PROPOSED IEBC MODIFICATIONS

Items #1, 27, 41 and HP 28 - Seismic Requirements in Existing Buildings

Note: new text Underlined, deleted text ~~Strikeout~~

Sections: 101.2, 407.1.1, 407.3.2.1.1, 507.2.2, 607.4.2, 707.5, 707.8, 807.3.1, 812.6, 903.3, 1001.2, 1102.4 (see attached document for text)

Needs and Benefits:
Until now, the goal regarding work on existing buildings has been for the building code to allow repairs without the entire building being brought up to code. New seismic requirements in the present Appendix K and the proposed IEBC are too broad and have and will significantly discourage renovation and reuse of existing buildings.

Geologic conditions within New York State may not justify the expense of either present requirements for existing buildings contained in the Appendix K of the New York State Uniform Fire Prevention and Building Code or those contained within the proposed International Code Council International Existing Building Code (IEBC).

New York State Codes and Seismic History

New York State's "old" 1984 statewide code nor the local codes that preceded it did not include specific seismic load requirements. In essence, it appears that most, if not all of the existing buildings within New York State were not built with any seismic considerations until 2003. This prior way of building is causing current hardship and costly upgrades when structural seismic provisions of the International Existing Code are applied to existing buildings where no prior seismic considerations were incorporated.

Establishing geologic patterns over human time scales is difficult at best. Hundreds of millions of years ago, the East coast was this continent's active plate tectonic boundary, as the West coast is today. In many areas of the East where earthquakes have occurred historically, specific faults causing the quakes have not been mapped or even identified. Another problem in evaluating earthquake risk is that earthquake records exist for only the last couple of hundred years.

New York State counties with the most seismic activity are St. Lawrence, Franklin, and Essex in the northern part of the state. New York's largest recorded earthquake (a magnitude 5.8) occurred in 1944, creating its greatest damage in Massena and Corwall in St Lawrence County. Building features affected most were chimneys, and several structures were declared unsafe for human occupancy until repaired. Cracks formed in the ground in Hogansburg, Franklin County, with brick-masonry and concrete structures were damaged there. No buildings collapsed and no one

was killed or injured.

Western United States

In California 3,371 people have died in 23 earthquakes since 1900. Other states with earthquake deaths include Alaska, Washington, Oregon, Hawaii, Idaho, Wyoming, and Montana.

The following discussion, written by the Association of Bay Area governments, California Division of Mines and Geology City of San Francisco describes the background and current approach that California is taking regarding decisions regarding seismic requirements:

> *"Faced with the disastrous losses from the Loma Prieta shock, the California Legislature realized that stronger measures were needed to combat earthquake hazards. In 1990, the Legislature passed the California Seismic Hazards Mapping Act to assist cities and counties in protecting public health and safety against such hazards. This law requires the State Geologist to make maps of seismic hazard zones, identifying areas prone to violent shaking and ground failure. It also requires that evaluation of these potential hazards precede approval of construction projects within defined hazard zones and that buyers of real estate be notified when the property lies within such a zone. This act builds on the success of both the 1972 law and the early maps of predicted ground shaking.*
>
> *1.The California Seismic hazards Mapping Act declares:*
>
> *a) The effects of strong ground shaking, liquefaction, landslides, or other ground failure account for approximately 95 percent of economic losses caused by an earthquake.*
>
> *b) Areas subject to these processes during an earthquake have not been identified or mapped statewide…*
>
> *c) It is necessary to identify and map seismic hazard zones…to reduce and mitigate those hazards to protect public health and safety.*
>
> *It is the intent of the Legislature to provide for a statewide seismic hazard mapping…program to assist cities and counties in…protecting the public…from…hazards caused by earthquakes.*
>
> *Experience in many states reveals that seismic hazard maps serve diverse audiences. Users of these maps include buyers and owners of real estate, geotechnical consultants and engineers, financial institutions, utility and transportation companies, emergency managers, and government planners.*

Mapping seismic hazards is especially important in urban areas of earthquake-prone regions of the United States. Such areas have large populations and huge investments in structures and lifelines that are at risk from earthquakes. Potential losses from future urban earthquakes are staggering. For example, a repeat of the 1886 Charleston, South Carolina, earthquake today would cause an estimated 2,000 fatalities and $5 billion of damage. In the central Mississippi Valley region, projected losses from a repeat of an 1811 earthquake are 6,000 lives and $50 billion of damage.

Crucial to reducing these potential losses is sound geologic knowledge leading to effective seismic safety policies and legislation."

This thoughtful and scientific approach should be the manner in which New York should be doing similar research to justify any regulations for seismic construction in New York State, instead of accepting the IEBC requirements. The IEBC requirements are painted with too broad a brush for New York State.

Other states experiences with seismic requirements

Tennessee is holding off adopting the ICC codes because of the seismic issue. There is a earthquake prone region in a portion of that state and people in that area are concerned that business will go elsewhere as a result of the seismic provisions. They have established a task force and are finding that various experts are disagreeing on technical aspects of seismic design. For example, some structural experts are claiming that the Mississippi delta soil conditions would cause buildings to fail in an earthquake while others think the soil conditions would act to damper seismic movement.

North Carolina and Kentucky have also amended or rescinded their ICC based codes after adopting them because of seismic issues.

What seismic rehabilitation requires and philosophy behind it.

Seismic upgrading techniques usually include the addition and/or strengthening of existing walls, frames and foundations. Adopting these recommendations often leads to heavy demolition, lengthy construction time, reconstruction and occupant relocation with all the associated direct and indirect costs.

In the last few decades, the approach regarding repairs to existing structures has permitted repairs to damage, with the repair itself required to comply with current code, but without requiring that either the element being repaired or the structure as a whole be re-designed to resist the vertical and lateral forces proscribed in the current code.

In years prior to its incorporation into the NYSUFP&BC in 2003, this philosophy represented a greatly debated but much-needed evolutionary leap with respect to prior

code requirements that contained specific cost-of-repair based triggers for upgrading. Simply, though cost-of-repair-based triggers for upgrading were intended to result in long-term improvement to the building inventory, in many communities such triggers actually discouraged repair and maintenance work via the creation of significant financial disincentives to repair. Under the influence of these triggers, many communities' building stock endured long-term deterioration.

With the introduction of the 2003 International Existing Building Code (IEBC), however, this time-tested and proven philosophy has been discarded in that the 2003 IEBC sets forth specific loss-of-capacity-based "triggers" for partial and full upgrades of existing damaged or deteriorated structures**.**

For older buildings whose structural drawings are no longer available, an analysis will first require an in-depth field investigation simply to repair inconsequential damage. An owner might spend tens of thousands of dollars to get a permit for a five hundred dollar repair. Building tenants may even be required to relocate. Such provisions could either cause repairs to be performed without proper engineering design, without permits, and without reputable contractors or alternatively to cause needed repairs to not be made and to allow small problems to ultimately degenerate into larger ones.

Many of the Main Street buildings most in need of re-use are older industrial and commercial buildings built long before current, lateral building standards were enacted. A "lateral load" is a sideways force on a building such as wind or an earthquake. Seismic retrofits to current code can be very expensive, and this cost can be the most important factor inhibiting conversion of some existing buildings to live/work use. This fact conflicts with the stated desire of cities to see underutilized (often vacant) buildings converted to a use for which there is often a pressing need and market demand.

Specific New York State requirements

Appendix K requirements for seismic loads for existing buildings occurs:

- for renovations
- where a change of occupancy occurs
- additions are made.

In the 2003 IEBC, the provisions of retrofitting existing buildings for seismic loads occurs:

- when repairs to structural elements occur
- where a change of occupancy occurs,
- additions are made
- when level 2 or level 3 alterations are made
- for historic buildings in high seismic zones
- in certain occupancies when a building is moved.

Generally speaking, seismic requirements in the 2003 IEBC are required when less work is being done on a building than Appendix K.

Department of State Code Administration and Enforcement Division regional staff were polled regarding the impact of Appendix K seismic requirements and consistently responded that these requirements were not being universally complied with because in many cases the cost of the seismic requirements would put an end to many projects.

It is proposed to delete the requirements for seismic retrofit of existing buildings (those constructed prior to January 1, 2003) except for "essential facilities" that would be needed in case of an earthquake emergency (i.e. —hospitals and health care with surgery: fire/police facilities: power plants; emergency shelters, etc). These facilities would only require parapet bracing. Any other work can of course be done voluntarily.

The requirement for parapet bracing for essential facilities in certain seismic zones addresses the problem that has occurred when earthquakes have occurred in New York: damage to chimneys and other brickwork that may cause damage or injury below.

The New York State Department of Health (DOH) regulates hospitals throughout the state and does not have seismic requirements for what are considered essential facilities. DOH is aware of California legislation which requires San Francisco to seismically upgrade its essential facilities over a period of twenty years, but is not pushing similar measures in New York State. If DOH does not consider it necessary to seismically strengthen its buildings, this requirement should not be imposed on it by the Department of State because of the tremendous expense involved.

Risk/Cost

Statistics indicate construction designed to withstand all possible scenarios is more costly than the derived benefit. Earthquakes, meteors, riots etc. may cause a fire. If it is a mild earthquake, small meteor, or ineffective riot, and then a fire ensues, the probability is that the system will survive and perform. Larger catastrophes will turn all preparations into an effort in futility.

States with the likelihood of severe earthquakes and the real danger of earthquake-related deaths, have determined the derived benefit outweighs the cost. Therefore not only construction, but infrastructure, has been designed to withstand earthquakes to the degree of protection and possibility, and cost, have established. Some states do not consider earthquake protection to be this cost effective. New York has not done the work necessary to make this determination.

Also, to be consistent, if existing and new buildings in New York State must meet seismic requirements, then other public services such as dams, transportation, communication and water systems also should be examined. The *San Francisco*

Chronicle (February 8, 2005) notes that rebuilding the San Francisco-owned regional water system on which 2.4 million Bay Area residents rely is now projected to cost $4.3 billion.

Before such sweeping requirements are imposed on New Yorks existing buildings, both the public and private sectors should commit to making seismic safety a priority in allocating financial and other resources. Seismic requirements presently disproportionately targets small building owners and those who are interested in Quality Communities issues and again these stakeholders have not been brought into this discussion.

Costs:

Rehabilitation costs: FEMA 156-157, 1994 titled *Typical Costs for Seismic Rehabilitation of Existing Buildings, Volume I and II* include a "typical" cost of all buildings in the database that can be used for general cost estimation purposes is $16.50/ s.f. According to Gary Searer, a structural engineer in California, that figure should doubled by 2005, which brings the typical figure for seismic rehabilitation to $31/ square foot–a figure does not include the cost of replacing architectural finishes. Some seismic upgrades in California have cost $300/ s.f.

Vertical addition costs. Based on two New York variance petitions, the cost of adding additional floors to an existing building went from $120 to $165 (a 35% increase) for one project and from $175 to $262 (a 50% increase) for another. Both variance requests were granted.

Conversion costs. A Syracuse developer has done cost estimates of conversions of several existing buildings. The first involved inserting a second floor of a former boiler plant to convert the building to an office building. The cost to create a 1,500 s.f. second floor within a 35' high space is $10.88/ s.f. without seismic requirements and $22.62/s.f. with seismic requirements. Before seismic requirements were required in New York, the second floor would have been integrated into the existing structure, which has plenty of structural capacity to carry the load. Under the seismic requirements, the most economical solution is to create an independent structure constructed independent of the boiler plant structure. There would also need to be excavation and the pouring of ten footings and more structural steel to independently carry the addition. The ICC code requires the construction of an independent structure free of the old boiler plant, but does not require the existing boiler plant meet seismic standards.

The second involves a two story factory building with a clerestory rising 20 feet above the second floor. The proposed plan converts this double height volume into loft bedrooms above the living room and kitchen. Without the addition of this loft space the economics of this project will not work. Before the seismic regulations went into effect, the new floor would have been supported from the existing structure, which has plenty of capacity to handle residential loads since the building was designed for heavier

industrial uses. This approach would cost $13.88/ s.f. The costs of constructing the new floor compliant with seismic requirements would require an independent structure through the building to support the loft floor. New structural columns would need to be extended through the building to support the new third floor. Twenty-six new footers to support 26 new columns that would rise 24-feet high to bear the weight of the new floor. It was estimated that this approach would cost $25.72/ s.f.

Alternatives:
Two alternatives were considered. One was retaining the 2003 IEBC requirements. The other was to use Appendix K requirements as written. The 2003 IEBC seismic requirements are more extensive than those of Appendix K. The subcommittee determined the 2003 requirements were thus more appropriate to be required of buildings built after January 1, 2003 (originally compliant with seismic requirements).

