

# State of Utah

### UTAH SEISMIC SAFETY COMMISSION

Michael O. Leavitt Governor

> T. Leslie Youd Chairperson

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### UTAH SEISMIC SAFETY COMMISSION

October 1, 1996

State Office Building, Room 1112
Minutes

**Members Present:** 

Chair, Les Youd Professor, BYU Civil Engineering Department

Lee Allison Director, Utah Geological Survey

Walter Arabasz Director, University of Utah Seismograph Stations

D. Douglas Bodrero Commissioner, Department of Public Safety
James Bailey Structural Engineers Association of Utah

Lorayne Frank Director, Division of Comprehensive Emergency Management

James Golden Assistant Chief Structural Engineer, Department of Transportation

William E. Juszcak Division of Facilities Construction and Management

Sen. Craig Peterson Utah State Senate

Barry Smith Western Mountain Region American Institute of Architects

**Members Not Present:** 

Ken Bullock Director, Utah League of Cities and Towns

Randall G. Updike U.S. Geological Survey (Ex-Officio)

Russ Wilder Federal Emergency Management Agency (Ex-Officio)
Suzanne Winters Science Advisor, Governor's Office of Planning and Budget

**CEM Staff Present:** 

Bob Carey EPICENTER Program Manager, Natural Hazards Section

Brenda Edwards Office Technician, Natural Hazards Section

John Rokich Natural Hazards Section Chief

**UGS Staff Present:** 

Gary Christenson Applied Geology Manager, Utah Geological Survey
Janine Jarva Senior Geological Technician, Utah Geological Survey

Barry Solomon Senior Geologist, Utah Geological Survey

Others Present

Carl Eriksson Structural Engineer and Building Official, Salt Lake County

Bruce Funk USSC Intern

Matthew Mabey BYU Department of Geology

Lee Siegel Salt Lake Tribune



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### Call to Order

Chairman Les Youd called the meeting to order at 9:05 a.m.

### **Review of Minutes**

The minutes were presented for approval and were approved as read by the Commission members in attendance.

### News

### December "Seismic Safety Commissions" Conference

Les informed the Committee that the California Seismic Safety Commission is hosting a meeting for representatives from seismic safety commissions across the country. The meeting will be December 3 - 5, 1996 in Los Angeles. Walter Arabasz and Les Youd will be the delegates from Utah. Their expenses will be paid by FEMA.

### **Building Board Presentation**

Les reported that a presentation to the State Building Board was made during their September meeting. The presentation was similar to the one made last year. The focus in this presentation was the high priority item of 10.5 million dollars per year added to the budget of DFCM to study the earthquake resistance of buildings in Utah and begin the retrofit process. He stated that voting on this item will be in October and further opportunities for input are unclear. Les stated that the chairman of the building board reacted favorably to the action presented. Bill Juszcak and Gary Christenson were also present.

Bill stated that the Building Board is confusing the role of the Commission, and the presentation was viewed as information and support for the project. He also reported that a bill will be presented to the building board to study the Capitol. Walter inquired if structures have been identified that need to be studied. Bill responded in the negative. Discussion followed on the process that has been used for other projects and stated that this project may be handled in a similar manner. Bill commented that the inventory could be accomplished "in-house" but the completion time would be greater.

Discussion began on the costs for the Capitol study: programming (how the building will be used, master plan for use during construction) was 3 million dollars, and retrofit 100 million dollars. Included in the discussion was the need to inventory all buildings to ascertain the structures that are critical.

Les stated that "selling" instrumentation through engineering and science alone may not be best, and encouraged "selling" it in terms of benefits for response and recovery suggesting a combined approach. Carl related a positive experience with the technology described by Lee. Lorayne also expressed the benefits of the equipment in the emergency response field.

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Bill reported that the building board will be meeting on Oct. 10 - 11, 1996 to hear requests; the hearings for the vote will be Oct. 25, 1996.

### **UACIR Plan Check Presentation**

Jim Bailey and Carl Eriksson made a presentation to the Utah Advisory Council on Intergovernmental Relations (UACIR). Carl reported that the presentation was well received but the actions to be taken next and by whom was unclear.

