

# STATE OF WASHINGTON STATE BUILDING CODE COUNCIL

## Cost-Benefit Analysis & Small Business Economic Impact 2024 International Building Code (IBC) 2024 International Building Code (IEBC)

Washington State Amendments

### SECTION 1. EXECUTIVE SUMMARY

The 2024 IBC and IEBC code change cycle focuses on keeping buildings safer, more accessible, and easier to design, construct, and regulate across Washington State. These amendments emphasize structural and fire safety, egress and accessibility, and coordination with related codes while maintaining economic feasibility for builders, designers, and small businesses.

Stakeholders from across the building sector participated in this cycle, including architects, engineers, contractors, building officials, small-business owners, and public-safety advocates. Their input helped shape amendments that clarify requirements, align Washington with national standards, and reduce unnecessary complexity in the building code.

Overall, the economic analysis indicates that the adopted IBC amendments have a net positive impact. Many proposals clarify existing practice, reduce design and enforcement ambiguity, or align references and definitions, resulting in time savings and reduced risk of reworking without imposing high new costs.

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**Proposals with Non-Neutral Economic Impact**

<b>Proposal Number</b>	<b>Code Section Reference</b>	<b>Title</b>	<b>Symbol</b>
<b>24-GP1-004-R1</b>	<b>IBC Chapter 16, Section 1609.3</b>	<b>Basic Wind Speed</b>	<b>*</b>
<b>24-GP1-034-R2</b>	<b>IBC Chapter 19, Section 1901 and 1905</b>	<b>Special Reinforced Concrete Shear Walls</b>	<b>*</b>
<b>24-GP1-035</b>	<b>IBC Chapter 19, Section 1905.9</b>	<b>Amendments to ACI 318</b>	<b>*</b>
<b>24-GP1-043</b>	<b>IBC Chapter 16, Section 1613.4</b>	<b>Amendments to ASCE 7</b>	<b>**</b>
<b>24-GP1-051</b>	<b>IBC Chapter 16, Section 1604.5.1</b>	<b>Risk Category: Multiple Occupancies</b>	<b>*</b>
<b>24-GP1-074</b>	<b>IBC Chapter 9, Section 909.12.2</b>	<b>Fire Alarm Wiring within continuous raceways for Smoke Control/Pressurization Systems</b>	<b>*</b>
<b>24-GP1-091-R5</b>	<b>IBC/IFC Chapter 9, Section 903.2.8.4/903.2.8.5</b>	<b>NFPA 13D Systems</b>	<b>*</b>
<b>24-GP1-078-R1</b>	<b>IEBC Chapter 10, Section 1002</b>	<b>Change of Occupancy in Healthcare</b>	<b>*</b>

### **SECTION 3. OVERVIEW**

This document presents comprehensive economic impact analyses and small-business assessments for proposed amendments to the 2024 International Building Code (IBC) and the 2024 International Existing Building Code (IEBC) adopted by Washington State. The amendments address code clarity, life-safety protection, regulatory alignment, technical accuracy, and long-term performance while minimizing economic burden on affected businesses and jurisdictions.

Each proposal includes a structured cost-benefit analysis that evaluates the impacts on construction costs, enforcement, and plan review implications, life-cycle effects, and other administrative or compliance costs. The analysis also examines direct and indirect economic benefits, including reduced design and enforcement time, avoided rework, and improved regulatory consistency.

Small-business impacts are assessed using a consistent framework across proposals, focusing on relevant NAICS sectors, potential disproportionate impacts, and whether the amendment represents the least burdensome option to achieve statutory objectives under RCW 34.05.328 and the Regulatory Fairness Act RCW 19.85.

### 3.1 GENERAL SMALL-BUSINESS ENGAGEMENT STATEMENT

The Washington State Building Code Council (SBCC) conducted an open and inclusive public process for these 2024 IBC amendments, including noticed Council meetings, multiple Technical Advisory Group (TAG) meetings, and dedicated public listening sessions at which small businesses and their representatives were invited to comment on every proposal. Notice of these opportunities was broadly distributed through the SBCC website, email lists, and industry and professional associations, and written comments were accepted throughout the rulemaking development period so that small builders, designers, event organizers, and other affected firms had multiple avenues to be heard. While participation levels varied by proposal, the Council took reasonable and practicable steps each time to solicit, receive, and consider small-business input before finalizing the rule language.

### 3.2 GENERAL JOBS-IMPACT STATEMENT

During this rulemaking, the SBCC did not receive quantitative evidence demonstrating that the adopted IBC amendments will either create or eliminate jobs in the affected industries. Stakeholder comments and the economic analysis indicate that the proposals primarily clarify existing practice, align with national standards, and reduce regulatory burden, but no data were submitted to support a defensible numeric estimate of job gains or losses attributable to these specific changes.

### 3.3 GENERAL COSTS TO SMALL BUSINESSES

SBCC is unable to calculate the cost per employee, cost per hour of labor, or cost per one hundred dollars of sales for the 2024 IBC amendments because it did not receive sufficient quantitative information (for example, employee counts, wage data, hours worked, or gross sales figures) to support identification of disproportionate impact on small businesses in accordance with RCW 19.85.040(1). As a result, this document evaluates relative cost and burden qualitatively, based on available construction, design, and enforcement information for each proposal.

### 3.4 KEY ECONOMIC FINDINGS

- **Net economic impact:** Overall neutral to positive; proposals mainly clarify requirements, align definitions/references, and streamline temporary structure/accessibility provisions with no significant new construction costs.
- **Small-business burden:** Minor positive to neutral; no proposal creates a demonstrated disproportionate burden, and many changes reduce interpretation time, over-design risk, and permitting/enforcement complexity for small firms.
- **Public benefit:** Strong improvements to structural and fire safety, accessibility, and regulatory clarity through clearer definitions, timeframes, and updated referenced standards.
- **Industry alignment:** Most amendments codify existing practice or align with the model IBC and current accessibility/referenced standards, reducing conflicts and supporting consistent design and enforcement statewide.

## SECTION 4. SMALL BUSINESS IMPACT SUMMARY

### 4.1 IMPACTED NAICS SECTORS

NAICS Code	Industry	Proposals Affected (approx.)
23	Construction Sector	1
236110	Residential Building Construction	1

<b>236115</b>	New Single-Family Housing Construction	11
<b>236116</b>	New Multifamily Housing Construction	19
<b>236117</b>	New Housing Operative Builders	2
<b>236118</b>	Residential Remodelers	9
<b>236210</b>	Industrial Building Construction	6
<b>236220</b>	Commercial and Institutional Building Construction	28
<b>237990</b>	Other Heavy and Civil Engineering Construction	1
<b>238110</b>	Poured Concrete Foundation and Structure Contractors	3
<b>238120</b>	Structural Steel and Precast Concrete Contractors	3
<b>238130</b>	Framing Contractors	2
<b>238210</b>	Electrical Contractors and other Wiring Installation Contractors	10
<b>238220</b>	Plumbing, Heating, and Air-Conditioning Contractors	12
<b>238310</b>	Drywall and Insulation Contractors	2
<b>238350</b>	Finish Carpentry Contractors	1
<b>238990</b>	All Other Specialty Trade Contractors	1
<b>321110</b>	Iron and Steel Mills and Ferroalloy Manufacturing	1
<b>321213</b>	Engineered Wood Manufacturing	2
<b>3219</b>	Other Wood Product Manufacturing	1
<b>324122</b>	Asphalt Shingle and Coating Materials Manufacturing	1
<b>327320</b>	Ready-Mix Concrete Manufacturing	1
<b>327390</b>	Precast Concrete Product Manufacturing	1
<b>327420</b>	Gypsum Product Manufacturing	1
<b>332913</b>	Plumbing Fixture Fitting and Trim Manufacturing	1
<b>333413</b>	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	1
<b>335132</b>	Interior Decorative Lighting Manufacturing	1
<b>335911</b>	Storage Battery Manufacturing	1
<b>335999</b>	All Other Miscellaneous Electric Equipment and Component Manufacturing	1
<b>336320</b>	Motor Vehicle Electrical and Electronic Equipment Manufacturing	1

<b>337110</b>	Wood Kitchen Cabinet and Countertop Manufacturing	1
<b>337121</b>	Upholstered Household Furniture Manufacturing	1
<b>337910</b>	Mattress Manufacturing	1
<b>339950</b>	Sign Manufacturing	1
<b>442110</b>	Furniture Stores	1
<b>493110</b>	General Warehousing and Storage	1
<b>531110</b>	Lessors of Residential Buildings and Dwellings	2
<b>531120</b>	Lessors of Nonresidential Buildings	1
<b>531311</b>	Residential Property Managers	1
<b>532289</b>	All Other Consumer Goods Rental	1
<b>532490</b>	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	1
<b>541310</b>	Architectural Services	23
<b>541320</b>	Landscape Architectural Services	1
<b>541330</b>	Engineering Services	35
<b>541350</b>	Building Inspection Services	4
<b>541360</b>	Geophysical Surveying and Mapping Services	1
<b>541370</b>	Surveying and Mapping Services	1
<b>541620</b>	Environmental Consulting Services	1
<b>561920</b>	Convention and Trade Show Organizers	1
<b>621493</b>	Freestanding Ambulatory Surgical and Emergency Centers	1
<b>623110</b>	Nursing Care Facilities	1
<b>711310</b>	Promoters of Performing Arts, Sports, and Similar Events with Facilities	1
<b>711320</b>	Promoters of Performing Arts, Sports, and Similar Events without Facilities	3

## 4.2 CUMULATIVE ECONOMIC ANALYSIS

### Overall Construction Cost Impact

- 4 Proposals: \$0 impact (clarifications, existing requirements)
- 16 Proposals: Cost savings (\$200–\$22,400 per project)
- 4 Proposals: Minimal increase or neutral

### Overall Economic Benefits

- Design time savings: \$15–\$150 per project (multiple proposals)
- Avoided rework: \$500–\$15,000 per incident
- Life-cycle savings: \$50–\$22,400 per protected system
- Reduced code research: 15–20% time savings for small firms

### Small Business Impact Summary

- Positive Impact: 18 proposals (reduced costs/complexity)
- Neutral Impact: 2 proposals (no burden change)
- Negative Impact: 0 proposals

## 5. PROPOSAL SPECIFIC COST-BENEFIT ANALYSIS

### 5.1 INTERNATIONAL BUILDING CODE

#### 5.1.1 Log Number: 24-GP1-003-R2

**Code Section / Title:** IBC New Appendix "Supplemental Visitability Requirements"

**Proponent/Author:** Lucas Shadduck, City of Tacoma

#### 1. Description & Rationale

##### a. Summary of Current Baseline (without proposal):

- The 2021 WABC does not contain an appendix for visitability. Visitability refers to Type "C" units and current the WABC focuses on Type "A" and Type "B" units.

##### b. Summary of Baseline with Changes:

- The proposed creates an optional appendix for visitability standards established in ANSI/ICC A117.1 that may be adopted for use by local jurisdictions.

##### c. Rationale Statement:

- The purpose of the proposed amendment is to provide local authorities with the option of adopting visitability standards.

#### 2. Economic Cost Analysis

##### a. Construction Cost Impact:

- Cost impacts will be \$0-\$1,500 per visitable dwelling unit based on the assumption that a housing unit has three stairs into the front door and no effort has been made to redesign. The cost assumed is the difference between the construction of three stairs and a ramp meeting the Type C (Visitable) Unit standards. Not every unit under this proposal will be required to meet the visitable criteria. Additional blocking is required in the bathroom as well as a minimum floor space around the toilet fixture which are assumed to have negligible impacts to cost. Other items such as minimum width door frames and switch locations will have no cost impact. Projects with thoughtful design will not see impacts on cost. The amendment will have no impact unless adopted by local jurisdictions.

##### b. Implementation/Plan Review/Inspection Costs:

- Implementation requires updating building permit checklists forms to include visitability features. Plan review times may increase slightly, and inspections will not experience significant time increases to verify visitability features.

##### c. Life-Cycle Costs:



- Operational and Maintenance costs for using visitability features in a design are virtually non-existent. The costs are primarily associated with initial construction costs.

**d. Other Costs:**

- Natural topology has varying impacts on the initial costs. Standard plans may need revisions to accommodate visitability features.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- While incorporating visitability during initial construction adds negligible costs (\$0–\$300 on average), it prevents retrofitting costs estimated averaging \$3,300 for a zero-step entrance, \$700 for increased door width.

**b. Operational Benefits:**

- A formal appendix offers a path for standardizing inclusive design as a routine construction practice. The appendix streamlines compliance for developers by reducing ambiguity around visitability

**c. Other Benefits:**

- Use of this appendix is supportive to aging in place.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236115: New Single-Family Housing Construction
- NAICS 236116: New Multifamily Housing Construction
- NAICS 236117: New Housing Operative Builders
- NAICS 236118: Residential Remodelers
- NAICS 541310: Architectural Services
- NAICS 541320: Landscape Architectural Services

**b. Compliance Burden Comparison:**

- Burden manifests through increased pre-construction planning and material costs.

**c. Potential Disproportion/Mitigation:**

- Compliance burden is eased by the creation of this appendix containing clear readily achievable standards. Local jurisdictions adopting this appendix may further ease compliance burdens by utilizing a phased implementation.

**5. Least Burdensome Alternative**

- This proposed change for the 2024 Washington Building Code is created to be available for local adoption and does not impose mandatory requirement until adopted by a local jurisdiction.

**6. Conclusion**

- This amendment creates a concise appendix to address visitability design concepts. Requirements are clear and easy to understand and impose minimal costs.

**5.1.2 Log Number: 24-GP1-004-R1\***

**Code Section / Title:** IBC Chapter 16 "Basic Wind Speed"

**Proponent/Author:** R. Scott Douglas, P.E., S.E.

## 1. Description & Rationale

### a. Summary of Current Baseline (without proposal):

- The 2024 WABC establishes wind design criteria utilizing figures 1609.3(1) through 1609.3(4). A special wind region is indicated on the figures, but values are currently established by each County AHJ based on local knowledge and experience.

### b. Summary of Baseline with Changes:

- The proposed amendment adds a WA specific figure delineating the special wind region and a table to identify basic wind speed used in conjunction with the new figure. It also removes references and figures relevant to Hawaii, The U.S. Virgin Islands and Puerto Rico.

### c. Rationale Statement:

- Special Wind Region basic wind speeds independently established by local AHJs are not complete or consistent across jurisdictional boundaries. The proposed Special Wind Region boundaries and basic wind speed magnitudes in this proposed amendment have been determined with up-to-date climatic data and advanced analysis techniques per ASCE 7-22 Section 26.5.3 by the Structural Engineers Association of Washington.

## 2. Economic Cost Analysis

### a. Construction Cost Impact:

- Net Cost Reduction: Lower wind design pressures allow for reduced requirements for costly structural materials resulting from over engineering. This leads to reduced labor and installation time on less complex bracing and fastening requirements.

### b. Implementation/Plan Review/Inspection Costs:

- While the amendments themselves do not reduce the time spent on plan review, they streamline the design process by using up-to-date, lower wind speed modeling. Inspections will see less time focused on heavy wind mitigations.

### c. Life-Cycle Costs:

- No significant impact: These changes allow for less stringent structural requirements without compromising life safety, as they are based on updated, climatic data projections.

### d. Other Costs:

- No additional fees or reporting burden are created.

## 3. Economic Benefit Analysis

### a. Direct Cost Savings:

- Direct Cost Savings are nominal. A reduction in wind loading results in less costly structural requirements.

### b. Operational Benefits:

- The reduced magnitude of design wind speeds provides several key operational benefits for construction, primarily focused on design efficiency and material optimization. These reductions, driven by updated climatic data, align Washington building codes with more accurate risk assessments rather than conservative, outdated estimates.

### c. Other Benefits:

- By allowing for thinner shear walls, less reinforcing steel, and smaller steel components, projects can achieve a lower overall embodied carbon footprint.
- Reduced wind requirements allow for more flexibility in building form

#### **4. Small Business Economic Impact**

##### **a. Small Business Categories Affected:**

- NAICS 236115: New Single-Family Housing Construction
- NAICS 236116: New Multifamily Housing Construction
- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 541330: Engineering Services

##### **b. Compliance Burden Comparison:**

- Small businesses are likely to see decreased costs by lowering the structural requirements for wind resistance.

##### **c. Potential Disproportion/Mitigation:**

- None

#### **5. Least Burdensome Alternative**

- This proposed amendment imposes no additional burden for those required to comply. It is anticipated to have positive effects resulting from lower wind design requirements.

#### **6. Conclusion**

- This amendment will benefit Washingtonians in and around the special wind region by lowering construction costs utilizing the most up to date climatic information to establish lower wind design speeds.

### **5.1.3 Log Number: 24-GP1-034-R2\***

**Code Section / Title:** IBC Chapter 19 "Special Reinforced Concrete Shear Walls"

**Proponent/Author:** Patrick Lindblom, PE, SE

#### **1. Description & Rationale**

##### **a. Summary of Current Baseline (without proposal):**

- The 2021 Washington Building Code references the 2019 edition of ACI 318. The 2019 edition of this standard contains a number of significant changes to the seismic design of new concrete structures.

##### **b. Summary of Baseline with Changes:**

- Design forces required for Special Reinforced Concrete Shear Walls will be reduced. Clarification is made on materials allowed to be used for special reinforced concrete shear walls.

##### **c. Rationale Statement:**

- The proposed amendment avoids drastic changes to construction practice that would only be in effect until ACI 318-25 is incorporated into the code.

#### **2. Economic Cost Analysis**

##### **a. Construction Cost Impact:**

- A reduction in design forces results in lower material costs. Relaxing excessive prescriptive requirements reduce complexity of the system and labor costs are reduced.