INTERNATIONAL EXISTING BUILDING CODE

SEISMIC CHANGES

Revised 3/28/05

Note: new text underlined, deleted text ~~strikeout~~

Highlighted text shows the latest revisions

The Existing Building Code Technical Subcommittee has retained 2003 IEBC requirements for seismic issues because they are clearer and more thorough than Appendix K requirements.

The following are all of the seismic sections of the Existing Building Codes as voted on by the Subcommittee. Attached is a SAPA document that justifies these proposed language changes.

Administration

101.2 Scope. Add the following exception:

> **Exception**: Existing buildings built before January 1, 2003 shall not be required to comply with the seismic requirements of this code with the exception of the requirements for parapet bracing as described in Section 707.8 of this code.

Repairs

407.1 General. Repairs of structural elements shall comply with this section for buildings built after January 1, 2003 :

Repairs

407.3.2.1.1 Extent of repair. The evaluation and analysis shall demonstrate that the building, once repaired, complies with the wind and seismic provisions of the International Building Code.

> **Exception:** The seismic design level for the repair design shall be the higher of the Building Code in effect at the time of original construction or reduced International Building Code level seismic forces as specified in Section 407.1.1.3.

Alterations - Level 1

~~**507.2.2 Parapet bracing and wall anchors for reroof permits**. Unreinforced masonry bearing wall buildings classified as Seismic Design Category D, E or F shall~~

~~have parapet bracing and wall anchors installed at the roof line whenever a reroofing permit is issued. Such parapet bracing and wall anchors shall be designed in accordance with the reduced International Building Code level seismic forces as specified in Section 407.1.1.3 and design procedures of Section 407.1.1.1~~

Alterations - Level 2

607.4.2 Lateral loads. Buildings in which Level 2 alterations increase the seismic base shear by more than 5 percent shall comply with the structural requirements specified in Section 707.

Alterations - Level ~~2~~ 3

707.5 Structural alterations. Buildings and structures undergoing structural alterations or buildings in which the seismic base shear is increased more than 5 percent because of alterations shall comply with this section.

Alterations - Level ~~2~~ 3

707.8 Parapet bracing and wall anchors ~~for reroof permits~~. ~~For~~ buildings of Seismic Use Group III classification as defined in the Building Code of New York State, unreinforced masonry bearing wall buildings classified as Seismic Design Category D, E or F shall have parapet bracing and wall anchors installed at the roof line ~~whenever a reroofing permit is issued~~. Such parapet bracing and wall anchors shall be designed in accordance with the reduced International Building Code level seismic forces as specified in Section 407.1.1.3 and design procedures of Section 407.1.1.1

Change of occupancy

807.3 Seismic loads. Existing buildings built after January 1, 2003 with a change of occcupancy shall comply with the seismic provisions of Sections 807.3.1 and 807.3.2.

Change of occupancy

812.6. Seismic loads. Existing buildings with a change of occupancy classification shall comply with the seismic provisions of Section 807.3.

Additions

903.3 Lateral-force-resisting system. The lateral force system of existing buildings built after January 1, 2003 to which additions are made shall comply with Sections 903.3.1, 903.3.2 and 903.3.3.

Historic Buildings

1001.2 Report. . . .Such a report shall be in accordance with Chapter 1 and shall identify each required safety feature that is in compliance with this chapter and where compliance with other chapters of this provisions would be damaging to the contributing historic features. In high seismic zones, a structural evaluation describing, at minimum, a complete load path and other earthquake-resistant features shall be prepared. In addition, the report shall describe each feature that is not in compliance with these provisions and shall demonstrate how the intent of these provisions is complied with in providing equivalent safety.

Relocated or moved buildings

1102.4 Seismic loads. Buildings built after January 1, 2003 shall comply with the International Building Code or International Residential Code seismic provisions at the new location as applicable.

Exceptions:

1. Structures in Seismic Design Categories A and B and detached one-and two-family dwellings in Seismic Design Categories A, B and C where the seismic loads at the new location are not higher than those at the previous location.
2. Structural elements whose stress is not increased by more than 5 percent.

PROPOSED IEBC MODIFICATIONS

Item #8 - Sprinkler System Relief is Water is Not Available at Floor

Note: new text underlined, deleted text ~~Strikeout~~

A. Sections 604.2, 604.2.1, 604.2.1.1, 704.1, 704.1.1
B. Section 604.2.2
C. Section 604.3

A. Code Section(s) affected by this change: Section 604.2.1 and 604.2.1.1

Code Text: APPLIES ONLY TO HIGH RISE BUILDINGS

IEBC 604.2 Automatic sprinkler systems. *Automatic sprinkler systems shall be provided in accordance with the requirements of Sections 604.2.1 through 604.2.5. Installation requirements shall be in accordance with the ~~International~~ Building Code of NYS.*

604.2.1 High-rise buildings. *In high-rise buildings, work areas ~~that include exits or corridors shared by more than one tenant or that serve an occupant load greater than 30~~ shall be provided with automatic sprinkler protection where the work area is located on a floor that has a sufficient sprinkler water supply from an existing standpipe or a sprinkler riser serving that floor.*

604.2.1.1 Supplemental automatic sprinkler system requirements. Where the work area on any floor exceeds 50 percent of that floor area, sprinkler protection shall apply to the entire floor on which the work area is located.
Exception: *Tenant spaces that are entirely outside the work area and separated by fire barriers having a minimum 2-hour rating for Group H and a minimum 1- hour rating for all other occupancy groups.*

704.1 Automatic sprinkler systems. *Automatic sprinkler systems as required and in accordance with the Building Code shall be provided in all work areas.*

> ***704.1.1 High-rise buildings.*** *In high-rise buildings, work areas shall be provided with automatic sprinkler protection where the building has a sufficient municipal water supply system to the site. Where the work area exceeds 50 percent of floor area, sprinklers shall be provided in the specified areas where sufficient municipal water supply for design and installation of a fire sprinkler system is available at the site.*

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Needs and Benefits:

The proposed rule making would require the installation of a fire sprinkler protection within HIGH RISE BUILDINGS ONLY for those (tenant) spaces where the level 2 work is included. This change is proposed because wor k areas without sprinkler protection in high-rise buildings is not acceptable to the basic level of required protection for these large buildings as evidenced by most large municipalities having retroactive fire sprinkler laws for high rise buildings. The exception to the supplemental sprinkler system requirements only allows deletion of sprinklers from other tenant spaces outside of the work area if the other tenant areas are separated by fire barriers with a 1 hour fire rating. This is similar to the NYC Local Law #5 regarding compartmentation provisions in high rises. We must maintain the same is needed in the remainder of New York. The main issue is to coordinate whether sprinkler systems are required (i.e. – the “trigger” or condition to make it a requirement) where the work area location such as floor level, amount of work and type of work and whether the location and occupancy would be required under the Building Code to be sprinklered. This, for existing buildings must then be balanced with the issue of whether or not sufficient water supply is available to that defined work area so as to not create an unreasonable cost of fire protection water supply based upon the extent and amount of work in the work area and the value created for the remainder of the building. Simply said, the water supply costs should not be excessive compared to the cost of the floor sprinkler system costs within the work area and for the remainder of the building as a whole. HOWEVER, at some point in time, when a building undergoes a significant amount of

work, either at one time or over a period of time such as years, the Technical Subcommittee recognizes that eventually having complete coverage “full gut to the structure” type of phased renovations of buildings without fire protection is not the intent of the codes as is reverts the buildings back to 1900 era technology. Thus, once a water supply infrastructure is provided for a high-rise building, the cost of the water supply can be proportioned over all floors of the building, as they all will reap benefit. Thus, sprinkler protection is not disproportionately expensive due to the floor areas and other tenants/floors, which will eventually be completed in the future. Most major real estate companies see the value in fire sprinkler protection in high-rise structures and promote their use as a building asset for tenants.

Costs:

There are no costs to Department of State, the State of New York, or local governments associated with the implementation of this proposed change. Once the water supply for a high-rise building is established or is already present (many times the case), the cost for sprinkler protection is quite reasonable as the only provision is for piping and sprinklers on the floor with a control valve and flow switch. Most major high-rise buildings already have a standpipe and fire pump water supply infrastructure in place for use and are in the heart of our downtown cities. However, some buildings may not have the infrastructure for water supply in place and thus should be included to protect the occupants and structure in accordance with currently available technology. The committee discussed and promotes the use of the existing standpipe water piping within the stair towers of many high rise buildings and the allowances in the NFPA 14 and 13 fire protection code standards which allows newly established fire protection water supplies to serve only the sprinkler demand and not the fire standpipe automatic water supply demands. The committee also promotes the use of not requiring standby power to any fire pumps on a sprinkler retrofit basis, thus further lowering costs. This reduces overall system costs and many jurisdictions such as Rochester, Syracuse, Albany and parts of Buffalo have strong enough municipal water systems to meet the sprinkler demands without the addition of a fire pump. Many 8 to 10 story high-rise buildings within these jurisdictions have been successfully retrofitted with sprinkler protection without a fire pump (one is directly across from City hall in Syracuse). With the advent of quick response sprinklers, the water demands are even lower now due to more rapid fire control and/or extinguishment. This is a low cost item in relationship to the entire building and work area involved typically only being approximately 2% of the building cost. In addition, the cost for this water supply is one time in the building and not every time a level 2 alteration is performed since the water supply serving the 15th floor of a building will be able to serve other work on the 15th and all other floors below during future alterations work.

In existing buildings, while system installation costs are dependant upon specific building configuration or construction type, some typical system costs can be

estimated. Since the a fire water supply to the building is required, many buildings will incur no additional costs for the water supply and this is expected most times for high rise buildings as large water service mains are within these structures to allow them to operate. Sprinkler protection on a floor typically will range from $1.25/SF to upwards of $4.50/SF depending upon many factors including locale, piping used, ceiling types, extent of coverage and size of job, hours of work allowed, etc. The average cost for a small split case electric powered fire pump system with controller and associated electric work also varies with many factors. One may typically see a fire pump and controller cost of $30,000+ plus the electrical costs of possibly $15,000+ if and when this would be needed. An recent high rise existing 29-story building in Upstate NY with a basic floor plate of ~15,000 GSF recently received price quotes from sprinkler contractors for $23,000 to $25,000 per floor to provide sprinkler protection using the existing fire standpipe and water supply present and doing one floor of work. It is expected an annual operating cost for testing and maintenance of the system approximately $250 per floor.

Alternatives:
Members of the technical subcommittee considered not supporting the proposal based upon economic reasons and the water supply dilemma for existing buildings. Much discussion took place, which resulted with the development and clarifications of the original proposal to allow for the exceptions included in the supplemental requirements. With the incorporation of the exceptions, the committee supported the amendment. The proposal addresses the concerns of having a “trigger point” which many thought too big and others thought too small, thus an understanding to not require extensive water supplies or emergency/standby power generators, but merely a minimal fire sprinkler water supply system for use in the fire standpipe system for the sprinklers within tenant spaces at a very reasonable cost.

B. Code Section(s) affected by this change: Section 604.2.2

Code Text: APPLIES <u>ONLY TO Low Rise</u> BUILDINGS

IEBC 604.2.2 All Groups. *In buildings with occupancies required by Chapter 9 of the Building Code to be provided with sprinkler protection, work areas ~~that include exits or corridors shared by more than one tenant or that serve an occupant load greater than 30~~ shall be provided with automatic sprinkler protection where all of the following conditions occur:*
1. The work area is required to be provided with automatic sprinkler protection in accordance with the ~~International~~ Building Code <u>of New York State</u> as applicable to new construction;

2. The work area exceeds 50 percent of the floor area; and
3. The building has sufficient municipal water supply for design of a fire sprinkler system available to the floor without installation of a new fire pump.

