

# Discussion of proposed updates to local building and fire codes as required by state law

Presenters: Mike Brennan, Development Services Director  
Gregg Schrader, Building Official  
Ken Carlson, Fire Marshal

Council Study Session April 25, 2016

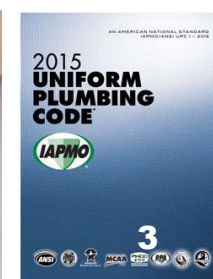
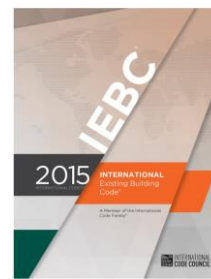
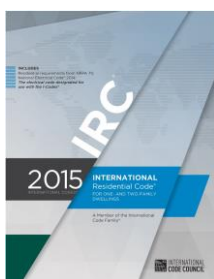
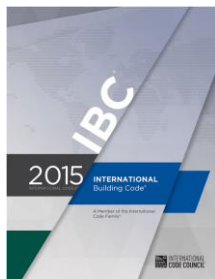


# Purpose of meeting:

- Provide an overview of code development and adoption process
- Overview of customer outreach efforts
- High level overview of significant changes in State and National Codes
- Review proposed significant changes in Bellevue amendments
- Receive feedback and direction from Council on proposed amendments

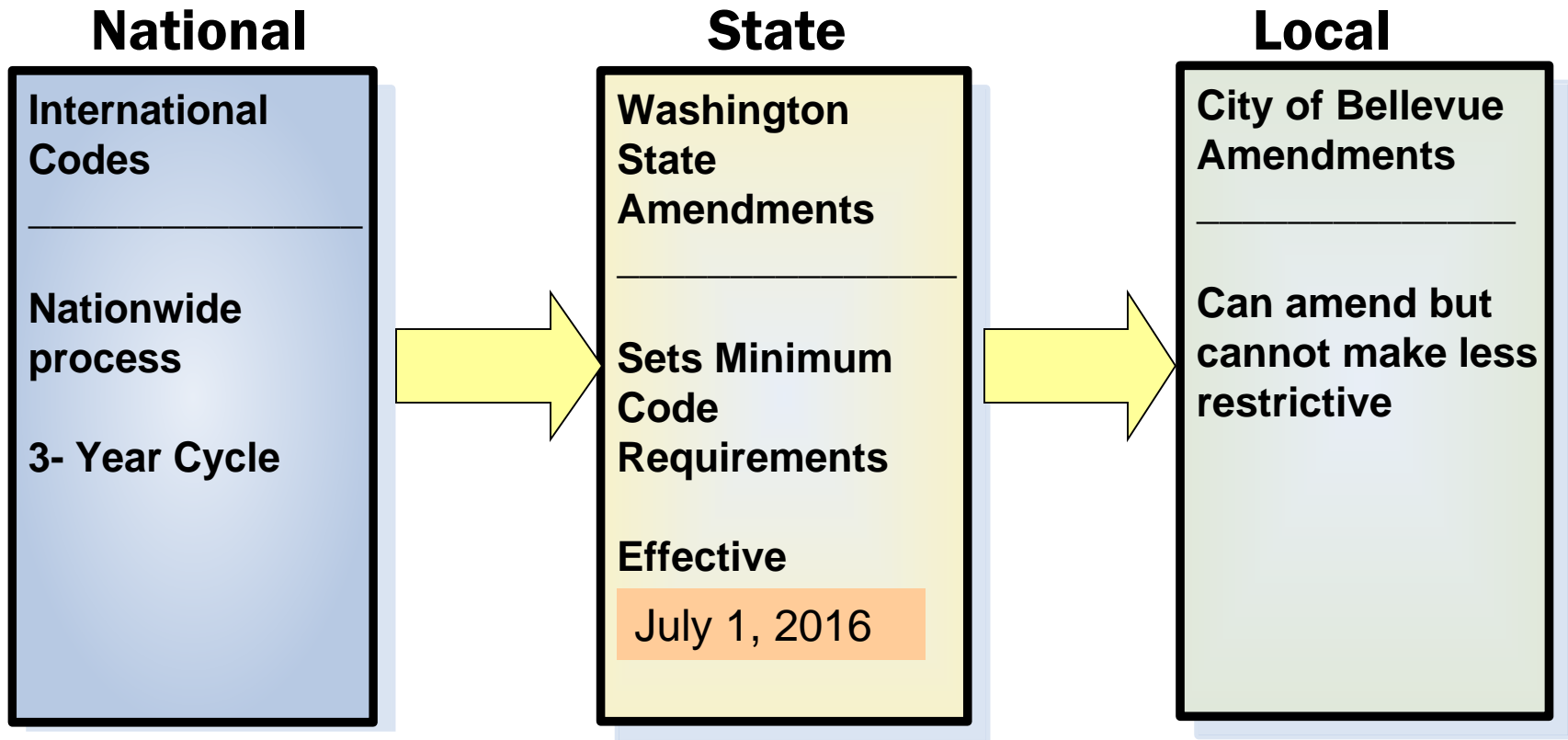
# Which Codes?

