



# Adopting the 2018 IECC

Midwest Building Energy Codes  
Conference



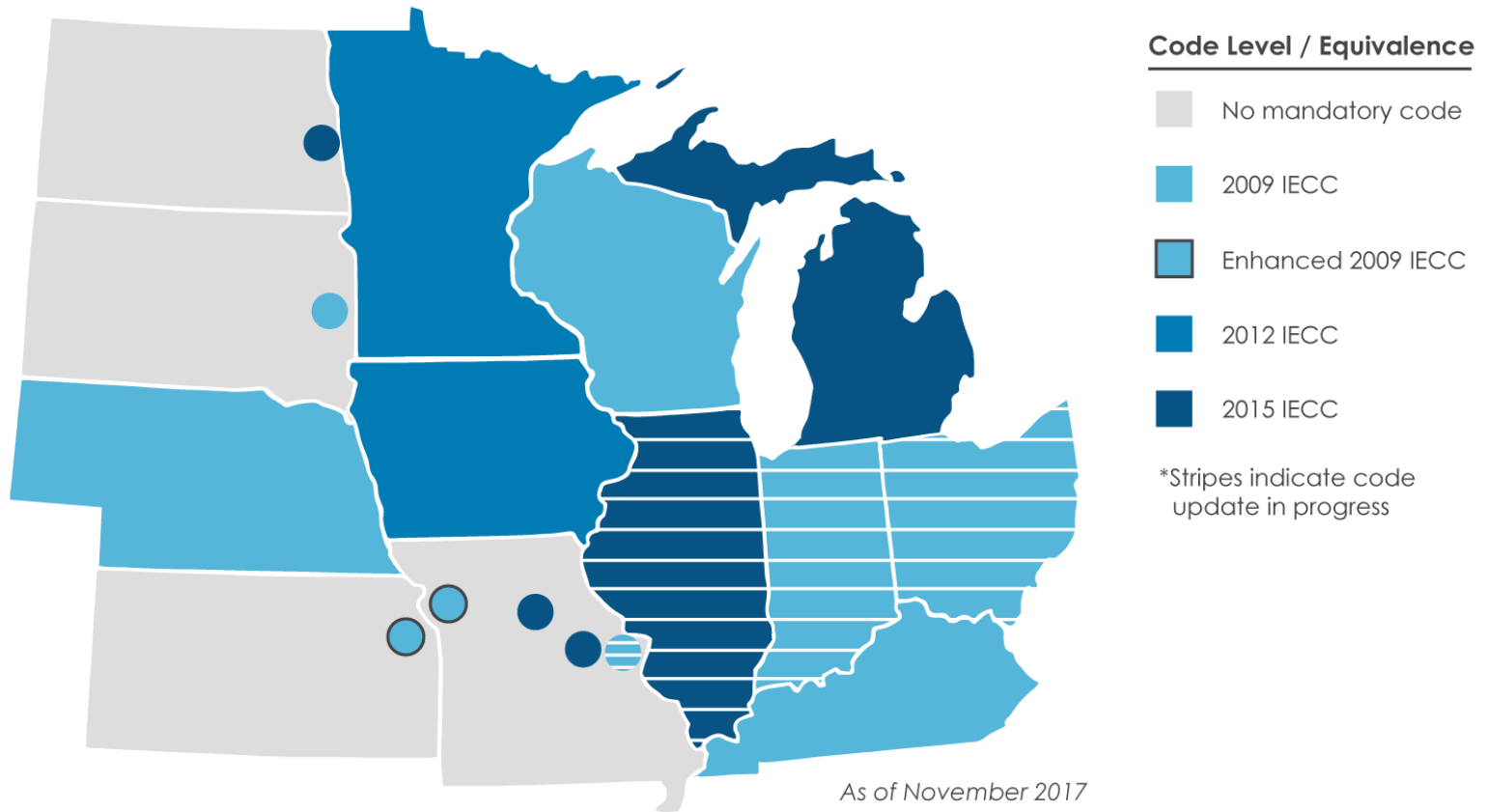
# Agenda

## *How to get involved with Adoption*

- Who's adopting the 2018?
- Understand Adoption process
- Review Guidance documents
- Engage Stakeholders
- Participate in the Process
- Submit Public Input

