Intro and Prior Meeting Recap
### Prior meeting recap

#### Process Streamlining
- Lisa Gluckstein and Neville Pereira presented on draft recommendations related to process streamlining.
- The Planning Department was identified as an important partner for finalizing and implementing the draft recommendations.
- The list of draft recommendations will be distributed back to the process streamlining subgroup for honing and then to the full working group.

#### Temporary Tenant Relocation
- Heather Heppner presented considerations for temporary tenant relocation.
- The working group discussed reactions and collaborated on ideas for potential temporary tenant relocation recommendations.
- The list of draft recommendations will be distributed back to the temporary tenant relocation subgroup for honing and then to the full working group.
Participatory Program Design Timeline

Note: This timeline omits ATC-151 milestones and broader public outreach milestones for legibility.
NBC publishing of draft inventory

- NBC attained through a public records request and published the draft inventory we have been using to inform program design.
- We are working on talking points to help you communicate with the stakeholders you represent about what this inventory is and isn't.
Outline

● Prior meeting recap
● Guiding Principles Exercise
● Technical recommendations
  ○ Technical process
  ○ What buildings to include (or exempt)
  ○ What level of retrofit to require, deficiencies to address
● Break
● Technical recommendations
  ○ Timeline and schedule categories
● Discussion
Covered in today's presentation

<table>
<thead>
<tr>
<th>Question</th>
<th>Tilt-up</th>
<th>Non-Ductile Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>What buildings are “in” vs exempt?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>What level of retrofit?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>What is the timeline?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>How will we determine schedule categories?</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>How will we incentivize action?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Guiding Principles Exercise
Technical recommendations process
ATC Team gathering input

- Executive Panel
- Stakeholder working group
- Office of Resilience and Capital Planning (ORCP)
- Building Department (SFDBI)
- Structural Engineers Association of Northern California (SEAONC)
- Existing Buildings Committee (EBC)
Technical recommendation development process

Other Ordinances
- SF Concrete Buildings Safety Program (CBSP)
- Stakeholder Working Group

SF Inventory
SF Existing Building Code
Recent Research

ATC Team
Draft ordinance (Feb 2023)

SEAONC Existing Buildings Committee
meetings and input in March, April, May

Final Draft ordinance
ATC meetings

- **Project Technical Committee meetings**
  - May 2022: Definitions of Concrete and RWFD, evaluation approaches
  - December 2022: Context from building inventory, other jurisdictions, cost
  - January 2023: Non-ductile concrete buildings to include/exempt
  - January 2023: RWFD buildings to include/exempt, Schedule categories
  - March 2023: Technical items to discuss with SEAONC and ATC draft recommendations
  - March 2023: Seismic hazard levels, key seismic deficiencies
  - May 2023: Draft code language

- **Stakeholder working group meetings**
  - October 2022
  - November 2022
  - January 2023
  - February 2023
  - April 2023
  - May 2023
  - June 2023

- **SEAONC EBC meetings:** March, April, May 2023
- **ORCP meetings:** bi-weekly
- **SFDBI meetings:** monthly
- **Executive Committee meetings:** quarterly
SEAONC Existing Buildings Committee (EBC) task group

- **Participants:**
  - Robert Kraus, SE (EBC Chair, stakeholder working group member)
  - Keith Palmer, SE, PhD (EBC past-Chair, concrete inventory studies)
  - Wayne Low, SE (SEAONC incoming President)
  - Jonathan Buckalew, SE (Soft-story ordinance)
  - Duke Crestfield, SE (Concrete studies, stakeholder working group)

- **October 2022 to present:** Robert reporting to larger Existing Building Committee membership on ATC and stakeholder working group efforts

- **March 2023 meeting with ATC (4 hrs):** Agreement on technical principles

- **April 2023:** Gather feedback from the larger Existing Building Committee membership in monthly committee meetings.

