

**Sunrise Report**

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**Plumbers and Sprinkler Fitters**

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**The Current Regulatory Scheme of  
Contractor Licensing Sufficiently  
Mitigates Risk from Plumbers  
and Sprinkler Fitters**



June 2006  
PE 06-07-381

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# Executive Summary

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## **Finding 1: The Current Regulatory Scheme of Contractor Licensing Sufficiently Mitigates Risk from Plumbers and Sprinkler Fitters.**

*According to the Applicant, there are approximately 3,000 plumbers, pipefitters and steamfitters as well as an additional 300 “helpers” of plumbers, pipefitters and steamfitters.*

The Affiliated Construction Trades Foundation (Applicant) has submitted a Sunrise application in accordance with WV Code §30-1a-1 et seq. proposing licensure of plumbers and sprinkler fitters. According to the Applicant, there are approximately 3,000 plumbers, pipefitters and steamfitters as well as an additional 300 “helpers” of plumbers, pipefitters and steamfitters. The Applicant describes the work environment of plumbers and sprinkler fitters to be new construction projects, renovations and maintenance of existing buildings as well as factories, hospitals, offices, schools, restaurants, apartments and houses.

The Applicant’s primary argument is that the current practice of plumbing and sprinkler fitting poses a risk to the public’s health and welfare because it allows incompetent practitioners to produce work that does not conform to acceptable standards. According to the Applicant, “Currently no one performing the work is required to have any knowledge or skills.” Furthermore, the Applicant states that “Most of our state has no building code law or regulation in place.”

*The Legislative Auditor finds that although West Virginia does not regulate plumbers and sprinkler fitters at the practitioner level, West Virginia does regulate plumbers and sprinkler fitters at the job level.*

However, the Legislative Auditor finds that although West Virginia does not regulate plumbers and sprinkler fitters at the practitioner level, West Virginia does regulate plumbers and sprinkler fitters at the job level. This means that although not every individual practicing plumbing and sprinkler fitting in West Virginia is required to demonstrate competency, each job being performed which exceeds \$2,500 in cost must have a licensed individual responsible for that job.

West Virginia currently employs the contractor level of licensure and the Applicant proposes the practitioner level of licensure. Although the regulatory systems are different in appearance, they are very similar in structure. The significant difference between these two systems is in the area of supervision requirements. At the contractor level, general supervision is exercised by the contractor over employees who have not demonstrated competency. At the practitioner level, direct supervision is exercised over employees who have not demonstrated competency by either a Master or Journeyman practitioner. When comparing these two types of supervision requirements, it would be reasonable to conclude that direct supervision would be the more desirable of the two when considering the goal of this type of regulation is to mitigate any potential risk to the public health and welfare from incompetent practitioners. Howev-

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er, the Legislative Auditor's analysis consistently shows that the current regulatory environment is sufficient to mitigate any potential for harm.

The Applicant proposes that the current unregulated practice of plumbing and sprinkler fitting in West Virginia poses a clear risk to the public health and welfare. While the unregulated practice of these occupations does present a clear risk, the Legislative Auditor concludes that the occupational groups in question are currently regulated, and that the current regulatory environment is sufficient to mitigate any potential for harm.

# Finding 1

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## The Current Regulatory Scheme of Contractor Licensing Sufficiently Mitigates Risk from Plumbers and Sprinkler Fitters.

*According to the Applicant, there are approximately 3,000 plumbers, pipefitters and steamfitters as well as an additional 300 “helpers” of plumbers, pipefitters and steamfitters.*

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The Affiliated Construction Trades Foundation (Applicant) has submitted a Sunrise application in accordance with WV Code §30-1a-1 et seq. proposing licensure of plumbers and sprinkler fitters. According to the Applicant, there are approximately 3,000 plumbers, pipefitters and steamfitters as well as an additional 300 “helpers” of plumbers, pipefitters and steamfitters. The Applicant describes the work environment of plumbers and sprinkler fitters to be new construction projects, renovations and maintenance of existing buildings as well as factories, hospitals, offices, schools, restaurants, apartments and houses.