Jim Bailey reported that Sanpete County has a mechanism in place to perform plan checks. He also reported that the white paper was well received. Carl also stated that thirteen jurisdictions have combined their resources to form a regional building department. Sen. Peterson attended the UACIR meeting and expressed his support in the meeting for the action presented.

### NSF Earthquake Engineering Center

Les reported that the National Science Foundation has requested proposals for four (4) centers in which two or three will be funded. He then reported that proposals are being prepared by the State University of New York at Buffalo, California Universities, University of Illinois, and the University of Texas.

Les introduced Matthew Mabey from the BYU Geology Department who has agreed to develop a proposal for a NSF center in Utah. Matthew began by stating several goals for his presentation to the Commission as being: 1) awareness, 2) moral support, and 3) to identify additional matching funding sources. He reported that two or three centers will be funded at two million dollars each per year, for five years with a possible extension of three years. The funding is a dollar for dollar match with non-federal funds. The deadline for proposals is October 15, 1996.

Matthew listed anticipated participants as: BYU, USU, U of U, Portland State University, Oregon Department of Geology and Mineral Industries, and UGS. He stated that the proposal is under the engineering director of NSF and the focus is placed on engineering.

Matthew then stated the amount of funding that would be necessary from each participant is 100 thousand dollars per year, in kind or real funds for an FTE and overhead etc.

Lee Siegel inquired on the purpose of including Oregon. Matthew responded that some programs in both states are complimentary, contacts are already established, and matching funds are available. He further commented that it would be beneficial to include other states, but the time constraints do not allow coordination at this time. Les then reported on contact from John Wallace of California for BYU and Les to be an affiliate of the California center; a conclusion has not been reached.

Matthew then outlined the concept behind the center to incorporate the progress that has been made and utilize it in a different way to produce more new research to develop a mitigation strategy. Key

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items are to: 1) identify the need, 2) quantify the hazard to reduce the costs of mitigation by reducing safety factors, 3) identify the most vulnerable buildings by detailed inventory to reduce the costs of mitigating the seen hazards vs. the entire building structure and 4) optimize the implementation of mitigation plans.

Discussion ensued on the funding procured by New York for their center. Jim suggested that a recommendation of the Commission be to ask the legislature for matching funds for this program. Les inquired if the possible appropriation of 10.5 million dollars to DFCM qualified as matching funds. Matthew responded in the affirmative. Discussion included the funding of the UDOT projects and that some of the funds may be federal and state funds. Jim Golden suggested that Dal Hawks and/or Doug Anderson would be of assistance in clarifying the funds availability. Les suggested to Matthew that they be contacted.

Walter stated that the work would be well rewarded if the only result was a consortium in Utah, and with the strength of the consortium, the funding requirement is feasible. He then expressed his support for the proposal. Les suggested that the Department of Geology and Geophysics at the University of Utah be contacted due to their national reputation which could add strength to the proposal.

Lee inquired if industry has a role in the proposal, to which Matthew responded in the affirmative. Les suggested to Matthew that Bob Grow and Peter McDonough be contacted for support or participation.

Sen. Peterson reported that a presentation was made to the bi-partisan management committee of the House and Senate on the importance of earthquake retrofit, preservation, and restoration of the Capitol. He stated that it was received very well and there may be a higher likelihood of funding being set aside.

Sen. Peterson stated that the working relationship is good with Oregon legislators which may produce additional funding for the Utah center. He also stated that additional funding may be identified by the legislature through a line item or intent language.

Motion: USSC prepare a letter in support of the Utah proposal

to NSF offering the Commission's assistance and

cooperation for the center if funded.

Moved By: Lee Allison

Seconded: Sen. Craig Peterson

Motion Carried: By a Quorum

### WSSPC Conference Report

Lorayne Frank, chairperson of WSSPC, reported that in a board meeting the NSF center proposal

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was discussed and due to a lack of information the proposal was not formally endorsed. Lorayne stated that a letter containing goals of the center was requested by NSF and will be written by Oct. 8, 1996 for their outreach section.

Lorayne reported that seismic safety commissions becoming more involved with WSSPC was a topic in a board meeting. She stated that invitations will be sent to the chairpersons of the seismic safety commissions to invite them to participate in the meetings.