- 2015 International Building Code
- 2015 International Residential Code
- 2015 International Mechanical Code
- 2015 International Fuel Gas Code
- 2015 International Existing Building Code
- 2015 International Energy Conservation Code
- 2015 International Fire Code
- 2015 Uniform Plumbing Code





# Washington State Adoption





# Bellevue Adoption Process

- Open houses for our stakeholders:
  - 11/13/15 – (9:00 a.m. – noon)
  - 11/20/15 – (1:00 p.m. – 4:00 p.m.)
  - 4/11/16 – (noon – 4:00 p.m.)
- April 25, 2016 – City Council Study Session
- May 23, 2016 – City Council Study Session (if needed)
- June 20, 2016 – City Council Adoption
- July 1, 2016 – State wide implementation

# Context of Open Houses

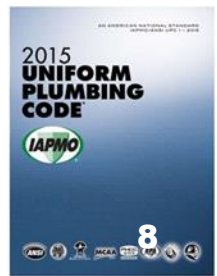
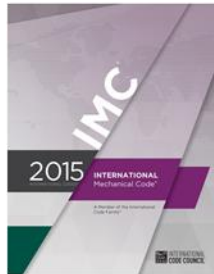
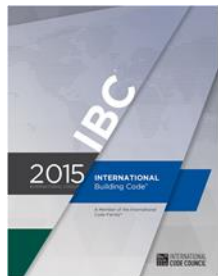
- Provided high level overview of National/State changes for each focus area.
- Attendees were asked these questions:
  - ☐ Does Bellevue have existing code amendments that cause you problems?
  - ☐ Are there existing amendments that we should consider deleting or amending?
  - ☐ Are there amendments that we should consider adding?
  - ☐ Other general feedback?

# Discussion Topics from Open Houses

- Sprinklers in single family homes
- Impacts of the new Washington State Energy Code
- Requirements for retroactive luminous markings in high-rise stairs
- Elevator hoistway pressurization in lieu of lobbies for fire service elevators
- Requirements for existing high-rise buildings to be equipped with emergency responder radio systems
- Current standpipe design pressures are not achievable.
- Structural cantilevered design for buildings taller than 240'
- Fire pump room requirements should be located in IBC as well as the IFC

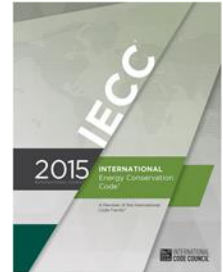
WASHINGTON STATE ENERGY CODE,  
RESIDENTIAL PROVISIONS

# Significant Changes in State & National Codes





# Updated Energy Code



The State of Washington has adopted and substantially amended the *International Energy Conservation Code*.

- ☐ Updated to achieve a higher level of energy conservation in new buildings
- ☐ All jurisdictions in the state are required to enforce
- ☐ The code cannot be amended locally



# Fire Alarm Systems

- Beginning July 1, 2017:
  - Fire alarm systems must be reviewed by an individual certified in fire alarms or a licensed professional engineer prior to application for permits
  - All inspection, testing, maintenance and programming shall be completed by an individual certified in fire alarms

# Building & Fire Codes



- 5 story wood frame buildings now allowed over 2 stories of concrete construction – total height not exceeding 70'
- All building code provisions for existing buildings now located in the IEBC
- New requirements for carbon dioxide use in beverage dispensing and marijuana production and processing



