

Maine Technical Building Codes And Standards Board

January 31, 2025

Senator Anne Beebe-Center
Representative Travis Hasenfus
Joint Standing Committee on
Criminal Justice and Public Safety
100 State House Station
Augusta, ME 04333

Senator Chip Curry
Representative Traci Gere
Joint Standing Committee on
Housing and Economic Development
100 State House Station
Augusta, ME 04333

Annual Report for 2024

Dear Senator Anne Beebe-Center, Representative Travis Hasenfus, and Members of the Joint Standing Committee on Criminal Justice and Public Safety, Senator Chip Curry, Representative Traci Gere, and Members of the Joint Standing Committee on Housing and Economic Development,

In accordance with the provisions of 10 MRS Section 9722, the Technical Building Codes and Standards Board (hereafter “the Board”) is providing the Joint Standing Committee (hereafter “the Committee”) with our annual report. This report is presented to provide the members of the Committee, as well as other members of the Legislature and the general public, an overview of the work performed by the Board, explain opportunities to improve the efficiency and effectiveness of the Maine Uniform Building and Energy Code (hereafter “the MUBEC”), explain the nature of conflicts between the MUBEC and existing statutes, and suggest alternative methods of funding activities related to the MUBEC.

Overview of Board Activities

During 2024, the Board met ten (10) times, greatly exceeding the quarterly meeting cycle envisioned in the original legislation. The focus of these three-hour long meetings was reviewing and amending the 2021 editions of the five (5) ICC codes and four (4) standards that comprise the MUBEC. See Exhibit 1. The update and adoption of the MUBEC is a very time-consuming process that requires a large volume of work and requires extraordinary commitment from the

volunteer board members and staff. In addition to full board meetings, in the fall of 2023, the board revived the Training and Certification sub-Committee (TCC). In 2024, the TCC also met ten (10) times to discuss the updating of, and innovation for, the code enforcement training program.

Most board members participated in the work of Technical Advisory Groups (TAGs) which focus on specific aspects of the MUBEC. The TAG meetings were informal and public participation was encouraged. The job of the TAGs is to “get down in the weeds” and report their findings to the Board on the finer intricacies of code conflicts and compatibility. During 2024, the Energy Code TAG had to meet two (2) additional times to finalize the rule changes to the Energy Stretch Code. In total, the Board members contributed well over 500 volunteer hours.

Recommendation 1: Increase in Staffing

The Division of Building Codes and Standards (DBCS) within the Inspection & Prevention Division of the State Fire Marshal’s Office (SFMO), who staff and support the Board, currently has only two (2) staff positions. These positions are not dedicated just to the MUBEC and the Technical Building Codes and Standards Board. The DBCS oversees the certification, continuing education and technical assistance for all Maine Code Officers pursuant to Title 30-A Section 4451 which includes the code enforcers of municipal Land Use, Shoreland Zoning and Plumbing. In July of 2025, it is anticipated that DBCS will be moving from the Office of the State Fire Marshal to the Maine Office of Community Affairs (MOCA). Technical code assistance will be very important to support the needs of the DBCS program and to work cohesively with the other components of MOCA such as municipal planning and the housing opportunity programs. The current staffing level is not adequate to perform the functions required. Specifically:

- The lack of adequate staff places considerable strain on volunteer Board members.
- The lack of adequate staff negatively impacts the training and certification of Code Enforcement Officers. Trained CEOs are essential in ensuring compliance with the MUBEC. Maine’s transition to more resilient and energy efficient buildings required by the MUBEC will be slower, or not happen at all, without appropriate enforcement.
- The lack of adequate staff leaves no time to provide technical assistance to the code officers, design professionals, contractors and building/homeowners that seek it. The codes that comprise the MUBEC are complicated and get more so with every code cycle. The Board believes the ability to provide technical assistance to the people of Maine would reduce discontent, increase code compliance and make our buildings more energy efficient and resilient.

The Board recommends that the number of staff supporting the Board be increased from two to five. The Board envisions the following staffing:

One (1) State Building Official (existing position) – Manages DBCS staff, directly supports Board as “Technical Codes Coordinator”, designing training programs and curriculum, interdepartmental outreach, and pursues funding in the way of grants and other opportunities.

One (1) Digital Information and Certification manager (new position) – Manage website (and social media), testing platform, certification of CEOs and providing technical assistance and interpretations.

Two (2) State Building Code Technical Advisor (new positions) – Organize and assist in training coverage and presentations, supports municipalities by assisting with interpretations and inspection support (not to be confused with coverage), providing technical assistance (similar to state plumbing and electrical inspectors.)

One (1) Administrative Assistant (existing position) – Supports the Board and other division staff along with other division administrative duties.

Recommendation 2: Make the MUBEC the Base Code for State Agencies

Pre-MUBEC, many state agencies wrote their own codes or adopted codes (hereafter “Legacy Codes”) that are not part of the MUBEC. Examples include the State Fire Marshal’s Office (SFMO), the Department of Professional and Financial Regulation (PFR) and the Department of Health and Human Services (DHHS). These legacy codes sometimes conflict with the MUBEC. The Board has generally been successful in resolving conflicts between the codes adopted by the SFMO and MUBEC. Unfortunately, many of the conflicts between the codes adopted at PFR and the requirements of MUBEC remain unresolved. See attached Exhibit 2.