Needs and Benefits:
The proposed rule making would require the installation of a fire sprinkler protection within buildings not classified as high rise buildings only where the work areas exceed 50% of a floor area, do not require addition of any fire pump to meet sprinkler flows, and only if the Building Code requires it for new construction. This change primarily editorial so as not to create a different class of occupancies not listed in the Building Code as requiring sprinkler protection. It also requires residential buildings meeting the 3 conditions to include sprinkler protection as this statistically in NY and the remainder of the country is where the fire death, injury and property loss is the greatest. This is why the ICC now mandates low cost residential sprinkler protection in residential occupancies. We must maintain the same is needed in New York. The main issue is to coordinate whether sprinkler systems are required (i.e. – the "trigger" or condition to make it a requirement) where the work area location such as floor level, amount of work and type of work and whether the location and occupancy would be required under the Building Code to be sprinklered. This, for existing buildings must then be balanced with the issue of whether or not sufficient water supply is available to that defined work area so as to not create an unreasonable cost of fire protection water supply based upon the extent and amount of work in the work area and the value created for the remainder of the building. Simply said, the water supply costs should not be excessive compared to the cost of the floor sprinkler system costs within the work area and for the remainder of the building as a whole. HOWEVER, at some point in time, when a building undergoes a significant amount of work, either at one time or over a period of time such as years, the Technical Subcommittee recognizes that eventually having complete coverage "full gut to the structure" type of phased renovations of buildings without fire protection is not the intent of the codes as is reverts the buildings back to 1900 era technology. Thus, using the allowable three "trigger" conditions to require sprinkler protection provides a reasonable exception.

Costs:
There are no costs to Department of State, the State of New York, or local governments associated with the implementation of this proposed change. Since the domestic water supply for most residential buildings is typically already present, many times this will be adequate to serve the low cost residential sprinkler system and the cost for sprinkler protection is quite reasonable especially with CPVC plastic pipe alternatives available. The committee discussed and promotes the use of the existing municipal water piping within the building for domestic use also serving the sprinkler water supply per the NFPA 13R fire protection code standards. The committee also recognizes that standby power to any fire pumps for low rise and residential systems is not code mandated. This reduces overall system costs

and most, if not all jurisdictions throughout the state have adequate enough municipal water systems to meet the sprinkler demands without the addition of a fire pump. This is a low cost item in relationship to the entire building and work area involved typically only being approximately 2% of the building cost.

In existing buildings, while system installation costs are dependant upon specific building configuration or construction type, some typical system costs can be estimated. Since the fire water supply to the building is likely already present, many buildings will incur no additional costs for the water supply and this is expected most times for municipal water system areas. Sprinkler protection on a floor of non-residential occupancy will typically range from $1.25/SF to upwards of $4.50/SF depending upon many factors including locale, piping used, ceiling types, extent of coverage and size of job, hours of work allowed, etc. Residential type system costs are even less with ranges expected from $1.00/SF to $1.50/SF due to small pipe sizes and flows less than 100 gallons per minute as common. It is expected an annual operating cost for testing and maintenance of the system approximately $250 per system.

Alternatives:
Members of the technical subcommittee considered not supporting the proposal based upon economic reasons and the water supply dilemma for existing buildings. Much discussion took place, which resulted with the development and clarifications of the original IEBC language, which still has three (3) significant requirements, all of which must be present for the sprinkler provision to be a mandate. With the incorporation of the qualifying provisions, the committee supported the amendment since many times the extent of the work area will never reach these triggers. In addition, once the cost and extent of residential systems was better understood, it was decided no other alternative reasonably was available commercially to provide the same level of safety as that provided by sprinklers, especially for the residential properties.

C. Code Section(s) affected by this change: Section 604.3

Code Text:

IEBC 604.3 Standpipes. *Where the aggregate work area exceeds 50% of any single floor area and <u>any work area</u> is located more than30 feet (15 240 mm) above or below the lowest level of fire department access, a standpipe system shall be provided. Standpipes shall have an approved fire department connection with hose connections at each floor level above or below the lowest level of fire department access. Standpipe systems shall be installed in accordance with the International Building Code <u>of NYS</u>.*

Exceptions:

~~*No pump shall be required*~~ *<u>Manual filled standpipes are permitted</u> provided that the standpipes are capable of accepting delivery by fire department apparatus of a minimum of 250 gallons per minute (gpm) at 65 pounds per square inch (psi) (946 L/m*

at 448KPa) to the topmost floor in buildings equipped throughout with an automatic sprinkler system or a minimum of 500 gpm at 65 psi (1892 L/m at 448KPa) to the topmost floor in all other buildings. Where the standpipe terminates below the topmost floor, the standpipe shall be designed to meet (gpm/psi) (L/m/KPa) requirements of this exception for possible future extension of the standpipe.

Needs and Benefits:

The proposed rule making would require the installation of a filled manual fire standpipe system (i.e. – piping and hose valves only, not necessarily any fire pumps or fire mains to the street) for work areas 30 feet or more above the lowest level of fire department access. This proposal focuses on building water supply infrastructure in Alterations Level 2 since Alterations Level 3, Change of Occupancy and Additions all refer back to Chapter 6. This change is proposed because work areas may never include exits or corridors shared by more than one tenant, many times work areas may only include exits or corridors and not tenants and a significant work area should be involved prior to requiring the standpipe system. The 50 feet was changed to 30 feet to be consistent with the Building/Fire Code requirements so as not to create an entirely different set of buildings without standpipes for fire department use (30 feet = 4 stories in most buildings and 50 feet = 6 stories in most places). This will provide a piping system, possibly without a water supply since manual filled standpipes may be permitted in buildings not classified as high-rise buildings. Since manual standpipes may be permitted, it is imperative they be interconnected to allow a fire department pumper to pump into a fire department connection and be assured of supplying all standpipe hose valves. Since many buildings in the 4 to 8 story heights may not have any standpipe system, it is imperative this provision be included to allow some means for manual suppression in these taller buildings found in many areas of the State.

Costs:

There are no costs to Department of State, the State of New York, or local governments associated with the implementation of this proposed change. This is a low cost item in relationship to the entire building and work area involved. In addition, the cost for this is one time in the building and not every time a level 2 alteration is performed since the alteration on say over 60% of the 5th floor of a building will not be needed for any other work on the 5th and all other floors below during future alterations work.

In existing buildings, while system installation costs are dependant upon specific building configuration or construction type, some typical system costs can be estimated. Since the exception does not require a fire water main into the building, the cost is essentially the labor and materials for a 4” or 6” piping system with minimal control valves and a 2.5” Class I hose valve at each floor and a fire department connection. The average cost for a 4 story class I manual (no pump) filled standpipe system within an existing building can range from approximately the following: 200’ of 4” steel pipe with fittings and hangers @ $20/LF = $4,000 + $1,000 for 5 hose valves +

say an additional $1,000 for control valve and fire department connection and water fill line yields ~$6,000.00 or less (about $1,200 - $1,500 per story). An 8-story building may be about $12,000-15,000 total cost. It is expected an annual operating cost for testing and maintenance of the system approximately $250 since it is not a full standpipe system.

Alternatives:
Members of the technical subcommittee considered not supporting the proposal based upon economic reasons. Much discussion took place, which resulted with the development and clarifications of the original proposal to allow for manual filled standpipes. With the incorporation of the exceptions, the committee supported the amendment. The proposal addresses the concerns of having a "trigger point" which many thought too big and others thought too small, thus a reasonable size of work area was included as well as significant allowances to not require water supplies but merely a minimal piping system for rapid and easy fire department use at a very low cost.

PROPOSED IEBC MODIFICATIONS

ITEM #12 - Allowing Transoms to Remain

(Note: new text <u>Underlined</u>, deleted text ~~Strikeout~~)

1003.4 Transoms. In fully sprinklered buildings of Group R-1, R-2 or R-3 occupancy, existing transoms in corridors and other fire-resistance-rated, walls may be maintained if fixed in the closed position. A sprinkler shall be installed on each side of the transom.

<u>Exception:</u> <u>Transoms conforming to Section 1005.8 shall be accepted in unsprinklered buildings.</u>

. **Needs and Benefits:**
The proposed rulemaking would allow for transoms to remain in existing buildings that do not contain a sprinkler system. The proposed rulemaking is neededo provide alternatives in the rehabilitation of historic structures. The proposed rulemaking would benefit historic structures that do not have a sprinkler system installed by providing a safe alternative to the removal of a feature that contributes to the historic character of the building. This benefit is already given for buildings undergoing a change of occupancy, the proposed rulemaking would benefit those structures undergoing other classifications of work such as additions, alterations and repairs.

. **Costs:**
There would be no new or increased costs for this proposed rulemakning, because the proposed rulemaking provides for an alternative to have an existing feature remain instead of requiring it to be removed entirely in an unsprinklered building.

Alternatives:
The committee considered leaving the text as written, however, it was a consensus of the committee that leaving the text as written would not allow minor construction projects to take advantage of an option in the code that is permitted for projects in which there is a change of occupancy.

PROPOSED IEBC MODIFICATIONS

ITEM #14 - Specify Minimum Ceiling Heights

(Note: new text Underlined, deleted text ~~Strikeout~~)

601.3 Compliance All new construction elements, components, systems, and spaces shall comply with the requirements of the International Building Code.

Exceptions:
Windows may be added without requiring compliance with the light and ventilation requirements of the International Building Code.
Newly installed electrical equipment shall comply with the requirements of Section 608.
The length of dead end corridors in newly constructed spaces shall only be required to comply with the provisions of Section 605.6.
The minimum ceiling height of the newly created habitable and occupiable spaces and corridors shall be 6'8"(2032mm).

Basement spaces of type R,M,B and S can have a ceiling height of not less than 6ft. 4in.(1930.4mm) of clear height under beams ,girders, ducts and similar obstructions, provided no more than 30% of the floor area is below 6' 8"(2032mm) and the basement is limited to one story below grade.

Justification for proposed code change Section 601.3
This rule making would amend the Existing Building Code which refers to the Building Code for ceiling height (BC 1207.2). The Building Code requires ceiling height of no less than 7 ft 6in. (2286 mm) for occupiable spaces, habitable spaces and corridors. Bathrooms, toilet rooms, kitchens, storage rooms and laundry rooms are permitted to have a height of no less than 7ft (2134 mm). There are exceptions for one and two family dwellings and basement rooms in one and two family dwellings.

Needs and Benefits:

The renovation of existing buildings would be problematic if existing framing of ceiling height did not conform to the building code. In most instances a structural unfeasibility would occur. Use of all of the habitable spaces in existing construction for renovation is necessary for profitable projects and full use of all available square footage. Basement spaces are an added boost for renovation projects adding to usable space for a multitude of occupancies.

Cost:
Cost implications would be in the thousands of dollars, not just in construction cost but also in lost revenue from deemed un-occupiable space. In most cases the construction cost would over run the capable return of investment for an entire project and many of the very usable vacant buildings would be left vacant.

Alternatives:
Alternatives to this proposal would inhibit the renovation and reuse of New York's many existing buildings in hope of revitalizing useful existing structures.

PROPOSED IEBC MODIFICATIONS

HP 16A - Fire Safety / Fire Separations / Mixed

(Note: New Text Underlined, Deleted Text ~~Strikeout~~**)**

1003.13 Historic Wall and Floor-Ceiling Assemblies in Mixed Use Occupancies. In buildings less than 3,500 sf/floor and less than four stories in height, an existing historic wall or floor/ceiling assembly identified in Section 1001.2 may remain provided that all vertical and horizontal penetrations are protected and the entire building is equipped with an approved automatic fire alarm and smoke or heat detection system in accordance with Section 907 of the BCNY.

> Exception: Group A-2 and H occupancies and areas where open flames are used or commercial cooking occurs as defined by the Fire Code of New York.

Justification for proposed code change Section 1003.13

One of the most difficult areas faced by small scale, main street buildings that are essential to the revitalization of downtown commercial areas is the required fire separation of the first floor ceiling and other first floor spaces with historic finishes that require a fire rating. Such ratings are generally required when a mixed use occurs. This is problematic since mixed uses are traditional to these buildings, and since encouraging mixed uses in downtowns has been determined to be an essential component of encouraging appropriate uses in small commercial buildings.

No cost effective means exists to provide a fire rating at the tin ceiling or similar assembly: ratings can only be achieved by extensive demolition and reinstallation or replacement. This adds such significant costs to projects that they become financially infeasible, causing buildings to remain vacant and vulnerable. Required removal of tin ceilings and other

ornamental assemblies such as plaster ceilings or walls will put a project in conflict with the *Secretary of the Interior's Standards for Rehabilitation.* Compliance with the standards is required where state or federal funds or permits are to be used or issued on historic buildings, or where federal tax incentives to encourage the rehabilitation of historic properties are used. Removal of historic materials, including glazing, is considered to be inconsistent with Standards #2 and #5 that require retention of historic materials, and could jeopardize the use of public funds or tax incentives that are essential to the rehabilitation project.

Needs and benefits:

This rule making would amend the provisions of the proposed Existing Building Code (EBC) by adding a new section that permits these retained assemblies when a building has an automatic fire alarm and smoke or heat detection system. This has been determined to be a reasonably equivalent solution, and once commonly proposed to the state's various boards. The provisions will not be available to conditions presenting the greatest hazard: where commercial cooking or open flames are used, or in Group A-2 (restaurants, etc.) and H occupancies.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:
The cost savings associated with retention of the historic materials will be generally balanced by the costs associated with the required improvements at penetrations and alarm/detection.

