AGENDA

New York City Codes
History of NYC Code Revision
2017 Code Revision
NYC Energy Conservation Code
Waterfront Code Development
Existing Building Code
Electrical Code
Q&A
NYC DOB EFFORTS IN PUERTO RICO

- Response to recent seismic events
- Over 40 staff deployed since January 2020
- ATC 20 Rapid & Detailed Assessments
- Over 11,000 assessments performed
NEW YORK CITY CODES
CURRENT NYC CODES

- 2014 Construction Codes
  - General Administrative Provisions
  - Building Code
  - Energy Code
  - Fuel Gas Code
  - Mechanical Code
  - Plumbing Code
- 2011 NYC Electrical Code
- Existing Building Code
- Waterfront Code

Coming Soon
CONSTRUCTION CODES

What are the Construction Codes?
- Administrate Code
- Plumbing Code
- Building Code
- Fuel Gas Code
- Mechanical Code

What do they address?
- Height and area limitations, sprinklers/fire protection, high-rise safety, accessibility, mechanical systems, sustainability
HISTORY OF NYC CODE REVISION
HISTORY OF CODE REVISION

- 1968 Building Code due for modernization
- September 11th 2001 WTC
- Nov. 2002 Mayoral Commission
- April 2003 Recommendations
  - ICC Codes
  - Stakeholder inclusion
  - Consensus adoption process
  - Periodic revision
MODEL CODE ADOPTION GOALS

■ 2003 Model Code Adoption
  − Adopt 2003 International Code Council
    − Format
    − Technical Requirements
  − Local Modifications
    − Administration
    − Carry over relevant 1968 Code requirements

■ NYC DOB Committees:
  − Technical
  − Advisory
  − Managing
2008 CONSTRUCTION CODES DEVELOPMENT TIMELINE

- September 11, 2001: Collapse of the World Trade Center
- November 2002: Mayoral Commission Formed
- April 2003: Mayoral Commission Recommendations Published
- April 2003 - July 2007: Department & Code Committee Work
- July 2007: Building Code, Mechanical Code, & Fuel Gas Codes Signed into Law
- December 2005: Plumbing Code Signed into Law
- March 2008: Clean-up Bill Signed into Law
- July 1, 2008: 2008 Construction Codes Effective

build safe | live safe
DEVELOPMENT CYCLES

Benefits:

- Updates Codes to national standards
- Incorporates latest technology
- Allows new materials and methods of construction
- Maintains consistency with other jurisdictions
2014 CODE REVISION

- Update to 2009 I-Code standards, correct errors, typos, and inconsistencies, clarify confusing language, incorporate bulletins
2017 CODE REVISION
GOALS

- Updating 2014 NYC Building Code for 2020 (estimated) release
- 2017 Code Revision Cycle
  - Update to 2015 I-Codes with NYC modifications
  - Adopt innovative new technologies by incorporating the latest national standards
  - Improve construction safety
  - Clarify existing text
  - Correct errors, typos and inconsistencies
- Anticipated submission date to Council is Q1/Q2 of 2020
REVISION PROCESS

- DOB Initial Draft (Including ICC Changes)
- Technical Committee Review
- DOB Legal & Law Dept. Review
- Final Technical Committee Review
- Managing Committee Review
- Submission to NY City Council
COMMITTEE STRUCTURE

DOB COMMISSIONER

MANAGING COMMITTEE

ADVISORY COMMITTEES
Chair & Co-Chair
Coordinator
Technical Advisor

TECHNICAL COMMITTEES
Chair & Co-Chair
Coordinator
Technical Advisor
<table>
<thead>
<tr>
<th>Committee</th>
<th>Type</th>
<th>Number of Members</th>
<th>Meetings to Date</th>
<th>Hours Per Meeting</th>
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<td><strong>645</strong></td>
<td><strong>335</strong></td>
<td><strong>36.5</strong></td>
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*Last Updated: February 2020*
## SCHEDULE