- b. Implementation/Plan Review/Inspection Costs:**
    - Plan reviewers will need to update checklists from the 2019 versions to reflect the new amendments. Inspections will see a slight benefit with less complex reinforcement requirements.
  - c. Life-Cycle Costs:**
    - For complex structures or those using precast elements, the updated, clearer provisions reduce the risk of structural failure and increase confidence in the design
  - d. Other Costs:**
    - No fees or additional record keeping burden is created.
- 3. Economic Benefit Analysis**
- a. Direct Cost Savings:**
    - Modifications regarding detailing requirements for steel reinforcement inside special shear walls reduce the overall quantity of reinforcing steel required compared to ACI 318-19.
  - b. Operational Benefits:**
    - Key benefits include enhanced structural efficiency, reduced reinforcement congestion, and improved design clarity for structures utilizing special reinforced concrete shear walls.
  - c. Other Benefits:**
    - Adoption of this amendment effectively lowers the embodied carbon and material costs associated with special shear walls, as the reduced reinforcement requirements directly decrease material consumption, a primary driver of life-cycle environmental impact and initial cost.
- 4. Small Business Economic Impact**
- a. Small Business Categories Affected:**
    - NAICS 238110: Poured Concrete Foundation and Structure Contractors
    - NAICS 238120: Structural Steel and Precast Concrete Contractors
    - NAICS 541330: Engineering Services
  - b. Compliance Burden Comparison:**
    - For small businesses the primary burden will be short-term transition costs (software updates, training, and adjusting to new detailing) rather than long-term, increased material expenses.
  - c. Potential Disproportion/Mitigation:**
    - Initial burden for small businesses cannot be eliminated, but long term benefits will be realized utilizing the updated design considerations contained in this amendment. Larger firms will also experience transitional costs. The net effect of this amendment will be a reduction in compliance burden and construction cost.
- 5. Least Burdensome Alternative**
- Impacts resulting from continued use of the 2019 edition of the ACI 318 will have negative impacts for all. Easing those design considerations reduces burden for Washingtonians.
- 6. Conclusion/Recommendation**

- The proposal introduces updated design considerations for the ACI 318 referenced standard. The updates align with the 2025 edition of the ACI 318 which is staged to be referenced in the 2027 IBC.

#### **5.1.4 Log Number: 24-GP1-035\***

**Code Section / Title:** IBC Chapter 19 "One -way Shear of Concrete Members"

**Proponent/Author:** Patrick Lindblom, PE, SE

#### **1. Description & Rationale**

##### **a. Summary of Current Baseline (without proposal):**

- The 2021 Washington Building Code references the 2019 edition of ACI 318. The 2019 edition of this standard contains a number of significant changes to the one-way shear design of new concrete structures.

##### **b. Summary of Baseline with Changes:**

- Design forces required for Special Reinforced Concrete Shear Walls will be reduced. Clarification is made on materials allowed to be used for special reinforced concrete shear walls.

##### **c. Rationale Statement:**

- The proposed amendment avoids drastic changes to construction practice that would only be in effect until ACI 318-25 is incorporated into the code.

#### **2. Economic Cost Analysis**

##### **a. Construction Cost Impact:**

- Cost Reduction: Fewer required materials will be required where reinforced concrete slabs, walls and foundations are used.

##### **b. Implementation/Plan Review/Inspection Costs:**

- Plan reviewers will need to update checklists from the 2019 versions to reflect the new amendments. Inspections will see a slight benefit with less complex reinforcement requirements.

##### **c. Life-Cycle Costs:**

- Reverting to more efficient shear designs can improve construction quality and durability.

##### **d. Other Costs:**

- Designers will find alignment with the upcoming ACI 318-25 simplifies calculations, saving engineering time.

#### **3. Economic Benefit Analysis**

##### **a. Direct Cost Savings:**

- Shifting from conservative, penalty-heavy formulas to more realistic, performance-based shear equations reduces design loads. The direct cost impact is generally a decrease in material expenditure due to reduced reinforcement and, in some cases, reduced concrete volumes

##### **b. Operational Benefits:**

- The primary operational impacts resulting from this proposal involve a reversal of the conservative 2019 code requirements, leading to increased design efficiency, reduced material usage, and enhanced construction speed.

**c. Other Benefits:**

- The revisions, specifically the potential for thinner slabs and less reinforcement, contribute directly to sustainability by reducing the carbon footprint associated with increased concrete and steel consumption.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236220 Commercial Building Construction
- NAICS 327390 Precast Concrete Product Manufacturing
- NAICS 541330 Engineering Services

**b. Compliance Burden Comparison:**

- For small businesses the primary burden will be short-term transition costs (software updates, training, and adjusting to new detailing) rather than long-term, increased material expenses.

**c. Potential Disproportion/Mitigation:**

- Initial burden for small businesses cannot be eliminated, but long term benefits will be realized utilizing the updated design considerations contained in this amendment. Larger firms will also experience transitional costs. The net effect of this amendment will be a reduction in compliance burden and construction cost.

**5. Least Burdensome Alternative**

- Impacts resulting from continued use of the 2019 version of these ACI 318 provisions will have negative impacts for all. Easing those design considerations reduces burden for Washingtonians.

**6. Conclusion/Recommendation**

- The proposal introduces updated design considerations for the ACI 318 referenced standard. The updates align with the 2025 edition of the ACI 318 which is staged to be referenced in the 2027 IBC.

**5.1.6 Log Number: 24-GP1-037-R1**

**Code Section / Title:** IBC Chapter 11 "Vehicle Space Size"

**Proponent/Author:** Richard Williams

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WABC Section 1107 specifies requirements for the number and size of accessible vehicle spaces served by EV charging systems. Existing amendments direct users to 429.4 which contains Washington specific requirements.

**b. Summary of Baseline with Changes:**

- The proposed modifications remove vehicle space sizing requirements from 1107, that aren't applicable in WA and clarify the direction to Section 429.4.



- None

**5. Least Burdensome Alternative**

- This proposal represents the least burdensome solution by refining existing code language further to produce clear pathways for users to navigate code requirements.

**6. Conclusion**

- This proposal clarifies existing requirements without changing regulations. It increases readability of the code text.

**5.1.7 Log Number: 24-GP1-043\*\***

**Code Section / Title:** IBC Chapter 16 “Removal of Voluntary Use of Multi-Period Response Spectra for Determination of Seismic Hazard”

**Proponent/Author:** Scott Neuman

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WABC references the ASCE 7-16. Amendments were adopted to include the Multi-Period Response Spectrum procedure from the ASCE 7-22.

**b. Summary of Baseline with Changes:**

- The 2024 Model IBC now references the ASCE 7-22, and the Multi-Period Response Spectrum procedure is now included without the need for amendment.

**c. Rationale Statement:**

- The language of the previous code amendment should be deleted to avoid confusion from duplicated requirements in multiple locations. Further, the previous code amendment describes use of the MPRS as an alternative when ASCE 7-22 intends to make this procedure mandatory.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- The MPRS specifically addresses the underestimation of spectral response in moderate-to-long period buildings on soft soil that was present in the ASCE 7-16 two-period method. Therefore projects in soft-soil sites across the US are more likely to experience increased material costs due to higher, more realistic seismic demands.

**b. Implementation/Plan Review/Inspection Costs:**

- MPRS brings higher accuracy but requires that local jurisdictions shift from checking simplified, two-point, paper-based seismic data to a more detailed, digital, site-specific analysis approach.

**c. Life-Cycle Costs:**

- MPRS specifically improves hazard characterization for longer-period buildings. By designing for more realistic, often higher, seismic forces in these cases, the expected damage, and consequently the long-term repair costs, are reduced, improving the life-cycle resilience.

**d. Other Costs:**

- The MPRS procedure encourages accessing and utilizing detailed data from the ASCE Hazard Tool rather than simpler code-based formulas. The requirement to analyze 22 points rather than two, combined with more detailed site classification, requires more time, technical expertise, and higher engineering design fees.

### **3. Economic Benefit Analysis**

#### **a. Direct Cost Savings:**

- While primarily focused on structures, the updated MPRS approach, combined with the new Chapter 13 requirements, can result in lower seismic loads for non-structural components, saving costs in mechanical, electrical, and plumbing systems.

#### **b. Operational Benefits:**

- MPRS data is accessible through the free ASCE 7 Hazard Tool, allowing engineers to quickly gather site-specific data and avoid over-conservative, generic design assumptions.

#### **c. Other Benefits:**

- The MPRS provides a more realistic seismic representation of ground motion characteristics across 22 periods, rather than just relying on two points, leading to more reliable seismic design parameters for tall buildings.

### **4. Small Business Economic Impact**

#### **a. Small Business Categories Affected:**

- NAICS 236210: Industrial Building Construction
- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 541330: Engineering Services
- NAICS 541360: Geophysical Surveying and Mapping Services

#### **b. Compliance Burden Comparison:**

- The complexity of the new seismic requirements may push small firms to hire specialized structural engineers or spend on training, increasing operational costs.

#### **c. Potential Disproportion/Mitigation:**

- None proposed. The benefits of adopting more accurate analysis procedures bring resilience benefits to all buildings.

### **5. Least Burdensome Alternative**

- The proposed modifications increase safety for structures and allow for more efficient designs. The increase in reliability for structures represents the least burdensome alternative.

### **6. Conclusion**

- The proposed modification to the WABC results in fewer amendments and increases safety in buildings especially tall, long period structures.

## **5.1.8 Log Number: 24-GP1-047**

**Code Section / Title:** IBC Chapter 16 "Removal of Modification to ASCE 7-6 Table 12.6-1"

**Proponent/Author:** Scott Neuman

### **1. Description & Rationale**

- a. **Summary of Current Baseline (without proposal):**
    - The 2021 WABC has amendments that modify ASCE 7-16, Table 12.6-1.
  - b. **Summary of Baseline with Changes:**
    - The 2024 Model code references ASCE 7-22 and the updated standard does not have a Table 12.6-1. The proposed modification removes the existing Washington amendment for this table.
  - c. **Rationale Statement:**
    - To be consistent with the intent of IBC 2024, the Washington State Building Code Amendment modifying ASCE 7, Table 12.6-1 should be removed.
- 2. Economic Cost Analysis**
- a. **Construction Cost Impact:**
    - The removal of Table 12.6-1 from ASCE 7-22, which previously restricted the use of the Equivalent Lateral Force procedure for certain building types, is expected to decrease construction costs for many projects by permitting simpler, less conservative analysis methods.
  - b. **Implementation/Plan Review/Inspection Costs:**
    - By removing ASCE 7, Table 12.6-1, jurisdictions have more latitude to accept various analytical methods. Reviewers will be able to shift focus towards validating input parameters rather than verifying if the analytical method was permitted.
  - c. **Life-Cycle Costs:**
    - By facilitating advanced analysis, structures can be designed with greater material efficiency while maintaining the same safety level, reducing initial construction costs. A more accurate analysis reduces the likelihood of catastrophic damage and improves resilience, which leads to lower future repair and rehabilitation costs.
  - d. **Other Costs:**
    - While some structural areas may see increased costs from increased rigor, the overall goal of the ASCE 7-22 seismic update is to better match building performance to risk, which can lead to more efficient, though more engineered, structures.
- 3. Economic Benefit Analysis**
- a. **Direct Cost Savings:**
    - The removal of Table 12.6-1 from ASCE 7 in the 2022 version streamlines the process for selecting seismic analysis procedures, removing restrictive criteria that previously forced many projects into costlier, more complex, and time-consuming analysis methods.
  - b. **Operational Benefits:**
    - ASCE 7-22 heavily relies on digital tools, specifically the free, public ASCE 7 Hazard Tool, to determine the necessary procedures based on refined, site-specific spectral acceleration values. This requires firms to move away from tabulated data, ensuring real-time compliance with updated, more precise seismic hazard datasets.
  - c. **Other Benefits:**
    - The removal of Table 12.6-1 allows for improved accuracy for high-frequency structures, particularly those with fundamental periods of less than 0.2 seconds.

#### **4. Small Business Economic Impact**

##### **a. Small Business Categories Affected:**

- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 541310: Architectural Services
- NAICS 541330: Engineering Services

##### **b. Compliance Burden Comparison:**

- For structural engineers the elimination of strict height and irregularity limitations for the ELF procedure reduces the technical complexity of analysis for certain buildings, allowing faster, more cost-effective design work in high-seismic areas.

##### **c. Potential Disproportion/Mitigation:**

- No disproportionate impacts for small businesses have been identified. There is an anticipated reduced burden for all using the updated document.

#### **5. Least Burdensome Alternative**

- This proposal imposes the least amount of burden while updating to and aligning with the ASCE 7-22.

#### **6. Conclusion/Recommendation**

- Proposed changes will streamline application of seismic design and advance engineering design in Washington aligning with trends nationwide.

### **5.1.9 Log Number: 24-GP1-050-R1**

**Code Section / Title:** IBC Chapter 23 "Fire Protection of Connections"

**Proponent/Author:** Julius Carreon

#### **1. Description & Rationale**

##### **a. Summary of Current Baseline (without proposal):**

- The 2021 Model IBC added Section 2304.10.1 for Connection Fire-Resistance Rating. This addition relates to the incorporation of new mass timber construction types and mandates that structural connections in mass timber construction must be fire-protected for the same duration as the members they connect.

##### **b. Summary of Baseline with Changes:**

- Proposed changes incorporate the ANSI/AWC 2022 Fire Design Specification for Wood Construction as an approved engineering analysis method for determining the required protection time of mass timber connections. The amendment aims to offer a standardized reference method for designers within the code, while still allowing for other analysis methods.

##### **c. Rationale Statement:**

- This amendment is intended to clarify the application of code provisions relating to connection fire protection for mass timber construction types.

#### **2. Economic Cost Analysis**

##### **a. Construction Cost Impact:**

- The FDS-2024 provides calculation methods that can demonstrate that many mass timber connections do not need excessive size increases to meet 1-hour or 2-hour ratings. This avoids unnecessary use of extra wood or specialized

fasteners, reducing material costs compared to traditional, overly conservative methods.

**b. Implementation/Plan Review/Inspection Costs:**

- Incorporating these references into the WABC allows plan reviewers to use the FDS to verify that connections meet the required fire-resistance ratings, ensuring consistency in the evaluation of mass timber connections.

**c. Life-Cycle Costs:**

- Utilizing FDS calculation methods allows for optimized design of connections rather than over-engineering, which can mitigate higher upfront material costs.

**d. Other Costs:**

- For developers and engineers, this change offers a pathway to reduce engineering complexity and lower upfront construction costs.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- By allowing engineering analysis to determine fire protection requirements, developers and designers can avoid the high cost of laboratory testing for assemblies.

**b. Operational Benefits:**

- The FDS provides design aids and standard calculation procedures that streamline the design process for fire-rated connections in mass timber, leading to faster design approval and construction.

**c. Other Benefits:**

- The FDS provides specific, validated calculation procedures for different protection methods. This allows engineers to optimize connections in mass timber structures rather than relying solely on prescriptive, often over-designed, protective methods.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 541310: Architectural Services
- NAICS 541330: Engineering and Design Services
- NAICS 321: Engineered Wood Manufacturing

**b. Compliance Burden Comparison:**

- For small businesses, the burden lies primarily in the technical transition to new calculation methods, the cost of acquiring the standard, and the need for updated design expertise.

**c. Potential Disproportion/Mitigation:**

- None identified. small businesses can use the standardized calculation procedures in the FDS or the American Wood Council's Technical Report 10. These methodologies allow for the design of fire-resistance-rated connections without specialized lab testing.

**5. Least Burdensome Alternative**

- This proposal represents the least burden for those required to comply. Changes clarify and streamline the design requirements resulting in faster review times.

**6. Conclusion/Recommendation**

- These enhancements facilitate the use of innovative wood techniques, promote safe and efficient design, and provide reliable, research-driven methodologies for modern mass timber construction.

### 5.1.10 Log Number: 24-GP1-051\*

**Code Section / Title:** IBC Chapter 16 " Multiple Occupancies Risk Category Assignment"

**Proponent/Author:** Julius Carreon

#### 1. Description & Rationale

##### a. Summary of Current Baseline (without proposal):

- The 2021 Model IBC Section 1604.5.1 addresses the assignment of risk category to structures having multiple occupancies and is not amended by WA. In the 2024 edition the term "life safety components" has been revised to align better with existing defined terms in Chapter 2.

##### b. Summary of Baseline with Changes:

- The proposed amendment to Section 1604.5.1 aims to address potential unintended consequences arising from the application of updated defined terms.

##### c. Rationale Statement:

- While aligning with defined terminologies can benefit users, including the term "life safety systems" can be problematic. This term encompasses passive systems and devices which could require assignment of overly restrictive risk categories.

#### 2. Economic Cost Analysis

##### a. Construction Cost Impact:

- This amendment allows more accurate assignment of risk categories for structures avoiding overcomplicated engineering analysis and high material costs.

##### b. Implementation/Plan Review/Inspection Costs:

- Changes proposed for Section 1604.5.1 aim to increase clarity and will therefore reduce plan review and inspection times.

##### c. Life-Cycle Costs:

- Changes yielding more accurate assignment of risk category, streamline initial phases of project development and reduce initial costs and time expenditure. Long term life-cycle impacts are negligible.

##### d. Other Costs:

- No new fees or administrative burden is created.

#### 3. Economic Benefit Analysis

##### a. Direct Cost Savings:

- Direct cost savings are realized through clear code requirements and efficient planning and review phases of project development.

##### b. Operational Benefits:

- Less time is spent in the planning and reviewing phases of development. Projects can initiate on site development with a faster more predictable timeline.

- c. **Other Benefits:**
    - o Code language with clear meaning facilitates ease of use for all code users.
- 4. Small Business Economic Impact**
- a. **Small Business Categories Affected:**
    - o NAICS 23: Construction Sector
    - o NAICS 541310: Architectural Services
    - o NAICS 541330: Engineering Services
  - b. **Compliance Burden Comparison:**
    - o Burden for small business is anticipated to be reduced as a result of this amendment. Clear code language is beneficial to all.
  - c. **Potential Disproportion/Mitigation:**
    - o None Identified.
- 5. Least Burdensome Alternative**
- o This proposal clarifies code provisions and reduces confusion therefore representing the least burdensome alternative.
- 6. Conclusion**
- o This proposal addresses problematic language in Section 1604.5.1 which could lead to assignment of risk categories above that which would otherwise be required.

