1. Type of Estimate and Analysis		2. Date		
☑ Original		02/06/2023		
3. Administrative Rule Chapter, Title and Number (and Clearinghouse Number if applicable) SPS 361 to 366				
4. Subject Commercial Building Code				
5. Fund Sources Affected □ GPR □ FED ⊠ PRO □ PRS □ SEG □ SEG-S	6. Chapter 20, Stats. Appropriations Affected $s.20.165(2)(j)$			
7. Fiscal Effect of Implementing the Rule				
No Fiscal Effect     Increase Existing Revenues	🛛 Increase	Costs	Decrease Costs	
Indeterminate Decrease Existing Revenues	Could Absorb Within Agency's Budget			
8. The Rule Will Impact the Following (Check All That Apply)				
□ State's Economy □ Specific Businesses/Sectors				
Local Government Units  Public Utility Rate Payers				
Small Businesses (if checked, complete Attachment A)				
9. Estimate of Implementation and Compliance to Businesses, Local Governmental Units and Individuals, pers. 227.137(3)(b)(1).				
\$0				
10. Would Implementation and Compliance Costs Businesses, Local Governmental Units and Individuals Be \$10 Million or more Over Any 2-year Period, pers. 227.137(3)(b)(2)?				

🗌 Yes 🖾 No

#### 11. Policy Problem Addressed by the Rule

The primary objective of this rulemaking project is to evaluate and update the Wisconsin Commercial Building Code, chapters SPS 361-366. This rulemaking update is intended to keep this Code consistent with dynamic, contemporary regional and national construction and fire prevention practices and standards, and with legislation enacted since the previous update of this Code. The update is also needed in order to meet the content and timeliness requirements for the energy conservation provisions of this Code as established in sections 101.027 (2) and (3) of the Wisconsin Statutes.

In addition, the project is expected to evaluate other administrative code chapters that may be affected by this update of the Wisconsin Commercial Building Code including, at least, chapters SPS 303, 305, 314, 316, 318, 340, 343, and 345, relating to administrative procedures; licenses, certifications and registrations; fire prevention; electrical; elevators, escalators, and lift devices; gas systems; boilers and pressure vessels; anhydrous ammonia; mechanical refrigeration; rental unit energy efficiency; solar energy systems; cleaning methods for historic buildings; buildings constructed prior to 1914; and plumbing; respectively.

This evaluation identified a need to move the authority for certain plumbing requirements out of ch. SPS 362 of the Commercial Building Code and into ch. 382 of the Wisconsin Plumbing Code. That change is incorporated into this rule project to ensure that the removal from the Commercial Building Code and insertion in the Plumbing Code happen simultaneously to avoid either a gap or overlap in regulation.

12. Summary of the Businesses, Business Sectors, Associations Representing Business, Local Governmental Units, and Individuals that may be Affected by the Proposed Rule that were Contacted for Comments.

This proposed rule was developed in consultation with the Wisconsin Commercial Building Code Council. The Commercial Building Code Council is authorized and created under s. 15.407 (18), Stats, and includes 11 members from different areas affected by the commercial building code. The council's duties are outlined in s. 101.023, Stats., which states:

"The commercial building code council shall review the rules relating to constructing, altering, adding to, repairing, and maintaining public buildings and buildings that are places of employment. The council shall consider and make recommendations to the department pertaining to these rules and any other matters related to constructing, altering, adding to, repairing, and maintaining public buildings and buildings that are places of employment. In preparing rules under this chapter that relate to public buildings and to buildings that are places of employment, the department shall consult with the commercial building code council."

Beginning in February 2021, the Wisconsin Commercial Building Code Council held monthly meetings to comprehensively review significant changes adopted in updated versions of the model building codes and other standards incorporated by reference in the rule.

The following is a summary of the comments received during the 60-day comment period:

-- Gail Nordheim from 350 Wisconsin: "350 Wisconsin is a part of an international coalition of organizations seeking to make transformational progress toward environmental justice and toward solving our planet's climate crisis. Building decarbonization is central to 350 Wisconsin's mission. The Department of Energy states that commercial buildings generate 16% of all U.S. carbon dioxide emissions. Therefore we applaud the Department of Safety and Professional Services in their efforts to update the commercial building codes now under review. These updates will reduce emissions. By adopting this version of the code the state agency is doing the right thing as this code update puts Wisconsin on the path to being a regional leader.