<table>
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<tr>
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<tbody>
<tr>
<td>Plumbing Code Revisions completed</td>
<td>Nov 2018</td>
</tr>
<tr>
<td>Plumbing Code Local Law submitted to City Council</td>
<td>Feb 2019</td>
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<tr>
<td>BC Committees complete assignment</td>
<td>June 2019</td>
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<tr>
<td>Mediation</td>
<td>Aug – Feb 2020</td>
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<tr>
<td>Complete Local Law</td>
<td>Q1/Q2 2020</td>
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<tr>
<td>Completion Bill submitted to City Council</td>
<td>Q1/Q2 2020</td>
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<tr>
<td>City Council Approval</td>
<td>Q2/Q3 2020</td>
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<tr>
<td>Code implementation</td>
<td>June 2020</td>
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<tr>
<td>Code becomes effective</td>
<td>June 2021</td>
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STATUS

- Plumbing Code Revisions completed
  - Local Law 14/2020 (Introduction No. 1481-A)
- Status of remaining codes:
  - 85% of all chapters completed Managing Committee
  - 4 of 3 Committees completed assigned work
  - Estimated Completion: end of 2020

Code Revision Update 12/6/2019

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<th>% Complete BC + FGC + MC</th>
<th>% Complete Admin</th>
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<td>99% 98%</td>
<td>100%</td>
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<tr>
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<td>Legal Review</td>
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<tr>
<td>Managing Committee</td>
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<td>City Council</td>
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NYC ENERGY CONSERVATION CODE
WHAT IS THE NYCECC?

- The New York City Energy Conservation Code
  - Applicable to ALL new buildings and alterations of buildings based on the scope of work
  - Includes requirements for:
    - The building envelope
    - HVAC&R systems
    - Lighting and electrical equipment
    - Commissioning
    - Energy Modeling
WHAT IS THE NYCECC?

International Energy Conservation Code (IECC 2018) and ASHRAE 90.1 2016

New York State Energy Code

NYStretch Code

NYC Energy Conservation Code
DEVELOPMENT OF THE 2020 NYCECC

- Changes to 2016 NYC Energy Conservation Code (NYCECC)
- IECC 2015 to the IECC 2018
- Local Law 32 of 2018
  - DOB must adopt provisions that “bring this code up to date with the most recent model stretch code published by the New York State Energy Research and Development Authority
- Changes made to align with NYSERDA’s NYStretch Energy code 2020
  - DOB staff participated in development
  - Targeted an aggregate energy reduction of 20% compared to ASHRAE 90.1-2013
NYC ADOPTION

- New York City will adopt:
  - The NY State Energy Conservation Construction code
  - Portions of the NYSERDA NYStretch Energy Code 2020
  - Local changes from the DOB Energy Code Committee process
  - Legacy changes from the NYCECC that should be preserved

- The NYS ECCC will go into effect May 12, 2020

- The proposed 2020 NYCECC (Intro 1816-2019) anticipated to go into effect the same day
WATERFRONT CODE DEVELOPMENT
SCOPE OF WORK

Development of New York City Construction Code Provisions Regulating the Construction and Maintenance of Waterfront Structures

- Existing Codes do not address waterfront structures
  - Waterfront structures: piers, bulkheads, permanently moored vessels, etc.
- No Model Code: ICC does not product a waterfront code

- Technical Research and Code Drafting
- Operational Research and Evaluation
- Communication Planning
- Environmental and Land Use Review
SCOPE OF WORK (CONT.)

- NYC Waterfront Construction Code
- Investigate and research transfer of permitting and enforcement of waterfront properties from SBS to the Department of Buildings
  - Identify and implement operations requirements
  - Propose staffing and equipment requirements for a DOB Waterfront Unit
- Procure consultants to assist DOB in creation of new Waterfront Code
- Additional DOB Subject Matter Experts
## SCOPE OF WORK (CONT.)

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Tasks &amp; Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>Research applicable standards&lt;br&gt;Propose provisions&lt;br&gt;Develop inspection requirements&lt;br&gt;Introduce maintenance standards&lt;br&gt;Attend City Council meetings, as required</td>
</tr>
<tr>
<td>Communications</td>
<td>Provide communications strategy&lt;br&gt;Identify committee members&lt;br&gt;Conduct outreach to industry stakeholders</td>
</tr>
<tr>
<td>Operations</td>
<td>Define the operational requirements for a Waterfront Unit.&lt;br&gt;Support DOB during ramp up of operations&lt;br&gt;Advance requirements gathering for the CRM (IT scope to be included in existing DOB contracts)</td>
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<tr>
<td>CEQR</td>
<td>Assess and research applicable Environmental &amp; Land Use issues</td>
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## PROGRAM SCHEDULE