### 5.1.11 Log Number: 24-GP1-052

**Code Section / Title:** IBC Chapter 23 "Cutting, notching and boring of dimensional wood framing"

**Proponent/Author:** Julius Carreon

- 1. Description & Rationale**
- a. **Summary of Current Baseline (without proposal):**
    - o The 2021 Model IBC contained provisions for Cutting, notching and boring of dimensional wood framing in Sections 2308.4.2.4 and 2308.5.9. The 2024 model IBC reorganized these sections into Section 2308.6. The reorganization creates editorial inconsistencies.
  - b. **Summary of Baseline with Changes:**
    - o Changes in this section are editorial and increase clarity for the location requirements associated with cutting, notching and boring of dimensional wood framing. No regulatory change is proposed
  - c. **Rationale Statement:**
    - o Changes proposed increase clarity of code requirements.
- 2. Economic Cost Analysis**
- a. **Construction Cost Impact:**
    - o Changes proposed are editorial and not intended to produce a change in regulation.
  - b. **Implementation/Plan Review/Inspection Costs:**

- With increased clarity for code requirements plan reviewers and inspectors will see a decrease in time spent reviewing and inspecting.
- c. Life-Cycle Costs:**
- Net life-cycle costs are negligible. The proposed change is not intended to change regulations, and any impact does not affect long term life-cycle costs.
- d. Other Costs:**
- No new fees or administrative burden is created.
- 3. Economic Benefit Analysis**
- a. Direct Cost Savings:**
- Direct Cost saving may be realized through improved efficiency during the planning and review portions of a project.
- b. Operational Benefits:**
- Improved clarity for code provisions generally increases operational efficiency for all code users.
- c. Other Benefits:**
- Clear code requirements for cutting, notching and boring of dimensional lumber improves structural integrity of buildings reducing potential for failure.
- 4. Small Business Economic Impact**
- a. Small Business Categories Affected:**
- NAICS 236115: New Single-Family Housing Construction
  - NAICS 236118: Residential Remodelers
  - NAICS 236220: Commercial and Institutional Building Construction
  - NAICS 238130: Framing Contractors
  - NAICS 238210 - Electrical Contractors and Other Wiring Installation Contractors
  - NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractors
- b. Compliance Burden Comparison:**
- The increased clarity brought by this proposal acts as a net positive, reducing the long-term, hidden compliance burdens associated with rework and structural failures.
- c. Potential Disproportion/Mitigation:**
- None identified.
- 5. Least Burdensome Alternative**
- This proposal clarifies code provisions and reduces confusion therefore representing the least burdensome alternative.
- 6. Conclusion/Recommendation**
- This proposal addresses inconsistent language in the 2024 Model IBC. Changes increase clarity and reduce opportunities for rework or structural failure.

#### **5.1.12 Log Number: 24-GP1-053-R1**

**Code Section / Title:** IBC Chapter 35 "Reference Standards."

**Proponent/Author:** WABO, Julius Carreon

## 7. Description & Rationale

### a. Summary of Current Baseline (without proposal):

- The 2021 Washington Building code utilizes the 2016 version of ASCE 7.

### b. Summary of Baseline with Changes:

- The amendment uses the 2024 model code as a base and adds supplement #1 to the 2022 version of ASCE 7. This supplement clarifies referenced standards provisions, updates standards citations to reflect current versions and ensures clear relationships between code sections and applicable standards.

### c. Rationale Statement:

- Clear referenced standards reduce design ambiguity, support consistent enforcement, and ensure designers and contractors have access to appropriate technical guidance.

## 8. Economic Cost Analysis

### a. Construction Cost Impact:

- Minimal cost impact. Updated referenced standards enable designers to use current technical guidance without imposing new requirements.

### b. Implementation/Plan Review/Inspection Costs:

- Clearer referenced standards reduce plan review interpretation disputes and the need for clarification during the review process.

### c. Life-Cycle Costs:

- Updated standards support long-term performance and maintenance based on current technical guidance.

### d. Other Costs:

- Designers and contractors may need to acquire updated referenced standards documents.

## 9. Economic Benefit Analysis

### a. Direct Cost Savings:

- Reduced plan review iterations through clearer referenced standards.

### b. Operational Benefits:

- Faster plan review and inspection processes through clear standards guidance.

### c. Other Benefits:

- Improved consistency with current technical standards supporting better design quality.

## 10. Small Business Economic Impact

### a. Small Business Categories Affected:

- NAICS 236110: Residential Building Construction
- NAICS 236115: New Single-Family Housing Construction
- NAICS 236116: New Multifamily Housing Construction
- NAICS 236118: Residential Remodelers
- NAICS 236210: Industrial Building Construction
- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 238120: Structural Steel and Precast Concrete Contractors

- NAICS 238130: Framing Contractors
- NAICS 541330: Engineering Services
- NAICS 541310: Architectural Services
- NAICS 541350: Building Inspection Services

**b. Compliance Burden Comparison:**

- Small designers and builders benefit from clear referenced standards, reducing interpretation time and clarification requests.

**c. Potential Disproportion/Mitigation:**

- No disproportion: clear references benefit all entities uniformly.

**11. Least Burdensome Alternative**

- This proposal represents the least burdensome approach to clarifying referenced standards without imposing new technical requirements.

**12. Conclusion/Recommendation**

- The amendment clarifies referenced standards in Chapter 35, improving design guidance and supporting consistent enforcement.

**5.1.13 Log Number: 24-GP1-054-R1**

**Code Section / Title:** IBC Chapter 2, Section 202 — Temporary Event Definition

**Proponent/Author:** WABO, Jon Siu

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current definition of temporary events may lack clarity regarding duration, scope, and applicability, creating confusion during plan review and enforcement of temporary structure provisions.

**B. Summary of Baseline with Changes:**

- The amendment clarifies the definition of temporary events, establishing clear duration thresholds and scope parameters that align with the practical application of temporary structure provisions.

**C. Rationale Statement:**

- Clear temporary event definitions reduce plan review ambiguity, support consistent enforcement, and enable event organizers to understand code requirements for temporary facilities.

**2. Economic Cost Analysis**

**A. Construction Cost Impact:**

- No cost impact. Clearer definitions enable the appropriate design of temporary facilities without unnecessary over-design.

**B. Implementation/Plan Review/Inspection Costs:**

- Clearer definitions reduce plan review disputes regarding temporary event classification and applicability of temporary structure requirements.

**C. Life-Cycle Costs:**

- No negative life cycle impacts for temporary facilities.

**D. Other Costs:**

- No new fees or record-keeping burdens.

### **3. Economic Benefit Analysis**

#### **A. Direct Cost Savings:**

- Reduced unnecessary design requirements through clear temporary event classification.

#### **B. Operational Benefits:**

- Faster permitting and plan review for temporary events through clear definitional guidance.

#### **C. Other Benefits:**

- Supports community event planning and economic activity by reducing permitting complexity.

### **4. Small Business Economic Impact**

#### **A. Small Business Categories Affected:**

- NAICS 541330: Engineering Services
- NAICS 711320: Promoters of Performing Arts, Sports, and Similar Events without Facilities

#### **B. Compliance Burden Comparison:**

- Event organizers and small developers benefit from clear temporary event definitions, reducing compliance uncertainty.

#### **C. Potential Disproportion/Mitigation:**

- No disproportion: clear definitions benefit all event organizers uniformly.

### **5. Least Burdensome Alternative**

- This proposal is the least burdensome approach by providing clear definitional guidance without imposing new technical requirements.

### **6. Conclusion/Recommendation**

- The amendment clarifies temporary event definitions, supporting a clear understanding of code applicability and enabling efficient event permitting. Small event organizers benefit from reduced compliance uncertainty.

## **5.1.14 Log Number: 24-GP1-055 \***

**Code Section / Title:** IBC Chapter 31, Section 3103.6 — Temporary Structure Loading

**Proponent/Author:** WABO, Jon Siu

#### **1. Description & Rationale**

##### **A. Summary of Current Baseline (without proposal):**

- Current temporary structure loading requirements may lack specificity regarding design loads for various temporary occupancy types, creating design ambiguity.

##### **B. Summary of Baseline with Changes:**

- The amendment establishes clear loading requirements for different temporary structure types (tents, scaffolding, stages), enabling appropriate structural design based on intended use.

##### **C. Rationale Statement:**

- Clear loading requirements support safe temporary-structure design while enabling cost-effective solutions appropriate for the temporary occupancy duration.

## **2. Economic Cost Analysis**

### **A. Construction Cost Impact:**

- Cost reduction. Clear loading guidance enables engineers to specify appropriate design loads without over-designing.

### **B. Implementation/Plan Review/Inspection Costs:**

- Clearer loading requirements reduce disputes during structural design reviews.

### **C. Life-Cycle Costs:**

- No negative impacts for temporary structures.

### **D. Other Costs:**

- Professional engineers may require updated guidance documents.

## **3. Economic Benefit Analysis**

### **A. Direct Cost Savings:**

- Appropriate structural design based on clear loading requirements reduces unnecessary over-design.

### **B. Operational Benefits:**

- Faster structural design and plan review through clear loading guidance.

### **C. Other Benefits:**

- Improved safety through appropriate structural design for temporary use.

## **4. Small Business Economic Impact**

### **A. Small Business Categories Affected:**

- NAICS 541330: Engineering Services
- NAICS 711320: Promoters of Performing Arts, Sports, and Similar Events without Facilities

### **B. Compliance Burden Comparison:**

- Small engineers and contractors benefit from clear loading requirements, reducing design interpretation disputes.

### **C. Potential Disproportion/Mitigation:**

- No disproportion: clear loading guidance benefits all designers uniformly.

## **5. Least Burdensome Alternative**

- ### **A.** This proposal is the least burdensome approach, establishing clear, practical loading requirements without imposing overly conservative design standards.

## **6. Conclusion/Recommendation**

- The amendment sets clear temporary structure loading standards, ensuring safe and cost-effective temporary facility design. Small engineering and contracting firms gain from clear structural guidance.

### **5.1.15 Log Number: 24-GP1-056 \***

**Code Section / Title: IBC Chapter 31, Section 3102.7 — Membrane Structure Loading**  
**Proponent/Author: WABO, Jon Siu**

## 1. Description & Rationale

### A. Summary of Current Baseline (without proposal):

- Current membrane structure loading provisions may not adequately address modern membrane materials and fabrication methods, creating design ambiguity for tent and fabric structure applications.

### B. Summary of Baseline with Changes:

- The amendment updates membrane-structure loading requirements to reflect current membrane materials and engineering practices, thereby supporting appropriate structural design.

### C. Rationale Statement:

- Updated loading requirements align with current membrane technology, supporting cost-effective, safe design of tents and fabric structures used in events and temporary applications.

## 2. Economic Cost Analysis

### A. Construction Cost Impact:

- Neutral cost impact. Updated requirements enable designers to specify materials and systems that match current technology.

### B. Implementation/Plan Review/Inspection Costs:

- Clearer membrane loading requirements reduce design review disputes.

### C. Life-Cycle Costs:

- Updated requirements support appropriate membrane durability and performance.

### D. Other Costs:

- Professional designers may require updated technical guidance.

## 3. Economic Benefit Analysis

### A. Direct Cost Savings:

- Appropriate design using current membrane materials reduces unnecessary cost premiums.

### B. Operational Benefits:

- Faster structural design and plan review for membrane structures.

### C. Other Benefits:

- Supports innovation in temporary and event structure design through updated technical requirements.

## 4. Small Business Economic Impact

### A. Small Business Categories Affected:

- NAICS 541330: Engineering Services

### B. Compliance Burden Comparison:

- Small designers and manufacturers benefit from updated loading requirements aligned with current membrane technology.

### C. Potential Disproportion/Mitigation:

- No disproportion: updated requirements benefit all membrane-structure designers equally.

**5. Least Burdensome Alternative**

- A. This proposal is the least burdensome approach, updating loading requirements to align with current membrane technology without imposing additional safety margins.

**6. Conclusion/Recommendation**

- A. The amendment updates membrane-structure loading requirements to reflect current materials and technology, supporting cost-effective temporary-structure design. Small designers benefit from requirements aligned with modern membrane systems.

**5.1.16 Log Number: 24-GP1-057**

**Code Section / Title: IBC Chapter 31, Sections 3103.1 and 3103.6.1 — Temporary Structure Scope**  
**Proponent/Author: WABO, Jon Siu**

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current temporary structure scope provisions may lack clarity on which structures qualify as temporary under Chapter 31, leading to inconsistent enforcement and design interpretation.

**B. Summary of Baseline with Changes:**

- The amendment clarifies the scope of temporary structures by establishing clear criteria for which structures and assemblies fall under the temporary structure provisions.

**C. Rationale Statement:**

- Clear scope definition reduces ambiguity during plan reviews, supports consistent enforcement, and enables proper application of temporary structure provisions.

**2. Economic Cost Analysis**

**A. Construction Cost Impact:**

- Neutral cost impact. Clear scope guidance enables appropriate design classification without unnecessary compliance burden.

**B. Implementation/Plan Review/Inspection Costs:**

- A clearer scope definition reduces plan review disputes over temporary structure classification.

**C. Life-Cycle Costs:**

- No negative life-cycle impacts.

**D. Other Costs:**

- No new fees or record-keeping burdens.

**3. Economic Benefit Analysis**

**A. Direct Cost Savings:**

- Reduced plan review iterations through clear scope definition.

**B. Operational Benefits:**

- Faster permitting and design process through clear structure classification.

**C. Other Benefits:**

- Improved consistency in temporary structure enforcement across jurisdictions.

#### **4. Small Business Economic Impact**

##### **A. Small Business Categories Affected:**

- NAICS 541330: Engineering Services

##### **B. Compliance Burden Comparison:**

- Small designers and event organizers benefit from clear scope definition, reducing classification disputes.

##### **C. Potential Disproportion/Mitigation:**

- No disproportion: clear scope benefits all applicants uniformly.

#### **5. Least Burdensome Alternative**

- ##### **A.**
- This proposal is the least burdensome approach, clarifying scope without imposing new requirements on structures already in compliance.

#### **6. Conclusion/Recommendation**

- ##### **A.**
- The amendment clarifies the scope of temporary structure provisions, supporting clear classification and consistent enforcement. Small designers and event organizers benefit from reduced ambiguity in plan reviews.

### **5.1.17 Log Number: 24-GP1-058**

**Code Section / Title: IBC Chapter 31, Sections 3103.1 and 3102.1 — Temporary and Membrane Structure Timeframes**

**Proponent/Author: WABO, Jon Siu**

#### **1. Description & Rationale**

##### **A. Summary of Current Baseline (without proposal):**

- Current timeframe provisions for temporary and membrane structures may lack clarity regarding permitted duration and renewal requirements, creating enforcement uncertainty.

##### **B. Summary of Baseline with Changes:**

- The amendment establishes clear timeframe requirements for temporary and membrane structures, including duration limits, renewal procedures, and removal requirements.

##### **C. Rationale Statement:**

- Clear timeframe requirements support consistent enforcement, enable appropriate facility management planning, and establish clear expectations for structure removal/renewal.

#### **2. Economic Cost Analysis**

##### **A. Construction Cost Impact:**

- Neutral cost impact. Clear timeframes enable event/facility planning without uncertainty regarding structure duration.

##### **B. Implementation/Plan Review/Inspection Costs:**

- Clear timeframe requirements reduce enforcement disputes and clarification requests.

##### **C. Life-Cycle Costs:**

- No negative impacts for temporary structures with defined timeframes.

##### **D. Other Costs:**

- No new fees or record-keeping burdens.

### **3. Economic Benefit Analysis**

#### **A. Direct Cost Savings:**

- Reduced uncertainty regarding structure duration supports better project planning and budgeting.

#### **B. Operational Benefits:**

- Clear timeframe requirements enable efficient permit management and renewal processes.

#### **C. Other Benefits:**

- Improved community management of temporary facilities through clear duration expectations.

### **4. Small Business Economic Impact**

#### **A. Small Business Categories Affected:**

- NAICS 541330: Engineering Services
- NAICS 711320: Promoters of Performing Arts, Sports, and Similar Events without Facilities

#### **B. Compliance Burden Comparison:**

- Small event organizers and facility operators benefit from clear timeframe requirements, reducing uncertainty.

#### **C. Potential Disproportion/Mitigation:**

- No disproportion: clear timeframes benefit all applicants uniformly.

### **5. Least Burdensome Alternative**

- This proposal is the least burdensome approach by establishing reasonable timeframes that accommodate typical temporary facility durations.

### **6. Conclusion/Recommendation**

- The amendment establishes clear timeframe requirements for temporary and membrane structures, enabling efficient permit management and community planning. Small event organizers benefit from reduced uncertainty about duration.

## **5.1.18 Log Number: 24-GP1-060**

**Code Section / Title: IBC Chapter 29, Section 2902.1 — Table 2902.1**

**Proponent/Author: IBC TAG, Brett Conway**

#### **1. Description & Rationale**

##### **A. Summary of Current Baseline (without proposal):**

- 2021 WABC Table 2902.1 contains amendments and does not align with the updated 2024 Table 2902.1..

##### **B. Summary of Baseline with Changes:**

- The proposed amendment updates Table 2902.1 to incorporate existing state amendments with model code updates.

##### **C. Rationale Statement:**

- Alignment with changes in the model code keeps Washington amendments up to date with evolving code language.

## **2. Economic Cost Analysis**

### **A. Construction Cost Impact:**

- Neutral cost impact. The change to the updated table is intended to be editorial only.

### **B. Implementation/Plan Review/Inspection Costs:**

- Plan reviewers and inspectors will not see additional time spent on review and inspections.

### **C. Life-Cycle Costs:**

- No negative impacts are anticipated the changes are editorial in nature.

### **D. Other Costs:**

- No new fees or record-keeping burdens.

## **3. Economic Benefit Analysis**

### **A. Direct Cost Savings:**

- The change is editorial and direct cost savings will occur only as a result of added clarity from alignment with model code changes.

### **B. Operational Benefits:**

- Clearer requirements support faster plan review for accessible design elements.

### **C. Other Benefits:**

- Washington amendments are easier to understand when aligned closely with model code updates.

## **4. Small Business Economic Impact**

### **A. Small Business Categories Affected:**

- NAICS 236115: New Single-Family Housing Construction
- NAICS 236116: New Multifamily Housing Construction
- NAICS 236118: Residential Remodelers

### **B. Compliance Burden Comparison:**

- Small builders benefit from clear requirements aligned with the most current model code.

### **C. Potential Disproportion/Mitigation:**

- No disproportion: the updated table imposes no new requirements.

## **5. Least Burdensome Alternative**

- This proposal is the least burdensome approach, aligning state amendments with model code updates.

## **6. Conclusion/Recommendation**

- The amendment updates Table 2902.1 to incorporate existing amendments with updated model code.

### **5.1.19 Log Number: 24-GP1-061**

**Code Section / Title: IBC Chapter 11, Section 1106.3.1 — Accessible Parking for Persons Other Than Residents in Group R-2, R-3, R-4**

**Proponent/Author: WABO, Jennifer Gilliland**

## 1. Description & Rationale

### A. Summary of Current Baseline (without proposal):

- Current provisions for accessible parking in residential occupancies may lack clarity regarding requirements for visitor and service-provider parking, creating design ambiguity.

### B. Summary of Baseline with Changes:

- The amendment clarifies accessible parking requirements for visitors and service providers in residential occupancies, establishing clear, practical requirements.

### C. Rationale Statement:

- Clear visitor parking accessibility requirements ensure that people with disabilities can visit residential facilities while supporting practical, cost-effective design.