Since the MUBEC is the “law” everywhere in Maine, state agencies should lead by example by embracing and adopting the MUBEC. The Board recommends that the legislature stipulate that compliance with the requirements of the MUBEC constitutes compliance with the Fuel Board rules for the proper installation and servicing of oil, solid fuel, propane, and natural gas burning equipment and that conflicts are to be resolved in favor of the MUBEC. To accomplish this, the legislature might need to clarify Title 10 §9725 and Title 32 Chapter 139 (and possibly other statutes) to require use of the MUBEC, perhaps with a few specific additional requirements or exclusions.

Recommendation 3: Increase in Funding

Currently, the activities of the Building Codes program are funded solely by an additional four cents per square foot surcharge levied for plan reviews conducted by the SFMO. According to Title 25 Section 2450-A: *“The revenue collected by this surcharge must be deposited into the Uniform Building Codes and Standards Fund”*.

The board feels that the funding is inadequate to run the program, let alone, fund additional needed staff or to sustain the full scope of the program through future budget cycles. For example, the 2024 budget included a line item for training of code officials, but the budget for that line item was zero. As stated earlier under staffing, the DBCS has recently been dependent on grant funding which is not secure with changing federal priorities.

In addition to not generating sufficient revenue, the current method of funding is not equitable because only a small portion of building construction projects in Maine are reviewed by the SFMO. See Exhibit 3.

Not only is the current fee revenue inadequate, requiring only the projects reviewed by the SFMO to provide funding for the MUBEC, it is not equitable and does not allow the program to reach its potential. The Technical Building Codes and Standards Board recommends that the legislature increase revenue by increasing the surcharge to adequately cover expenses or other dedicated funding sources. The Board feels increased funding is necessary to continue to provide education and training to code officials and include design professionals, contractors, and the public to streamline operations and expedite construction timelines.

The Board looks forward to fulfilling its responsibility to update the building code for uniformity, building energy efficiency, and strengthen community resiliency in Maine. This letter has been reviewed and approved by the Board with a unanimous vote of 7 to 0 on January 31, 2025.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Gregory Day', written in a cursive style.

Gregory Day
Assistant State Fire Marshal
Technical Building Codes and Standards Board, Chair designee

Exhibit 1: MUBEC Codes and Standards

- Commercial Building Code – International Building Code (IBC) provides requirements for the construction, enlargement, replacement, relocation, use and occupancy of commercial buildings.
- Existing Buildings Construction Code – International Existing Building Code (IEBC) provides the scope for the alteration, addition, repair, relocation and change of occupancy or use of existing buildings.
- Residential Building Code – International Residential Code (IRC) provides requirements for the construction, alteration, movement, enlargement, replacement repair, use and occupancy of residential one- & two-family buildings and townhomes not more than three (3) stories in height.
- Energy Codes – International Energy Conservation Code (IECC), which is split into provisions applying specifically to Residential and commercial construction, as defined specific to the IECC.
 - Commercial Energy Provisions (IECC) – provide requirements for energy efficient construction practices in commercial buildings and residential buildings greater than three (3) stories in height.
 - Residential Energy Provisions (IECC) – provide requirements for energy efficient construction practices in all residential buildings three (3) stories or less.
- Mechanical Systems & Ventilation Code – International Mechanical Code regulates the design, installation, maintenance, alteration, and inspection of mechanical systems that are permanently installed to provide control of environmental conditions and related processes.
- ASHRAE 90.1 Energy Standard for Buildings Except Low-Rise Residential Buildings – provides minimum energy efficiency requirements for the design, construction, and planning for operation and maintenance of new buildings, new portions of building or the systems of buildings other than low-rise residential.
- Commercial Ventilation Standard – ASHRAE 62.1 Indoor air quality provide requirements for ventilation and mechanical systems in commercial construction excluding 1 & 2 family dwellings and town houses.
- Residential Ventilation Standard – ASHRAE 62.2 Indoor air quality provide requirements for ventilation and mechanical systems in residential construction excluding 1 & 2 family dwellings and town houses.
- Radon – Standard E-1465-2008, Standard Practice for Radon Control provides the requirements for the installation and management of radon systems when they are required.

Exhibit 2: MUBEC's conflict with legacy codes

The MUBEC includes requirements for the safe and energy efficient installation of mechanical systems including boilers, HVAC systems, ventilation, ductwork, refrigeration, and piping. Many of these requirements reside in the International Mechanical Code (hereafter "the IMC"). Importantly, the IMC is coordinated with the other MUBEC codes and the ASHRAE standards. However, the Maine Fuel Board has statutory responsibility (per MRS Title 10 §9725) to issue their own rules, dictating the standards for the installation of boilers, water heaters, and other fuel fired equipment. The Fuel Board continues to adopt their own independent standards and adopts certain National Fire Protection Association (NFPA) codes that conflict with the MUBEC.

To minimize conflict, the Board has excluded chapters 8, 10, and 13 of the IMC, deferring to the Fuel Board. This change requires practitioners and other stakeholders in Maine's design and construction industry, including CEOs, to refer to, and comply with, the Fuel Board rules in addition to the IMC and ASHRAE Standard. The Fuel Board rules add complexity, and potential costs, without materially benefiting the people of Maine. This increase in complexity and cost undoubtedly adds strain to compliance and enforcement.

Exhibit 3: Additional reason for lack of funding

The current method of funding is not equitable in part, due to the portion of construction projects in Maine which are reviewed. By law, the SFMO would review the plans for a 100-room hotel but, generally, the SFMO would not review the plans for a 50-unit apartment building or a single-family home. (This is because neither the apartment building, nor the single-family home, are places of public accommodation.) Thus, while all three projects must comply with the MUBEC, only one pays the surcharge that supports activities related to the MUBEC.