### 1996 Earthquake Conference

Lee reported that there were 190 paid attendees and a \$500 profit recorded which will be used to begin the planning for the next conference. He continued by reviewing the information from the questionnaire regarding the conference. Lee stated that the overall response was positive and the participants were motivated to take action and would attend another conference. Janine reported on the demographics of the attendees as being approximately 60% business (C.E.O.'s or upper level management); 15% banking/financial; small percentage of firefighters, police officers, emergency response personnel; and 4 or 5 mayors.

Lee reported that the nominations for the awards were impressive in quality. He then reported on the awards that were given. Lee stated that a press release was sent on the day the award recipients were selected.

Motion: Extend formal thanks on behalf of the Commission to the

conference organizing committee and chair for a superb

job in organizing the conference.

Moved By:

Walter Arabasz

Seconded:

Lorayne Frank

**Motion Carried:** 

By a Quorum

Discussion followed on the membership procedure to include Ann Becker on the Education and Awareness Standing Committee. Les requested that a letter be written informing her that she is accepted as a member of the standing committee. Discussion followed on the profit made from the conference.

Discussion ensued on the format for the next conference. Suggestions were made to have a half day conference which may attract more decision makers, and to have the organizing committee make recommendations on the format, theme, and approach. It was also suggested that the conference be combined with an exercise. Discussion ensued on the groups involved with an exercise and the targeting of specific groups for conferences. Co-sponsorship of a conference was also discussed and Walter stated that with the variety of groups that are interested, encouragement of other conferences and co-sponsorship of them throughout the year may be an activity to consider.

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### 1996-1997 Activities

### Report on Funding Requests from Departments

Lorayne and Lee reported that agency funding requests require a 50% match from savings from within the existing department budgets. Thus, no funding requests will be made. Lee reviewed the budget process with the Commission.

Walter expressed that efforts are on-going for real-time monitoring of earthquakes and funding is also being sought through alternative avenues.

### Legislative Initiatives

Sen. Peterson reported that the bill file is open and suggested that the direction and a bill stating what the Commission wants accomplished be drafted as soon as possible.

Carl commented that the UBC Commission and the Inspector Licensing Board reviewed his "plan check" proposal. The Inspector Licensing Board proposed several changes in the proposal in regards to the plans examiners and building officials being licensed. Sen. Peterson suggested that the language in the seventh paragraph be changed, i.e., "Each agency shall have a dedicated fund established that shall maintain a sufficient balance within the fund to maintain proper inspection..." He also suggested that a proactive approach be taken in the appropriations act and to run the bills and appropriation acts separately. Sen. Peterson commented that to achieve the Commission's goals an approach to acquire funding through the legislature may be needed.

Carl reviewed concerns from the Inspector Licensing Board concerning following the rules and assuring compliance; otherwise, legislators may not pass the bill. The July date may be too soon to implement a training program and complete the training. Carl suggested that January 1, 1999 replace the July date in the proposal. The Inspector Licensing Board did vote in favor of the proposal.

Carl then reported that he was requested by the Home Builders Association to write an article. He stated that a colleague, Gary Margetts, reviewed the article and responded by writing a letter to him. Copies of the letter and article were distributed to the Commission members. Carl discussed the challenges in following the plans and field inspections. Mr. Margetts commented that if the builders, contractors, and home designers as well as the building and plan inspectors were trained, a cost savings and better product generally may result.

Carl then reviewed the proposed licensing of building officials and plans examiners, explaining the levels of training available. Lorayne inquired if a training program was already established. Carl stated that the UBC Commission has an education advisory committee to establish licensing training. He stated that paragraph seven has not been presented to the Inspector Licensing Board. Carl then commented that the seventh paragraph creates a number of enterprise funds.

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Discussion ensued on the form of support from the Commission for the proposal. Walter expressed that the law is still being shaped and the Commission can make motions for support on the final bill. Support for the concept was expressed by members of the Commission.

Carl also reported that the UBC will be printed for the last time in 1997. He further stated that a code will be published in 2000, as an international code combining the UBC, Southern, and National Building codes. The quality of the document is unknown. Carl commented that the direction for the next few years is unclear but suggested to continue with the direction being taken in regards to seismic issues.