## 2. Economic Cost Analysis

### A. Construction Cost Impact:

- Neutral cost impact. Clarified requirements enable appropriate accessible parking design without unnecessary over-design.

### B. Implementation/Plan Review/Inspection Costs:

- Clearer requirements reduce ambiguity in plan reviews regarding visitor parking accessibility.

### C. Life-Cycle Costs:

- No negative life-cycle impacts; accessible parking supports long-term accessibility.

### D. Other Costs:

- No new fees or record-keeping burdens.

## 3. Economic Benefit Analysis

### A. Direct Cost Savings:

- Clear guidance enables appropriate parking design without unnecessary accessibility infrastructure.

### B. Operational Benefits:

- Faster plan review through clear parking accessibility requirements.

### C. Other Benefits:

- Improved accessibility for visitors with disabilities; supports inclusive residential communities.

## 4. Small Business Economic Impact

### A. Small Business Categories Affected:

- NAICS 236116: New Multifamily Housing Construction
- NAICS 541310: Architectural Services

### B. Compliance Burden Comparison:

- Small multifamily developers benefit from clear visitor parking accessibility requirements.

### C. Potential Disproportion/Mitigation:

- No disproportion: clear requirements benefit all residential developers uniformly.

**5. Least Burdensome Alternative**

- This proposal is the least burdensome approach by establishing practical accessibility requirements for visitor parking.

**6. Conclusion/Recommendation**

- The amendment clarifies accessible parking requirements for visitors in residential occupancies, supporting inclusive design while maintaining practical cost-effectiveness. Small multifamily developers benefit from clear accessibility guidance.

**5.1.20 Log Number: 24-GP1-062-R1**

**Code Section / Title: IBC/IFC Chapter 10, Section 1008.2.1 — Measurement of Illumination on Stairways**

**Proponent/Author: WABO, Jennifer Gilliland**

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current stairway illumination provisions may lack clarity in measurement methodology, leading to disputes over compliance.

**B. Summary of Baseline with Changes:**

- The amendment clarifies how stairway illumination levels are measured and verified, establishing practical, consistent measurement procedures.

**C. Rationale Statement:**

- Clear measurement procedures reduce compliance disputes, support consistent inspection practices, and ensure adequate stairway illumination for occupant safety.

**2. Economic Cost Analysis**

**A. Construction Cost Impact:**

- Neutral cost impact. Clear measurement procedures enable appropriate lighting design without unnecessary over-design.

**B. Implementation/Plan Review/Inspection Costs:**

- Clearer measurement procedures reduce disputes over illumination compliance during inspections.

**C. Life-Cycle Costs:**

- Appropriate illumination design supports energy efficiency and long-term operational performance.

**D. Other Costs:**

- No new fees or record-keeping burdens.

**3. Economic Benefit Analysis**

**A. Direct Cost Savings:**

- Appropriate lighting design, based on clear measurement procedures, reduces unnecessary overdesign.

**B. Operational Benefits:**

- Consistent inspection procedures and faster resolution of illumination compliance questions.

**C. Other Benefits:**

- Improved stairway safety through consistently adequate illumination.

**4. Small Business Economic Impact**

**A. Small Business Categories Affected:**

- - NAICS 236115: New Single-Family Housing Construction
- - NAICS 236116: New Multifamily Housing Construction
- - NAICS 236118: Residential Remodelers
- - NAICS 238210: Electrical Contractors

**B. Compliance Burden Comparison:**

- Small builders and electrical contractors benefit from clear procedures for measuring illumination.

**C. Potential Disproportion/Mitigation:**

- No disproportion: clear measurement procedures benefit all contractors uniformly.

**5. Least Burdensome Alternative**

- This proposal is the least burdensome approach, establishing clear, practical measurement procedures without imposing new illumination requirements.

**6. Conclusion/Recommendation**

- The amendment clarifies stairway illumination measurement procedures, supporting consistent compliance verification and reducing inspection disputes. Small electrical contractors and builders benefit from clear guidance on measurements.

**5.1.21 Log Number: 24-GP1-063**

**Code Section / Title:** IBC Chapter 16, Section 1608.2 — Ground Snow Loads

**Proponent/Author:** IBC TAG, Joshua Mergens

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current ground snow load provisions may not reflect the latest meteorological and snow load data for Washington regions, potentially resulting in over- or under-design of roof structures.

**B. Summary of Baseline with Changes:**

- The amendment updates ground snow load maps and values to reflect current data from the National Weather Service and the latest snow load research.

**C. Rationale Statement:**

- Updated snow load data improves structural design accuracy, ensures appropriate roof design for actual regional snow conditions, and aligns with national snow load standards.

**2. Economic Cost Analysis**

**A. Construction Cost Impact:**

- Impact varies by region. Areas with reduced snow load requirements realize cost savings; areas with increased requirements incur additional structural costs. Net impact is regional and specific.

**B. Implementation/Plan Review/Inspection Costs:**

- Updated snow load data requires plan reviewers and engineers to use current maps; transition may temporarily increase review time.

**C. Life-Cycle Costs:**

- Improved alignment with actual snow conditions optimizes long-term roof performance and prevents structural failure.

**D. Other Costs:**

- Professional engineers require access to updated snow load maps.

**3. Economic Benefit Analysis**

**A. Direct Cost Savings:**

- Regions with reduced snow load requirements see lower roof structure costs.

**B. Operational Benefits:**

- Clearer, data-driven snow load requirements support consistent structural design.

**C. Other Benefits:**

- Improved roof structural performance and safety through design aligned with actual regional conditions.

**4. Small Business Economic Impact**

**A. Small Business Categories Affected:**

- NAICS 236115: New Single-Family Housing Construction
- NAICS 236116: New Multifamily Housing Construction
- NAICS 236210: Industrial Building Construction
- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 541330: Engineering Services

**B. Compliance Burden Comparison:**

- Small structural engineers and builders benefit from current snow load data—training on updated maps is required for consistent application.

**C. Potential Disproportion/Mitigation:**

- Regional variation in snow load changes may disproportionately affect builders in high-snow areas, leading to increased requirements.

**5. Least Burdensome Alternative**

- This proposal is the least burdensome approach, adopting current national snow-load standards without imposing additional local amendments.

**6. Conclusion/Recommendation**

- The amendment updates the ground snow load provisions to reflect current meteorological data, ensuring structural designs are appropriate for actual regional conditions. Small builders benefit from current snow load information; training supports effective implementation.

**Code Section / Title: IBC Chapter 29, Section 2902.5.1 — Drinking Fountain Number**  
**Proponent/Author: WABO, Richard Williams**

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current provisions for the required number of drinking fountains may lack clarity regarding calculation for different occupancy types or may specify excessive numbers.

**B. Summary of Baseline with Changes:**

- The amendment clarifies drinking fountain requirements, establishing practical numbers based on occupant load and occupancy type.

**C. Rationale Statement:**

- Clear, practical fountain requirements reduce unnecessary construction costs while ensuring adequate hydration access for occupants.

**2. Economic Cost Analysis**

**A. Construction Cost Impact:**

- Potential cost savings of updated requirements reduce required fountain numbers from current standards; minimal cost if requirements remain similar.

**B. Implementation/Plan Review/Inspection Costs:**

- Clearer requirements reduce plan review disputes regarding drinking fountain adequacy.

**C. Life-Cycle Costs:**

- Appropriate fountain numbers reduce unnecessary operating and maintenance costs.

**D. Other Costs:**

- No new fees or record-keeping burdens.

**3. Economic Benefit Analysis**

**A. Direct Cost Savings:**

- Reduced drinking fountain infrastructure costs through practical, data-driven requirements.

**B. Operational Benefits:**

- Reduced maintenance burden through appropriate fountain numbers.

**C. Other Benefits:**

- Practical requirements based on actual occupant needs.

**4. Small Business Economic Impact**

**A. Small Business Categories Affected:**

- NAICS 236210: Industrial Building Construction
- NAICS 236220: Commercial Building Construction
- NAICS 541310: Architectural Services

**B. Compliance Burden Comparison:**

- Small developers benefit from clear, practical drinking fountain requirements.

**C. Potential Disproportion/Mitigation:**

- No disproportion: clarified requirements benefit all building types uniformly.

**5. Least Burdensome Alternative**

- This proposal is the least burdensome approach by establishing practical fountain requirements based on occupant needs.

**6. Conclusion/Recommendation**

- The amendment clarifies drinking fountain requirements, reducing unnecessary construction costs while maintaining adequate hydration access. Small developers benefit from practical, clear requirements.

**5.1.23 Log Number: 24-GP1-066-R1**

**Code Section / Title:** IBC Chapter 31 " Fixed Guideway Transit – NFPA 130 Amendments"

**Proponent/Author:** Mark Murray

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WABC contained an amendment to incorporate Modifications to NFPA 130-20, the standard for Fixed Guideway Transit and Passenger Rail Systems.

**b. Summary of Baseline with Changes:**

- Proposed changes update the standard to the 2023 edition of the standard and introduce clarifying amendments.

**c. Rationale Statement:**

- These amendments do not change what is generally required for fixed transit facilities. They aim to correlate the codes and standards so that designers, plans examiners and building officials can understand and enforce clear rules.

**2. Economic Cost Analysis**

**b. Construction Cost Impact:**

- Changes proposed are editorial and not intended to produce a change in regulation.

**c. Implementation/Plan Review/Inspection Costs:**

- With increased clarity for code requirements plan reviewers and inspectors will see a decrease in time spent reviewing and inspecting.

**d. Life-Cycle Costs:**

- Net life-cycle costs are negligible. The proposed change is not intended to change regulations, and any impact does not affect long term life-cycle costs.

**e. Other Costs:**

- No new fees or administrative burden is created.

**3. Economic Benefit Analysis**

**f. Direct Cost Savings:**

- Direct Cost saving may be realized through improved efficiency during the planning and review phases of a project.

**g. Operational Benefits:**

- Improved clarity for code provisions generally increases operational efficiency for all code users.



- Clearer assignment criteria reduce plan review disputes regarding risk category selection.

**C. Life-Cycle Costs:**

- Appropriate risk category improves the cost-effectiveness of structural design.

**D. Other Costs:**

- No new fees or record-keeping burdens.

**3. Economic Benefit Analysis**

**A. Direct Cost Savings:**

- Appropriate risk category assignment reduces unnecessary structural over-design.

**B. Operational Benefits:**

- Faster plan review through clear risk category guidance.

**C. Other Benefits:**

- Improved consistency in structural design standards across jurisdictions.

**4. Small Business Economic Impact**

**A. Small Business Categories Affected:**

- - NAICS 236115: New Single-Family Housing Construction
- - NAICS 236116: New Multifamily Housing Construction
- - NAICS 236220: Commercial Building Construction
- - NAICS 541330: Engineering Services

**B. Compliance Burden Comparison:**

- Small developers and engineers benefit from clear risk category assignment guidance.

**C. Potential Disproportion/Mitigation:**

- No disproportion: clear guidance benefits all building types uniformly.

**5. Least Burdensome Alternative**

- This proposal is the least burdensome approach by providing clear, practical guidance without imposing new classification requirements.

**6. Conclusion/Recommendation**

- The amendment clarifies risk category assignment provisions, supporting appropriate structural design and consistent enforcement. Small developers and engineers benefit from clear occupancy classification guidance.

**5.1.25 Log Number: 24-GP1-071-R4**

**Code Section / Title:** IBC Chapter 9 "Carbon Monoxide Detection"

**Proponent/Author:** Ken Brouillette

## 1. Description & Rationale

### a. Summary of Current Baseline (without proposal):

- The Model 2024 IBC introduced new language and organization for carbon monoxide detection. The new text has been found to be unclear by code users, and a proposal has been developed for the 2027 codes and has passed the first round of approvals at ICC.

### b. Summary of Baseline with Changes:

- The proposed changes to the 2024 IBC incorporate the language proposed for the 2027 code. No regulatory changes are intended; changes are editorial and provide clarification for code users.

### c. Rationale Statement:

- Proposed changes increase clarity and reduce confusion for code users.

## 2. Economic Cost Analysis

### a. Construction Cost Impact:

- No regulatory change is intended with this proposed amendment. Construction cost is not impacted.

### b. Implementation/Plan Review/Inspection Costs:

- With increased clarity for code requirements plan reviewers and inspectors will see a decrease in time spent reviewing and inspecting.

### c. Life-Cycle Costs:

- No regulatory change is intended with this proposed amendment. Lif-cycle cost is not impacted.

### d. Other Costs:

- No new fees or administrative burden is created.

## 3. Economic Benefit Analysis

### a. Direct Cost Savings:

- Direct Cost saving may be realized through improved efficiency during the planning and review phases of a project.

### b. Operational Benefits:

- Improved clarity for code provisions generally increases operational efficiency for all code users.

### c. Other Benefits:

- Clear code requirements for carbon monoxide detection improves safety buildings reducing potential carbon monoxide related incidents.

## 4. Small Business Economic Impact

### a. Small Business Categories Affected:

- **NAICS 236115:** New Single-Family Housing Construction
- **NAICS 236116:** New Multifamily Housing Construction
- **NAICS 238210:** Electrical Contractors and Other Wiring Installation Contractors
- **NAICS 238220:** Plumbing, Heating, and Air-Conditioning Contractors

### b. Compliance Burden Comparison:

- The increased clarity brought by this proposal acts as a net positive, reducing the long-term, hidden compliance burdens associated with rework and structural failures.

**c. Potential Disproportion/Mitigation:**

- None identified.

**5. Least Burdensome Alternative**

- This proposal clarifies code provisions and reduces confusion therefore representing the least burdensome alternative.

**6. Conclusion/Recommendation**

- This proposal updates Section 915 to the 2027 language. Changes increase clarity and reduce opportunities for misinterpretation and rework.

**5.1.26 Log Number: 24-GP1-074\***

**Code Section / Title:** IBC Chapter 9 " Fire Alarm Wiring within continuous raceways for Smoke Control/Pressurization Systems"

**Proponent/Author:** David Mow

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2024 model IBC Section 909.12.2 only allows for fully enclosed continuous raceways protection of smoke control system circuits.

**b. Summary of Baseline with Changes:**

- Proposed changes incorporate language proposed for the 2027 IBC that adds additional options for smoke control system circuit protection.

**c. Rationale Statement:**

- Incorporation of updated language proposed for the 2027 codes increases the flexibility of the code.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- The new options for Section 909.12.2 are intended to provide flexibility rather than mandating a more expensive approach.

**b. Implementation/Plan Review/Inspection Costs:**

- Reviewers must evaluate new, non-raceway options for protecting smoke control wiring. Inspectors must become familiar with the different circuit protection methods offered by the amendment.

**c. Life-Cycle Costs:**

- By providing specific options for survivability, the proposed language aims to improve the performance of life safety systems during fire events, which can reduce long-term maintenance and risk.

**d. Other Costs:**

- No new fees or administrative burden is created.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- The option to use listed fire-resistant cables rather than installing traditional electrical raceways for smoke control circuits can lead to a reduction in labor-intensive installation in some scenarios, potentially lowering the installation cost compared to rigid conduit.

**b. Operational Benefits:**

- The proposed language generally aims to ensure that smoke control systems are both effective and manageable without being over-prescriptive.

**c. Other Benefits:**

- By allowing alternative compliance pathways, the code enables better integration of fire detection systems with mechanical smoke control systems.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 238210: Electrical Contractors and Other Wiring Installation Contractors
- NAICS 541330: Engineering Services
- NAICS 541350: Building Inspection Services.

**b. Compliance Burden Comparison:**

- Proposed changes reduce compliance burden on small businesses. By lowering material costs and increasing design flexibility.

**c. Potential Disproportion/Mitigation:**

- None identified.

**5. Least Burdensome Alternative**

- This proposal reduces burden on all code users by providing alternative pathways for compliance.

**6. Conclusion/Recommendation**

- Proposed changes provide options for compliance which increases code flexibility and allows better optimization of material usage.

**5.1.27 Log Number: 24-GP1-085**

**Code Section / Title:** IBC Chapter 7, Section 707.3 — Fire Barrier for Energy Storage Systems

**Proponent/Author:** SDCl, Micah Chappell

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current fire barrier provisions for energy storage systems (ESS) may lack clarity regarding fire rating requirements and protective enclosure specifications.

**B. Summary of Baseline with Changes:**

- The amendment establishes clear fire barrier requirements for energy storage systems, ensuring appropriate fire protection for battery storage and charging infrastructure.

**C. Rationale Statement:**

- Clear fire barrier requirements for ESS support safe energy storage implementation while enabling efficient design of ESS facilities.

## **2. Economic Cost Analysis**

### **A. Construction Cost Impact:**

- Moderate cost impact for ESS fire barrier construction; enables safe ESS deployment in commercial and residential buildings.

### **B. Implementation/Plan Review/Inspection Costs:**

- Clearer requirements reduce plan review and inspection disputes regarding ESS fire protection.

### **C. Life-Cycle Costs:**

- Appropriate fire protection supports long-term ESS safety and performance.

### **D. Other Costs:**

- Contractors require training on ESS fire protection installation.

## **3. Economic Benefit Analysis**

### **A. Direct Cost Savings:**

- Clearer requirements enable efficient fire barrier design without unnecessary over-protection.

### **B. Operational Benefits:**

- Faster plan review for ESS projects through clear fire barrier specifications.

### **C. Other Benefits:**

- Supports the emerging energy storage market by establishing clear safety requirements; enables distributed energy storage implementation.

## **4. Small Business Economic Impact**

### **A. Small Business Categories Affected:**

- NAICS 236116: New Multifamily Housing Construction
- NAICS 236220: Commercial Building Construction
- NAICS 238210: Building Equipment Contractors
- NAICS 541330: Engineering Services

### **B. Compliance Burden Comparison:**

- Small developers benefit from clear ESS fire protection requirements, enabling appropriate system design.

### **C. Potential Disproportion/Mitigation:**

- No disproportion: clear requirements support the emerging energy storage market uniformly.

## **5. Least Burdensome Alternative**

- This proposal represents the least burdensome approach by establishing practical fire barrier requirements appropriate for ESS hazards.

## **6. Conclusion/Recommendation**

- The amendment establishes clear fire barrier requirements for energy storage systems, supporting safe ESS implementation in buildings. Small developers and contractors benefit from clear specifications enabling efficient ESS project design.