Alternatives:

Not proceeding with this proposal. This was rejected due to the importance of addressing one of the most common problems faced by historic main street properties.
Requiring automatic suppression systems. The high cost of a sprinkler system, complemented by the ability to compensate for the condition through addressing penetrations and full alarm/detection, resulted in rejecting the requiring of a sprinkler system for this condition. Additionally, installing an automatic fire-extinguishing system for the ceiling or historic wall treatment condition would require extensive removal of historic finishes. Documentation identifying this condition as being hazardous in mixed use occupancies (with the exception of those to which the proposal will not apply) has not been identified.

605.3 Number of exits. The number of exits shall be in accordance with Sections 605.3.1 through 605.3.3.

605.3.1 Minimum number. Every story utilized for human occupancy on which there is a work area that includes exits or corridors shared by more than one tenant within the work area shall be provided with the minimum number of exits based on the occupancy and the occupant load in accordance with the *International Building Code*. In addition, the exits shall comply with Sections 605.3.1.1 and 605.3.1.2.

605.3.1.1 Single-exit buildings. Only one exit is required from buildings and spaces of the following occupancies:

1. In Group A, B, E, F, M, U, and S occupancies, a single exit is permitted in the story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22 860 mm).

2. Group B, F-2, and S-2 occupancies not more than two stories in height that are not greater than 3,000 square feet per floor (279 m2), when the exit access travel distance does not exceed 75 feet (22 860 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1 hour.

3. Open parking structures where vehicles are mechanically parked.

4. ~~Groups R-1 and R-2, except that in community residences for the developmentally disabled, the maximum occupant load excluding staff is 12.~~ In buildings containing Group B, S2, or M, the required building features in Table 605.3.1 (1) shall be provided based upon the highest story occupied by the specific use group.

5. ~~Groups R-1 and R-2 not more than two stories in height, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet (15 240 mm). The minimum fire-resistance rating of the exit enclosure and of the opening protection shall be 1hour.~~ In buildings containing Group R2 Apartment or Boarding Houses or R3, the required building features in Table 605.3.1.1 (2) shall be provided based upon the highest story occupied by the specific use group.

6. In multilevel dwelling units in buildings of Occupancy Group R-1 or R-2, an exit shall not be required from every level of the dwelling unit provided that one of the following conditions is met:
   6.1 The building containing such dwelling units is of Type I or II construction, and travel distance within the dwelling unit does not exceed 75 feet (22 860 mm); or
   6.2 The building is not more than three stories in height and all third-floor space is part of one or more dwelling units located in part on the second floor; and no habitable room within any such dwelling unit shall have a travel distance that exceeds 50 feet (15 240 mm) from the outside of the habitable room entrance door to the inside of the entrance door to the dwelling unit.

7. In Group R-2, H-4, H-5, and I occupancies and in rooming houses and childcare centers, a single exit is permitted in a one-story building with a maximum occupant load of 10 and the exit access travel distance does not exceed 75 feet (22 860 mm).

8. In buildings of Group R-2 occupancy that are equipped throughout with an automatic fire sprinkler system, a single exit shall be permitted from a basement or story below grade if every dwelling unit on that floor is equipped with an approved window providing a clear opening of at least 5 square feet (0.47 m2) in area, a minimum net clear opening of 24 inches (610 mm) in height and 20 inches (508 mm) in width, and a sill height of not more than 44 inches (1118 mm) above the finished floor.

~~9. In buildings of Group R-2 occupancy of any height with not more than four dwelling units per floor; with a smokeproof enclosure or outside stair as an exit; and with such exit located within 20 feet (6096 mm) of travel to the entrance doors to all dwelling units served thereby.~~

~~10.~~ 9. In buildings of Group R-3 occupancy equipped throughout with an automatic fire sprinkler system, only one exit shall be required from basements or stories below grade.

Table 605.3.1.1 (1)

		Maximum Number of Stories Above Grade (Note a)				
		1 or 2 story		3 story		4 and 5 story
	Required Building Features	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
	Permitted Occupancy	B, S2, or M	B, S2, or M	B or S2	B, S2 or M	B or S2
	Content Restriction limited to storage or retail display of hazardous materials within the building not exceeding 10% of maximum allowable quantities in Table B307.7.(1)	Yes	Yes	Yes	Yes	Yes
	Maximum Gross Floor Area per Story (square feet)	3,500	3,500	3,500	3,500	3,500
	Exit Access Travel Distance (feet)	50	75	50	75	75
	One Emergency Escape & Rescue Opening per F1009 on each floor and accessible to each tenant	Yes	No	Yes	Yes	Yes

	Required Building Features	Maximum Number of Stories Above Grade (Note a)				
		1 or 2 story		3 story		4 and 5 story
		No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
	Shaft & Vertical Exit Enclosures Fire Resistance Rating (hours)	1	½	1	½	2
	Corridor Fire Resistance Rating (hours) (Note b)	½	0	1	½	1
	Corridor Opening Protective Fire Protection Rating (hours)	0.33	Self closing	¾	0.33	¾
	Vertical Exit & Hoistway Venting at 3.5% of shaft area per F910 and activated by a smoke detector or Pressurization per F909	No	No	No	No	Yes
	Corridor & Exit Interior Finish per F806	Yes	Yes	Yes	Yes	Yes
	Horizontal Assemblies between Use Groups (hours) (Note b)	½	0	½	0	1
	Fire partitions between tenants (hours) (Note b)	½	0	½	0	1
	Table 302.1.1 Incidental Use Areas Fire Resistance Rating Enclosures (hours)	1	½	2	½	2
	Fire Dampers per B715 for Duct and Air Transfer Openings in Horizontal Assemblies and Shaft Enclosures which require a Fire Resistance Rating	Yes	No	Yes	No	Yes
	Electrical Branch Circuits Meet NEC requirements	Yes	Yes	Yes	Yes	Yes
	Manual Fire Alarm System per F907 with Supervisory Service per B901.6	Yes	Yes	Yes	Yes	Yes
	Automatic Heat Detection System per F907 throughout building in spaces which would otherwise be provided with fire sprinklers per NFPA 13	Yes	No	Yes	No	No
	Automatic Smoke Detection per F907 in shared exit access corridors	No	No	No	No	No
	Electrically Supervised Quick Response Wet Pipe Sprinkler System Throughout Building per B903.3. (Note c)	No	Yes	No	Yes	Yes
	Class I Manual Wet Fire Standpipe System per F905.3	No	No	No	No	Yes

a. Provided the building has not more than one level below the first story and this is not applicable for Type V Construction greater than 3

stories in height

b. Zero (0) fire resistance rating means wall is required to resist the passage of smoke
c. Dry pipe sprinkler protection with standard response sprinklers is only permitted in unheated spaces subject to freezing temperatures.

Table 605.3.1.1 (2)

		Maximum Number of Stories Above Grade (Note a)				
		1 or 2 story		3 story		4 and 5 story
	Required Building Features	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
	Permitted Occupancy	R2 Apartment or Boarding Houses & R3	R2 Apartment or Boarding Houses & R3	R2 Apartment or Boarding Houses & R3	R2 Apartment or Boarding Houses & R3	R2 Apartment or Boarding Houses & R3

	Maximum Number of Stories Above Grade (Note a)				
	1 or 2 story		3 story		4 and 5 story
Required Building Features	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
Content Restriction limited to storage or retail display of hazardous materials within the building not exceeding 10% of maximum allowable quantities in Table B307.7(1)	Yes	Yes	Yes	Yes	Yes
Maximum number of Dwelling Units per story and Maximum Gross Floor Area per Story (square feet)	4 dwelling units and 3,500 GSF	4 dwelling units and 3,500 GSF	4 dwelling units and 3,500 GSF	4 dwelling units and 3,500 GSF	4 dwelling units and 3,500 GSF
Exit Access Travel Distance (feet)	50	75	50	75	75
One Emergency Escape & Rescue Opening per F1009 within each dwelling unit or on each floor accessible to each sleeping room where dwelling units are not present	Yes	No	Yes	Yes	Yes
Shaft & Vertical Exit Enclosures Fire Resistance Rating (hours)	1	½	1	½	2
Corridor Fire Resistance Rating (hours) (Note b)	½	0	1	½	1
Corridor Opening Protective Fire Protection Rating (hours)	0.33	Self closing	¾	0.33	¾
Vertical Exit & Hoistway Venting at 3.5% of shaft area per F910 and activated by a smoke detector or Pressurization per F909	No	No	No	No	Yes
Corridor & Exit Interior Finish per F806	Yes	Yes	Yes	Yes	Yes
Horizontal Assemblies between Use Groups (hours) (Note b)	½	0	½	0	1
Fire partitions between tenants (hours) (Note b)	½	0	½	0	1
Table 302.1.1 Incidental Use Areas Fire Resistance Rating Enclosures (hours)	1	½	2	½	2
Fire Dampers per B715 for Duct and Air Transfer Openings in Horizontal Assemblies and Shaft Enclosures which require a Fire Resistance Rating	Yes	No	Yes	No	Yes
Electrical Branch Circuits Meet NEC requirements	Yes	Yes	Yes	Yes	Yes

		Maximum Number of Stories Above Grade (Note a)				
		1 or 2 story		3 story		4 and 5 story
	Required Building Features	No Sprinklers	Sprinklers	No Sprinklers	Sprinklers	Sprinklers
	Manual Fire Alarm System per F907 with Supervisory Service per B901.6	Yes	Yes	Yes	Yes	Yes
	Automatic Heat Detection System per F907 throughout building in spaces which would otherwise be provided with fire sprinklers per NFPA 13	Yes	No	Yes	No	No
	Single & Multiple Station Smoke Alarms within Dwelling Units per F907.2.10.2 and F907.2.10.3	Yes	Yes	Yes	Yes	Yes
	Automatic Smoke Detection in shared exit access corridors	Yes	No	Yes	No	No
	Electrically Supervised Quick Response or Residential (as applicable) Wet Pipe Sprinkler System Throughout Building per B903.3. (Note c)	No (NOTE C)	Yes	Not Required except in Type V construction (Note C)	Yes	Yes
	Class I Manual Wet Fire Standpipe System per F905.3	No	No	No	No	Yes

a) Provided the building has not more than one level below the first story and this is not applicable for Type V Construction greater than 3 stories in height
b) Zero (0) fire resistance rating means wall is required to resist the passage of smoke
c) Quick Response Sprinkler protection is required in all non-residential occupancies located below Group R, and for all 3-story Type V buildings. Dry pipe sprinkler protection with standard response sprinklers is only permitted in unheated spaces subject to freezing temperatures.

Needs and Benefits:
The proposed rule making would allow extensive single exit buildings with built in protection for currently recognized safety features without undue burden and in fact many times cost savings to developers. Refer to Appendix K and BCNYS prior SAPA documentation for this item.

Costs:
There are no costs to Department of State, the State of New York, or local governments associated with the implementation of this proposed change. Refer to Appendix K and BCNYS prior SAPA documentation for this item.

Alternatives:
Members of the technical subcommittee considered not supporting the proposal based upon economic reasons and the water supply dilemma for existing buildings. Much discussion took place, which resulted with the development and clarifications of the original Appendix K language, which was significantly difficult to read and comprehend. Thus the committee included a table for more readily understood provisions for use in single exit buildings. Refer to Appendix K and BCNYS prior SAPA documentation for this item.

PROPOSED IEBC MODIFICATIONS

ITEM #31 - Energy Code Coordination

Note: new text Underlined, deleted text ~~Strikeout~~

Add exception to Section 101.2:

Exception: Energy conservation measures in existing buildings shall be in conformance with Section 101.4.2 through 101.4.2.5 of the Energy Conservation Construction Code of New York State.

Delete Section 906 in its entirety.

PROPOSED IEBC MODIFICATIONS

ITEM #32 - Amendments for Adaptable Units

(Note: new text Underlined, deleted text Strikeout) a building, regardless of whether an elevator exists. Existing language in Appendix K does not do this, as floors with one, two or three units would be required to have a Type B unit, representing 100%, 50% or 33% of the units on those floors, respectively.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:
There will be increased costs where dwelling units or sleeping units are reconstructed in a building with an elevator and 20 or less. In this case, twenty-five percent of the units will have to be Type B units, whereas Appendix K would require no Type B units in the building.