### Required Sunrise Analysis

WV Code §30-1A-3 requires the Legislative Auditor to evaluate Sunrise applications based on 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.

*The Legislative Auditor also finds that the current practice of plumbing and sprinkler fitting is not unregulated in West Virginia and that the current regulatory environment is sufficient to mitigate the potential for harm.*

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The Legislative Auditor finds that there is a clear risk to the public health and welfare from the unregulated practice of plumbing and sprinkler fitting. However, **the Legislative Auditor also finds that the current practice of plumbing and sprinkler fitting is not unregulated in West Virginia and that the current regulatory environment is sufficient to mitigate the potential for harm.**

### Applicant Proposes Licensure

When considering whether the public can be reasonably expected to benefit from an assurance of competency, the Legislative Auditor must determine what method of regulation is best suited for the occupation. West Virginia allows for different levels of professional regulation. What separates each level of regulation is whether or not the potential harm

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to the public is a result of a lack of competency, and whether or not this competency should be possessed by all members who practice in an occupation. The different levels of regulation include:

1. **Registration** - Under registration, individuals are required to comply with specified standards in order to be placed on a registry. The standards may involve passing an examination, submitting proof of possessing certain credentials, or meeting other specified requirements, such as passing a background check. The registry indicates those individuals who are “registered” or qualified to perform in a given occupation. Unregistered individuals may perform a registered occupation, however, the registry provides the public information and a choice of whether to employ someone registered or unregistered. Notwithstanding, that in some case’s employment may be restricted by law or by policy to those on a registry.
2. **Certification** - Under certification, individuals are required to comply with specified standards, such as passing an examination or possessing certain credentials. The primary difference between registration and certification is that certification grants individuals the right to use a specified title. Although any individual can practice the occupation, those who are not certified are prohibited from presenting themselves to the public under the title that is reserved for those who are certified in the occupation. A certification process is generally considered “title protection.”
3. **Licensure** - Under licensure, only individuals who are licensed can practice the occupation, and use of the occupational title is restricted to individuals who are licensed. Licensure standards usually require individuals to comply with specified standards, such as passing examinations which test the individual’s subject knowledge as well as practical application of the occupation. In addition to the requirements placed on individuals wishing to practice the occupation, practitioners must also possess certain educational or experiential requirements as well as participate in continuing education requirements.

According to the Applicant:

*Licensure is preferred to certification for both plumbers and sprinkler fitters because of the human health and safety consequences of untrained workers installing and maintaining plumbing and fire protection systems and equipment.*

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*Furthermore, many other states, including some adjacent states, use licensure requirements making it important for West Virginia employees to have comparable credentials which would allow them to work in states which have reciprocal licensing agreements.*

### **Applicant's Argument For Licensure**

As stated above, the Applicant has two primary reasons why licensure is being sought: **the protection of the public's safety and welfare; and, the ability for a practitioner's competency to be recognized by other jurisdictions.** The Applicant further elaborates on these conditions by indicating that the public would benefit from the licensure of plumbers and sprinkler fitters in four ways:

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*As stated above, the Applicant has two primary reasons why licensure is being sought: the protection of the public's safety and welfare; and, the ability for a practitioner's competency to be recognized by other jurisdictions.*

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1. **Establishing competency of workers** - *Improperly installed plumbing and/or sprinkler systems can lead to contaminated water supplies leading to serious health problems. Furthermore, improperly installed sprinkler systems can defeat the purpose of required fire protection systems and lead to injury and death as a result.*
2. **Requiring work be performed to standards** - *[Licensure] will require that those who perform the functions of plumbing and sprinkler fitting have knowledge of and competency in current codes and regulation recognized as national and state standards.*
3. **Protecting West Virginia workers from incompetent competition** - *Many states have licensing requirements creating a situation where West Virginia workers are not allowed to work in these states without a license, but anyone can do plumbing or sprinkler fitting work here. Licensure would put West Virginia workers and companies on a level playing field with most of the nation.*
4. **Establishing a uniform credentialing system within West Virginia** - *Some West Virginia municipalities require a plumber to have a license, including Charleston and Huntington.... The [licensure] would set one state wide standard, consistent with national standards for Licensure.*