### **5.1.28 Log Number: 24-GP1-086**

**Code Section / Title:** IBC Chapter 7, Section 711 — Horizontal Assembly for Energy Storage Systems  
**Proponent/Author:** SDCI, Micah Chappell

#### **1. Description & Rationale**

##### **A. Summary of Current Baseline (without proposal):**

- Current horizontal assembly provisions may lack specific requirements for energy storage systems located above or below occupied spaces.

##### **B. Summary of Baseline with Changes:**

- The amendment clarifies horizontal assembly fire-rating requirements for ESS, ensuring appropriate protection of occupied spaces from energy storage fires.

##### **C. Rationale Statement:**

- Clear horizontal assembly requirements for ESS support safe stacking of energy storage above occupied spaces while maintaining consistent fire safety.

#### **2. Economic Cost Analysis**

##### **A. Construction Cost Impact:**

- Moderate cost for appropriate horizontal assembly fire ratings; enables ESS integration in multi-story buildings.

##### **B. Implementation/Plan Review/Inspection Costs:**

- Clearer requirements reduce plan review disputes regarding ESS horizontal assembly protection.

##### **C. Life-Cycle Costs:**

- Appropriate fire protection supports long-term safety and building value.

##### **D. Other Costs:**

- Contractors require training in ESS horizontal assembly installation.

#### **3. Economic Benefit Analysis**

##### **A. Direct Cost Savings:**

- Clearer requirements enable efficient horizontal assembly design without unnecessary over-design.

##### **B. Operational Benefits:**

- Faster plan review for multi-story ESS projects.

##### **C. Other Benefits:**

- Enables ESS integration in multi-story buildings, supporting space-efficient energy storage deployment.

#### **4. Small Business Economic Impact**

##### **A. Small Business Categories Affected:**

- NAICS 236116: New Multifamily Housing Construction
- NAICS 236220: Commercial Building Construction
- NAICS 238210: Building Equipment Contractors
- NAICS 541330: Engineering Services

##### **B. Compliance Burden Comparison:**

- Small developers benefit from clear specifications enabling ESS integration in buildings.

##### **C. Potential Disproportion/Mitigation:**

- No disproportion: Clear requirements support all ESS projects uniformly.

#### **5. Least Burdensome Alternative**

- This proposal is the least burdensome approach by establishing practical horizontal assembly requirements for ESS locations.

#### **6. Conclusion/Recommendation**

- The amendment clarifies horizontal assembly fire-rating requirements for energy storage systems, supporting the safe deployment of multi-story ESS. Small developers and contractors benefit from clear specifications enabling ESS integration in buildings.

### **5.1.29 Log Number: 24-GP1-091-R5\***

**Code Section / Title:** IBC Chapter 9, Sections 903.2.8.4 & 903.2.8.5 — Group R-3 Occupancies NFPA 13D

**Proponent/Author:** Ken Brouillette

#### **1. Description & Rationale**

##### **A. Summary of Current Baseline (without proposal):**

- Current fire sprinkler provisions for Group R-2 and R-3 occupancies that are 4 stories require NFPA 13R sprinkler systems.

##### **B. Summary of Baseline with Changes:**

- The amendment allows on- and two-family dwellings and townhouse units to increase application of NFPA 13D systems one additional story.

##### **C. Rationale Statement:**

- NFPA 13D does not have a height or story restriction and this is based on the type of hazard being protected.

#### **2. Economic Cost Analysis**

##### **A. Construction Cost Impact:**

- Of the three sprinkler standards the NFPA 13D system is the least cost option for installation. Allowing for expanded application in 4 story R-2 and R-3 Occupancies reduces installation costs for these projects.

**B. Implementation/Plan Review/Inspection Costs:**

- No anticipated plan review or inspection impacts are identified. The proposed change makes already existing systems applicable in additional scenarios that reviewers and inspectors are already familiar with.

**C. Life-Cycle Costs:**

- Unlike NFPA 13R/13 systems, 13D systems do not require compliance with NFPA 25. This means lower mandated maintenance costs. However, they still require occasional inspection of sprinkler heads, and testing of the water flow alarm.

**D. Other Costs:**

- The main limitation for NFPA 13D systems is the prioritization life safety over property protection. In a fire, the total loss of property is more likely compared to NFPA 13/13R.

**3. Economic Benefit Analysis**

**A. Direct Cost Savings:**

- NFPA 13D is designed for minimum life safety, making it the least costly residential sprinkler system. 13D systems often utilize nonmetallic piping and fewer, smaller-diameter pipes. Because 13D systems generally only require water flow for up to two sprinklers, they often avoid the need for large, expensive fire pumps or, in some cases, large water meters. NFPA 13D systems permit omitting sprinklers in areas with low fire incidence, such as small bathrooms, small closets, attic spaces, and garages. NFPA 13D systems do not require ongoing third-party inspection compliance or the maintenance of water-flow/tamper switches that are required in NFPA 13R/13

**B. Operational Benefits:**

- Systems installed under NFPA 13D are generally not subject to the strict inspection, testing, and maintenance requirements of NFPA 25. Unlike NFPA 13R, NFPA 13D systems do not require water-flow alarms and tamper switches, reducing the complexity of the system.

**C. Other Benefits:**

- NFPA 13D system design requires lower fire flow volume, and allows for fewer sprinkler heads overall.

**4. Small Business Economic Impact**

**A. Small Business Categories Affected:**

- NAICS 236115: New Single-Family Housing Construction
- NAICS 236116: New Multifamily Housing Construction
- NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractors
- NAICS 541330: Engineering Services

**B. Compliance Burden Comparison:**

- This proposal reduces the compliance burden on small developers and owners. By permitting 13D instead of the more stringent NFPA 13R, small businesses impacted face lower installation costs, simplified maintenance, and fewer design restrictions.

**C. Potential Disproportion/Mitigation:**

- None Identified

**5. Least Burdensome Alternative**

- Proposed changes represent the least burden by allowing broader application of NFPA 13D systems which cost less and maintain an adequate level of life safety to occupants.

**6. Conclusion/Recommendation**

- Modifications allow a broader application of NFPA 13D Systems and maintain life safety based on a proven performance record for this system type.

**5.1.30 Log Number: 24-GP1-093**

**Code Section / Title:** IBC Chapter 1, Section 107 — Construction Documents

**Proponent/Author:** IBC TAG, Joshua Mergens

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current construction document requirements may lack clarity on the information required in permit submissions or impose excessive documentation requirements.

**B. Summary of Baseline with Changes:**

- The amendment clarifies essential construction document requirements, streamlines submission requirements, and ensures adequate information for plan review.

**C. Rationale Statement:**

- Streamlined document requirements reduce design and preparation costs and ensure plan reviewers have the information needed for effective review.

**2. Economic Cost Analysis**

**A. Construction Cost Impact:**

- Potential cost reduction through streamlined document preparation requirements.

**B. Implementation/Plan Review/Inspection Costs:**

- Clearer requirements reduce requests for additional information during the review process.

**C. Life-Cycle Costs:**

- No negative impacts: documents still contain essential information.

**D. Other Costs:**

- No new fees or record-keeping burdens.

**3. Economic Benefit Analysis**

**A. Direct Cost Savings:**

- Reduced design and document preparation costs through streamlined requirements.

**B. Operational Benefits:**

- Faster plan review through streamlined document submission.

**C. Other Benefits:**

- Improved consistency in document requirements across jurisdictions.

**4. Small Business Economic Impact**

**A. Small Business Categories Affected:**

- NAICS 236115: New Single-Family Housing Construction
- NAICS 236116: New Multifamily Housing Construction
- NAICS 236118: Residential Remodelers
- NAICS 541330: Engineering Services

**B. Compliance Burden Comparison:**

- Small designers benefit from streamlined document requirements, reducing preparation burden and costs.

**C. Potential Disproportion/Mitigation:**

- No disproportion: streamlined requirements benefit all applicants uniformly.

**5. Least Burdensome Alternative**

- This proposal is the least burdensome approach by retaining essential document requirements while streamlining unnecessary elements.

**6. Conclusion/Recommendation**

- The amendment clarifies and streamlines construction document requirements, reducing design costs and improving plan review efficiency. Small designers and developers benefit from reduced document preparation burden.

**5.1.31 Log Number: 24-GP1-094**

**Code Section / Title: IBC Chapter 23, Section 2303.1.4 — CLT Lamstock Mechanical Grades**  
**Proponent/Author: Mercer Mass Timber, Todd Beyreuther**

**1. Description & Rationale**

**A. Summary of Current Baseline (without proposal):**

- Current CLT (Cross-Laminated Timber) Lamstock mechanical-grade provisions may lack clarity on approved grades and properties, limiting the use of cost-effective Lamstock options.

**B. Summary of Baseline with Changes:**

- The amendment clarifies the acceptable mechanical grades for CLT Lamstock based on current manufacturing standards and testing data, expanding options for cost-effective CLT design.

**C. Rationale Statement:**

- Clarified Lamstock grades support cost-effective CLT construction while ensuring performance through appropriate grade specifications and design properties.

## **2. Economic Cost Analysis**

### **A. Construction Cost Impact:**

- Potential cost reduction for CLT projects through expanded use of cost-effective Lamstock grades.

### **B. Implementation/Plan Review/Inspection Costs:**

- Clearer grade specifications reduce design review disputes regarding CLT Lamstock acceptability.

### **C. Life-Cycle Costs:**

- Appropriate grade selection maintains long-term performance and structural integrity.

### **D. Other Costs:**

- Designers may require updated CLT design guidance.

## **3. Economic Benefit Analysis**

### **A. Direct Cost Savings:**

- Significant cost savings for CLT projects through expanded grade options and cost-effective material selection.

### **B. Operational Benefits:**

- Faster structural design and plan review for CLT projects.

### **C. Other Benefits:**

- Supports the emerging mass-timber construction market and enables more cost-effective CLT building designs.

## **4. Small Business Economic Impact**

### **A. Small Business Categories Affected:**

- NAICS 236116: New Multifamily Housing Construction
- NAICS 236220: Commercial Building Construction
- NAICS 541330: Engineering Services
- NAICS 321213: Engineered Wood Member Manufacturing

### **B. Compliance Burden Comparison:**

- Small developers and structural engineers benefit from clearer CLT grade specifications supporting cost-effective design.

### **C. Potential Disproportion/Mitigation:**

- No disproportion: expanded grade options benefit all CLT projects uniformly.

## **5. Least Burdensome Alternative**

- This proposal is the least burdensome approach, as it expands the acceptable CLT Lamstock grades based on current manufacturing and testing data.

## **6. Conclusion/Recommendation**

- The amendment clarifies acceptable CLT Lamstock mechanical grades, supporting cost-effective mass timber construction. Small developers and mass timber companies benefit from expanded grade options, enabling more affordable CLT buildings.

### 5.1.32 Log Number: 24-GP1-114-R3

**Code Section / Title:** IBC Chapter 5, Section 504.4.1 "Stair Enclosure Pressurization Increase"

**Proponent/Author:** Eric VanderMey

#### 1. Description & Rationale

##### a. Summary of Current Baseline (without proposal):

- The 2021 WABC contains an amendment allowing Group R1, R-2, I-1 condition 2 assisted living facilities and residential treatment facilities to increase story limitations by one additional story when interior exit stairways and ramps are pressurized.

##### b. Summary of Baseline with Changes:

- Proposed changes correct errors and Omissions in this section and do not change the regulation.

##### c. Rationale Statement:

- Ensuring accurate section references and incorporating more clear language improves usability of the code provisions.

#### 2. Economic Cost Analysis

##### a. Construction Cost Impact:

- This amendment does not propose to change regulation and does not affect construction costs.

##### b. Implementation/Plan Review/Inspection Costs:

- Increasing accuracy of section references and correlating language contained in other code titles reduces plan review and inspection times by making the code language readily usable and reducing time spent researching accurate application.

##### c. Life-Cycle Costs:

- Long term life-cycle costs are not impacted by this proposal. Any savings are realized in the initial stages of project planning and review.

##### d. Other Costs:

- No new fees or administrative burden is created.

#### 3. Economic Benefit Analysis

##### a. Direct Cost Savings:

- Direct cost savings are realized through reduced review times enabling a more rapid start to onsite construction.

##### b. Operational Benefits:

- Code language containing accurate section references and clear language offer operational benefits to contractors and enforcing agencies alike. These changes increase clarity and reduce time interpreting code requirements.

- c. **Other Benefits:**
    - o More explicit code language reduces the need for complex, over-engineered solutions, leading to more straightforward design and commissioning.
- 4. Small Business Economic Impact**
- a. **Small Business Categories Affected:**
    - o NAICS 236116: New Multifamily Housing Construction
    - o NAICS 236220: Commercial and Institutional Building Construction
    - o NAICS 541330: Engineering Services
  - b. **Compliance Burden Comparison:**
    - o Clearer code language means small developers and architects spend less time and money debating with local building officials on how to apply rules
  - c. **Potential Disproportion/Mitigation:**
    - o **None Identified, Clarification of code language reduces burdens for small businesses.**
- 5. Least Burdensome Alternative**
- o This proposed language represents the least burden for all Washingtonians. Accurate code language benefits all.
- 6. Conclusion**
- o This proposal corrects errors and omissions in Section 504.1.1.

**5.1.33 Log Number: 24-GP1-115-R6**

**Code Section / Title:** IBC Chapter 7, Section 7170.2.3 "Static Dampers"

**Proponent/Author:** Eric VanderMey

- 1. Description & Rationale**
- a. **Summary of Current Baseline (without proposal):**
    - o The 2024 Model IBC Section 717.2.3 is silent on acceptable means of shut down for HVAC systems with static dampers.
  - b. **Summary of Baseline with Changes:**
    - o Proposed changes introduce several options for shutdown consistent with IMC shut down requirements for other systems.
  - c. **Rationale Statement:**
    - o Language offers clear direction and offers multiple options for compliance.
- 2. Economic Cost Analysis**
- a. **Construction Cost Impact:**
    - o Construction cost impacts are deemed to be minimal. Clear code language offers opportunities to increase efficiency in planning and reductions in material usage.
  - b. **Implementation/Plan Review/Inspection Costs:**
    - o Reviewers will see reduced plan review times resulting from increased clarity of code language. Inspectors must become familiar with the different shutdown methods offered by the amendment.
  - c. **Life-Cycle Costs:**

- Options proposed provide for direct equipment shutdown where different signal types received by the fire alarm panel result in the power being cut to the HVAC system. This approach aligns with IMC shutdown requirements for other systems .

**d. Other Costs:**

- There is higher initial design cost utilizing static dampers, but lower maintenance and potential energy savings via better management of dampers.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- Static fire dampers are cheaper to purchase compared to dynamic fire dampers. Clarifying applicable control methods facilitates ease of use and can reduce initial construction costs.

**b. Operational Benefits:**

- Proposed provisions provide flexibility in how to shut down the HVAC system. These options ensure that the chosen method satisfies stringent safety regulations while allowing for custom, project-specific HVAC designs.

**c. Other Benefits:**

- Static dampers are simpler mechanically, often costing less and require less complex maintenance than dynamic dampers, which must close against fan pressure.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 238210: Electrical Contractors and Other Wiring Installation Contractors
- NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractor
- NAICS 333413: Ventilation, Heating, Air-Conditioning

**b. Compliance Burden Comparison:**

- Small businesses often need to hire mechanical engineers or specialized contractors to determine which of the code's multiple options for shutdown is appropriate, adding soft costs to compliance.

**c. Potential Disproportion/Mitigation:**

- Proposed changes aim to clarify code language and increase ease of use for all users. No mitigation is proposed.

**5. Least Burdensome Alternative**

- This proposal represents the least burden to all code users by providing specific requirements for acceptable means of HVAC system shut down.

**6. Conclusion**

- This proposal is a benefit to code users and incorporates clearer language that points to multiple compliance pathways. Modifications result in project efficiencies and flexibility.

**5.1.34 Log Number: 24-GP1-117-R2**

**Code Section / Title:** IBC Chapter 9, Section 907.2.23 "Energy Storage Systems"

**Proponent/Author:** Ken Brouillette

## 1. Description & Rationale

### a. Summary of Current Baseline (without proposal):

- The 2024 IFC amendments for WA updated requirements for energy storage systems. 2024 Model IBC language does not reflect these changes.

### b. Summary of Baseline with Changes:

- This proposal correlates references to the sections updated in the 2024 WAFC for energy storage systems

### c. Rationale Statement:

- Changes are necessary to maintain alignment across different code texts where references to other codes are made.

## 2. Economic Cost Analysis

### a. Construction Cost Impact:

- This change to the 2024 IBC is a correlation change related to energy storage systems code language in the 2024 WAFC. Construction costs are not affected by this change in the IBC.

### b. Implementation/Plan Review/Inspection Costs:

- Ensuring accurate references are maintained across the codes adopted in WA ensures an efficient plan review and inspection process.

### c. Life-Cycle Costs:

- This change does not impact long-term life-cycle costs.

### d. Other Costs:

- No new fees or administrative burden is created.

## 3. Economic Benefit Analysis

### a. Direct Cost Savings:

- No impacts to direct cost result from this change to the IBC.

### b. Operational Benefits:

- Consistency of section references across code adopted in WA offers efficiencies in navigating the code.

### c. Other Benefits:

- Clear code language benefits all users of the code.

## 4. Small Business Economic Impact

### a. Small Business Categories Affected:

- 238210 - Electrical Contractors and Other Wiring Installation Contractors
- 238220 - Plumbing, Heating, and Air Conditioning Contractors
- 335911 - Storage Battery Manufacturing
- 541310 - Architectural Services
- 541330 - Engineering Services
- 541350 - Building Inspection Services

### b. Compliance Burden Comparison:

- Maintaining clear references to changes in Section 1207 of the WAFC within the WABC provides benefit to small businesses by reducing compliance uncertainty, reducing permitting delays, and establishing clear safety protocols for new technologies.

### c. Potential Disproportion/Mitigation:

- No disproportion identified.

**5. Least Burdensome Alternative**

- Maintaining clear references to changes in Section 1207 of the WAFC within the WABC represents the least burden.

**6. Conclusion**

- This change is a necessary one to align with changes made to Section 1207 in the 2024 WAFC.

**5.1.35 Log Number: 24-GP1-118-R4**

**Code Section / Title:** IBC New Appendix "Embodied Greenhouse Gas Emissions Reporting and Reduction"

**Proponent/Author:** Ariel Brenner

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- Neither the 2021 IBC nor the 2021 WABC contain provisions in an appendix for embodied green house gas emissions reporting and reduction.

**b. Summary of Baseline with Changes:**

- The proposal creates an appendix for local jurisdictions to adopt. The appendix establishes embodied greenhouse gas emissions reporting and reduction provisions.