Discussion ensued on the white paper which included comments concerning endorsing the white paper without a motion and an inquiry concerning the insurance commission, rates, and if they are involved. Carl responded that the ISO is a non-profit organization, established by private insurance companies for setting their rates. He stated that the rates have decreased in some cases due to an effective plan review process.

Motion: The USSC adopt the white paper on building code

enforcement in Utah as an official position of the

Commission.

Moved by:

Lee Allison

Seconded:

Walter Arabasz

**Motion Carried:** 

By a Quorum

### Progress Report

Les introduced Bruce Funk to the Commission as the author of the report. Les stated that the report is presently under review and requested that comments on the report be returned to Bruce by October 4, 1996. Les suggested that the executive summary and conclusion be reviewed in particular due to the policy statements in those sections. Lee Siegel inquired on the completion date of the report. Bruce responded that it will be at least a couple of weeks after the responses are returned to him.

### **USSC Budget Report**

Lee proceeded to report on the Commission's budget. He reported that the funds were not all expended and to protect against lapsing the funds, UGS expended the amount and proposed that the amount be reimbursed to the USSC budget from UGS' current budget. Sen. Peterson suggested that a line item be set up to establish a base level of funding and to allow flexibility. He will also make the necessary changes for carry-forward authority. Discussion followed on the benefits of making the budget reporting changes and Sen. Peterson commented that it may highlight the seismic issues.

### **Next Meeting**

The next meeting is scheduled for Thursday, January 9, 1997 at 9:00 a.m. in room 1112 in the State Office Building.

### A White paper

Addressing

## **Building Code Enforcement in Utah**

Prepared for
The Advisory Council on Intergovernmental Relations
by
The Utah Seismic Safety Commission
July 26, 1996

### **Executive Summary**

Building Code enforcement in Utah has seen great strides in the past 10 years, but serious deficiencies still exist, which result in inequities for owners, builders, and the citizens in general. These inequities bring with them widely varying costs of construction from one jurisdiction to the next, and will soon result in varying insurance rates from one city or county to another, as the Insurance Services Office (ISO) begins to rate building code effectiveness. While some of the differences are a result of under-regulation, with potentially dangerous consequences, there is also a rising occurrence of over-regulation because of inadequate training or inappropriate allocation of resources for providing such training.

### The Purpose of Building Code Enforcement

Building code enforcement had little purpose a hundred years ago, when our society was primarily agrarian and rural, and the structures built were generally simple in nature. When a complex structure was constructed, it was usually done by someone who knew and understood many of the issues concerned with life safety and structural strength. In this century our society has made several important changes that require a different approach to new construction:

- \* We have become more urbanized, with concentrations of construction that affects neighbors in many ways.
- \* Our architectural needs or desires have become more complex, such that the buildings have complicated structural issues that need to be addressed.
- \* Technical developments in the past 100 years have led to complex systems being included in our homes and buildings, notably the electrical, mechanical(heating), and plumbing systems.

As a result of such changes, and a number of disasters (the great Chicago fire, San Francisco earthquake, etc.) the need for building code enforcement became evident and has grown ever since. The charging statement of the building code currently in use in Utah (the Uniform Building Code, or UBC) is, "to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures...." Any action or interpretation that seeks to accomplish more than this is inappropriate under the law.

### A Brief History of Code Enforcement in Utah

Building code enforcement in Utah began in the late 1800's in Salt Lake City, and has spread throughout the state to the point where most of Utah's citizens are regulated by a code enforcement agency that has at least basic capability of providing this service. In the mid-80's a serious concern was expressed by the homebuilders and others that each of the many jurisdictions in the state had different codes and enforced them differently. This resulted in the adoption in 1987 of the Uniform Building Code statewide, under the contractor's licensing board. In 1989 this law was replaced by a new law, the Uniform Building Standards Act, which more uniquely identified the problems and issues. This act established the Uniform Building Code Commission, required the licensure of building inspectors by July 1, 1993, and assessed a 1% surcharge on building permits to fund the training of inspectors to obtain greater uniformity. Under this act great progress has been made in establishing uniformity in enforcement of the codes, and the quality of construction has been markedly improved throughout the state.