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*While protecting West Virginia workers from competition with individuals from other states and the establishment of a uniform credentialing system may be important to practitioners of plumbing and sprinkler fitting, they have little to do with protecting the public or benefitting the public by ensuring competency.*

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As West Virginia Code states, the purpose of the Sunrise process involves the protection to the public, and the benefit to the public from ensuring competency. While protecting West Virginia workers from competition with individuals from other states and the establishment of a uniform credentialing system may be important to practitioners of plumbing and sprinkler fitting, they have little to do with protecting the public or benefitting the public by ensuring competency. **In this regard, the Legislative Auditor concludes that these two reasons are not valid arguments for licensure as it relates to the Sunrise process.**

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The Legislative Auditor agrees with the Applicant in that the unregulated practice of plumbing and sprinkler fitting poses a clear risk to the health and welfare of the citizens of West Virginia. It is possible for sprinklers to fail when fire occurs which could result in loss of life and property loss. Furthermore, improperly installed plumbing could potentially lead to contamination and has the potential for property loss. **However, the Legislative Auditor does not agree that the practice of plumbing and sprinkler fitting in West Virginia is unregulated. Additionally, the Legislative Auditor concludes that the current regulatory environment for plumbers and sprinkler fitters is sufficient to mitigate the potential for harm to the public.**

### **Current Regulatory Scheme Present in West Virginia**

*The Legislative Auditor finds that although West Virginia does not regulate plumbers and sprinkler fitters at the practitioner level, West Virginia does regulate plumbers and sprinkler fitters at the job level.*

The Applicant's primary argument is that the current practice of plumbing and sprinkler fitting poses a risk to the public's health and welfare because it allows incompetent practitioners to produce work that does not conform to acceptable standards. According to the Applicant, "Currently no one performing the work is required to have any knowledge or skills." Furthermore, the Applicant states that "Most of our state has no building code law or regulation in place."

The Legislative Auditor finds that although West Virginia does not regulate plumbers and sprinkler fitters at the practitioner level, West Virginia does regulate plumbers and sprinkler fitters at the job level. This means that although not every individual practicing plumbing and sprinkler fitting in West Virginia is required to demonstrate competency, each job being performed which exceeds \$2,500 in cost must have a licensed individual responsible for that job.

### **Contractor Licensing**

According to WV Code §21-11-6, no one may act in the capacity of a contractor in the state of West Virginia without a contractor's license issued by the Contractor's Licensing Board. WV Code §21-11-3(c) defines a contractor as:

*a person who in any capacity for compensation, other than as an employee of another, undertakes, offers to undertake, purports to have the capacity to undertake, or submits a bid to construct, alter, repair, add to, subtract from, improve, move, wreck or demolish any building, highway, road, railroad, structure or excavation associated with a project, development or improvement, or to do any part thereof, including the erection of scaffolding or other structures or works in connection therewith, where the cost of the undertaking is Two thousand five hundred dollars or more.*

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*Any plumbing or sprinkler fitting project which exceeds \$2,500 in cost must be conducted by a company that employs at least one individual with a valid contractor's license.*

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Any plumbing or sprinkler fitting project which exceeds \$2,500 in cost must be conducted by a company that employs at least one individual with a valid contractor's license. The contractor's license issued by the Contractor License Board (Board) requires individuals to demonstrate competency in the particular area of specialization for which they are seeking to be licensed by passing an examination. For example, if an individual seeks to be licensed as a plumbing contractor, the individual must pass an exam to ensure that individual's competency with regards to plumbing. The board considers "plumbing" as a separate area of specialization as well as "piping." According to the West Virginia Division of Labor, there are 2,629 individuals licensed as "plumbing contractors" and 1,250 licensed as "piping contractors" in West Virginia.