However, this code change must be weighed in conjunction with the changes proposed in Level 1 and 2 Alteration requirements *vis a vis* the accessibility requirements of the state's current Appendix K. Considered as a package, these changes focus on requiring accessibility only in those Group R-2 alterations where improving accessibility for persons with disabilities will be the result. The effect of removing access requirements for most dwelling units and sleeping units undergoing renovations or alterations as defined by Appendix K is to reduce the general construction costs in the code. We believe this more than offsets the increase in construction costs for smaller buildings with elevators which represent a minor fraction of the buildings affected by this code change package.

Alternatives:
No significant alternative proposals were given consideration. Keeping the elevator/no-elevator dichotomy of Appendix K would retain an inequitable and frankly illogical distinction in the code that benefits neither persons with disabilities nor building owners.

812.5 Accessibility. Existing buildings or portions thereof that undergo a change of group or occupancy classification shall have all of the following accessible features:

1. At least one accessible building entrance.

2. At least one accessible route from an accessible building entrance to primary function areas.

3. Signage complying with Section 1110 of the ~~*International*~~ *Building Code* *of New York State*.

4. Accessible parking, where parking is provided.

5. At least one accessible passenger loading zone, where loading zones are provided.

6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

7. Where more than four Groups R-2 or R-3 dwelling units or sleeping units are being constructed, twenty-five percent shall comply with Section 1107.6 of the *Building Code of New York State*.

Exception: Buildings without elevator service where the lowest story containing Group R-2 or R-3 dwelling units or sleeping units is not the ground floor.

Where it is technically infeasible to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible. Changes of group or occupancy that incorporate any alterations or additions shall comply with this section and Sections 506.1, 606.1 and 905.1 as applicable.

~~Exception: Type B dwelling or sleeping units requi red by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities.~~

Justification for proposed code change Section 812.5:
Needs and benefits:
This proposal reflects the current Appendix K requirement for Type B dwelling units where a building or portion thereof undergoes a change in occupancy (K801.9 references K604, which has the requirement for twenty-five percent Type B units.)

In Appendix K of the Building Code of New York State, twenty-five percent of the ground floor dwelling units in Group R-2 buildings without elevators must be Type B dwelling units and twenty-five percent of the dwellings on each floor in a building with an elevator having more than 20 units must be Type B units. This proposal accomplishes two important changes to that requirement as it relates to changes of occupancy to Groups R-2 and R-3.

First, by referencing Section 1107.6, specifically 1107.6.2 of the code, it clarifies that required Type B dwelling units in Level 3 Alterations must include the enhanced features required of dwelling units and sleeping units in new construction.

Second, it removes the distinction between buildings with or without elevators. It is illogical to require a building with eighteen units to have five Type B units where no elevator is provided but no Type B units if an elevator exists. It makes sense to limit the number of Type B units to twenty-five percent of those in a building, regardless of whether an elevator exists. Existing language in Appendix K does not do this, as floors with one, two or three units would be required to have a Type B unit, representing 100%, 50% or 33% of the units on those floors, respectively.
The other critical change is that it exempts units in building without elevators where an occupancy other than Group R-2 occupies the first floor. This exception addresses the adaptive reuse of small multistory buildings typical of Main Streets in small towns across the state, where commercial space is located on the first floor and a second or third floor is being converted from offices (Group B) to apartments (Group R-2). Under current Appendix K requirements, at least twenty-five percent of the units in these non-elevator buildings would have to be Type B and served by an accessible route, requiring a platform lift or some other vertical conveyance to get to the second story. (At worst, an elevator could be necessary which, in changes of occupancy with

20 or fewer units, would mean that no Type B units would be required – a Catch-22 whereby the only way of avoiding an elevator is to install an elevator.) The other solution is to locate twenty-five percent of the dwelling units on the first floor, losing valuable commercial space to dwelling units that are often difficult to market given their street-level location in a commercial district. Because the cost of a vertical accessible route may make the conversion of second or third floor space into dwelling units economically infeasible, exempting these small conversions makes sense.

Costs:
Costs to regulated parties for implementation of and compliance with the rule:

The general impact of this amendment will be to reduce the cost of construction when a upper-story portion of building undergoes a change of occupancy to Group R-2.
There will be increased costs where dwelling units or sleeping units are created in a building with an elevator and 20 or less units. In this case, twenty-five percent of the units will have to be Type B units, whereas Appendix K would require no Type B units in the building. This trade off will benefit the state by making the reuse of older buildings in small towns more practicable, a condition far more common than that of the small elevator-building that may need greater access.

Alternatives:
No significant alternative proposals were given consideration. Keeping the elevator/no-elevator dichotomy of Appendix K would retain an inequitable and frankly illogical distinction in the code that benefits neither persons with disabilities nor building owners.

ITEM #33 - SCOPING SECTION

Note: new text Underlined, deleted text Strikeout)

101.2 Scope. The provisions of the ~~International Existing Building~~ this Code shall apply to the repair, alteration, change of occupancy, addition and relocation of existing buildings. A building or portion of a building that has not been previously occupied or used for its intended purpose shall comply with the provisions of the ~~International~~ Building Code of New York State for new construction. Repairs, alterations, change of occupancy, existing buildings to which additions are made, historic buildings and relocated buildings complying with the provisions of the ~~International~~ Building Code, ~~International~~ Mechanical Code, ~~International~~ and Plumbing Code of New York State and ~~International Residential Code~~ as applicable shall be considered in compliance with the provisions of this code.

Exceptions:

1. One and two-family dwellings and ~~multiple single family dwellings~~ townhouses not more than three stories high with separate means of egress and their accessory structures or changes of occupancy thereto shall comply with the Residential Code of New York State.

2. Agricultural buildings used solely in the raising, growing or storage of agricultural products by a farmer engaged in a farming operation.

PROPOSED IEBC MODIFICATIONS

ITEM #35 - SECTION 804 FIRE PROTECTION

Note: new text Underlined, deleted text ~~Strikeout~~

804.1 General. Fire protection requirements of Section 812 shall apply where a building or portions thereof undergo a change of occupancy classification.
804.1.1 Group A. Where a building or portions thereof undergo a change from any occupancy to a A occupancy or to a different sub group within an existing A occupancy, the entire building shall comply with Chapter 9 of the Building Code.

Exception 1: Where portions of an existing building that are changed to an A occupancy is separated from the remainder of the building with fire barriers having a fire resistance rating as required in the Building Code for the separate occupancy, only that portion changed to an A occupancy and the means of egress there from shall comply with Chapter 9 of the Building Code.

Exception 2: This section does not apply to A5 occupancies.

PROPOSED IEBC MODIFICATIONS

ITEM #37 - REFERENCE STANDARD SECTION 102.4.2 DELETED

Note: new text Underlined, deleted text ~~Strikeout~~

~~102.4.2 Compliance with other codes, standards and guides. Compliance with the structural provisions of the 2000 International Building Code, 2003 International Building Code, 1999 BOCA National Building Code, 1997 Standard Building Code or 1997 Uniform Building Code shall be deemed exceeding or equivalent to compliance with the structural provisions of this code.~~

Rehabilitation of Existing Structures for Nightclubs

RULE TEXT:

Part 1221 of Title 19 of the Official Compilation of Codes, Rules and Regulations of the State of New York is amended by adding a new section 1221.3 to read as follows:

1221.3 Nightclubs.

(a) The provisions of this section shall ~~take precedence over less restrictive~~ supersede conflicting provisions of the *Building Code of New York State*, including Appendix K thereof, with respect to nightclubs. Terms not defined in this section shall have meanings ascribed to them in the *Building Code of New York State.*

(b) For the purposes of this Part 'nightclub' shall mean any use of a building or portion thereof, as provided in paragraphs (1), (2) and (3) of this subdivision:

(1) the subject space is classified in Group A-2 or as a dance hall in Group A-3 occupancy; and

(2) at least 20 percent of the subject assembly space is for concentrated occupancy, with or without fixed seating, where the net assembly floor area per person is 7 square feet (0.65 m^2) or less; and

(3) live or recorded entertainment, including but not limited to vocalists, bands, musical reviews, comedy acts, dance music, and similar entertainment is ~~normally~~ provided. Entertainment shall not be deemed to include jukeboxes, background music or similar uses of live or recorded music.

(c) Where repairs or renovations regulated by Appendix K of the *Building Code of New York State* are undertaken in existing nightclubs, foam plastic materials that are not permitted to be used in new construction by the *Building Code of New York State* shall ~~not be permitted~~ be removed from work areas in existing nightclubs.

(d) Where existing nightclubs ~~include~~ contain or are located within reconstruction work areas, as defined in Appendix K of the *Building Code of New York State*, the building or portion thereof in which the nightclub is located shall comply with the provisions of this subdivision.

(1) Interior finishes in nightclubs and the means of egress therefrom shall be in

conformance with Table 803.4 of the *Building Code of New York State*.

(2) Where an automatic sprinkler system is required to be installed by section K706 of Appendix K of the *Building Code of New York State*, an adequate water supply shall be deemed to be available where the automatic sprinkler system can be designed and installed without installation of a fire pump. Where an adequate water supply is not available, the code enforcement official may accept alternative ~~protection~~ means for protecting occupants not intimate with ignition from the effects of fire. A written report shall be prepared and submitted by a registered design professional, which provides documentation that the proposed alternative(s) meet this performance standard.

(3) Where an automatic fire detection system is required to be installed by section K707.3 of Appendix K of the *Building Code of New York State*, it shall be installed in conformance with the provisions of section 907.2.1 of the *Fire Code of New York State*.

(4) The means of egress from nightclubs shall be in conformance with section 1010 of the *Fire Code of New York State*. ~~The exception to section 1010.1 shall be applicable solely to~~ Existing nightclubs required to conform with ~~applicable~~ provisions of the Uniform Fire Prevention and Building Code in effect on and after January 1, 1984 shall not be required to conform with Section 1010.

(e) Where there is a change of occupancy classification to a nightclub, or the character of use within a Group A-2 or A-3 occupancy of an existing building or portion thereof is changed to a nightclub, the building shall comply with the provisions of this subdivision~~, regardless of whether a change of occupancy classification is involved~~.

(1) Nightclubs shall not be located on a story of a building where such use would not be permitted by ~~Chapter 5~~ Table 503 of the *Building Code of New York State*, and as modified by Section 504 where applicable.

(2) Interior finishes in nightclubs and the means of egress therefrom shall be in conformance with Table 803.4 of the *Building Code of New York State*.

(3) An approved, supervised automatic sprinkler system conforming with the provisions of section 903.3 of the *Fire Code of New York State* shall be installed throughout all floor areas containing a nightclub having an occupant load of 100 or more persons, and on all floor levels between the nightclub and the level of exit discharge.

(4) An approved, supervised automatic fire alarm system conforming with the provisions of section 907 of the *Fire Code of New York State* shall be installed throughout all buildings containing a nightclub, except that notification appliances shall be required only on floor levels containing a nightclub.

(5) The means of egress from nightclubs shall be in conformance with section 1010 of the *Fire Code of New York State*. The exception ~~to~~ set forth in section 1010.1 shall not be applicable.

Regulatory Impact Statement

Statutory Authority

Subdivision 1 of Executive Law, §377 authorizes the State Fire Prevention and Building Code Council to periodically amend the provisions of the New York State Uniform Fire Prevention and Building Code (Uniform Code). Subdivision 1 of Executive Law, § 378 directs that the Uniform Code shall address standards for safety and sanitary conditions. Subdivision 2 of Executive Law, §378 directs that the Uniform Code shall address standards for the safeguarding of life and property from the hazards of fire. This proposal would add provisions to improve the fire safety of occupants in nightclubs, when buildings or portions thereof are rehabilitated.

Legislative Objectives

In enacting the Uniform Code Act, the Legislature stated its findings and purposes in Section 371; among these findings and purposes, the following provision would be applicable to nightclubs in rehabilitated buildings, whether such facilities were pre-existing or represent a new use:

> "§371.2. The legislature declares that it shall be the public policy of the state of New York to: . . .
>
> > b. Provide for the promulgation of a uniform code addressing building construction and fire prevention in order to provide a basic minimum level of protection to all people of the state from hazards of fire and inadequate building construction. In providing for such a uniform code, it is declared to be the policy of the state of New York to: . . .
> >
> > > (4) require new and existing buildings alike to keep pace with advances in technology concerning fire prevention and building construction, including, where appropriate, that provisions apply on a retroactive basis; . . ."

This proposal accords with the public policy objective cited above by adding fire safety provisions necessary to assure minimal public safety in nightclubs located in existing buildings, where current regulations do not provide for such features. This proposal does so in a reasonable manner by making requirements proportional to the work undertaken in such buildings or portions thereof.

