or geographical areas as the administrator may designate and otherwise shall entitle the licensee to the rights and privileges of an Elevator Mechanic license issued in this chapter. The administrator shall renew an emergency Elevator Mechanic license during the existence of an emergency. No fee shall be charged for any emergency Elevator Mechanic license or renewal thereof.
- (B) An Elevator Contractor shall notify the administrator when there are no licensed personnel available to perform elevator work. The Elevator Contractor may request that the administrator issue Temporary Elevator Mechanic licenses to persons certified by the licensed Elevator Contractor to have an acceptable combination of documented experience and education to perform elevator work without direct and immediate supervision. Any person certified by an Elevator Contractor to have an acceptable combination of documented experience and education to perform elevator work without direct and immediate supervision shall immediately seek a Temporary Elevator Mechanic license from the Director of Licenses and shall pay such fee, as the Board shall determine. It shall be renewable as long as the shortage of license holders shall continue and while employed by the licensed elevator contractor that certified the individual as qualified.

# Wording that might be used for the Continuing Education Requirements is as follows;

The renewal of all licenses granted under the provisions of this section shall be conditioned upon the submission of a certificate of completion of a course designed to ensure the continuing education of licensees on new and existing provisions of the regulations of the Elevator Safety Review Board. Such course

shall consist of not less than eight hours of instruction that shall be attended and completed within one year immediately preceding any such license renewal.

The courses shall be taught by instructors through continuing education providers that may include, but shall not be limited to, association seminars, and labor training programs. The Elevator Safety Review Board shall approve the continuing education providers. All instructors shall be approved by the Board and exempt from the requirements of the preceding paragraph with regard to their application for license renewal provided that such applicant was qualified as an instructor at any time during the one year immediately preceding the scheduled date for such renewal.

A licensee who is unable to complete the continuing education course required under this section prior to the expiration of their license due to a temporary disability may apply for a waiver from the Board. This will be on a form provided by said board which shall be signed under the pains and penalties of perjury and accompanied by a certified statement from a competent physician attesting to such temporary disability. Upon the termination of such temporary disability, such licensee shall submit to said board a certified statement from the same physician, if practicable, attesting to the termination of such temporary disability. At which time a waiver sticker, valid for 90 days, shall be Issued to such licensee and affixed to his license.

Approved training providers shall keep uniform records, for a period of ten years, of attendance of licensees following a format approved by the Board and such records shall be available for Inspection by said board at its request. Approved training providers shall be responsible for the security of all attendance records and certificates of completion; provided, however, that falsifying or knowingly allowing another to falsity such attendance records or certificates of completion shall constitute grounds for suspension or revocation of the approval required under this section