*Until June 2005, individuals performing in the capacity of sprinkler fitters were only required to have a valid business license and pass a law test. However, in June 2005, the Division of Labor instituted a new license class, with input from the West Virginia Fire Marshal's Office, designated as "Sprinkler and Fire Protection" contractors. These individuals must also now demonstrate competency.*

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Until June 2005, individuals performing in the capacity of sprinkler fitters were only required to have a valid business license and pass a law test. However, in June 2005, the Division of Labor instituted a new license class, with input from the West Virginia Fire Marshal's Office, designated as "Sprinkler and Fire Protection" contractors. These individuals must also now demonstrate competency. According to the Division of Labor, there are 6 individuals licensed as "Sprinkler and Fire Protection" contractors. Table 1 shows the number of individuals licensed in the three license categories as well as the work permitted by the license type.

Table 1 FY 2006 Licensed Plumber, Pipe Fitting, and Sprinkler and Fire Protection Contractors and Applicable Scope of Practice*		
Contractor Type	# of Licensed Contractors	Scope of Practice Requiring License
Plumbing Contractor	2,629	Installation, maintenance, extension and alteration of piping, plumbing fixtures, plumbing appliances and plumbing appurtenances, venting systems and public or private water supply systems within or adjacent to any building or structure; including the installation of gas piping, chilled water piping in connection with refrigeration processes and comfort cooling, hot water piping in connection with building heating, piping for stand pipes or work incidental to the installation.
Piping Contractor	1,250	Installation of process, power plant, air, oil, gasoline, chemical or other kinds of piping; and boilers and pressure vessels using joining methods of thread, weld, solvent weld or mechanical methods or work incidental to the installation.
Sprinkler Fitting and Fire Protection	6	Installation, repair or maintenance of fire suppression systems, including water sprinkler and chemical systems, and work incidental to the installation or repair.
*Source: West Virginia Division of Labor		

The exam administered to plumbing contractors, pipe fitting contractors, and fire protection contractors includes a section on business law as well as a unit designed to ensure the competency of the contractor in the specific field for which licensure is sought. A minimum score of 70% is required in each subject area of an exam to be considered for licensure. Appendix B shows a breakdown of the examinations by subject area and the percentage of total questions for each subject area. **It should be noted that the Applicant does not indicate any objection nor does the Applicant convey any concerns as to the validity and reliability of the current test administered by the Board to determine the competency of individuals seeking licensure. Moreover, the Applicant suggests utilization of the same exam to determine competency.** This is indicated by the Applicant's response to Question 18 of the Sunrise application which asks the Applicant to describe the testing method currently used to measure qualifications for entry and provide documentation for its validity. According to the Applicant:

*There are many states with requirements for plumber and sprinkler fitter licensing. Thompson Prometric/Exterior is currently the company that administers West Virginia contractor licensing tests and crane operator certification tests. On their web site they have details about their test development, validity and reliability. They currently provide tests for plumbers which are geared for the International Plumbing Code adopted by West Virginia.*

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## Incompetence of the Population

Because the Applicant has not expressed any concerns with the validity of the current exam used to determine the competency of a contractor, the Applicant appears to be alluding to the employees of a licensed contractor when suggesting that incompetence currently exists in the proposed regulated population. However, the application is contradictory in this sense in that the Applicant proposes “grandfathering” all individuals currently practicing the trade who can demonstrate experience performing the work. **If individuals currently acting in the capacity of employees of licensed contractors are incompetent, then issuing these individuals a license without requiring them to demonstrate competency via an examination would not result in additional or increased protection to the public.**

Furthermore, with regard to Sprinkler Fitting and Fire Protection contractors, when sprinkler systems are constructed in structures subject to the West Virginia Fire Code (all structures except for one and two family dwellings), the West Virginia Fire Marshal inspects these systems to ensure proper activation, thereby ensuring that the public currently receives the maximum benefit of any additional regulation. According to the West Virginia Fire Marshal,

*[In FY] 04-05 we looked at 320 systems. In [FY] 03-04 we looked at 263 systems. If there are any problems with a system, they are fixed while we are there. We have no data that tells us if it did or did not work. The system must work before we pass it.*

Although the Fire Marshal does not have authority to inspect these systems in one and two family dwellings, the Fire Marshal has suggested that the actual number of these systems is likely small because they are cost prohibitive. Additionally, according to the Applicant, 55 municipalities and 6 counties have adopted the state building code. These areas, and possibly additional areas, may require a building inspector to inspect all construction work done to ensure that it is done correctly. The Legislative Auditor has no data on this as it is done on a local level only.