The economic impact of the updated codes is clear. A 2019 analysis by the Midwest Energy Efficiency Alliance indicated that if Wisconsin updated to the 2018 International Energy Conservation Codes (IECC), it would save 15% of energy costs based on a weighted average of all building types. This would result in a first year savings of \$2,700,000 based on commercial construction levels in Wisconsin. The proposed codes move Wisconsin to the 2021 IECC for even greater savings.

Updating Wisconsin's Commercial Energy Code would lead to substantial positive economic impacts including but not limited to:

1. High-quality job creation in construction-related industries;

2. Reduction in utility bills for consumers whereby energy cost savings can lead to more disposable income for people to use in the wider economy;

- 3. Health cost savings and improved occupant health and comfort;
- 4. Reduction in electricity use;
- 5. Cost-effectiveness in construction, cheaper to build to the most updated code when looking at the life cycle cost;
- 6. Greater building resilience following extreme weather events;
- 7. Ability to market buildings as healthier with lower utility costs to businesses/tenants; and
- 8. Greater access to federal funding opportunities regarding codes and energy efficiency.

If we were to enact codes that match the 2021 standards, we could save up to 30% more energy, which could result in \$170 million in savings for Wisconsinites by 2030. Updating codes would result in energy savings, monetary savings, more resilient towns and cities, more jobs and put money back into consumer's pockets."

-- Justin Koscher from Polyisocyanurate Insulation Manufacturers Association (PIMA): "

The Polyisocyanurate Insulation Manufacturers Association (PIMA) is writing in support of the proposed rule updating Wisconsin's commercial building energy code (chapter SPS 363), which is part of the Department's larger update to the Commercial Building Code, chapters SPS 361-366. Adopting this draft rule will bring the State's commercial building

energy code in line with the 2021 International Energy Conservation Code (IECC) and fulfills a key recommendation from the Governor's Task Force on Climate Change. Also, we applaud the State for removing the weakening amendments adopted in prior code adoption cycles that had the effect of diluting the energy code's effectiveness in reducing energy waste and building operating costs. Keeping the State's energy code updated to the current version of the IECC is an important and cost-effective policy for addressing the negative economic and environmental impacts caused by building energy waste – a sector that is responsible for 40% of total U.S. energy use. This practice will help Wisconsin achieve a range of benefits, including:

- Reduced air pollution;
- Consumer and business cost savings;
- · Increased flexibility and reliability of our energy system and grid;
- Reduced peak energy demand; and
- Improved energy productivity.

Maintaining the State's energy code to current standards ensures that Wisconsin will benefit from the regular improvements in construction practices and component technologies. This is especially true for commercial buildings where the relatively fast pace of innovation has resulted in significant energy savings over the last several code cycles. Under the 2021 IECC, the average energy use intensity of commercial buildings in Wisconsin will improve by approximately 9% compared to the current State code.

For every model code update, the Pacific Northwest National Laboratory and U.S. Department of Energy provide statespecific data on energy savings and incremental construction costs illustrating that building owners and occupants (and the State as a whole) quickly benefit from the adoption of the IECC without weakening amendments. The simple payback for the 2018 IECC and 2021 IECC in Wisconsin is two years and immediate, respectively."

-- Eric Lacey from Responsible Energy Codes Alliance (RECA): "The Pending Rule updating the Wisconsin Commercial Building Code would generate positive energy and cost savings for the owners and occupants of commercial buildings statewide and would help Wisconsin achieve meaningful greenhouse gas reduction in a costeffective manner. We urge the Department to move quickly to finalize this rule and to continue to improve both commercial and residential statewide energy codes going forward. RECA's members and supporters have been involved in energy code development and adoption for over twenty years, and we offer our assistance and experience as you work to maximize building energy efficiency."

-- Ben Rabe from New Buildings Institute (NBI): "NBI is a national non-profit supporting better buildings that reduce energy use and carbon emissions through research, policy guidance and market transformation. We pride ourselves on technical expertise in cost-effective, scalable technologies that reduce energy use and carbon emissions in buildings in both the residential and commercial sectors. NBI urges to fully adopt the 2021 IECC commercial provision, which also apply to large multifamily buildings.