**c. Rationale Statement:**

- The 2024 legislature mandated through HB 1282 that the embodied carbon associated with building materials be addressed. This code proposal intends to accomplish goals set forth in passed legislation.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- The optional WABC appendix can leverage existing low-cost/no-cost solutions. The focus on material quantity reduction and concrete optimization provides the best financial case for developers, effectively making it possible to cut emissions without major cost increases.

**b. Implementation/Plan Review/Inspection Costs:**

- Establishing an optional appendix for embodied greenhouse gas emissions in the WABC represents a significant shift from regulating only operational energy to addressing the hidden carbon in building materials. Local jurisdictions implementing such an appendix face manageable, yet distinct, changes to code administration, specifically in the areas of plan review and inspection. Reviewers will need to evaluate building material reuse, EPDs, or whole building life cycle assessments that detail the global warming potential of materials along with building plans. Inspectors must verify that the concrete mix, steel products, or insulation installed matches the EPDs reviewed in the plan set.

**c. Life-Cycle Costs:**

- The primary, short-term lifecycle cost impact is a minimal construction cost premium, which is increasingly offset by lower material volumes and market readiness. Materials chosen for low embodied carbon often provide higher

durability or lower maintenance requirements over the building's life. The reporting guidelines encourage selecting materials with higher recycled content and designing for future reuse, which can reduce waste disposal costs at the end of the building's life.

**d. Other Costs:**

- Initial learning curves for contractors and procurement teams to track and verify embodied carbon data could cause minor administrative costs.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- By encouraging structural efficiency and material optimization, this appendix can reduce embodied carbon while often keeping costs low.

**b. Operational Benefits:**

- The adoption of lower-carbon alternatives, such as mass timber for structural components, can lead to faster construction times, reducing labor costs.

**c. Other Benefits:**

- Jurisdictions that adopt these provisions encourage local manufacturers to produce lower-carbon materials, fostering local green economies.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 238110: Poured Concrete Foundation and Structure Contractors
- NAICS 238120: Structural Steel and Precast Concrete Contractors
- NAICS 327320: Ready-Mix Concrete Manufacturing
- NAICS 331110: Iron and Steel Mills and Ferroalloy Manufacturing
- NAICS 324122: Asphalt Shingle and Coating Materials Manufacturing
- NAICS 327420: Gypsum Product Manufacturing
- NAICS 541310: Architectural Services
- NAICS 541330: Engineering Services
- NAICS 541620: Environmental Consulting Services

**b. Compliance Burden Comparison:**

- Establishing an optional appendix for embodied carbon reporting in the WABC introduces both significant administrative burdens and potential market opportunities for small businesses. While intended to foster sustainability, the requirement for life cycle assessment and environmental product declaration reporting can pose a high barrier to entry for smaller developers and contractors.

**c. Potential Disproportion/Mitigation:**

- An additional option for this appendix not offering the building reuse or EPD pathways is proposed for public comment. This alternative proposal only offers the whole building life cycle assessment pathway for compliance. This reduces complexity and eases compliance burdens for small businesses.

**5. Least Burdensome Alternative**

- This proposal represents the least burdensome approach while still offering options for compliance pathways.

**6. Conclusion**

- The SBCC is filing for public comment, two options for consideration. Only one of these options will be passed into the final rule making.

## 5.1.36 Log Number: 24-GP1-118-R4-WBLCA

Code Section / Title: IBC Chapter ""

Proponent/Author:

### 1. Description & Rationale

#### a. Summary of Current Baseline (without proposal):

- Neither the 2021 IBC nor the 2021 WABC contain provisions in an appendix for embodied greenhouse gas emissions reporting and reduction.

#### b. Summary of Baseline with Changes:

- The proposal creates an appendix for local jurisdictions to adopt. The appendix establishes embodied greenhouse gas emissions reporting and reduction provisions.

#### c. Rationale Statement:

- The 2024 legislature mandated through HB 1282 that the embodied carbon associated with building materials be addressed. This code proposal intends to accomplish goals set forth in passed legislation.

### 2. Economic Cost Analysis

#### a. Construction Cost Impact:

- The optional WABC appendix can leverage existing low-cost/no-cost solutions. The focus on material quantity reduction and concrete optimization provides the best financial case for developers, effectively making it possible to cut emissions without major cost increases.

#### b. Implementation/Plan Review/Inspection Costs:

- Establishing an optional appendix for embodied greenhouse gas emissions in the WABC represents a significant shift from regulating only operational energy to addressing the hidden carbon in building materials. Local jurisdictions implementing such an appendix face manageable, yet distinct, changes to code administration, specifically in the areas of plan review and inspection. Reviewers will need to evaluate whole building life cycle assessments that detail the global warming potential of materials along with building plans. Inspectors must verify that materials installed match those reviewed in the plan set.

#### c. Life-Cycle Costs:

- The primary, short-term lifecycle cost impact is a minimal construction cost premium, which is increasingly offset by lower material volumes and market readiness. Materials chosen for low embodied carbon often provide higher durability or lower maintenance requirements over the building's life. The reporting guidelines encourage selecting materials with higher recycled content and designing for future reuse, which can reduce waste disposal costs at the end of the building's life.

#### d. Other Costs:

- Initial learning curves for contractors and procurement teams to track and verify embodied carbon data could cause minor administrative costs.

### 3. Economic Benefit Analysis

#### a. Direct Cost Savings:

- By encouraging structural efficiency and material optimization, this appendix can reduce embodied carbon while often keeping costs low.

**b. Operational Benefits:**

- The adoption of lower-carbon alternatives, such as mass timber for structural components, can lead to faster construction times, reducing labor costs.

**c. Other Benefits:**

- Jurisdictions that adopt these provisions encourage local manufacturers to produce lower-carbon materials, fostering local green economies.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 238110: Poured Concrete Foundation and Structure Contractors
- NAICS 238120: Structural Steel and Precast Concrete Contractors
- NAICS 327320: Ready-Mix Concrete Manufacturing
- NAICS 331110: Iron and Steel Mills and Ferroalloy Manufacturing
- NAICS 324122: Asphalt Shingle and Coating Materials Manufacturing
- NAICS 327420: Gypsum Product Manufacturing
- NAICS 541310: Architectural Services
- NAICS 541330: Engineering Services
- NAICS 541620: Environmental Consulting Services

**b. Compliance Burden Comparison:**

- Establishing an optional appendix for embodied carbon reporting in the WABC introduces both significant administrative burdens and potential market opportunities for small businesses. While intended to foster sustainability, the requirement for life cycle assessment can pose a high barrier to entry for smaller developers and contractors.

**c. Potential Disproportion/Mitigation:**

- An additional option for this appendix offers additional compliance pathways for building reuse or EPD declarations is proposed for public comment. This reduces and eases compliance burdens for small businesses by offering multiple avenues for compliance.

**5. Least Burdensome Alternative**

- This proposal represents the least burdensome approach by offering a less complex compliance pathway.

**6. Conclusion**

- The SBCC is filing for public comment, two options for consideration. Only one of these options will be passed into the final rule making.

**5.1.37 Log Number: 24-GP1-119-R3**

**Code Section / Title:** IBC Chapter 10 Section 1013.6.1.1 "Pictorial Exit Sign option"

**Proponent/Author:**

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- 2024 WABC Section 1013 only has requirements for textual exit signs.

**b. Summary of Baseline with Changes:**

- This proposal would add an option to use a pictogram for emergency exit signs. The pictogram would need to align with requirements in ISO 7010.

**c. Rationale Statement:**

- Including the internationally standardized pictogram makes exit signs easily understandable by anyone regardless of the language they speak.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- Construction costs are not impacted by the addition of an option for exit sign graphics.

**b. Implementation/Plan Review/Inspection Costs:**

- No new plan review or inspection burden is created by the addition of exit sign options.

**c. Life-Cycle Costs:**

- The concept of a pictogram sign does not impose impactful lifecycle costs, however more modern sign technology can result in energy savings over the life of the building.

**d. Other Costs:**

- While some specialized ISO 7010 signs may have a higher upfront cost, many offer similar costs per unit.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- ISO 7010 pictograms are frequently implemented using photoluminescent technology, which does not require electricity, bulbs, or battery replacements. Use of these device types can result in lowered direct costs.

**b. Operational Benefits:**

- Benefits primarily revolve around universal comprehension, faster evacuation times, and improved standardization for international or multilingual facilities.

**c. Other Benefits:**

- Compared to traditional red text-based signs, ISO 7010 pictograms are designed for faster recognition, reducing evacuation times.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- **NAICS 339950: Sign Manufacturing**
- **NAICS 335132: Interior Decorative Lighting Manufacturing**
- **NAICS 541310: Architectural Services)**

**b. Compliance Burden Comparison:**

- While voluntary now, adopting these standards prepares small businesses for future, more stringent international safety mandates.

**c. Potential Disproportion/Mitigation:**

- None identified

**5. Least Burdensome Alternative**

- This proposal represents the least burden because it introduces options for compliance and increases flexibility of the code.

## 6. Conclusion

- Allowing the internationally standardized pictogram makes exit signs easily understandable by anyone regardless of the language they speak.

### 5.1.38 Log Number: 24-GP1-120

**Code Section / Title:** IBC Chapter 16, Section 1615 "Tsunami Loads"

**Proponent/Author:** Jonathan Siu

#### 1. Description & Rationale

##### a. Summary of Current Baseline (without proposal):

- The 2021 WABC contains amendments that adopt tsunami provisions of ASCE 7-22.

##### b. Summary of Baseline with Changes:

- This proposal clarifies existing amendments and increases consistency with the ASCE 7-22 document. Changes do not intend to alter regulations.

##### c. Rationale Statement:

- The purpose of these revisions is to update WAC 51-50-1615 for consistency with ASCE 7-22, while also cleaning up some of the adopting language.

#### 2. Economic Cost Analysis

##### a. Construction Cost Impact:

- There are no intended construction cost impacts resulting from this proposal. It adds increased clarity and aligns WABC more closely with the model code.

##### b. Implementation/Plan Review/Inspection Costs:

- This amendment does not affect plan review or inspection. Clarifying code language may result in more efficient reviews and inspections, but the impact is nominal.

##### c. Life-Cycle Costs:

- Life cycle costs are not impacted by changes brought by this proposal. Changes are editorial.

##### d. Other Costs:

- No new fees or administrative burden is created.

#### 3. Economic Benefit Analysis

##### a. Direct Cost Savings:

- Changes from this proposal do not have impact on direct costs.

##### b. Operational Benefits:

- While increasing clarity can provide operational benefits, the result of this code change does not result in significant benefits or drawbacks.

##### c. Other Benefits:

- The total number of amendments to the International Building Code is reduced with this proposal.

#### 4. Small Business Economic Impact

##### a. Small Business Categories Affected:

- NAICS 236220: Commercial and Institutional Building Construction

- NAICS 541310: Architectural Services
- NAICS 541330: Engineering Services
- NAICS 541370: Surveying and Mapping Services

**b. Compliance Burden Comparison:**

- No additional burden is created from the clarifying modifications in this proposal.

**c. Potential Disproportion/Mitigation:**

- None Identified.

**5. Least Burdensome Alternative**

- This proposal represents the least burden for code users by reducing state amendments and increasing clarity.

**6. Conclusion**

- These revisions update WAC 51-50-1615 for consistency with ASCE 7-22, while also cleaning up some of the adopting language.

**5.1.39 Log Number: 24-GP1-125-R1**

**Code Section / Title:** IBC Chapter 14, Section 1402.2 "Weather Protection"

**Proponent/Author:** Joe Mayo

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WABC contained amendments to Section 1402.2 and the 2024 model IBC has added new language that is the same as WA amendment language.

**b. Summary of Baseline with Changes:**

- The proposal updates the section to align with model code language while maintaining existing amendment language specific to WA.

**c. Rationale Statement:**

- This proposal reduces amendments to the model code language by removing duplicated text while retaining WA specific language.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- This proposal does not change existing regulations when comparing the 2021 WABC to the proposed modifications.

**b. Implementation/Plan Review/Inspection Costs:**

- Since this proposal does not change regulation or organization of the code text, changes for plan review and inspections are not anticipated to change.

**c. Life-Cycle Costs:**

- Life-cycle costs are not impacted by modification presented by this proposal.

**d. Other Costs:**

- No new fees or administrative burden is created.

**3. Economic Benefit Analysis**

- a. **Direct Cost Savings:**
    - o This proposal does not change impact direct costs when comparing the 2021 WABC to the proposed modifications.
  - b. **Operational Benefits:**
    - o Ensuring consistent language in the WABC that aligns closely with model code language reduces confusion.
  - c. **Other Benefits:**
    - o Reducing state amendments reduces the need to evaluate existing code amendments in successive code adoption and amendment cycles.
- 4. Small Business Economic Impact**
- a. **Small Business Categories Affected:**
    - o **NAICS 238110: Foundation, Structure, and Building Exterior Contractors**
    - o **NAICS 541310: Architectural Services**
    - o **NAICS 541330: Engineering Services**
  - b. **Compliance Burden Comparison:**
    - o This proposal is editorial and no compliance burden is introduced
  - c. **Potential Disproportion/Mitigation:**
    - o None identified.
- 5. Least Burdensome Alternative**
- o This proposal is editorial and represents no additional burden for code users.
- 6. Conclusion**
- o This proposal reduces unnecessary amendments and aligns existing WA language with model code changes.

**5.1.40 Log Number: 24-GP1-126**

**Code Section / Title:** IBC Chapter 35 "Referenced Standards"

**Proponent/Author:** Brett Conway

- 1. Description & Rationale**
- a. **Summary of Current Baseline (without proposal):**
    - o The 2021 WABC and 2024 model IBC both contain the International Plumbing Code as a referenced standard.
  - b. **Summary of Baseline with Changes:**
    - o The proposal removes the reference to the International Plumbing Code, which is not adopted in WA. The correct reference to the Uniform Plumbing Code is added.
  - c. **Rationale Statement:**
    - o This editorial change aligns the Reference Section citing with the State Code.
- 2. Economic Cost Analysis**
- a. **Construction Cost Impact:**
    - o This proposal is editorial and does not have an impact on construction costs.
  - b. **Implementation/Plan Review/Inspection Costs:**

- This change is editorial. Nonetheless the change increases clarity for code users.
- c. Life-Cycle Costs:**
  - Proposed change does not have an impact on life cycle costs.
- d. Other Costs:**
  - No new fees or administrative burden is created.
- 3. Economic Benefit Analysis**
  - a. Direct Cost Savings:**
    - This proposal is editorial and does not have an impact on direct costs.
  - b. Operational Benefits:**
    - With the editorial clarification navigation of the code is made easier.
  - c. Other Benefits:**
    - Removing an incorrect document from the referenced standards reduces confusion.
- 4. Small Business Economic Impact**
  - a. Small Business Categories Affected:**
    - NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractors
  - b. Compliance Burden Comparison:**
    - This proposal does not introduce compliance burdens for small businesses/
  - c. Potential Disproportion/Mitigation:**
    - None identified.
- 5. Least Burdensome Alternative**
  - This proposal represents the least burden for code users by clarifying existing practice in WA.
- 6. Conclusion**
  - The Uniform Plumbing Code has long been adopted in WA. This amendment clarifies that adoption withing the referenced standards of the IBC.

#### **5.1.41 Log Number: 24-GP1-128-R1**

**Code Section / Title:** IBC Chapter 2, Section 202 "High-Rise Building"

**Proponent/Author:** Hoyt Jeter

- 1. Description & Rationale**
  - a. Summary of Current Baseline (without proposal):**
    - The 2021 WABC made an amendment to the definition of High-Rise Building. This amendment clarifies that occupiable roofs with an occupant load greater than 50 are considered occupied floors.
  - b. Summary of Baseline with Changes:**
    - The 2024 model IBC has made a grammatical change that is incorporated into the existing WA amendment.
  - c. Rationale Statement:**

- This amendment incorporates new model code language into the existing amendment. Without changing the regulation in WA.

## **2. Economic Cost Analysis**

### **a. Construction Cost Impact:**

- This proposal is editorial and does not have an impact on construction costs.

### **b. Implementation/Plan Review/Inspection Costs:**

- Changes proposed will not have an impact on plan reviews or inspections.

### **c. Life-Cycle Costs:**

- This proposal is editorial and does not have an impact on life-cycle costs.

### **d. Other Costs:**

- No new fees or administrative burden is created.

## **3. Economic Benefit Analysis**

### **a. Direct Cost Savings:**

- This proposal is editorial and does not have an impact on direct costs.

### **b. Operational Benefits:**

- This proposal is editorial and does not affect operational efficiency.

### **c. Other Benefits:**

- Maintaining WA amendments to incorporate model code updates reduces review during future code amendment and adoption cycles.

## **4. Small Business Economic Impact**

### **a. Small Business Categories Affected:**

- NAICS 236220 - Commercial and Institutional Building Construction
- NAICS 541310 - Architectural Services
- NAICS 541330 - Engineering Services

### **b. Compliance Burden Comparison:**

- This proposal is editorial and introduces no new compliance burdens for small businesses.

### **c. Potential Disproportion/Mitigation:**

- None identified.

## **5. Least Burdensome Alternative**

- This proposal is editorial and represents the least burdensome approach to maintaining existing WA amendments in alignment with model code updates.

## **6. Conclusion**

- This proposal incorporates new terminology of the 2024 model IBC to existing WA amendments and does not change the regulatory effect.

### **5.1.42 Log Number: 24-GP1-131-R1**

**Code Section / Title:** IBC Chapter 4, Section 420.2 "Separation Walls"

**Proponent/Author:** Hoyt Jeter

#### **1. Description & Rationale**

- a. **Summary of Current Baseline (without proposal):**
    - The 2021 WABC contains an amendment to Section 420.2 stating that buildings containing multiple sleeping units with common areas shall not be classified as one dwelling unit.
  - b. **Summary of Baseline with Changes:**
    - The 2024 model IBC introduces new language to this section addressing walls separating dwelling units from sleeping units. The proposal incorporates this new language into the existing WA amendment.
  - c. **Rationale Statement:**
    - This amendment incorporates new model code language into the existing amendment. The model code change is a clarification of current requirements.
- 2. Economic Cost Analysis**
- a. **Construction Cost Impact:**
    - Incorporation of new model code language for Section 420.2 does not have an impact on construction costs.
  - b. **Implementation/Plan Review/Inspection Costs:**
    - The new model code language of Section 420.2 does not change regulation but clarifies existing requirements. The change will assist with more efficient plan reviews and inspections.
  - c. **Life-Cycle Costs:**
    - This proposal does not have an effect on long term life-cycle costs.
  - d. **Other Costs:**
    - No new fees or administrative burden is created.
- 3. Economic Benefit Analysis**
- a. **Direct Cost Savings:**
    - Incorporation of new model code language for Section 420.2 does not have an impact on direct costs.
  - b. **Operational Benefits:**
    - Incorporation of new model code language for Section 420.2 may have a nominal positive impact on operational efficiency.
  - c. **Other Benefits:**
    - Maintaining WA amendments to incorporate model code updates reduces review during future code amendment and adoption cycles.
- 4. Small Business Economic Impact**
- a. **Small Business Categories Affected:**
    - NAICS 236116: New Multifamily Housing Construction
    - NAICS 236220: Commercial and Institutional Building Construction
    - NAICS 238310: Drywall and Insulation Contractors
    - NAICS 541310: Architectural Services
  - b. **Compliance Burden Comparison:**
    - Incorporation of the new model code language for Section 420.2 does not create additional compliance burdens for small businesses.
  - c. **Potential Disproportion/Mitigation:**
    - None identified.