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*It should be further noted that neither the regulatory environment proposed by the Applicant to govern plumbing nor that which is employed in other states is significantly different than that which is currently in place in West Virginia.*

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## Contractor Licensing Versus Practitioner Licensing

It should be further noted that neither the regulatory environment proposed by the Applicant to govern plumbing nor that which is employed in other states is significantly different than that which is currently in place in West Virginia. According to the Legislative Auditor’s research, there are three states that appear to have no regulations governing the practice of plumbing, and four states regulate plumbing at the local level only. The remaining 43 states generally regulate the practice of plumbing in one of two ways:

1. Regulation at the contractor level through the licensure of construction jobs (11 states);or
2. Regulation at the practitioner level through the licensure of construction practitioners (32 states).

Table 2 shows the breakdown of states by licensure type.

<b>Table 2 Regulation of Plumbing in Individual States</b>				
<b>States Regulating Plumbers at the Contractor Level</b>				
Mississippi	Connecticut	West Virginia	Arizona	California
Ohio	Florida	South Carolina	North Carolina	New Mexico
Nevada				
<b>States Regulating Plumbers at the Practitioner Level</b>				
Maine	Massachusetts	Michigan	Kentucky	Maryland
Louisiana	Montana	Minnesota	Idaho	New Hampshire
Delaware	Hawaii	Georgia	South Dakota	North Dakota
Colorado	Oklahoma	Oregon	Utah	Rhode Island
Arkansas	Vermont	Alaska	Texas	Washington
Wisconsin	Alabama	Indiana	Virginia	New Jersey
Tennessee*	Illinois			
<b>States Regulating Plumbers at Local Level Only</b>				
New York	Kansas	Wyoming	Iowa	
<b>States With No Regulation of Plumbers</b>				
Missouri	Pennsylvania	Nebraska		
* Tennessee has recently passed legislation to regulate plumbers using a model that contains both elements of contractor licensure and plumber licensure.				

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*West Virginia currently employs the contractor level of licensure and the Applicant proposes the practitioner level of licensure. Although the regulatory systems are different in appearance, they are very similar in structure. Each system has a population of individuals who are required to demonstrate competency through either an examination, experience, or both.*

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*When comparing these two types of supervision requirements, it would be reasonable to conclude that direct supervision would be the more desirable of the two when considering the goal of this type of regulation is to mitigate any potential risk to the public health and welfare from incompetent practitioners, however, the Legislative Auditor's analysis has consistently shown that the current regulatory environment is sufficient to mitigate any potential for harm.*

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West Virginia currently employs the contractor level of licensure and the Applicant proposes the practitioner level of licensure. Although the regulatory systems are different in appearance, they are very similar in structure. Each system has a population of individuals who are required to demonstrate competency through either an examination, experience, or both. At the job level, the individual required to demonstrate competence is the contractor. At the practitioner level, it is the Master or Journeyman plumber who is required to demonstrate competence. Additionally, each system has a group of individuals who are not required to demonstrate competency. At the job level, this group would consist of employees of the contractor. At the practitioner level, this group would consist of apprentices or individuals in training.

### **Comparison of General Supervision to Direct Supervision**

The significant difference between these two systems is in the area of supervision requirements. At the contractor level, general supervision is exercised by the contractor over employees who have not demonstrated competency. At the practitioner level, direct supervision is exercised over employees who have not demonstrated competency by either a Master or Journeyman practitioner. These two types of supervision, general and direct, differ in the following manner:

1. **General Supervision-** the contractor provides assignments by indicating generally what is to be done, limitations, quality and quantity expected, deadlines and priorities. The employee uses initiative in carrying out recurring assignments without the physical presence of the contractor. Ultimately, it is the contractor who is responsible for producing work that is technically accurate and in compliance with instructions and established procedures.
2. **Direct Supervision-** the Journeyman and Master practitioner(s) gives specific instructions on all assignments. The physical presence of the supervising practitioner is required on the job site for the purpose of reviewing the completeness and accuracy of the practitioner's work product. Additionally, the supervised practitioner may be required to perform tasks which provide inherent checks built into the nature of the work.