Wisconsin's current commercial energy code is based on the 2015 IECC and ASHRAE 90.1-2013 and was adopted in 2018. Since then, other Midwestern states such as Illinois, Minnesota, and Michigan have begun the process to adopt the 2021 IECC or equivalent as their commercial energy code. The 2021 IECC is a clear and substantial improvement over the 2015 version and will provide a range of energy efficiency, comfort, resiliency, and environmental benefits for the owners and occupants of commercial and large multifamily buildings in Wisconsin. A recent study by the U.S. Department of Energy (DOE) indicates that if Wisconsin updates from the 2015 IECC to the 2021 IECC, Wisconsin residents would experience the following savings:

• \$0.055 per square foot in annual savings

- \$1.144 per square foot decrease in construction costs
- \$3.23 per square foot in life-cycle cost savings over a 30-year period
- 5.3 metric ton reduction in statewide CO2 emissions by 5.3 over a 30-year period

Additionally, these changes to the energy code will help the State meet the goal for all electricity consumed within the state to be 100 percent carbon-free by 2050 outlined in the Clean Energy Plan. For these reasons, NBI encourages Wisconsin to move forward with the adoption of the 2021 IECC commercial provisions."

-- Stacey Paradis from Midwest Energy Efficiency Alliance (MEEA): "Thank you for the opportunity to provide comments on the adoption of the 2021 International Energy Conservation Code (IECC) for commercial buildings. The Midwest Energy Efficiency Alliance (MEEA) is a member-based non-profit organization serving as a collaborative network, promoting energy efficiency to optimize energy generation, reduce consumption, create jobs and decrease carbon emissions in all Midwest communities. MEEA has previously worked in Wisconsin on energy codes and provided technical assistance to the Wisconsin Department of Safety and Professional Services in previous energy code adoption cycles.

MEEA supports the current Wisconsin Commercial Building Code draft rules published for public comment. Updating the statewide commercial energy code to the 2021 IECC would not only improve building efficiency, create more comfortable and healthier indoor environments and result in greater building resilience, but it would also provide numerous economic benefits to Wisconsin's residents and business owners.

Adopting the 2021 IECC will reduce energy use and costs for Wisconsin residents and business owners, provide the state with health cost savings, create jobs and allow Wisconsin to access future federal funding for energy code and energy efficiency advancements. In order to realize greater economic, resilience and health benefits, MEEA strongly encourages Wisconsin to adopt the 2021 IECC for commercial buildings."

13. Identify the Local Governmental Units that Participated in the Development of this EIA. None

14. Summary of Rule's Economic and Fiscal Impact on Specific Businesses, Business Sectors, Public Utility Rate Payers, Local Governmental Units and the State's Economyas a Whole (Include Implementation and Compliance Costs Expected to be Incurred)

These proposed rules may have an economic impact on small businesses, as defined in s. 227.114 (1), Stats., and will be submitted to the Small Business Regulatory Review Board for a determination on whether the rules will have a significant economic impact on a substantial number of small businesses. The Department of Safety and Professional Services estimates a total of \$247,000 in one-time costs for staffing and supplies and \$4,600 in annual costs for IT subscriptions to implement the rule. The updates are necessary for the Department to perform the functions stated in SPS 361.01. The estimated costs may not be absorbed in the agency budget.

15. Benefits of Implementing the Rule and Alternative(s) to Implementing the Rule

The primary purpose of the codes under consideration is to protect public safety, health, and welfare. Periodic review and update of these codes is necessary to ensure that they still achieve that purpose. In addition, the review and update allows the opportunity to recognize and stay current with new construction products and practices. The review and update under this scope statement will include evaluation of the 2018 and 2021 editions of the above-mentioned model building code suite for incorporation. The primary alternative would be to not perform this rule-review process. This would reduce the public benefits that would otherwise occur by performing this review.

16. Long Range Implications of Implementing the Rule

The long range implications of implementing the rule are the update of the Commercial Building Code standards and practices throughout Wisconsin to ensure public health and safety and ensure Wisconsin buildings are safe.

17. Compare With Approaches Being Used by Federal Government

Energy Conservation Requirements - Section 304 (a) of the Energy Conservation and Production Act (ECPA) (Pub. L. No. 94-385), as amended, requires the US Department of Energy (DOE) to establish energy conservation standards and encourage states and local governments to adopt and enforce those standards through their building codes and other construction control mechanisms.