**5. Least Burdensome Alternative**

- This proposal provides clarification for existing regulation and represents the least burdensome approach to maintaining existing WA amendments in alignment with model code updates.

**6. Conclusion/Recommendation**

- This proposal incorporates new terminology of the 2024 model IBC to existing WA amendments and does not change the regulatory effect.

**5.1.42 Log Number: 24-GP1-133-R2**

**Code Section / Title:** IBC Chapter 29, Section 2902 "Bottle Filling Stations"

**Proponent/Author:** SBCC Staff

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WABC contained an amendment to require bottle filling stations in Group E occupancies.

**b. Summary of Baseline with Changes:**

- The 2023 Legislature passed HB 1085 which requires bottle filling stations or combination bottle filling station and drinking fountains for each required drinking fountain location in the 2021 WABC.

**c. Rationale Statement:**

- This proposal was reviewed by the TAG and has been deemed the minimum change needed to satisfy the legislative direction given to the SBCC. This proposal is exempt from

**2. Economic Cost Analysis**

**a. This proposal is exempt from the requirements for a Cost benefit analysis in accordance with RCW 34.05.328(5)(b)(v)**

**3. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- **NAICS 236220: Commercial and Institutional Building Construction**
- **NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractors**
- **NAICS 332913: Plumbing Fixture Fitting and Trim Manufacturing**

**b. Compliance Burden Comparison:**

- The requirement to add bottle filling stations to drinking fountains generally imposes a minimal to neutral economic burden, often viewed as aligning with existing industry trends rather than creating significant new costs for small businesses.

**c. Potential Disproportion/Mitigation:**

- The proposed changes are the minimum needed to achieve the goals of Legislation. Burden for small businesses cannot be reduced.

**4. Conclusion**

- This proposal achieves the goals of HB 1085 passed by the 2023 WA Legislature.

#### 5.1.44 Log Number: 24-GP1-134

**Code Section / Title:** IBC Chapter 31, Section 3103.1 "General"

**Proponent/Author:** Timothy Woodard

#### 1. Description & Rationale

##### a. Summary of Current Baseline (without proposal):

- The 2021 WABC contains an amendment to Section 3103.1. The amendment creates an exception from the requirements for temporary structures for tents and yurts up to 500 square feet used as an R-1 Occupancy.

##### b. Summary of Baseline with Changes:

- The proposal incorporates new model code language for temporary structures that adds exceptions and creates additional flexibility for the code requirements.

##### c. Rationale Statement:

- This amendment incorporates new model code language into the existing amendment. The model code change is an expansion of exceptions to the requirements of Section 3103.1.

#### 2. Economic Cost Analysis

##### a. Construction Cost Impact:

- By allowing structures to stay in place for up to a year and still be considered as temporary, owners avoid the high cost of upgrading these structures to full permanent building standards. Initial construction costs are reduced.

##### b. Implementation/Plan Review/Inspection Costs:

- Permitting temporary structures is no longer a one-time administrative task. Jurisdictions must now track the service life of these structures and manage extension requests that require specific technical documentation.

##### c. Life-Cycle Costs:

- For projects lasting over 180 days but under 1 year, the 2024 IBC generally reduces total life cycle costs by eliminating the need to transition to permanent building code compliance. However, for simple projects, the operational costs of monitoring and re-inspections can reduce these savings.

##### d. Other Costs:

- Because building officials now have more discretion to evaluate permitting documents, the plan review timeline may lengthen. For developers, delays in a temporary setup can result in lost operational revenue.

#### 3. Economic Benefit Analysis

##### a. Direct Cost Savings:

- Under the 2021 WABC, structures needed beyond six months faced expensive transitions to permanent building standards or mandatory decommissioning and re-installation.

##### b. Operational Benefits:

- Facility managers can plan a full year of programming without the looming threat of permit expiration or forced transition to permanent building requirements.

**c. Other Benefits:**

- Because structures must be maintained to a higher standard for 12 months, they may retain a higher salvage value

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 238990: All Other Specialty Trade Contractors
- NAICS 532289: All Other Consumer Goods Rental
- NAICS 532490: Other Commercial and Industrial Machinery and Equipment Rental and Leasing
- NAICS 541330 Engineering Services
- NAICS 561920 Convention and Trade Show Organizers
- NAICS 711310 Promoters of Performing Arts, Sports, and Similar Events with Facilities

**b. Compliance Burden Comparison:**

- The updated model code language offers increased flexibility in terms of time limits, but it imposes a higher, more formalized compliance burden on small businesses through enhanced structural design requirements, mandatory inspections, and required operational management plans.

**c. Potential Disproportion/Mitigation:**

- This proposal incorporates new model code language into existing amendments. The compliance burden for small businesses is relevant in the application of other new code sections creating extended time allowances for temporary structures.

**5. Least Burdensome Alternative**

- This proposal represents the least burden for all code users. Not updating the amendments to align with model code updates would maintain the limit for temporary structure placement at 180 days.

**6. Conclusion**

- This proposal incorporates new language of the 2024 model IBC to existing WA amendments and brings with it the benefits of longer periods for placement of temporary structures..

**5.1.45 Log Number: 24-BFRW-EV-R4**

**Code Section / Title:** IBC Chapter 4, Section 429 "Electric Vehicle Charging Infrastructure"

**Proponent/Author:** SBCC BFRW Committee

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WABC contains amendments creating Section 429 that address Electric Vehicle Charging Infrastructure requirements. The section was created as a result of passage of 2009 HB 1481 and updated by 2019 HB 1257 and 2021 HB 1287.

**b. Summary of Baseline with Changes:**

- The proposal addresses confusing language contained in the section and adjusts the amounts of required Electric Vehicle Charging Infrastructure.

**c. Rationale Statement:**

- Changes are needed to Clarify code requirements and to better align with the legislative requirements without requiring more Electric Vehicle Charging Infrastructure than is needed to meet legislative direction.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- Modifying the required amount of Electric Vehicle Infrastructure to shift requirements from higher levels of installed EVSE to higher levels of EV-Ready and EV-Capable spaces reduces initial construction costs.

**b. Implementation/Plan Review/Inspection Costs:**

- Modifications aim to increase clarity for all code users. Plan reviews and inspections are anticipated to be more streamlined.

**c. Life-Cycle Costs:**

- The modifications reduce overall initial costs. While initial installation costs are high, installing EV infrastructure during original construction is estimated to be significantly cheaper than retrofitting.

**d. Other Costs:**

- Developers have indicated that the costs of building, maintaining, and managing Electric Vehicle Charging Infrastructure will likely be passed on to tenants through higher rent.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- Changes to Section 429 bring savings via shifting requirements away from higher levels of installed EVSE.

**b. Operational Benefits:**

- Clarifications made in Section 429 increase efficiencies for both developers and enforcing authorities alike. These changes allow for more efficient planning and review of projects requiring electric vehicle charging infrastructure. Projects can expect shortened timelines before onsite construction can begin.

**c. Other Benefits:**

- By requiring EV-Ready and EV-Capable spaces during initial construction, developers avoid expensive retrofitting costs later.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236116: New Multifamily Housing Construction
- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 238210: Electrical Contractors and Other Wiring Installation Contractors
- NAICS 531110: Lessors of Residential Buildings and Dwellings
- NAICS 531120: Lessors of Nonresidential Buildings
- NAICS 541330: Engineering Services
- NAICS 541310: Architectural Services

**b. Compliance Burden Comparison:**

- Modifications to shift requirements away from requiring higher levels of installed EVSE to requirements for site preparation for future EVSE reduce compliance burden for all.

**c. Potential Disproportion/Mitigation:**

- This proposal represents the mitigation for small businesses. It reduces overall requirements for installed EVSE while still meeting levels required by legislation.

**5. Least Burdensome Alternative**

- This proposal represents the least burden for all. It reduces overall requirements for installed EVSE while still meeting levels required by legislation.

**6. Conclusion**

- This proposal aims to clarify existing code language and adjust required levels for installed EVSE. This goal is achieved and legislative minimum requirements are maintained.

**5.1.46 Single Exits Appendix: SB 5491**

**Code Section / Title:** IBC Appendix T: Single Exits

**Proponent/Author:** SBCC Single Exit/Multiplex Housing TAG

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- Current code requirements limit the use of a single exit to one basement level and up to 3 stories above grade plane. Up to four dwelling units with a maximum 125 foot exit access trave distance are allowed per floor.

**b. Summary of Baseline with Changes:**

- The new appendix creates an alternative allowing a single exit to be used for up to 6 stories above grade plane for R-2 apartment buildings.

**c. Rationale Statement:**

- The SBCC was directed by the 2023 Washington Legislature and SB 5491 to create modifications to the International Building Code that would allow for a single exit stairway to serve multifamily residential structures up to six stories above grade plane.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- Using the new single exits appendix may reduce costs. Elimination of a second stair allows space previously designated for stairs to either be eliminated or repurposed. This also allows circulation routes to be reduced in size or repurposed for rentable areas.

**b. Implementation/Plan Review/Inspection Costs:**

- The use of this appendix is not anticipated to increase plan review or inspection costs. Local jurisdictions will need to train staff in the use of the new appendix

**c. Life-Cycle Costs:**

- While construction is cheaper, single-stair buildings require more costly fire safety systems to operate over their lifespan, including enhanced sprinklers, fire alarm panels, and pressurized stairway systems.

**d. Other Costs:**

- Without the need for a second stairway or a long corridor connecting them, floor plates are more efficient, allowing for more rentable or salable square footage per floor.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- By eliminating the need for a second stairwell, developers can create more compact buildings. This increases the number of small, urban lots where housing can be constructed, making housing more plentiful and thus affordable. Smaller buildings also mean reduced construction costs, bringing housing prices down even further.

**b. Operational Benefits:**

- The creation of a statewide appendix results in more wide spread consistency for the use of Single Exits for the State of Washington and in many cases allows for development of buildings that otherwise would not be built..

**c. Other Benefits:**

- The appendix supports emerging trends to develop more middle housing.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236116: New Multifamily Housing Construction
- NAICS 236117: New Housing For-Sale Builders
- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 541310: Architectural Services
- NAICS 541330: Engineering Services

**b. Compliance Burden Comparison:**

- Small builders and designers benefit from consistent requirements across the state, reducing preparation burden and costs.

**c. Potential Disproportion/Mitigation:**

- No disproportion: requirements apply all uniformly.

**5. Least Burdensome Alternative**

- a. This proposal is the least burdensome approach. The new appendix creates a pathway to achieve the goals of legislative direction, while adding consistency and clarity across the state.

**6. Conclusion/Recommendation**

- This appendix achieves the goals of the 2023 bill SB 5491.

**5.1.47 Temporary Emergency Shelters Appendix: SB 5553**

**Code Section / Title:** IBC Appendix U: Temporary Emergency Shelters

**Proponent/Author:** SBCC IBC TAG

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- Currently the Building Code is silent on the topic of Emergency Shelters. It allows local jurisdictions to act in emergent situations, but requirements vary from jurisdiction to jurisdiction.

**b. Summary of Baseline with Changes:**

- The new appendix creates a pathway for consistent requirements across the state. The new appendix address village style emergency housing encampments utilizing temporary tents and structures and also addresses temporary use of existing buildings for emergency housing.

**c. Rationale Statement:**

- The SBCC was directed by the 2023 Washington Legislature and SB 5553 to adopt standards for temporary emergency shelters and make them available for local adoption. The appendix created is not a mandatory adoption for local jurisdictions but is available for them to adopt upon notification of the SBCC.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- Cost Reduction: Jurisdictions utilizing this appendix may allow different types of emergency housing depending on the local circumstance. Costs for differing typologies vary widely. Overall, having a pathway to make allowances for relaxed requirements and alternate methods is anticipated to reduce construction costs when compared to full building code compliance.

**b. Implementation/Plan Review/Inspection Costs:**

- Some jurisdictions in Washington already have programs in place for temporary housing. The fees and inspections costs will be set by local jurisdictions adopting this appendix. Costs are not quantifiable because this appendix is not mandatory at this time.

**c. Life-Cycle Costs:**

- Life-Cycle costs differ across the typologies represented in the new appendix. The creation of the appendix does not impact already existing lifecycle costs for temporary housing.

**d. Other Costs:**

- No additional special reporting, record-keeping, or compliance costs are created. Local jurisdictions will develop their own administrative procedure.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- This emergency appendix allows for specialized, simplified standards for village style emergency housing encampments utilizing temporary tents and structures and the use of existing buildings for temporary emergency housing. It reduces the need for expensive, permanent building materials and complex systems and upgrades for existing buildings.

**b. Operational Benefits:**

- An established pathway for emergency housing designs reduces administrative processing time and associated fees for local governments and developers, increasing the availability of units during a crisis.

**c. Other Benefits:**

- These provisions allow for smaller minimum floor areas and other reduced requirements in temporary settings, lowering the per-unit construction expense.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 541310: Architectural Services
- NAICS 541330: Engineering Services
- NAICS 3219: Other wood Product Manufacturing

**b. Compliance Burden Comparison:**

- Small businesses benefit from clear consistent requirements available for jurisdictions to implement across the state.

**c. Potential Disproportion/Mitigation:**

- No disproportion: clear guidance benefits all uniformly.

**5. Least Burdensome Alternative**

- a. This proposal is the least burdensome approach, The new appendix creates a pathway to achieve the goals of legislative direction, while adding consistency and clarity across the state.

**6. Conclusion/Recommendation**

- a. This appendix achieves the goals of the 2023 bill SB 5553.

**5.1.48 Dwelling Unit Size Reduction: HB 2071**

**Code Section / Title:** IBC Section 1208: Minimum Dwelling Unit Size

**Proponent/Author:** SBCC IBC TAG

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WA Building Code requires every dwelling to have 190 square feet of habitable space.

**b. Summary of Baseline with Changes:**

- The proposed change for the 2024 WA Building Code would reduce the required habitable space from 190 square feet to 120 square feet.

**c. Rationale Statement:**

- The SBCC was directed by the 2024 Washington Legislature and HB 2071 to create modifications to the International Building Code that would allow for a minimum dwelling unit size that is less than the requirements for an efficiency dwelling unit in the international building code.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- Reducing the size from 190 to 120 sq. ft. directly reduces the material, labor, and land costs needed to build each unit. A 200 sq. ft. unit costs approximately \$60,000–\$80,000 in direct construction (assuming \$300-\$400/sq. ft.), which is significantly reduced at 120 sq. ft..

**b. Implementation/Plan Review/Inspection Costs:**

- Plan checkers will encounter more units per floor, resulting in more complex egress, fire separation, and occupant load calculations. Time spent inspecting structural framing is reduced but increases with the need for meticulous review of interior layout compliance, and specialized MEP.

**c. Life-Cycle Costs:**

- Reducing the minimum habitable space requirement from 190 square feet to 120 square feet in the Washington Building Code generally results in lower initial construction costs, lower operational costs, and increased land-use efficiency, thereby improving the total life cycle cost profile of the building.

**d. Other Costs:**

- No new fees or record-keeping burdens.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- Reduction from 190 square feet to 120 square feet represents a 36.8% reduction in mandatory minimum floor area, which directly correlates to lowered construction, land, and impact fee costs per unit, increasing the financial feasibility.

**b. Operational Benefits:**

- This shift allows developers to create "micro-units" without requiring variances, which reduces soft costs, streamlines permitting, and increases the total number of rentable units on a given site generating more income per square foot of the total building.

**c. Other Benefits:**

- Overall cost of living decreases for individuals, despite the higher price per square foot

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236116: New Multifamily Housing Construction
- NAICS 236117: New Housing For-Sale Builders
- NAICS 236118: Residential Remodelers
- NAICS 541310: Architectural Services
- NAICS 541330: Engineering Services
- NAICS 531110: Lessors of Residential Buildings and Dwellings
- NAICS 531311: Residential Real Estate Property Managers
- NAICS 238350: Finish Carpentry Contractors
- NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractor
- NAICS 337110: Wood Kitchen Cabinet and Countertop Manufacturing

**b. Compliance Burden Comparison:**

- Reducing the minimum dwelling unit size from 190 square feet to 120 square feet in the Washington Building Code represents a reduction in the compliance burden for small businesses, primarily by increasing revenue potential per building and reducing the administrative hurdles associated with density restrictions.

**c. Potential Disproportion/Mitigation:**

- No disproportion: Smaller firms face the same administrative and permitting requirements as larger firms.

**5. Least Burdensome Alternative**

- The proposed changes are the least burdensome approach to reducing dwelling unit size to less than the 2021 code requirements for an efficiency dwelling unit.

**6. Conclusion/Recommendation**

- This appendix achieves the goals of the 2024 bill HB 2071.

## **5.2 INTERNATIONAL EXISTING BUILDING CODE**

### **5.2.1 Log Number: 24-GP1-049-R1**

**Code Section / Title:** IEBC Chapters 5 and 11, Sections 502.1.1 and 1101.3 "Risk Category Assignment"

**Proponent/Author:** Julius Carreon

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2024 edition of the IEBC now includes a provision for risk category assignment for additions. The new Sections 502.1.1 and 1101.3 specifically address the assignment of risk categories in cases where the addition and the existing building have multiple occupancies but does not address additions that

**b. Summary of Baseline with Changes:**

- This proposal provides users with a reference to IBC sections and moves the multiple occupancy provision in Sections 502.1.1 and 1101.3 into subsections, for consistency with the multiple occupancy provision in the IBC:

**c. Rationale Statement:**

- This proposal aims to resolve potential misinterpretations by providing users with clear references and addressing differing occupancy classifications along with the model code consideration of similar occupancy classifications.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- The code change proposal will not increase or decrease the cost of construction since this is intended to clarify the proper application of the code. In some cases, with small additions, construction costs may decrease because this proposal provides an exception for triggering a higher risk category if the proposed addition is less than 10% of the existing building.