### The Building Permit Process

The permit process is used here in its narrowest sense and is not to be confused with landuse (planning and zoning), impact fees, utilities, and other issues. While these other issues can have significant political impact, the building permit process is almost totally a technical issue, and its principles apply without regard to jurisdictional boundaries. Plans are first submitted to the building department and reviewed to see that they comply with the applicable codes. Any deviations from the code requirements are required to be corrected prior to issuance of a permit. This is based on the concept that "it is easier to fix it on paper than to fix it in the ground". The plan review is performed by building department personnel, who, at this point, are not required to have training or licensing. The permit is then issued (usually subject to acceptance by the zoning enforcement personnel) and the structure then is required to be built in accordance with these approved plans. Inspections are required to take place at different stages of construction, usually just before that aspect of the work is covered. The inspections, under state law, are required to be done by licensed, trained building inspectors. Upon completion of the project, a final inspection is performed by the building inspector, and if it meets all required criteria, it receives final approval. This final approval allows for the structure to be used and occupied, and allows for utilities to be connected to it.

The lack of review by licensed plans examiners or by licensed engineers raises serious issues about the seismic integrity of many of our buildings. With the earthquake potential in Utah as high as it is, it is imperative that a thorough review of each structure be provided to ensure that both we and future generations are protected from the catastrophic losses of a major earthquake.

To offset the cost of providing these reviews and inspections, two main fees are collected: a plan review fee, and a building permit fee. The plan review fee is usually figured as a percentage of the building permit fee, and is collected in addition to, and sometimes in advance of the building permit fee. The building permit fee is usually based on the valuation of the work, and is calculated based on a fee schedule adopted by the local jurisdiction. These fees are intended to cover the cost of providing complete inspection services as required by the code.

The total cost, on average, usually falls in the range of 0.6% to 0.9% of the total calculated value of the building - for instance the fees for a \$100,000 house would probably be in the range of \$600 to \$900 dollars, and would pay for the plan review, the inspections, and the administrative support for the building inspection service.

### Inspection Services to be Provided

While the typical home, garage, or small store that is built has relatively simple code enforcement issues to deal with, larger buildings such as high-rise office buildings, manufacturing plants, hospitals, and shopping malls have very complex and difficult code issues. Because of this the code outlines extensive services that are required to assure safe and serviceable structures. The fees collected are intended to allow the jurisdiction to provide, among others, the following services:

- a. Special Inspection coordination for large projects
- b. Approved Fabricator review for products like trusses and precast concrete
- c. Prefabricated construction review
- d. Quality control inspection services to verify consistent, accurate work
- e. Quality control plan review services
- f. Code development services codes are constantly being updated and revised
- g. Training services
- h. Review of new products and services
- I. Non-engineering plan review, for fire safety, exits, etc.
- i. Engineering review (structural, mechanical, electrical, grading) of plans
- k. Absenteeism/overload support to provide continuous service
- 1. Tracking building permit data for county assessor, US Census, etc.
- m. Performing specialty inspections, such as high rise test sequences
- n. Maintain inspection equipment for transportation and for specialty inspections

A recent survey indicated that no jurisdiction in the state provides *all* of these services at an acceptable level. In fact, the jurisdictions in the United States that currently provide a true full-service inspection department are jurisdictions that issue permits for at least half a billion dollars worth of construction each year. Utah's largest jurisdictions, Salt Lake City and Salt Lake County, issue permits for work valued at between \$100,000,000 and \$350,000,000 each year. For nearly all jurisdictions in the state, it is not possible for each to independently provide a full service inspection program. Economies of scale show up clearly in this kind of program.

The failure of local building departments to provide approval of fabricators, coordination of special inspectors, review of prefabricated construction, and similar services, seriously compromises the ability of structures to resist the lateral loads imposed by earthquakes in our seismically active area.

### Use of Building Permit Revenue

It has come to our attention that most jurisdictions remit a substantial portion of their building permit revenues to the city general fund to provide other services unrelated to the enforcement of building codes. While some cities will keep 10% or so of their revenue for unrelated purposes, many will use up to 90% for that, with the average probably falling around 50%. In other words, of the approximately \$20,000,000 in building permit fees collected in Utah in 1995, only about \$10,000,000 was used for building code enforcement; the remainder went for unrelated purposes.