Needs and Benefits

The basis for determining the need for the proposed rule making is the report entitled "Fire Safety in Public Assembly Occupancies" prepared by the New York State Department of State and issued on August 14, 2003.

In brief, the report examines existing provisions of New York State laws and regulations in response to incidents which resulted in multiple fatalities at the Station Nightclub in West Warwick, Rhode Island, and the E2 nightclub in Chicago, Illinois. The purpose of the report was to determine whether existing laws and regulations would prevent a similar incident from occurring in New York State. The report concluded that applicable laws and regulations do provide substantial

protections for persons visiting nightclubs in New York State; however, such laws and regulations also allow gaps in providing an appropriate and reasonable level of safety to the public.

In order to provide the public with a reasonable level of safety, this proposed rule making would define the term 'nightclub' so as to limit the application of the rule to facilities that pose the greatest risk to public safety, and provide for fire safety provisions that increase in stringency with expansion of the scope of intended rehabilitation work. In doing so, the proposed rule retains the proportional approach of Appendix K of the *Building Code of New York State*.

The primary benefit of the proposed rule making will be a reduction in the probability of multiple fatality fires in nightclubs in New York State. Data available from the National Fire Protection Association (NFPA) indicate that in dining and drinking establishments, the fatality rate per 1,000 fires is 0.8 in buildings not equipped with automatic sprinkler systems, and 0.0 in buildings that are equipped with such systems. The addition of a requirement for sprinkler systems in such buildings will reduce the potential for multiple fatalities. There are no similar data examining the impact of differing interior finishes, fire alarm systems or characteristics of the means of egress; however, post-fire analyses prepared by NFPA have indicated that delayed notification of occupants and inadequate protection of the means of egress have contributed to fatalities in public assembly fire incidents.

While fires that result in a large number of fatalities in public assembly occupancies have been rare events in the United States, they have the worst fatality record on a fatalities-per-incident basis. The large numbers of fatalities in fires such as the Station nightclub and Happy Land Social Club are considered an unacceptable consequence by members of the public and governmental leaders, typically leading to changes in laws and regulations intended to reduce the potential for recurrences.

Costs

a. Costs to regulated parties. Regulated parties consist of owners of nightclubs or buildings in which they are located, who are intending to conduct rehabilitation work to the facilities in which the nightclubs are located. Costs will vary widely, depending upon the scope of the intended rehabilitation work, the size of the nightclub, construction features of the existing building, and availability of public utilities to the site.

Where repairs or renovations to existing nightclubs are intended, owners would be required to remove existing foam plastic materials from affected areas that would be prohibited for new construction by the *Building Code of New York State*. It is considered likely that areas covered by such materials would be limited in extent. Depending upon the composition of existing substrates, demolition and removal of existing foam plastic and substrate would cost in the range of $0.45 to $1.35 per square foot; installation and finishing of new drywall would cost approximately $2.00 per square foot.

Where it is intended to undertake reconstruction of existing nightclubs, as defined in Appendix K of the *Building Code of New York State*, the proposed rule would add provisions in addition to those for interior finishes. The installation of an automatic sprinkler system would be required where an

adequate water supply is available at the floor on which the nightclub is located, but a fire pump would not be required to provide an adequate water supply for the sprinkler system. Where fire pumps and their necessary accessories are not required, automatic sprinkler systems can be installed for $1.50 to $4.00 per square foot. It should be noted that this provision is based on the 2003 International Existing Building Code, which is expected to become the basis for an *Existing Building Code of New York State* in the next two to three years. The estimated cost of a required fire detection system is $0.60 to $0.75 per square foot.

Modifications to the means of egress may be required for some nightclubs undergoing reconstruction; however, it is not feasible to estimate the costs involved without a profile of a 'typical' nightclub. Where such nightclubs are located in buildings constructed in compliance with the Uniform Code on and after January 1, 1984, there are likely to be no requirements for alterations to the means of egress. Where located in older buildings, costs could vary widely, depending upon existing construction and location within the building. For a nightclub located on a grade level story, adding one exit door may cost $2,500 to $3,000, excluding the cost of a ramp to grade. If required, a new exit stair may cost up to $6,000 per story in low-rise construction.

Where the occupancy of a building or portion thereof is changed to a nightclub, additional costs beyond those required for reconstruction may be required. In that an automatic sprinkler system would be required for all nightclubs with 100 or more occupants, a fire pump may be required where there is insufficient pressure or flow to meet hydraulic sprinkler demand. Depending on the capacity of the water supply system, the cost of a fire pump, generator set, controllers and other required accessories could be up to $100,000. The costs for automatic fire alarm systems and means of egress are likely to be similar to those discussed in the paragraphs on reconstruction.

Sources for costs cited in this section include R.S. Means *Repair and Remodeling Cost Data*, and estimates from engineers and contractors familiar with fire protection systems.

b. Costs to the agency, state and local governments. There will be no costs to state and local government to implement the proposed rule, in that the governmental entities are currently administering and enforcing the Uniform Code.

Local Government Mandates

No programs, services, duties, or responsibilities are imposed by the rule upon any county, city, town, village, school district, fire district or other special district.

Paperwork:

There are no reporting requirements, forms or any other paperwork that would be necessary as a result of this rule.

Duplication:

There are no relevant rules or other legal requirements of the state or federal government that

duplicate, overlap or conflict with the proposed rule.

Alternatives:

The Department of State considered not proposing a rule at this time, instead incorporating the substance of the proposed rule into an adoption of the 2003 International Codes. This alternative was rejected because the Department intends to review the 2003 International Codes in a deliberate manner, which may result in a proposed rule making action one to one-and-one-half years from the current time. The Department also considered not proposing a rule until such time as the International Code Council acts on proposals submitted in connection with its 2003/2004 code change cycle. In that these proposals would not be incorporated into International Codes until 2006, this alternative would delay further the benefits that may be gained from proceeding with a rule making action at this time.

The Department considered proposing alternative definitions of nightclubs and application of the proposed rule to all occupancies within Group A-2. These alternatives were rejected because they would have negatively impacted regulated facilities such as restaurants and taverns, without affording the public a significant improvement in fire safety.

Federal standards:

The new rule does not exceed any minimum standards of the federal government. There are no similar standards or subject areas.

Compliance schedule:

The proposed rule would impose compliance requirements that involve no unusual or innovative technical solutions. Regulators and regulated parties would be adequately prepared to comply with the provisions of the proposed rule by the date on which it becomes effective.

Regulatory Flexibility Analysis for Small Businesses and Local Governments

Effect of Rule

The proposed rule will affect persons who currently operate nightclubs, when they undertake construction projects in such facilities. It will also affect persons who propose to change the use of existing buildings or portions thereof to nightclubs, regardless of whether they intend to undertake construction. The proposed rule will not affect the continued operation and maintenance of existing nightclubs.

Where construction is undertaken or a change of use is implemented, the increase in construction costs will vary from modest to substantial, depending upon specific physical characteristics of the building in which a nightclub is intended to be located. This may result in reducing the feasibility of using specific buildings for nightclubs. Where an existing nightclub is proposed to undergo reconstruction, the proposed rule may result in the delay of a project, a reduction in scope of

construction, or abandonment of the project. Where a nightclub is proposed as a new use in an existing building, the proposed rule may affect the choice of buildings suitable for the proposed use. There is no estimate of the number of businesses that will be affected.

The proposed rule would not impose any requirements on local governments.

Compliance requirements

The proposed rule will not impose any additional reporting, record keeping or other affirmative acts on small businesses or local governments.

Professional services

The proposed rule will require small businesses undertaking regulated activities to expand the scope of professional services from architects and/or engineers. The proposed rule will not require local governments to acquire professional services of any type to comply with the rule.

Compliance costs

Regulated businesses and industries will incur capital improvement costs to comply with the proposed rule. Regulated businesses and industries will incur annual costs for inspection, testing and maintenance of fire protection systems associated with compliance with the proposed rule. Annual costs for these activities are estimated to be less then one thousand dollars. Local governments will not incur capital or annual costs associated with compliance with the proposed rule.

Economic and technological feasibility

The proposed rule reestablishes certain provisions that were in effect in the Uniform Fire Prevention and Building Code from January, 1984 to January, 2003. There are no economic or technological barriers to full compliance with the proposed rule by regulated parties.

Minimizing adverse impact

Small businesses which engage in the operation of nightclubs, where such facilities would be subject to the proposed rule, would be subject to an adverse economic impact. The economic impact would range from modest to substantial, depending upon the specific physical characteristics of the building in which a nightclub is intended to be located. The proposed rule does not require the installation of an automatic sprinkler system in a nightclub with less than 100 occupants, nor does it require the installation of an automatic fire detection system in a nightclub with less than 50 occupants. The proposed rule also requires increasing capacity and numbers of exits with increases in the number of occupants. Thus, it establishes differing compliance requirements based on the scale of the business. Business owners may also propose to use performance standards in lieu of design standards by petitioning the Department for a variance

from the requirements of the Uniform Code. In that the Department of State receives and acts on approximately 1,000 variance petitions annually, this is a well established procedure. Exempting small businesses from the effects of the rule would endanger public safety by not providing appropriate fire safety to occupants of nightclubs.

Local governments would not be regulated by the proposed rule and therefore would not be subject to an economic impact, adverse or otherwise.

Small business and local government participation

Department of State staff consulted with individual fire service and code enforcement personnel in the development of the proposed rule, and also reviewed it with representatives of a coalition of fire service and code enforcement organizations. The Department provided a draft of the proposed rule to the Empire State Restaurant and Tavern Association, which represents businesses that sell alcoholic beverages for on-premises consumption.

Rural Area Flexibility Analysis

Types and Estimated Numbers of Rural Areas

The proposed rule will apply to every city, town, village and county which is subject to the New York State Uniform Fire Prevention and Building Code. There is no differentiation between rural areas and urban areas of the State.

Reporting, Record Keeping and Other Compliance Requirements; and Professional Services

For those entities in rural areas of the State, there will be no reporting, record keeping or similar compliance requirements.

The proposed rule will require small businesses undertaking regulated activities in rural areas, as well as urban areas, to expand the scope of professional services from architects and/or engineer. The proposed rule will not require local governments to acquire professional services of any type to comply with the rule.

Costs

Regulated businesses and industries will incur capital improvement costs to comply with the proposed rule. Regulated businesses and industries will incur annual costs for inspection, testing and maintenance of fire protection systems associated with compliance with the proposed rule. Annual costs for these activities are estimated to be less then one thousand dollars. Local governments will not incur capital or annual costs associated with compliance with the proposed rule.

Initial capital costs and annual costs may be somewhat higher as a result of this rule for entities

located in rural areas, where private water supplies would be required for compliance with provisions for automatic sprinkler systems.

Minimizing Adverse Impact

The proposed rule could have an adverse impact on nightclubs located in rural areas, compared with those located in urban or suburban areas. Where nightclubs would be subject to the proposed rule, those with occupancies of 100 or more persons would be required to install an automatic sprinkler system. If there is not a water supply system available at the location of the nightclub, or if a water supply system that is available does not provide sufficient pressure or flow to operate an automatic sprinkler system, the cost of designing and installing a system would be increased; the economic impact would range from moderate to substantial, depending upon the specific characteristics of the water supply system and the building for which protection is being provided.

In developing the proposed rule, the Department did not consider establishing differing compliance requirements, nor exempting rural areas from coverage by the rule, as is suggested by State Administrative Procedures Act §202-bb(2), in that such action would endanger public safety by not providing appropriate fire safety to occupants of nightclubs. Performance standards in lieu of design standards are available in rural areas by petitioning the Department for a variance from the requirements of the Uniform Code. In that the Department of State receives and acts on approximately 1,000 variance petitions annually, this is a well established procedure.

Local governments would not be regulated by the proposed rule and therefore would not be subject to an economic impact, adverse or otherwise.

Rural Area Participation

Department of State staff reviewed the proposed rule with representatives of a coalition of fire service and code enforcement organizations. The Department provided a draft of the proposed rule to the Empire State Restaurant and Tavern Association, which represents businesses that sell alcoholic beverages for on-premises consumption. These organizations represent broad constituencies, having membership in rural areas, as well as urban and suburban areas.

Job Impact Statement

The Department of State has concluded after reviewing the nature and purpose of the proposed rule that it will not have a substantial adverse impact on jobs and employment opportunities in New York State.