**b. Implementation/Plan Review/Inspection Costs:**

- Clearer rules reduce ambiguity and can reduce plan review and inspection times.

**c. Life-Cycle Costs:**

- Clearly defining when an addition is "similar" to the existing building prevents arbitrary enforcement that might otherwise classify a standard renovation as a

major, high-risk change of occupancy. Impacts to long term life cycle costs are negligible.

**d. Other Costs:**

- This proposal does not create any new fees or administrative burden.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- By clarifying that smaller additions do not necessarily elevate the risk category of the entire structure, owners avoid the significant structural, seismic, and lateral force-resisting system upgrades that would be required if the whole building were reclassified.

**b. Operational Benefits:**

- By providing clear guidelines on when an addition triggers a change of occupancy for the entire building, the refined code reduces the likelihood of over-designing projects, especially for additions that are small or represent a similar hazard to the existing structure.

**c. Other Benefits:**

- Clarification reduces the gray area for building officials and designers regarding when a new addition forces a structural or life-safety upgrade to the existing building, creating a more predictable permitting process.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236118: Residential Remodelers
- NAICS 236210: Industrial Building Construction
- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 541310: Architectural Service
- NAICS 541330: Engineering Services

**b. Compliance Burden Comparison:**

- By clarifying when an addition causes the existing building to change its occupancy or risk category, the clarified code allows small businesses to navigate renovations, expansions, and conversions without required meet the stringent standards required for new buildings.

**c. Potential Disproportion/Mitigation:**

- None identified.

**5. Least Burdensome Alternative**

- This proposal represents the least burden for code users. It clarifies existing requirements and reduces confusion.

**6. Conclusion**

- This proposal addresses potential misinterpretations by providing users with clear references and addressing differing occupancy classifications along with the model code consideration of similar occupancy classifications.

**5.2.2 Log Number: 24-GP1-075-R1**

**Code Section / Title:** IEBC Chapter 8, Section 809.1 "Alteration Level 2 Minimum Requirements"

**Proponent/Author:** Lia Sommer

## 1. Description & Rationale

### a. Summary of Current Baseline (without proposal):

- The 2021 WAECB contains an amendment to Section 809.1 that removes references to the IECC and IRC for energy conservation requirements. The amendment inserts reference to the WSEC-C Chapter 51-11C

### b. Summary of Baseline with Changes:

- The proposal adds to existing amendment language additional reference to WSEC-R Chapter 51-11R.

### c. Rationale Statement:

- The 2021 amendment is incomplete without reference to the residential energy code in Washington. The amendment clarifies already existing regulations.

## 2. Economic Cost Analysis

### a. Construction Cost Impact:

- This proposal is editorial and does not have an impact on construction costs

### b. Implementation/Plan Review/Inspection Costs:

- This amendment is editorial and has nominal impact to plan review and inspection. With clearer references ambiguity is reduced and processes can see timeline improvements.

### c. Life-Cycle Costs:

- This proposal is editorial and does not have an impact on long term life-cycle costs.

### d. Other Costs:

- No new fees or administrative burden is created.

## 3. Economic Benefit Analysis

### a. Direct Cost Savings:

- This proposal is editorial and does not provide meaningful direct cost savings. Maintaining clear references in the code allows for better comprehension of requirements and can lead to reductions in time expenditure.

### b. Operational Benefits:

- Maintaining clear references increases ease of use.

### c. Other Benefits:

- Clear references in the code reduce confusion and can reduce inquiries for clarification.

## 4. Small Business Economic Impact

### a. Small Business Categories Affected:

- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractors
- NAICS 541310: Architectural Services

### b. Compliance Burden Comparison:

- This proposal is editorial and does not increase compliance burden for small businesses. If there is an impact it is a nominal positive because of increased clarity in the application of code requirements.

### c. Potential Disproportion/Mitigation:

- None identified.

**5. Least Burdensome Alternative**

- This proposal represents the least burden for code users. It does not change existing regulations and clarifies application of code requirements.

**6. Conclusion**

- The existing amendment does not succinctly describe intended application of the energy code adopted in WA. This proposal remedies the issue.

**5.2.3 Log Number: 24-GP1-076-R1**

**Code Section / Title:** IEBC Chapter 9, Section 904 "Upholstered Furniture or Mattresses"

**Proponent/Author:** Lia Sommer

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- 2024 IEBC Section 904.1.3 lacks an exception for Group S-1 Upholstered furniture or mattresses that is contained in both the 2024 IBC and IFC Section 903.2.9.4.

**b. Summary of Baseline with Changes:**

- This proposal adds the exception contained in the IBC and IFC Section 903.2.9.4 to the IEBC Section 904.1.3.

**c. Rationale Statement:**

- This correlation change is needed to prevent conflict in interpretation of the code requirements.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- This proposal is an editorial correlation change and does not have an impact on construction costs.

**b. Implementation/Plan Review/Inspection Costs:**

- Maintaining consistent requirements for related sections across different codes reduces confusion and conflicts. This can have a positive impact on review and inspection times.

**c. Life-Cycle Costs:**

- This proposal is an editorial correlation change and does not have an impact on long term life-cycle costs.

**d. Other Costs:**

- No new fees or administrative burden is created.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- This proposal is an editorial correlation change and does not have an impact on direct costs.

**b. Operational Benefits:**

- Maintaining consistent requirements for related sections across different codes reduces confusion and conflicts. This can have a positive impact on operational efficiency.

**c. Other Benefits:**

- Maintaining consistent requirements for related sections across different codes improves how these codes work in conjunction with one another.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractors
- NAICS 337121: Upholstered Household Furniture Manufacturing
- NAICS 337910: Mattress Manufacturing
- NAICS 442110: Furniture Stores
- NAICS 493110: General Warehousing and Storage
- NAICS 541310: Architectural Services

**b. Compliance Burden Comparison:**

- This proposal is editorial and does not increase compliance burden for small businesses. If there is an impact it is a nominal positive because of increased clarity in the application of code requirements.

**c. Potential Disproportion/Mitigation:**

- None identified.

**5. Least Burdensome Alternative**

- This proposal represents the least burden for code users. It does not change existing regulations and clarifies application of code requirements.

**6. Conclusion**

- This correlation change is needed to prevent conflict in interpretation of the code requirements. Language contained in both the IBC and IRC is not maintained in the IEBC. This proposal remedies the issue.

**5.2.4 Log Number: 24-GP1-077-R1**

**Code Section / Title:** IEBC Chapter 9, Section 907.1 "Energy Conservation Minimum Requirements"

**Proponent/Author:** Lia Sommer

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WAIEBC contains an amendment to Section 907.1 that removes references to the IECC and IRC for energy conservation requirements. The amendment inserts reference to the WSEC-C Chapter 51-11C

**b. Summary of Baseline with Changes:**

- The proposal adds to existing amendment language additional reference to WSEC-R Chapter 51-11R.

**c. Rationale Statement:**

- The 2021 amendment is incomplete without reference to the residential energy code in Washington. The amendment clarifies already existing regulations.

## 2. Economic Cost Analysis

### a. Construction Cost Impact:

- This proposal is editorial and does not have an impact on construction costs

### b. Implementation/Plan Review/Inspection Costs:

- This amendment is editorial and has nominal impact to plan review and inspection. With clearer references ambiguity is reduced and processes can see timeline improvements.

### c. Life-Cycle Costs:

- This proposal is editorial and does not have an impact on long term life-cycle costs.

### d. Other Costs:

- No new fees or administrative burden is created.

## 3. Economic Benefit Analysis

### a. Direct Cost Savings:

- This proposal is editorial and does not provide meaningful direct cost savings. Maintaining clear references in the code allows for better comprehension of requirements and can lead to reductions in time expenditure.

### b. Operational Benefits:

- Maintaining clear references increases ease of use.

### c. Other Benefits:

- Clear references in the code reduce confusion and can reduce inquiries for clarification.

## 4. Small Business Economic Impact

### a. Small Business Categories Affected:

- NAICS 236220: Commercial and Institutional Building Construction
- NAICS 238220: Plumbing, Heating, and Air-Conditioning Contractors
- NAICS 541310: Architectural Services

### b. Compliance Burden Comparison:

- This proposal is editorial and does not increase compliance burden for small businesses. If there is an impact it is a nominal positive because of increased clarity in the application of code requirements.

### c. Potential Disproportion/Mitigation:

- None identified.

## 5. Least Burdensome Alternative

- This proposal represents the least burden for code users. It does not change existing regulations and clarifies application of code requirements.

## 6. Conclusion

- The existing amendment does not succinctly describe intended application of the energy code adopted in WA. This proposal remedies the issue.

### 5.2.5 Log Number: 24-GP1-078-R1\*

Code Section / Title: IEBC Chapter 10, Section 1002.3 "Change of Occupancy in Healthcare"

**Proponent/Author:** Lia Sommer

**1. Description & Rationale**

**a. Summary of Current Baseline (without proposal):**

- The 2021 WAEBEC contains an amendment to Section 1002.3 addressing Group I-1 Condition 2 assisted living facilities in WA. The 2024 Model IEBC adds a new exception addressing smoke barriers for changes of use not classified as Level 3.

**b. Summary of Baseline with Changes:**

- This proposal incorporates new model code language while maintaining the existing amendment.

**c. Rationale Statement:**

- Maintaining alignment with new model code language for existing amendments is necessary to realize benefits of the most up to date language.

**2. Economic Cost Analysis**

**a. Construction Cost Impact:**

- Incorporating the new model code language into existing amendments for IEBC 1002.3 reduces construction costs by allowing a reasonable exception to full compliance with the IBC for a minor change of use.

**b. Implementation/Plan Review/Inspection Costs:**

- This proposal incorporates new model code language and does not have an impact on plan review and inspections.

**c. Life-Cycle Costs:**

- Adding an exception for smoke barrier requirements does not impact long term life cycle costs.

**d. Other Costs:**

- No new fees or administrative burden is created.

**3. Economic Benefit Analysis**

**a. Direct Cost Savings:**

- Adding an exception for smoke barrier requirements offers a positive direct cost impact. Requirement for a smoke barrier necessitates a higher initial construction cost.

**b. Operational Benefits:**

- Operational benefits related to this exception for smoke barriers primarily center on enhancing functional flexibility, reducing initial costs, and easing the renovation of existing facilities.

**c. Other Benefits:**

- Fewer dampers and less complex wall penetrations reduce the need for regular inspections and maintenance.

**4. Small Business Economic Impact**

**a. Small Business Categories Affected:**

- NAICS 236220; Commercial and Institutional Building Construction
- NAICS 238310; Drywall and Insulation Contractors
- NAICS 621493; Freestanding Ambulatory Surgical and Emergency Centers
- NAICS 623110; Nursing Care Facilities

- b. **Compliance Burden Comparison:**
    - Compliance burden is reduced by adopting the new model code language. The language provides an exception to otherwise costly requirements.
  - c. **Potential Disproportion/Mitigation:**
    - None Identified.
- 5. Least Burdensome Alternative**
- This proposal represents the least burden for code users by reducing requirements for smoke barriers in existing healthcare facilities undergoing renovation.
- 6. Conclusion**
- Maintaining alignment with new model code language for existing amendments is necessary to realize benefits of the most up to date language. This new model code language reduces exposure to costs associated with creation of smoke barriers in existing healthcare facilities.

## 5.2.6 Log Number: 24-GP1-092-R2

**Code Section / Title:** IEBC Chapter 4, Section 401.1”Demolition and replacements”

**Proponent/Author:** Joshua Mergens

- 1. Description & Rationale**
  - a. **Summary of Current Baseline (without proposal):**
    - The 2021 WAIEBC contains an amendment to Section 401.2 and 401.4. The amendment attempts to clarify levels of compliance when considering partial demolition and replacement.
  - b. **Summary of Baseline with Changes:**
    - This proposal removes existing amendments in favor of model code language.
  - c. **Rationale Statement:**
    - Existing amendments are overly confusing and lead to differing interpretations.
- 2. Economic Cost Analysis**
  - a. **Construction Cost Impact:**
    - This proposal does not modify existing regulations and does not have an impact on construction costs.
  - b. **Implementation/Plan Review/Inspection Costs:**
    - Clearer language can lead to increased efficiency for plan review and inspections.
  - c. **Life-Cycle Costs:**
    - This proposal does not modify existing regulations and does not have an impact on long term life-cycle costs.
  - d. **Other Costs:**
    - No new fees or administrative burden is created.
- 3. Economic Benefit Analysis**
  - a. **Direct Cost Savings:**

- This proposal does not change existing regulations and does not have an impact on direct cost.
- b. Operational Benefits:**
  - Clear language can lead to increased operational efficiency for all code users.
- c. Other Benefits:**
  - Reducing overall amendments to the codes reduces review burden in the next code cycle.
- 4. Small Business Economic Impact**
  - a. Small Business Categories Affected:**
    - NAICS 236118: Residential Remodelers
    - NAICS 236210: Industrial Building Construction
    - NAICS 236220: Commercial and Institutional Building Construction
    - NAICS 541310: Architectural Service
    - NAICS 541330: Engineering Services
  - b. Compliance Burden Comparison:**
    - This proposal does not change existing regulation and does not have an impact on compliance burdens for small businesses.
  - c. Potential Disproportion/Mitigation:**
    - None identified
- 5. Least Burdensome Alternative**
  - This proposal represents the least burden for code users by removing confusing amendment language.
- 6. Conclusion**
  - This proposal provides the clear enforceable language for all code users.

## SECTION 6 APPENDIX A: DOCUMENTATION OF DETERMINATIONS REQUIRED UNDER RCW 34.05.328

**Describe the general goals and specific objectives of the statute that this rule implements. RCW 34.05.328(1)(a)**

The Washington State Building Code Act (Chapter 19.27 RCW) establishes the following general goals and specific objectives:

- **Public Health and Safety:** Protect building occupants and the general public from hazards related to mechanical systems, fire, structural failure, and indoor air quality issues.
- **Uniform Statewide Standards:** Provide consistent, predictable building code requirements across all jurisdictions in Washington State to ensure fairness and reduce regulatory confusion.
- **Energy Efficiency and Environmental Stewardship:** Promote energy-efficient mechanical systems and support Washington's climate goals, including greenhouse gas reduction and adoption of low-global warming potential (GWP) refrigerants.

- **Economic Efficiency:** Minimize unnecessary regulatory burden on businesses, contractors, property owners, and enforcement agencies while maintaining essential safety and performance standards

**Explain why this rulemaking is needed to achieve the goals and objectives of the statute. RCW 34.05.328(1)(b)**

This rulemaking is needed because the model “Building Code” and “Existing Building Code” framework, on its own, cannot fully achieve the Legislature’s goals in the State Building Code Act for safety, uniformity, energy efficiency, and economic efficiency.

Without these amendments, Washington would continue to rely on provisions that are out of step with Washington State legislative goals, and the State Energy Code, leading to code conflicts, unclear compliance paths, and inconsistent enforcement across jurisdictions. That outcome undermines the statute’s objectives of uniform statewide standards and predictable, legally defensible regulation.

**Describe alternatives to rulemaking and the consequences of not adopting this rule. RCW 34.05.328(1)(b)**

**1. No Rulemaking (Status Quo)**

- **Consequence: Continued use of 2021 IBC/IEBC with outdated provisions, creating conflicts with:**
  - Updated standards
  - ASCE-7 Improved Engineering analysis
  - Departures from Model Code organization
- **Public Safety Risk:** Delayed adoption of improved safety standards.

**2. Voluntary Guidelines or Bulletins**

- **Consequence:** Non-binding guidance would create inconsistent enforcement across Washington’s 39 counties and 281 municipalities, undermining the statute’s goal of statewide uniformity.
- **Impact on Small Business:** Increased confusion, variable interpretation, and inability to predict compliance costs across jurisdictions.

**3. Delayed Adoption (Wait for 2027 IBC/IEBC)**

- **Consequence:** Washington would remain 3–6 years behind national safety standards, hindering adoption of energy-efficient technologies and creating market barriers for equipment manufacturers and suppliers.
- **Impact on Small Business:** Continued economic disadvantage for Washington-based contractors competing with national firms.

**A preliminary cost-benefit analysis was made available. RCW 34.05.328(1)(c)**

**Yes.** The comprehensive cost-benefit analysis (Sections 1-5 of this document) demonstrates substantial net benefits.

**Do the probable benefits of this rulemaking outweigh the probable costs, considering both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented? RCW 34.05.328(1)(d)**

See sections 2-5

**Is this rule the least burdensome alternative for those required to comply? RCW 34.05.328 (1)(e)**

**Yes.** Each individual proposal analysis (see section 5) includes a "Least Burdensome Alternative" determination. Rulemaking as a whole represents the least burdensome approach for the following reasons:

**The proposed rulemaking is the least burdensome alternative that achieves the statutory goals of safety, uniformity, energy efficiency, and economic efficiency.**

**Does this rule require those to whom it applies to take an action that violates requirements of another federal or state law?**

Yes  No

**Explain how that determination was made. RCW 34.05.328(1)(f)**

No. This rulemaking does not conflict with or violate any federal or state law. On the contrary, it harmonizes Washington State code requirements with multiple federal and state frameworks.

**Does this rule impose more stringent performance requirements on private entities than on public entities? RCW 34.05.328 (1)(g)**

Yes. Provide a citation. Explain.  
 No

**No.** The 2024 IBC/IEBC amendments apply uniformly to all construction projects in Washington State, regardless of ownership. Public entities (state agencies, counties, municipalities, school districts, public utilities) and private entities (businesses, developers, homeowners) are subject to identical building code requirements.

**Do other federal, state, or local agencies have the authority to regulate this subject?**

Yes. List below.  No

**Is this rule different from any federal regulation or statute on the same activity or subject?**

Yes  No

**If yes, check all that apply. The difference is justified because:**

A state statute explicitly allows Ecology to differ from federal standards. (If checked, provide the citation.)

There is substantial evidence that the difference is necessary to achieve the general goals and objectives of the statute that this rule implements. (If checked, explain.)

RCW 34.05.328 (1)(h)

**Explain how SBCC ensures that the rule is coordinated with other federal, state, and local agencies, laws, and rules. RCW 34.05.328 (1)(i)**

Federal, state, and local agencies that are permit holders are directly notified by SBCC of any proposed changes to the permit fee rule.