### **Insurance Rates and Building Code Enforcement**

The Insurance Services Office, an independent service company operated under the auspices of the insurance companies of the United States, also known as ISO, has begun conducting audits of building departments, using the Building Code Effectiveness Grading Schedule. This measures the ability of a building department to effectively administer and enforce the building codes of the jurisdiction, and will be used to assist the insurance companies to establish appropriate rate structures reflecting the quality of building code enforcement in a jurisdiction. While rate increases are not expected as a result of this study, building departments which receive a favorable rating will have insurance rates drop in their cities, as much as 17%.

The first area to receive this review was the hurricane-prone south east states. These surveys were completed in 1995. The next area is the seismically active areas, including the west coast and the mountain states. Utah is expected to be rated during 1998, and many of our cities and counties will not qualify for the favorable ratings because of their inability to deliver a "full-service" program.

### **Inequality in Services Provided**

In spite of the great strides made in uniformity of codes, there are still wide disparities in the way building codes are enforced statewide. As an example, a set of plans submitted for review in one city may require the plans to be reviewed and stamped by a licensed engineer, at considerable increase in cost, both for the engineering and for the implementation of his/her requirements. The same plans submitted in another city may not even be reviewed for structural requirements, possibly resulting in a substandard structure. In most cases a proper review would result in some middle ground requirements that would be reasonable, while still protecting the interests and investment of the owners and users of the structure.

#### **Solutions**

The solutions to these issues consist of a number of different steps, which could be taken each on its own merits, or as a single package. Solutions could range from incentives for local governments to provide the appropriate services, to establishment of statewide agencies to administer or serve the local agencies. Each package should address the following issues:

1. Ensure that all building permit revenue is deposited in a dedicated, non-lapsing fund. Such a fund should have a cap, possibly equal to the past two years expenditures. This would allow for the department to ride through the volatile fluctuations so common in the construction industry, as well as make capital purchases, such as trucks or computers, without severely

impacting one particular year. When the cap is exceeded, the excesses could be transferred to the general fund, and consideration given to lowering the fee schedule, to avoid exceeding the cap in the future. While some may consider applying this principle to all permit/license fees, such action or consideration is beyond the scope of this paper.

- 2. Provide for the voluntary or mandatory establishment of regional or statewide agencies that would provide assistance to local jurisdictions in meeting the objective of providing a truly full-service inspection program. This would include such items as quality control audits; special inspection coordination; code development; approved fabricator programs; support for absenteeism/overload circumstances; plan review for complex structures; engineering review; training; maintenance of a technical library, and other appropriate services. A state agency could be established to provide all of these services for approximately 12% of the permit revenue, or regional agencies could be established by cities and counties, or private agencies could proffer their services to accomplish these objectives.
- 3. A state building codes commissioner, or state building official, should be provided for, who could see to it that many of these services are coordinated or made available at the local level. This person would also serve as knowledgeable technical support for the UBC Commission, and identify and coordinate training needs throughout the state.
- 4. Provide for licensing or certification of building officials and plans examiners throughout the state, to be assured of some minimum levels of competence for those mandated to administer the codes.
- 5. Establish a means by which state buildings and school buildings are reviewed and inspected by plans examiners and inspectors who have access to the same resources that would be available to the local building departments by these legislative actions.

#### Conclusion

The purpose of building codes is to protect life, limb, health, property and public welfare. Such protection should be measurable in terms of lower insurance rates; consistency in enforcement from one jurisdiction to another; and homes, offices, and schools which afford a comforting degree of safety. While unnecessary intrusion into people's lives must be avoided, each of us has a right to assurance that our homes and buildings are safe places of abode.