<table>
<thead>
<tr>
<th>Year</th>
<th>Period</th>
<th>Key Milestones</th>
</tr>
</thead>
</table>
- Project Plan Approved  
- Code Development Research Begins  
- Agency Outreach Begins |
- Operational Research Begins  
- Agency Outreach Continues  
- Recommendations completed by 3rd Quarter  
- Code Drafting Begins |
| FY 2021 | (7/2021-6/2022) | - Code Drafting continues  
- Agency Outreach Continues  
- Consultant Code drafting completed by 4th Quarter  
- Call for Committee (if time allows) |
| FY 2022 | (7/2022-6/2023) | - Call for Committee  
- Committee Review Work  
- Stakeholder Outreach  
- Implementation Planning |
| FY 2023 | (7/2023-6/2024) | Estimated results, based on work completion:  
- Charter Change (if required, current jurisdiction within SBS)  
- Passage of Code  
- Code and Implementation Activities Launch |

### Key Dates
- 1/2019 - Contract Certification
- 5/2019 - Project Plan Approved
- 8/2019 - Operational Research Began
COMPLETED AGENCY OUTREACH

- NYC Department of Small Businesses Services
- NYC Department of City Planning
- NYC Economic Development Corporation
- NYC Department of Parks and Recreation
- U.S. Coast Guard
- NYS Department of Environmental Conservation
- U.S. Army Corps of Engineers
- NYS Department of State, Waterfront Consistency Review Unit
- Port Authority of New York and New Jersey
- U.S. Coast Guard, Engineering Officer
CODE DEVELOPMENT TASKS

- **CD1:** Identified and evaluated waterfront typologies
- **CD2:** Further defined characteristics and attributes to develop waterfront code provisions which are common to each waterfront typology group
- **CD4:** Defined the current regulatory framework applicable in the City as it pertains to designing, licensing, permitting, construction, and inspection of waterfront typologies.
  - AECOM is currently performing research to determine SBS’ role in the regulation of design, permitting, and construction of waterfront structures
CODE DEVELOPMENT TASKS

- **CD5**: Defined the current regulatory framework applicable to 3 jurisdictions as to construction and maintenance activities of waterfront typologies identified in CD1. (Includes permitting, licensing, and enforcement operations)
  - Preliminary research revealed San Francisco, London, Baltimore
- **CD6**: Analyzed existing national and international standards, design guidelines, industry best practices, and other guidance documents
- **CD8**: Identify maintenance requirements
OPERATIONS RESEARCH

- Shadowing Activities:
  - Plan Examination
  - Application Filing Process
  - Inspections
  - Licensing (all construction trades)

- Department of Small Business Services
  - Operations Kickoff on 9/19
  - Shadowing/Interviews held on 9/23 through 9/27 (1 week)

- Department of Buildings
  - Operations Kick off on 9/5
  - Shadowing/Interviews began on 11/8 and expected to continue throughout December
EXISTING BUILDING CODE
EXISTING BUILDING CODE DEVELOPMENT PROJECT

- **Goal:** Remove barriers to rehabilitation of existing buildings while maintaining acceptable levels of safety
  - Simplify & consolidate requirements for ease of use
  - Promote repair, maintenance and reuse of buildings by streamlining requirements and triggers for upgrades
  - Update requirements to latest standards & practices

- Accomplish in 6 phases

- Contract extension through June 2024 – notification filed with Comptroller
## PHASES OF EBC DEVELOPMENT