ROPOSED IEBC MODIFICATION

ITEM HP #1 - General/ Report

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

Report. A historic building undergoing ~~repair,~~ alteration, or change of occupancy shall be investigated and evaluated. If it is intended that the building meet the requirements of this chapter, a written report shall be prepared and filed with the code official by a registered design professional when such a report is necessary in the opinion of the code official. Such report shall be in accordance with Chapter 1 and shall identify:

1. Each required safety feature that is in compliance with the provisions of this chapter

2. Where compliance with ~~other chapters of these~~ provisions of other chapters would damage the contributing historic character or ~~be damaging to the contributing historic~~ contributing historic features.

~~3. In high seismic zones a structural evaluation describing, at minimum, a complete load path and other earthquake-resistant features shall be prepared. In addition, the report shall describe each feature that is not in compliance with these provisions and shall demonstrate how the intent of these provisions is complied with in providing an equivalent level of safety.~~

Justification for proposed code change Section 1001.2

Needs and benefits:

This rule making would amend the provisions of the proposed Existing Building Code (EBC) pertaining to the requirements for the contents of the report. The proposed rule making would

amend the proposed EBC to eliminate the category of repair as one needing a report, since the level of work for repairs is limited and the requirement to prepare a report for such a limited amount of work is seen as burdensome. The proposed rule making clarifies that the report is for informational purposes only and does not require the author to provide alternatives in this document. Alternatives are addressed in the appropriate sections of the code. For the same reason, all references to seismic requirements are moved to Section 1006 Structural. The remaining proposed changes are for the purpose of providing clarity and consistency in the language of the code. This amendment may have a cost benefit for New York State building owners, since it reduces the need for creating a report in the instance of the repair category of work.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:

There may be a cost reduction involved with this change in the code text if the owner is involved only in repair work on historic buildings.

Alternatives:

Requiring a report for repair work may discourage the work being done. However, it was thought that the report was warranted for any work beyond repairs.

PROPOSED IEBC MODIFICATIONS

ITEM HP #2 - General / Special Occupancy

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

1001.3 Special O~~o~~ccupancy E~~e~~xceptions, ~~museums.~~ Historic buildings used for ~~When a building in Group R-3 is also used for Group A, B, or M~~ purposes such as museums, ~~tours,~~ libraries, exhibits, and ~~other public assembly activities~~ similar uses ~~or for museums~~ less than 3,500 square feet (325.5 m2) per floor and under four stories in height, shall be regulated as a ~~, the code official may determine that the occupancy is~~ Group B occupancy. ~~when life-safety conditions can be demonstrated in accordance with Section 1001.2.~~ Adequate means of egress shall be provided and ~~in such buildings, which may~~ shall, as applicable, include:

1. A ~~a~~ means of maintaining doors in an open position to permit egress,

2. A ~~a~~ limit on building occupancy to an occupant load permitted by the means of egress capacity

3. A~~, a~~ limit on occupancy of certain areas or floors, or

4. S~~s~~upervision by a person knowledgeable in the emergency exiting procedures.~~, shall be provided.~~

Justification for proposed code change Section 1001.3
Needs and benefits:

The 2003 IEBC recognizes that for historic buildings used as museums, upgrading for code compliance to Occupancy Group A, B, or M may require changes to those buildings that are economically burdensome, physically impossible to accomplish, or destructive of the very historic fabric that is the object of the building's use as a museum. Therefore, the IEBC granted an exception to these buildings when they are residential buildings that accommodate museum tours, exhibits, and other public assembly activities, or to any building under 3,000 square feet that is used as a museum. The code official is given the discretion to determine that the occupancy is Group B when life-safety conditions can be demonstrated in the report (Section 1001.2). In return for this more lenient occupancy classification, adequate means of egress must be provided, and some operational means of providing these are permitted.

A number of changes to this section are proposed to make the NYEBC consistent with previously approved provisions of Appendix K of the current code; to relieve the local code official of the burden of making the determination as to Group B classification; to eliminate vague language; and to extend this exception to historic buildings other than residential that serve similar functions to museums, namely those that house exhibits and libraries.

For the purposes of permitting a single-exit building, Appendix K currently describes a small

building as one that is less than four stories and less than 3,500 square feet in gross floor area per story (see TABLE BK702.2.3(2)). This description has been used in the proposed change in place of the 3,000 square foot size limit given in the IEBC.

It was felt that the phrases "tours" and "other public assembly activities" were vague and potentially too broad in their application, so "tours" was deleted and the phrase re-written to state uses similar to museums, libraries, and exhibits. Libraries were added to this grouping of buildings because a great many historic buildings house libraries and the quiet and controlled nature of library use is similar to that of a museum.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:

While it is difficult to estimate the cost savings generated by this rule because of the varied nature of instances where it would apply, complying with Group A or M code requirements could entail many more expensive changes than Group B requirements. By permitting historic museums, libraries, and exhibit buildings to be regulated as a Group B occupancy and permitting some operational means of compliance with means of egress requirements, owners of these buildings can avail themselves of less expensive options for providing for life safety while still fully utilizing their buildings.

Alternatives:

Alternatives to this proposed rule change consist of leaving the code unchanged; expanding the building uses permitted to include those other than museum, library, and exhibit; and imposing additional life-safety requirements. It was felt that leaving the code unchanged would impose an unnecessary burden on owners of historic buildings that were used as museums, libraries, or exhibits, and that some required changes could even be in opposition to the public policy goal of preserving the state's historic heritage.

Building uses other than museum and exhibit were considered, among them libraries, restaurants, shops and multiple dwellings. It was decided that the life-safety alternatives afforded buildings in this section should be restricted to buildings housing museums, libraries, exhibits, and similar uses where the occupants were generally under observation and under the control of the building operators, and thus a very low risk of hazard was present.

To ensure that the risk to human life and property was minimized, the size of all buildings permitted to use the alternatives of this section was limited to that used for determining that a multi-story building could have only one means of egress.

With these restrictions as to types of building uses and building size, it was felt that additional life-safety requirements were unnecessary.

PROPOSED IEBC MODIFICATION

ITEM HP # 5 - Repair / Replacements

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

1002.5 Replacement. Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original configuration, height and size shall be permitted. Such replacements shall not be required to meet the materials and methods requirements of Section 401.2.

Exception: Replacement glazing in hazardous locations shall comply with safety glazing requirements of ~~Chapter 24 of the International Building Code~~ the Building Code of New York, except for historic glazing identified in Section 1001.2 which is permitted to remain, or may be replaced in kind to match historic glazing.

Justification for proposed code change Section 1002.5
This proposed code change will permit historic glazing as identified in the Report to be replaced in kind. The proposal will promote a consistent appearance where all glazing is not required for replacement (a situation typical to rehabilitation projects), and will not require wood or metal frames to be modified to accept alternate glazing. No documentation has been provided that substantiates the unsafe conditions presented by inkind replacement of historic glazing materials.

Replacement with alternate glazing will put a project in conflict with the *Secretary of the Interior's Standards for Rehabilitation.* Compliance with the standards is required where state or federal funds or permits are to be used or issued on historic buildings, or where federal tax incentives to encourage the rehabilitation of historic properties are used. Removal of historic materials, including glazing, is considered to be inconsistent with Standards #2 and #5 that require retention of historic materials, and could jeopardize the use of public funds or tax incentives that are essential to the rehabilitation project.

Needs and benefits:

This rule making would amend the provisions of the proposed Existing Building Code (EBC) to permit replacement of historic materials in limited conditions to be done in traditional materials when documented as historic in the project Report (Section 1001.2). It is necessary that this provision be modified as proposed in order to promote consistency between adjacent openings where some historic glazing is proposed to be retained.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:
The proposed rulemaking will provide cost savings by not requiring metal and wood frames and sash to be reworked (when technically feasible) or replaced. It will also permit historic

building owners to take advantage of the financial incentives designed to encourage reinvestment in existing buildings.

Alternatives:
Leave language as proposed in EBC and have all replacement glazing in hazardous locations replaced to match code compliant conditions for new construction. This was rejected because of the unnecessary and expensive implications on historic frames and sash, the visual inconsistency between adjacent openings that would be created, and the lack of compelling evidence documenting this as a critical safety issue.

PROPOSED IEBC MODIFICATIONS

ITEM # HP 6 - FIRE SAFETY - GENERAL

Note: new text Underlined, deleted text ~~Strikeout~~

1003.2 General. Every historic building that does not conform to the construction requirements specified in this code for the occupancy or use and that does not safeguard the occupancy or use from the hazard of fire and explosion shall be provided with an approved automatic fire-extinguishing system as determined appropriate by the code official. However, an automatic fire-extinguishing system shall not be used to substitute for, or act an alternative to, the required number of exits from any facility.

PROPOSED IEBC MODIFICATIONS

ITEM # HP8 - FIRE SAFETY - INTERIOR FINISHES

Note: new text Underlined, deleted text ~~Strikeout~~

1003.5 Interior finishes. Historic wall and ceiling finishes identified in Section 1001.2. ~~The existing finishes of walls and ceilings~~ shall be accepted. ~~when it is demonstrated that they are the historic finishes.~~

PROPOSED IEBC MODIFICATIONS

ITEM # HP 12 - GUARD OPENINGS

Note: new text Underlined, deleted text ~~Strikeout~~

1003.10.2 Guard openings. The spacing between existing intermediate railings or openings in existing ornamental patterns shall be permitted to remain. ~~accepted~~. Missing elements or members of a guard may be replaced to match historic features. ~~in a manner that will preserve the historic appearance of the building or structure.~~

1003.11 Exit signs. Where exit sign or egress path marking location would damage the historic character or contributing historic features. ~~of the building~~, alternative exit signs are permitted with approval of the code official. Alternative signs shall identify the exits and egress path.

PROPOSED IEBC MODIFICATIONS

ITEM HP #14 - Fire Safety / Paneled Doors

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

1003.12.2 Paneled Doors. Existing paneled doors that are contributing historic features and are located in corridors required to have a one-hour fire rating may remain provided that:

The doors are tight fitting.
The building is equipped with a quick response automatic sprinkler system.
A quick response sprinkler head is located at each side of the door.

Justification for proposed code change Section 1003.12.2

Needs and benefits:

This rule making would amend the provisions of the proposed Existing Building Code (EBC) pertaining to paneled doors. The proposed rule making would amend the proposed EBC to provide for the retention of historic wood doors in historic buildings which are equipped with a quick response automatic sprinkler system. This amendment will provide a cost savings to New York State building owners by allowing them to retain existing doors rather than replace them with new rated doors in fire-rated corridors.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:

The cost savings will vary depending on the building in question and the condition of the doors to be retained, since they will need to be made tight fitting. However, this would require only minor carpentry work, and would be much less expensive than replacing the doors at a cost of approximately $300 each.

Alternatives:

Not doing anything would not provide protection for existing paneled doors. Using this approach, historic fabric is saved and safety measures are provided which met with approval from the fire safety community.

FINAL APPROVED PROPOSED IEBC MODIFICATIONS

HP # 15 - Fire Safety / General / Sprinklers

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

1001.2.1
For purposes of compliance with Section 104.11, NFPA 914 NFPA 914: Code for Fire Protection in Historic Structures, 2001 Edition
and NFPA 101A Alternative Approaches to Life Safety may be used as Reference Standards.

1003.12 Automatic Fire Extinguishing System.

1003.12.1 General. Every historical building that ~~cannot be made to~~ does not conform to the construction requirements specified in the ~~International Building Code~~ Building Code of New York for the occupancy or use and that does not safeguard the occupancy or use from the hazard of fire and explosion ~~constitutes a distinct fire hazard~~ shall be deemed to be in compliance if provided with an automatic fire-extinguishing system in accordance with Section 903 of the Building Code of New York.

However an automatic fire-extinguishing system shall not be used to substitute for, or act as an alternative to, the required number of exits or total capacity from any facility.

~~Exception: When the code official approves an alternative life-safety system.~~

Justification for proposed code change Section 1003.12
Four substantive changes are proposed: others are editorial in nature.
Replacement of the term “distinct fire hazard” with a definition derived from the *Fire Code of New York.* This replacement is proposed due to the lack of definition of the term in the *Building Code of New York.*
Providing reference to a particular section of the *Building Code of New York* for proposed automatic fire extinguishing systems. The lack of a specific reference would permit different automatic fire-extinguishing systems to be approved inconsistently across the state.
Inclusion of language establishing that the fire-extinguishing system was not to be used as an alternate to exits is a general reiteration of a condition used in other provisions of this chapter, with the addition of the requirement that the total exit capacity must be met.
Elimination of the exception for “alternate life safety system” due to the lack of definition of this term and its potential to create inconsistent code applications.

These changes were deemed necessary due to the reliance of this provision on a sprinkler system to establish an acceptable level of safety.