Proposed amendment to state law:

### 58-56-9. Qualifications of inspectors - Contract for inspection services.

- 1) Effective July 1, 1993, all inspectors employed by a local regulator, state regulator, or compliance agency to enforce provisions of the codes adopted pursuant to this chapter shall:
  - (a) meet minimum qualifications as established by the division in collaboration with the commission or be certified by a nationally recognized organization which promulgates codes adopted under this chapter, or pass an examination developed by the division in collaboration with the commission;
  - (b) be currently licensed by the division as meeting those minimuj qualifications; and
- (c) be subject to revocation or suspension of their license or may be placed on probation if found guilty of unlawful or unprofessional conduct.
- (2) Effective July 1, 1998, all plans examiners employed by a local regulator, state regulator, or compliance agency to enforce provisions of the codes adopted pursuant to this chapter shall:
  - (a) meet minimum qualifications as established by the division in collaboration with the commission or be certified by a nationally recognized organization which promulgates codes adopted under this chapter, or pass an examination developed by the division in collaboration with the commission;
  - (b) be currently licensed by the division as meeting those minimum qualifications; and
  - (c) be subject to revocation or suspension of their license or may be placed on probation if found guilty of unlawful or unprofessional conduct.
- (3) Effective July 1,1998, all building officials employed by a local regulator, state regulator, or compliance agency to enforce provisions of the codes adopted pursuant to this chapter shall:
  - (a) meet minimum qualifications as established by the division in collaboration with the commission or be certified by a nationally recognized organization which promulgates codes adopted under this chapter, or pass an examination developed by the division in collaboration with the commission;
  - (b) be currently licensed by the division as meeting those minimum qualifications; and
  - (c) be subject to revocation or suspension of their license or may be placed on probation if found guilty of unlawful or unprofessional conduct.
- (24) A local fegulator, state regulator, or compliance agency may contract for the services of a licensed inspector not regularly imployed by the regulator or agency.
- (35) (a) The division shall use the monies received in Subsection (46) to provide education regading the code and amendments to:
  - (i) building inspectors; and
  - (ii) individuals engaged in construction-related trades.
  - (b) All funding available for the building inspectors education program shall be non-lapsing.
- (46) Each compliance agency shall charge a 1% surcharge on all building permits issued and shall transmit 80% of the amount collected to the division to be utilized by the division to fulfill the requirements of Subsection (35). The surcharge shall be deposited as a dedicated credit.
- (7) Each compliance agency shall deposit all funds collected under authority of the building codes in a dedicated, non-lapsing account to be used only for purposes of code enforcement. Up to 25% of such funds may be used by the agency for related purposes, including, but not limited to, enforcement of land-use ordinances, engineering costs related to new development, and enforcement of abatement ordinances related to buildings and structures.

Proposed amendment to state rules:

R-156-56-3. Definitions.

(xx) "Building Official" means a person employed by a local regulator, state regulator or compliance agency for the purpose of administering an agency established to assure compliance with the adopted building codes, and represents the local regulator, state regulator or compliance agency in matters relating to such codes.

#### R-156-56-xx. Licensure of Building Officials.

- (1) License Classifications. Each building official shall qualify for licensure and be licensed by the division in one of the following classifications not later than July 1, 1998:
  - (a) Class I Building Official
  - (b) Class II Building Official
  - (c) Class III Building Official
  - (2) Scope of Work. The scope of work permitted under each building official classification is as follows:
    - (a) Class I Building Official: Administer an agency which provides code enforcement services in a jurisdiction with any volume of work.
    - (b) Class II Building Official: Administer an agency which provides code enforcement services for a jurisdiction having a total annual permit valuations not exceeding \$100,000,000.
    - (c) Class III Building Official: Administer an agency which provides code enforcement services for a jurisdiction having a total annual permit valuation not exceeding \$25,000,000.
  - (3) Qualifications for licensure. The qualifications for licensure for each building official classification are as follows.
    - (a) Class I Building Official
      - (i) Have a certification as a building official from a nationally recognized independent testing agency.
      - (ii) Have and maintain an Inspector I license in building, electrical, mechanical and plumbing. Up to three of the required license requirements may be met by having and maintaining the following:
        - (A) Unlimited Plans Examiner license may be used to replace two of the required licenses.
        - (B) Engineers license or Architects license may be used to replace three of the required licenses.
      - (iii) Have a minimum of four years experience in code enforcement
    - (b) Class II Building Official
      - (i) Have and maintain an Inspector I license in building, electrical, mechanical and plumbing. Up to three of the required license requirements may be met by having and maintaining the following:
        - (A) Unlimited Plans Examiner license may be used to replace two of the required licenses.
        - (B) Engineers license or Architects license may be used to replace three of the required licenses.
        - (C) Inspector III license in any trade (building, electrical, mechanical, or plumbing) may be used to replace its counterpart Inspector I license, up to a maximum of three.
        - (D) Certification as a building official from a nationally recognized independent testing agency may be used to replace three of the required licenses.
      - (ii) Have a minimum of two years experience in code enforcement
    - (c) Class III Building Official
      - (i) Have and maintain any of the following:
        - (A) Unlimited Plans Examiner license or Residential and Light Commercial Plans Examiner license
        - (B) Inspector I license in any trade (building, electrical, mechanical or plumbing) and an Inspector III license in any other of the four trades.
        - (C) Inspector III license in any three trades (building, electrical, mechanical or plumbing)
        - (D) Certification as a building official from a nationally recognized independent testing agency