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
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<tbody>
<tr>
<td>Phase I</td>
<td>Charrettes (Complete)</td>
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<tr>
<td>Phase II</td>
<td>Research (Complete)</td>
</tr>
<tr>
<td>Phase III</td>
<td>Code Drafting (In Progress)</td>
</tr>
<tr>
<td>Phase IV</td>
<td>Committee Work</td>
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<tr>
<td>Phase V</td>
<td>Council Submission</td>
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<tr>
<td>Phase VI</td>
<td>Implementation, Outreach, &amp; Training</td>
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<tr>
<td>Phase</td>
<td>Date</td>
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<tr>
<td>-------------------------------------------</td>
<td>------------</td>
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<tr>
<td>Phase II Research Report completed</td>
<td>June 2019</td>
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<tr>
<td>Phase III Final Draft completion</td>
<td>Dec 2020</td>
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<tr>
<td>Phase IV Committee Work completion</td>
<td>Dec 2021</td>
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<tr>
<td>Phase V City Council Negotiation &amp; Approval</td>
<td>Dec 2022</td>
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<tr>
<td>Phase VI Implementation, Training &amp; Outreach</td>
<td>June 2024</td>
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PHASE II

**Goal:** Build upon the data gathered through the charrettes (Phase I) by researching and analyzing the current state of NYC existing building stock with regard to prevalent types, common deficiencies, vulnerabilities, risks, and existing governing framework of regulations

**Deliverables:**
- Kickoff Meeting
- Project Plan
- Building Stock Analysis Report
- Regulatory Review Report
- Benchmarking Summary Report
- NYC EBC Recommendations Report
- Case Studies
- Phase III Project Plan
PHASE II DELIVERABLES

Building Stock Analysis Report
Summarizes the review of building stock, charrette findings, and categories of building and identification of building types.

Regulatory Review Report
Identifies provisions appropriate for inclusion, regulations requiring coordination, relevant technical requirements in existing regulations that impact construction performed in existing buildings, and constraints. Assesses the experience of other jurisdictions and summarizes the research, prioritized recommendations and challenges.

Benchmarking Summary Report
Summary of research, analysis and interviews conducted and provide recommendations based on lessons learned.

NYC EBC Recommendations Report
Includes commentary, makes recommendations for all issues highlighted during the assessment of building stock and regulatory reviews, and describes any further work recommended.
PHASE III

- **Goal:** Draft an EBC to meet the NYC context for future DOB and Technical Committee Review

- **Deliverables:**
  - Proposed Provisions of NYC EBC
  - Draft Other Code Provisions
  - Overview, Additional Analysis and Assessments
PHASE III DELIVERABLES

Proposed Provisions of NYC EBC
Includes a summary of the proposed provisions, a first draft of the NYC EBC, and an updated draft incorporating feedback received from the DOB.

Draft Other Code Provisions
Proposed modifications to other codes or regulations that ICC identified in the Regulatory Review Report (Phase II) as requiring revision.

Overview, Additional Analysis and Assessments
To support the review and approval of the proposed provisions of the NYC EBC and/or revisions proposed to other codes, rules or regulations. May analysis/assessments may include environmental impact, land use, or technical.
ELECTRICAL CODE
GOALS

■ Update current NYC Electrical Code to align with the 2014 National Electric Code (NEC)
■ Draft NYC-specific amendments
■ Coordinate Electrical Code with Construction Codes
■ Repeal Title 27 (the 2011 NYC EC) and integrate its provisions into Title 28
■ Mirror the construction codes revision process
  – Technical provisions
    – Mechanical Committees: Consensus
    – Managing Committee: Consensus
  – Administration Provisions
    – Technical Committees: Advisory
    – Managing Committee: Consensus
## SCHEDULE OF MILESTONES & DELIVERABLES

### Electrical Code Committee Work Completion

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<tr>
<th>Committee #1: Wiring Methods and Materials</th>
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<tbody>
<tr>
<td>Committee #2: Wiring Protection, Switchboards &amp; Panels</td>
<td>Feb 2020</td>
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<tr>
<td>Committee #3: Equipment for General Use</td>
<td>Mar 2020</td>
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<tr>
<td>Committee #4: Special Occupancies &amp; Equipment</td>
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<td>Committee #5: Fire Pump &amp; Special Conditions</td>
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<td>Committee #6: Remote Control, Signaling and Low Voltage Power</td>
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MEDIATION PROCESS

No Consensus
Chair declares impasse

Position Papers
Submitted by interested parties to DOB

Mediation Process
Chaired by Tech Affairs Asst. Comm.

Final Determination
Issued by DOB First Deputy Commissioner
NEXT STEPS

■ Complete Technical Committee work
■ Legal review
■ Managing Committee review
■ Submit to Council
QUESTIONS?