42 U.S.C. 6833 requires the DOE secretary to review any new revision of the International Energy Conservation Code (IECC) and American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ANSI/ASHRAE/IESNA) Standard 90.1 within 12 months after the publication date to determine whether the revision will improve energy efficiency in commercial buildings. If the DOE Secretary determines that the standard will achieve energy savings, each state is required to review the standards no later than 2 years after publication and certify that the state has reviewed and updated provisions of the state's commercial building code to incorporate provisions of the revised standards to the extent that the code will meet or exceed the revised standard.

DOE issued a determination on February 27, 2018, that ASHRAE Standard 90.1-2016, as compared to ASHRAE Standard 90.1-2013, would achieve greater energy efficiency in buildings subject to the code. DOE estimates national savings in commercial buildings of approximately 8.3% energy cost savings, 7.9% source energy savings, 6.8% site energy savings, and 4.2% carbon emissions savings.

DOE issued a determination on July 2, 2021, that ASHRAE Standard 90.1-2019, as compared to ASHRAE Standard 90.1-2016, would achieve greater energy efficiency in buildings subject to the code. DOE estimates national savings in commercial buildings of approximately 4.3% energy cost savings, 4.3% source energy savings, 4.7% site energy savings, and 4.2% carbon emissions savings.

On December 10, 2019, DOE issued a determination that the 2018 IECC, as compared to then 2015 IECC would achieve greater energy efficiency in buildings subject to the code as compared to the 2018 IECC. DOE estimates national savings in residential buildings of approximately 1.97% energy cost savings, 1.91% source energy savings, 1.68% site energy savings.

On July 19, 2021, DOE issued a determination that the 2021 IECC, as compared to the 2018 IECC, would achieve greater energy efficiency in buildings subject to the code as compared to the 2018 IECC. DOE estimates national savings in residential buildings of approximately 8.66% energy cost savings, 8.79% source energy savings, 9.38% site energy savings.

Similar to federal requirements, s. 101.027 (2), Wis. Stats., requires the department to review the energy conservation code and promulgate rules to improve energy conservation. The department is required to consider any cost of the required compared to any reasonable economic and environmental benefit of the requirement.

The review process used to evaluate the IECC and ASHRAE Standard 90.1 as part of this rule revision meets both federal and state requirements for reviewing energy conservation standards for use in commercial buildings. Wisconsin modifications to the IECC and ASHRAE Standard 90.1 are found in ch. SPS 363.

Accessibility Requirements -In addition to energy conservation requirements, commercial buildings are also required to meet federal requirements for accessibility for the disabled. These regulations include the following:

28 CFR 35 – Nondiscrimination on the Basis of Disability in State and Local Government Services.

28 CFR 36 - Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities.

24 CFR 40 – Accessibility Standards for Design, Construction, and Alteration of Publicly Owned Residential Structures.

24 CFR 41 – Policies and Procedures for the Enforcement of Standards and Requirements for Accessibility by the Physically Handicapped.

24 CFR 100 – Discriminatory Conduct Under the Fair Housing Act.

Both 28 CFR 35 and 28 CFR 36 require public buildings and commercial facilities, including government-owned and operated buildings and facilities, to be designed, constructed, and altered in compliance with the accessibility construction regulations specified under the federal Americans with Disabilities Act Accessibility Guidelines. 24 CFR 40 and 41 provide technical guidance on the design, construction, and alteration of dwelling units as required by the federal Fair Housing Amendments Act of 1988. The American National Standard: Accessible and Usable Buildings and Facilities, (ICC A117.1), which is incorporated into 24 CFR 100 by reference, is the federal technical standard for the design of housing and other facilities which are accessible to persons with disabilities as referenced in the federal Fair Housing Act.

Wisconsin ensures commercial buildings meet federal accessibility requirements through its adoption of the IBC. Chapter 11 of the IBC addresses accessibility and incorporates ICC A117.1 as a secondary standard.

18. Compare With Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota) Illinois:

Currently, State Board of Education (ISBE) enforces building codes for their own structures. All other codes in the state are adopted by local municipalities, fire protection districts and counties. The IL Energy Conservation Act requires the State to adopt the current version of the IECC for all commercial and residential occupancies. The residential portion of the state's adoption is a mini-max code statewide. Illinois also adopts its own Statewide plumbing code.