# Proposed Significant Changes in Local (Bellevue) Codes

# Our Process



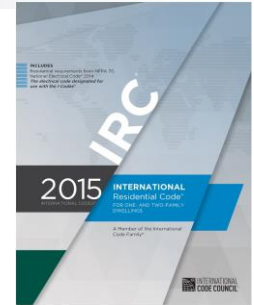
- Evaluate stakeholder feedback
- Work with area cities to align code amendments wherever possible
- Determine if state or national code now addresses a local amendment – if yes, delete amendment
- Determine effectiveness of existing amendment, modify or delete as appropriate

# Phasing Large Projects

- Proposing to add project phasing language to BCC 23.05 to facilitate large projects that are designed and constructed over multiple years



# Solar Ready?



- Should the City of Bellevue adopt Appendix Chapter U of the International Residential Code which would provide voluntary “Solar Ready” provisions for newly constructed 1 & 2 family buildings.
- 300 square foot roof area free of obstructions
- Electrical service space
- < \$2000 for average house



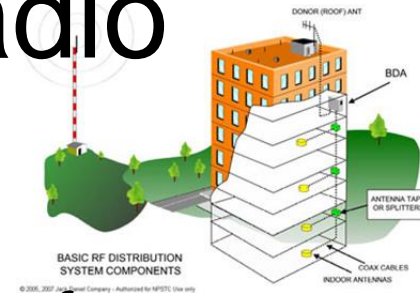
# Roof-top Amenity Spaces

- Clarification of requirements to allow roof-top amenity areas for multi-family buildings





# Emergency Responder Radio Coverage



- Currently evaluating effectiveness of mobile repeaters
- If found to be effective in certain buildings, a “fee in lieu of” fund will be proposed
- Would improve our communication ability in existing buildings and significantly reduce cost for owners/developers in certain new buildings

# Mobile Food Vending



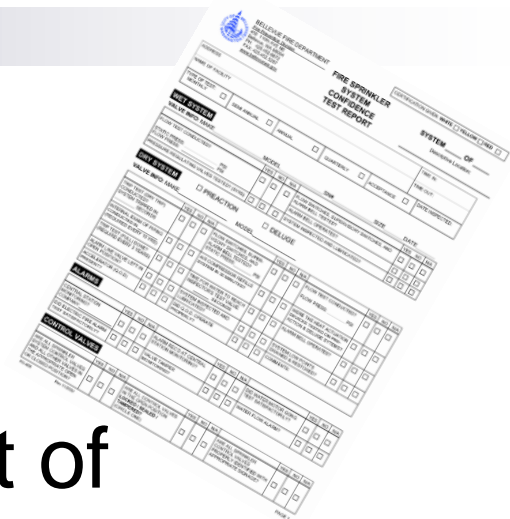
- Cooking hoods cleaned every 6 months
- Fire Extinguishers on hand
- Generators appropriately separated
- No blocking of exits, fire lanes
- Propane canisters in compliance with DOT regulations

# Construction mitigation for large wood buildings



- Applies to buildings:
  - Over 350,000 s.f. or
  - 200,000 s.f. when the building exceeds 50' in height or
  - 80,000 s.f. when exposures exist within 60'
- Modeled after San Jose CA ordinance developed after 11 alarm fire in 2002 (Santana Row)
- Requires installation of fire walls to limit contiguous areas of unprotected wood to 50,000 s.f. or less in area
- Requires exterior walls to be protected when exposures exist within 60'

# Confidence Testing



- Proposal to outsource oversight of confidence testing program effective 1/1/2017
- Will require council approval of interlocal agreement and contract
- Will significantly increase the % of fire/life safety systems that are inspected, tested and repaired as required

# Staff seeking direction on final preparation of adoption ordinances.

April 25, 2016	City Council Study Session
May 23, 2016	City Council Study Session (if needed)
June 20, 2016	City Council Adoption
July 1, 2016	Statewide Implementation





# Code Policy Issues

- Phasing Large Projects
- Voluntary Solar-Ready
- Roof-top Amenity Spaces
- Emergency Responder Radio Coverage
- Mobile Food Vending
- Construction Mitigation for Large Wood Buildings
- Confidence Testing