Needs and benefits: In many instances, the installation of a sprinkler system can provide an equivalent level of safety to that which would have been established by other fire safety approaches. Where appropriate, affordable, and feasible due to the existence of public water mains and adequate water pressure levels, sprinklers can provide an unparalleled level of safety where other requirements would have excessive costs or require unnecessary and prohibitive changes to the historic building. The proposed changes will create more consistency in situations where sprinklers are a reasonable solution, and will eliminate questions related to determination of 'distinct fire hazard', what type of systems are acceptable, and what would constitute an 'alternate life safety system'.

Costs:

Costs to regulated parties for implementation of and compliance with the rule: Design costs would be minimized due to the greater clarity included in the code. There would be minimal impact on the cost of construction.

Alternatives:

1. Leaving most existing language was rejected due to the lack of clarity and definition.
2. Leaving the option of an 'alternate life safety system' was rejected due to the inconsistency of code applications that would be likely statewide.

PROPOSED IEBC MODIFICATIONS

HP 16A - Fire Safety / Fire Separations / Mixed

(Note: New Text Underlined, Deleted Text ~~Strikeout~~**)**

1003.13 Historic Wall and Floor-Ceiling Assemblies in Mixed Use Occupancies. In buildings less than 3,500 sf/floor and less than four stories in height, an existing historic wall or floor/ceiling assembly identified in Section 1001.2 may remain provided that all vertical and horizontal penetrations are protected and the entire building is equipped with an approved automatic fire alarm and smoke or heat detection system in accordance with Section 907 of the BCNY.

Exception: Group A-2 and H occupancies and areas where open flames are used or commercial cooking occurs as defined by the Fire Code of New York.

Justification for proposed code change Section 1003.13
One of the most difficult areas faced by small scale, main street buildings that are essential to the revitalization of downtown commercial areas is the required fire separation of the first floor ceiling and other first floor spaces with historic finishes that require a fire rating. Such ratings are generally required when a mixed use occurs. This is problematic since mixed uses are traditional to these buildings, and since encouraging mixed uses in downtowns has been determined to be an essential component of encouraging appropriate uses in small commercial buildings.

No cost effective means exists to provide a fire rating at the tin ceiling or similar assembly: ratings can only be achieved by extensive demolition and reinstallation or replacement. This adds such significant costs to projects that they become financially infeasible, causing buildings to remain vacant and vulnerable. Required removal of tin ceilings and other ornamental assemblies such as plaster ceilings or walls will put a project in conflict with the *Secretary of the Interior's Standards for Rehabilitation.* Compliance with the standards is required where state or federal funds or permits are to be used or issued on historic buildings, or where federal tax incentives to encourage the rehabilitation of historic properties are used. Removal of historic materials, including glazing, is considered to be inconsistent with Standards #2 and #5 that require retention of historic materials, and could jeopardize the use of public funds or tax incentives that are essential to the rehabilitation project.

Needs and benefits:
This rule making would amend the provisions of the proposed Existing Building Code

(EBC) by adding a new section that permits these retained assemblies when a building has an automatic fire alarm and smoke or heat detection system. This has been determined to be a reasonably equivalent solution, and once commonly proposed to the state's various boards. The provisions will not be available to conditions presenting the greatest hazard: where commercial cooking or open flames are used, or in Group A-2 (restaurants, etc.) and H occupancies.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:
The cost savings associated with retention of the historic materials will be generally balanced by the costs associated with the required improvements at penetrations and alarm/detection.

Alternatives:
Not proceeding with this proposal. This was rejected due to the importance of addressing one of the most common problems faced by historic main street properties.
Requiring automatic suppression systems. The high cost of a sprinkler system, complemented by the ability to compensate for the condition through addressing penetrations and full alarm/detection, resulted in rejecting the requiring of a sprinkler system for this condition. Additionally, installing an automatic fire-extinguishing system for the ceiling or historic wall treatment condition would require extensive removal of historic finishes.
Documentation identifying this condition as being hazardous in mixed use occupancies (with the exception of those to which the proposal will not apply) has not been identified.

PROPOSED IEBC MODIFICATIONS

ITEM HP #16b - Alterations / Accessibility

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

SECTION 1004. ALTERATIONS

1004.1 Accessibility requirements. The provisions of Section 506 shall apply to buildings and facilities designated as historic structures that undergo alterations, unless technically infeasible. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the code official or the State Historic Preservation Officer, the alternative requirements of Sections 1004.1.1 through 1004.1.5 for that element shall be permitted.

Justification for proposed code change Section 1001.2

This rule making would amend the provisions of the proposed Existing Building Code (EBC) to include the State Historic Preservation Officer (SHPO) as an alternative to the code official for the determination of historic significance and the impact on such significance by a proposed change to accommodate strict compliance with accessibility requirements.

Needs and benefits:

The proposed change would not eliminate the need to make facilities accessible; it would only allow the use of the alternatives already permitted by code in Section 1004.1.1. It would also provide consistency in determining historic significance. The (SHPO) already has the authority in matters concerning the impacts on historic buildings under state law (Section 14.09 of the State Historic Preservation Act) and federal law (Section 106 of the National Historic Preservation Act). SHPO staff are trained to recognize historic sig nificance and to determine how proposed building changes would affect that significance. By contrast, local code officials receive no training in this area and may be reluctant to make decisions based on

historic significance. The proposed code change allows the owner to work either with the local code official, or to request comment from the SHPO.

The need for statewide consistency in the application of the code has been a primary rationale for adopting Appendix K and a version of the IEBC. Allowing the SHPO to determine impacts that might affect the significance of historic buildings is consistent with other state law and would provide a uniform basis for evaluating the effect of work on historic buildings.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:

There would be no impact on the cost of construction. The same planning and design materials prepared for code official review would be used to obtain the comments of the SHPO.

Alternatives:

Alternatives considered were to leave the language unchanged; change the term “significance” to “character” or “character defining features”; to have the SHPO review all proposed changes necessitated by accessibility requirements; and to provide training to code officials so they would be qualified to make these determinations. The last alternative would have required the code official to master a new field of knowledge, an unreasonable expectation given current work demands. To leave the language unchanged would place the burden of determining historic significance on the code official, and result in inconsistencies statewide. The requirement to have all projects reviewed by SHPO was considered burdensome for the owner, as this additional process could produce long project delays. Ultimately, it was decided to conform to the language of the federal ADA/ABA Accessibility Guidelines, Section 202.5 Alterations to Qualified Historic Buildings and Facilities, which allows the SHPO to make the determination regarding impacts to historic significance, and to provide the option of having the local code official make that dec ision, if the owner preferred.

PROPOSED IEBC MODIFICATION

ITEM HP #19 - Change of Occupancy / Location on Property

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

1005.3 Location on property. ~~H~~istoric structures undergoing a change of use to a higher hazard category in accordance with Section 812.4.3 may use alternative methods to comply with the fire resistance and exterior opening protective requirements per Section 104.11 ~~. Such alternatives shall comply with Section 1001.2.~~

Justification for proposed code change Section 1005.3

Needs and benefits:

This rule making would amend the provisions of the proposed Existing Building Code (EBC) pertaining to location on property. The proposed rule making would amend the proposed EBC to reference Section 104.11 Compliance Alternatives in place of Section 1001.2 Report. The purpose of this proposed amendment is to provide more direct reference to the section that deals with compliance alternatives in the code. This amendment will have no cost impacts on New York State building owners. This amendment is intended only to clarify the intent of the code.

Costs:

Costs to regulated parties for implementation of and compliance with the rule: There are no costs involved with this change in the code text.

Alternatives:

If the text was left as is, the code user would use the report prepared per Section 1001.2. Instead the user is referred to the code section defines alternative materials, design and methods of construction and equipment which to give more options for compliance. Often buildings which are moved are hundreds of years old

and retaining their original attributes is of utmost importance.

PROPOSED IEBC MODIFICATIONS

ITEM HP #22 - Change of Occupancy / Exit Signs

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

1005.11 Stairways and railings. Existing stairways shall comply with the requirements of these provisions. The code official shall grant alternatives for stairways and railings if alternative stairways are found to be acceptable or are judged to meet the intent of these provisions. ~~Existing stairways shall comply with Section 1003.~~

Exception: For buildings less than ~~3,000 (279 m2)~~ 3,500 square feet (325.5 m2) per floor and less than 4 stories in height, existing conditions are permitted to remain at all stairs and rails.

Justification for proposed code change Section 1005.11

This rule making would amend the provisions of the proposed Existing Building Code (EBC) to allow the retention of some existing stairways, and all existing stairways in "small buildings." The deletion of the reference to Section 1003 eliminates a redundancy, as this section is included in "these provisions" in the first sentence of this subsection.

Needs and benefits:

Physical and structural modifications to stairways are an effort in all buildings, in particular those with relatively small footprints and 2-3 stories where the costs of such changes can not be absorbed. Requirements to modify an existing stair are so onerous in small buildings that it is can quickly become the basis on which an owner elects to abandon a building or project. The importance of this issue is so great that it

encouraged the committee to establish a de facto definition of small building (less than 3,500 square feet (325.5 m2) per floor and less than 4 stories in height) that was reiterated in other sections of this chapter for consistency.

Enlarging or modifying existing stairways usually requires major changes to the building, resulting in prohibitive costs, loss of rentable or usable floor space, and the destruction of historic features. Required changes to stairways and their components will put a project in conflict with the *Secretary of the Interior's Standards for Rehabilitation.* Compliance with the standards is required where state or federal funds or permits are to be used or issued on historic buildings, or where federal tax incentives to encourage the rehabilitation of historic properties are used. Such modifications are considered to be inconsistent with Standards #2 and #5 that require retention of historic materials, and could jeopardize the use of public funds or tax incentives that are essential to the rehabilitation project.

Any one of these consequences can render the rehabilitation of a building economically unfeasible, with the result that other needed upgrades are not made. Small buildings have limited numbers of occupants, and have been in use for many years without major problems relating to the configuration of their stairways. It is reasonable to permit these conditions to continue, as no documentation has been suggested that they create dangerous conditions.

Most of these buildings are in older commercial areas of large cities, or constitute the downtown of smaller villages. These buildings are especially vulnerable to obsolescence, and one goal of adopting Appendix K and the IEBC is to provide for the reasonable rehabilitation of these buildings. Permitting flexibility in the retention of existing stairways contributes to this goal.

Costs:

Costs to regulated parties for implementation of and compliance with the rule:

There could be significant cost savings to the owner, who would not have to rework or replace the existing stairways in his building, or reconfigure the entire floor plan. The exact amount of cost savings would depend on the specific conditions of each building, but could range from $10,000 to $50,000.

Alternatives:

Alternatives considered were to leave the wording as is: however, this would be inconsistent with the other requirements for small buildings, which are generally seen to be a special case and a major building type to be addressed by the philosophy of this code.

PROPOSED IEBC MODIFICATIONS

ITEM # HP 26 - CHANGE OF OCCUPANCY/ACCESSIBILITY

Note: new text Underlined, deleted text ~~Strikeout~~

1005.15 Accessibility requirements. The provisions of Section 812.5 shall apply to buildings and facilities designated as historic structures that undergo a change of occupancy, unless technically infeasible. Where compliance with the requirements for accessible routes, ramps, entrances or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the ~~authority having jurisdiction~~ code official or the State Historic Preservation Officer, the alternative requirements of Section 1004.1.1 through 1004.1.5 for those elements shall be permitted.

PROPOSED IEBC MODIFICATIONS

ITEM HP #28 - Structural / Seismic

(Note: New Text Underlined, Deleted Text ~~Strikeout~~)

1006.3 Seismic. Where compliance with the provisions of this code would damage historic character or contributing historic features identified in Section 1001.2, alternative methods per Section 104.11 may be used.

Justification for proposed code change Section 1006.3

Needs and benefits:

This rule making would amend the provisions of the proposed Existing Building Code (EBC) pertaining to seismic. The proposed rule making would amend the proposed EBC to relocate seismic requirements from Section 1001.2 Report to a new section within Section 1006 Structural. This is a more logical location for seismic requirements as they are structural in nature. This has the benefit of leaving the Report to supply the information needed by the code official, rather than also addressing alternatives. Proposals for alternatives are more appropriately contained

within the sections where they apply. The proposed amendment also references the alternatives permitted under Section 104.11. This amendment will have no cost impacts on New York State building owners. This amendment is intended only to clarify the intent of the code.

Costs:

Costs to regulated parties for implementation of and compliance with the rule: There are no costs involved with this change in the code text.

Alternatives:

Not clarifying language and placing information in the most appropriate location in the code could result in confusion as to what the code requires, with ensuing inconsistent enforcement.se