The 2018 IECC applies to residential and commercial construction for which permits are issued statewide. The Illinois State Board of Education has adopted the 2018 IECC, 2015 IBC, IFC, IMC, IFGC, IPMC, IEBC for Pre-K thru 12 public Education Facilities (other than vehicular), but do not apply to Chicago. IBC adopted by Dept. of Health for hospitals where local codes do not apply.

The below codes are in effect for State owned facilities:

- 2015 International Building Code
- 2018 International Energy Conservation Code
- 2015 International Existing Building Code
- 2015 International Fire Code (excluding Chapter 4)
- 2015 International Fuel Gas Code
- 2015 International Mechanical Code
- 2015 International Property Maintenance Code

#### Iowa:

The State of Iowa imposes a combination of state required codes and locally adopted codes. When municipalities update their codes, they are required to update to the codes adopted by the state. The Iowa Building Code Bureau adopts the IBC, IRC, IMC, IEBC and IECC. The State Fire Marshal adopts the IFC. The Iowa Plumbing and Mechanical Code Advisory Council is responsible for the adoption of the state plumbing code. The state adopted versions of IFC and IECC are required to be enforced for all occupancies statewide by state and local government enforcement agencies. Local jurisdictions have the option of adopting the remaining state adopted codes or a stricter code as determined by the jurisdiction. Consequently, many local jurisdictions have adopted the IPC.

The Iowa Code with amendments is based on the 2015 editions of the International Codes, except for the IMC which is the 2021 edition and the IECC which is the 2012 edition. The state IFC and IECC are required for all construction. Iowa is a home-rule state and there is no law forcing them to update their codes. When they do update their codes, local jurisdictions with populations in excess of 15,000 have the option of adopting the prevailing state adopted codes or a stricter code as determined by the jurisdiction. Michigan:

The Michigan Construction and Fire Codes are promulgated by the Construction Code Commission and State Fire Safety Board and are evaluated for revisions or modifications every three years (statutorily mandated) except for the residential code, which is on a flexible cycle of every three to six years. Once codes have been passed by those bodies, the regulations must be approved by the state legislature.

The code adoption process follows the I-Code three-year cycle (except for the IRC, which is a 3-6-year flex cycle), with a target effective date in January one year following the release of the new I-Codes. Codes are updated as needed every year.

The current editions of the MI Building, Residential, Mechanical, Plumbing., and Existing Building Codes have not been posted at this time.

#### Minnesota:

The adopting authority for the Minnesota State Building Code the Minnesota Department of Labor and Industry (DLI), Construction Codes & Licensing Division (CCLD). Jurisdictions that adopt building codes must adopt the Minnesota State Building Code or remain at their present level. CCLD has the authority to develop fire codes but delegates the authority to the State Fire Marshal who appoints a committee of fire chiefs and fire marshals to review and make recommendations for rulemaking. The State Fire Marshal administers the Minnesota Fire Code.

In 2015, the Minnesota Legislature passed a law requiring ICC codes be updated no more than every six years. That restriction does not apply to the codes administered by the authoritative state electrical board, plumbing board and high-pressure piping board.

19. Contact Name	20. Contact Phone Number
Joseph Ricker	608-267-2242

This document can be made available in alternate formats to individuals with disabilities upon request.

# ATTACHMENT A

1. Summaryof Rule's Economic and Fiscal Impact on Small Businesses (Separatelyfor each Small Business Sector, Include Implementation and Compliance Costs Expected to be Incurred)

2. Summary of the data sources used to measure the Rule's impact on Small Businesses

3. Did the agency consider the following methods to reduce the impact of the Rule on Small Businesses?

Less Stringent Compliance or Reporting Requirements

Less Stringent Schedules or Deadlines for Compliance or Reporting

Consolidation or Simplification of Reporting Requirements

Establishment of performance standards in lieu of Design or Operational Standards

Exemption of Small Businesses from some or all requirements

Other, describe:

4. Describe the methods incorporated into the Rule that will reduce its impact on Small Businesses

5. Describe the Rule's Enforcement Provisions

6. Did the Agency prepare a Cost Benefit Analysis (if Yes, attach to form)

🗆 Yes 🛛 No