When comparing these two types of supervision requirements, it would be reasonable to conclude that direct supervision would be the more desirable of the two when considering the goal of this type of regulation is to mitigate any potential risk to the public health and welfare from incompetent practitioners, however, the Legislative Auditor's analysis has consistently shown that the current regulatory environment is sufficient to mitigate any potential for harm. While a contractor may have an economic incentive to deviate from excepted standards or codes, this incentive is not passed down to the employee. An employee would likely only incorrectly apply his trade because of lack of knowledge, skills or ability, and the Legislative Auditor has no reason to conclude that this is occurring

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either because it is not occurring or because the current regulatory scheme properly mitigates the potential for harm. **The Applicant provided no evidence in the application or in subsequent communications that harm has occurred because employees of licensed contractors performed their trade incorrectly.** Furthermore, the Legislative Auditor has not identified the clear presence of harm or endangerment to the health, safety or welfare of the public from this population of practitioners.

### **Conclusion**

The Applicant proposes that the current unregulated practice of plumbing and sprinkler fitting in West Virginia poses a clear risk to the public health and welfare. While the unregulated practice of these occupations do present a clear risk, the Legislative Auditor concludes that the occupational groups in question are currently regulated, and that the current regulatory environment is sufficient to mitigate any potential for harm.

# Appendix A: Transmittal Letter

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## WEST VIRGINIA LEGISLATURE *Performance Evaluation and Research Division*

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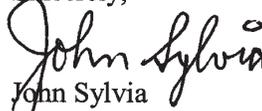
Dear Mr. White:

This is to transmit a draft copy of the Sunrise Report on Plumbers and Sprinkler Fitters. This report is scheduled to be presented on June 12, 2006, in Room 215 of the East wing of the Capitol Building. We will inform you of the exact time once the information becomes available. It is expected that a representative from your agency will 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 an exit conference to discuss any concerns you may have with the report, please notify us between June 6, 2006 and June 8, 2006. We need your written response by noon on June 9, 2006, in order for it to be included in the final report. If your agency intends to distribute additional material to committee members at the meeting, please contact the House Government Organization staff at 340-3192 by Thursday, June 8, 2006 to make arrangements.

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

Sincerely,

  
John Sylvia

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*Joint Committee on Government and Finance*

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# Appendix B

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<b>Total Questions and Percentage of Questions by Content for Plumbers, Piping, Sprinkler and Fire Protection Contractors</b>	
<b>Business Law Section - Applicable to All Contractors - 50 Questions</b>	
Subject Area	% of Questions
Business Organization	4%
Licensing	8%
Estimating and Bidding	8%
Contracts	16%
Project Management	12%
Risk Management	6%
Safety - OSHA	6%
Labor Law	16%
Financial Management	10%
Tax Law	10%
Lien Law	4%
<b>Piping Contractor - 50 Questions</b>	
General Regulations	20%
Specialty Mechanical Systems	24%
Pipefitting	30%
Fuel Gas	20%
Safety	6%
<b>Plumbing Contractor - 120 Questions</b>	
General Knowledge	15
General Regulations	18
Plumbing Fixtures	5%
Water Supply Systems	8%
Drainage, Waste and Sanitary Vents	15%
Indirect Waste	3%
Roof Drain Piping	3%
Specialty Plumbing	8%
Isometric Analysis	8%
Fuel Gas Systems	17%

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Code and General Knowledge	10%
Sprinkler Systems	50%
Water Supply, Storage and Distribution	15%
Materials and Methods	10%
Private Hydrants and Stand Pipe Systems	10%
Commercial Kitchen Equipment	5%
<i>*Source: West Virginia Division of Labor Candidate Information Bulletin</i>	