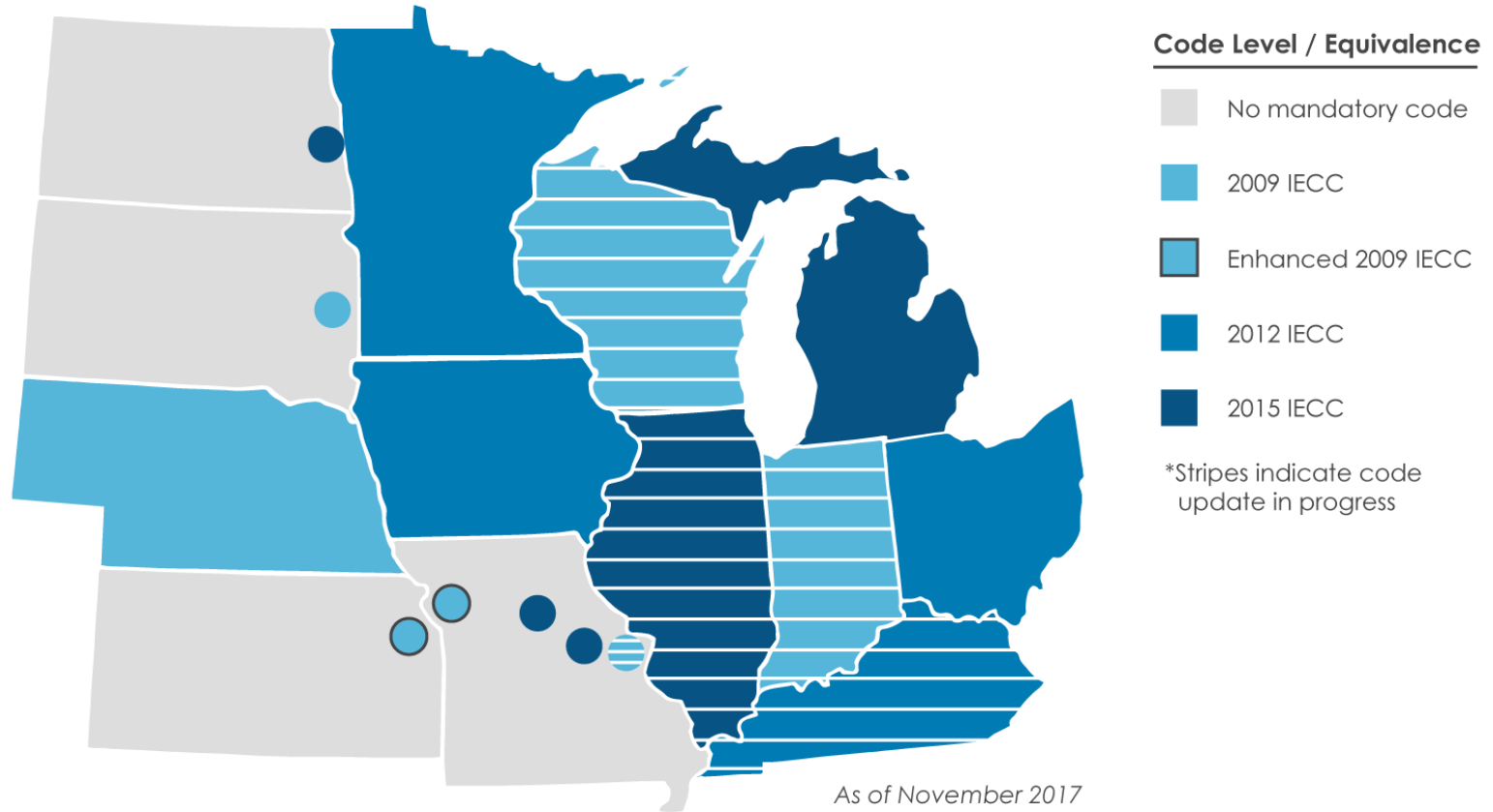
# Residential Building Energy Codes

## *Current Status in Midwest*



# Commercial Building Energy Codes

## *Current Status in Midwest*



# Adoption Process

- When does a state update?
  - No req. or,
  - Legislation specifying timeline to adopt
    - Typically 3-6 years
- Types of process – although each state differs
  - Legislative
    - Adopt by legislature or developed by agency and approved by legislature, signed by governor
      - Less opportunity for public engagement
  - Regulatory
    - Approval by regulatory agency and legislative committee or executive branch