Proposed amendment to state rules:

R-156-56-3. Definitions.

(xx) "Plans examiner" means a person employed by a local regulator, state regulator or compliance agency for the purpose of reviewing plans for compliance with the building code.

#### R-156-56-xx. Licensure of Plans Examiners.

- (1) License Classifications. Each plans examiner employed by a local regulator, state regulator, compliance agency, or private agency providing inspection services to a regulator or compliance agency, shall qualify for licensure and be licensed by the division in one of the following classifications not later than July 1, 1998:
  - (a) Unlimited Plans Examiner
  - (b) Residential and Light Commercial Plans Examiner
  - (2) Scope of Work. The scope of work permitted under each plans examiner classification is as follows:
    - (a) Unlimited Plans Examiner:
      - (i) In accordance with the provisions of the UBC as currently adopted by the State of Utah, review plans submitted for compliance with the non-structural aspects of the UBC.
      - (ii) Review any plan for conformance with conventional construction provisions of the UBC, where applicable.
    - (b) Residential and Light Commercial Plans Examiner
      - (i) In accordance with provisions of the UBC as currently adopted by the State of Utah, review the following plans for compliance with the non-structural aspects of the UBC:
        - (A) R-3 Occupancies
        - (B) U Occupancies
        - (C) B, M, F, or S occupancies not exceeding 12,000 square feet
        - (D) Mixed occupancies consisting of B and M occupancies with a total combined square footage not exceeding 12,000 square feet.
        - (E) A-3, E-3, or H-4 occupancies not exceeding 3,000 square feet. Such occupancies may be mixed with B or M occupancies, where the total square footage does not exceed 12,000 square feet.
        - (F) Mixed occupancies consisting of R-3 and U occupancies of any size.
    - (ii) The Residential and Light Commercial Plans Examiner may review any R-3 or U occupancy for compliance with conventional construction provisions of the code.
  - (3) Qualifications for licensure. The qualifications for licensure for each plans examiner classification are as follows.
    - (a) Unlimited Plans Examiner
      - (i) Have and maintain a Plans Examiner certification from a nationally recognized independent testing agency.
      - (ii) Have a minimum of two years experience in code enforcement
    - (b) Residential and Light Commercial Plans Examiner
      - (i) Attend a state accredited or state sponsored series of classes addressing topics relative to the Residential and Light Commercial Plans Examiner areas of expertise, with training to identify when an Unlimited Plans Examiner license is required.
      - (ii) Annually attend a state accredited or state sponsored class reviewing topics in (i) above, code changes, and other areas identified as pertinent to plan review.

Revision to last paragraph on page 1 of the White Paper:

As a result of such changes, and a number of disasters (the great Chicago fire, San Francisco earthquake, etc.) the need for building code enforcement became evident and has grown ever since. The charging statement of the building code currently in use in Utah (the Uniform Building Code, or UBC) is, "to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures...."

Any action or interpretation that seeks to accomplish more than this is inappropriate under the law. It is well understood that building code enforcement should not seek to require more than is specified under the law. At the same time, because the building code rests upon what are acknowledged to be "minimum standards", the desired safeguards depend critically upon effective implementation of the code