# Adoption Timeline

## *Regulatory Process*

- Typically 1 – 1.5 years
- Steps in Adoption
  - Code Agency
    1. Notice of intent issued
    2. Review code + discuss amendments
      - Subcommittees to review various codes
    3. Proposed code
    4. Public hearings
    5. Final code to legislative body
  - Legislative Body
    1. Legislative review
    2. Public hearings
    3. Adopted date (maybe approved by Gov.), set implementation date

# Home Rule States

## *No Statewide Code*

- Similar process to state update
  - City Council/Mayor/Building Commission issue intent
  - Building Commission review code
    - Subcommittees to review various codes
  - Write Proposed Code
  - Building Commission holds public meeting
  - Once approved, must be approved by Council at public meeting

# Guidance Documents

## *Understanding the Energy Code*

### Key Changes in the 2018 IECC *Residential Code*

#### Window U-Factors- R402.1.2

Window U-factors will see a modest improvement in the 2018 IECC. Below is a comparison table between the 2015 and 2018 IECC by climate zone.

Climate Zone	2015 U-Factor	2018 U-Factor
4	.32	.32
5–8	.32	.30

#### Lighting Equipment– R404.1

A proposal to increase the percentage of high efficacy lamps in permanently installed fixtures from 75% to 90% passed. This will remain a mandatory requirement in the code.

#### Air Barrier & Insulation- R402.4.1.1

Added language to the air barrier and insulation installation table will specify the following:

- Supply and return register boots must be sealed to the subfloor or drywall
- Recessed lighting must be sealed to the finished surface
- Space behind electrical/phone boxes need to be insulated

#### ERV/HRV Fan Efficiency– R403.6.1

A minimum fan efficiency of 1.2 cfm/watt has been added for HRV and ERVs.

#### Energy Rating Index– R406

ERI scores will be increased to the levels in the table below. Where on-site renewable energy is included in the ERI calculation, buildings must meet or exceed the thermal envelope requirements in Table R402.1.2 of the 2015 IECC. The 2009 IECC envelope backstop will remain in effect for buildings without on-site generation.

Climate Zone	2015 ERI Score	2018 ERI Score
4	54	62
5	55	61
6	54	61
7	53	58
8	53	58

#### Heated Slab Insulation– R402.1.2

R-5 insulation has been added as a requirement in Table R402.1.2 for heated slabs in all climate zones.

#### Buried Ductwork in Attic– R403.3.6

Ducts that are tested to have a maximum leakage rate of 1.5 cfm25/100 sq. ft. to the outside, are insulated with  $\geq$  R-8 insulation, and have at least R-19 insulation above and to the sides of the ducts, count as being in conditioned space.

<http://www.mwalliance.org/sites/default/files/media/2018-IECC-Key-Efficiency-Changes.pdf>





# Guidance Documents

## *DOE Resources*

- Current state energy codes
- Cost-effectiveness analyses by state
- Final determinations
- Impact of model energy codes
- Energy code field studies
- Research, webinars, etc.

# Guidance Documents

## *Other Key Resources*

- ICC
- ASHRAE
- National Labs
- Regional/National Efficiency Orgs
- Green Building Websites

# Engage Stakeholders

## *Typical Stakeholders*

- Code officials (state and local)
- State Energy Office
- Builders, architects, engineers, energy raters
- Energy & environmental advocates,
- Utilities
- Manufacturers
- Construction trades
- Policymakers

# Engage Stakeholders

## *Less Represented Stakeholders*

- Low-Income Groups
- Municipalities
- Universities
- K-12 School Districts
- Fire Officials
- Real Estate Industry
- Homeowners
- Renters

# Participate

*The more the merrier!*

- Follow the process
- Attend committee meetings to review codes
  - Speak publicly about your experiences
- Submit comments to the agency
- Attend public hearings and testify on proposed codes
- Write to your building commissioner, representatives, governor, etc.

# Your involvement matters!

- Energy codes affect everyone
- Code adoption is a public process
- Best decisions are made after hearing from all sectors
- Energy codes are in place for 3-6 years
  - Public gets few opportunities to weigh in

# *Discussion*

Thank you!

*Ian Blanding*  
*Midwest Energy Efficiency Alliance*  
*[iblanding@mwalliance.org](mailto:iblanding@mwalliance.org)*