- **May 2023 meeting with ATC (3 hrs):** Review draft code requirements

- **May 2023:** Provide written comments on draft technical requirements to ATC

- **May 2023 meeting with ATC:** Address key technical aspects of comments
Review other retrofit programs

- Berkeley retrofit grants program
- Los Angeles concrete program
- West Hollywood
- Santa Monica
- SF soft-story ordinance
- SF private school ordinance

<table>
<thead>
<tr>
<th>Performance target</th>
<th>Berkeley</th>
<th>West Hollywood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Scope: Address &quot;Critical Seismic Deficiencies&quot;</td>
<td>'Critical Seismic Deficiencies'</td>
<td>'Major Deficiencies'</td>
</tr>
<tr>
<td>Preferred Scope: S-5 in BSE-2E</td>
<td>Slab punching shear</td>
<td>Load path</td>
</tr>
<tr>
<td>(Same for all Risk Categories)</td>
<td>Column shear behavior</td>
<td>Weak or soft story</td>
</tr>
<tr>
<td></td>
<td>Columns with significant axial load AND large spacing of confining tie reinforcement</td>
<td>Vertical irregularity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Torsion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Captive column</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inadequate seating length for gravity support</td>
</tr>
</tbody>
</table>

| Timeline | Several rounds of grants offered | 3 years: Screening report
5 year: Phase 1 plans
7 years: Phase 1 permit
10 years: Phase 1 construction finish
13 years: Phase 2 plans
15 years: Phase 2 permit
20 years: Phase 2 construction finish | BPOE:
RC12: S-3 in BSE-1E, S-5 in BSE-2E
RC3/4: S-2 in BSE-1E, S-5 in BSE-2E
Also show global stability at 150% of pushover target displacement.
Historical buildings may be allowed lower performance per CHBC.
Draft ordinance
Concrete Building Safety Program

- Mandatory retrofit
- One ordinance, RWFD and Concrete, separated requirements
- Ordinance language covers changes to SFEBC, Administrative bulletin(s) cover clarification of requirements and commentary
Section 3. The San Francisco Existing Building Code is hereby amended by modifying Chapter 3 and adding Chapter 5G and Chapter 5H, to read as follows:

CHAPTER 3:
PROVISIONS FOR ALL COMPLIANCE METHODS

CHAPTER 5G:
MANDATORY EARTHQUAKE RETROFIT OF RIGID-WALL-FLEXIBLE-DIAPHRAGM BUILDINGS

CHAPTER 5H:
MANDATORY EARTHQUAKE RETROFIT OF NON-DUCTILE CONCRETE BUILDINGS
Outline of concrete retrofit chapter

CHAPTER 5H:
MANDATORY EARTHQUAKE RETROFIT OF NON-DUCTILE CONCRETE BUILDINGS

SECTION 501H. PURPOSE

SECTION 502H. SCOPE
Buildings included, excluded

SECTION 503H. DEFINITIONS

SECTION 504H. COMPLIANCE REQUIREMENTS
Forms to be completed by CA P.E.

SECTION 505H. SCHEDULE CATEGORIES AND DEADLINES FOR COMPLIANCE

SECTION 506H. ENGINEERING CRITERIA FOR COMPLIANCE
Performance, deficiencies

SECTION 507H. IMPLEMENTATION AND ADMINISTRATION
Fees, etc.
What buildings are in?
Concrete buildings included in the program

- Retrofit or show compliant
- Exempt if no concrete columns
- Exempt

Year of original construction
- 1997 UBC (permit application July 1, 1999 or later)

Stories
- (taller)
- 3
- 2
- 1

(older)
Exemptions

- **Age.** Built 2000 or later, or permit application date 7/1/1999 or later.
- **One story.** Above grade.
- **Two story.** And no concrete columns nor wall piers.
- **Complete steel frame.** Supporting gravity floor load and roof load.
- **Non-concrete building.** Concrete limited to floors, roofs, foundations, basements.
- **Previous retrofit.** Satisfying triggered retrofit requirement in past 15 years.
- **One- and two-family residential.** R-3 occupancy and incidental Group U occupancy.
## SFBC benchmark code editions

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Date of Compliance</th>
<th>Model Code (for reference)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Frame, wood shear panels (Types W1 &amp; W2)</td>
<td>1/1/1984</td>
<td>UBC 1976</td>
</tr>
<tr>
<td>Wood Frame, wood shear panels (Type W1A)</td>
<td>7/1/1999</td>
<td>UBC 1997</td>
</tr>
<tr>
<td>Floor areas greater than 3,000 ft² per level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel moment-resisting frame (Types S1 &amp; S1a)</td>
<td>12/28/1995</td>
<td>UBC 1994</td>
</tr>
<tr>
<td>Steel concentrically braced frame (Types S2 &amp; S2a)</td>
<td>7/1/1999</td>
<td>UBC 1997</td>
</tr>
<tr>
<td>Steel eccentrically braced frame (Types S2 &amp; S2a)</td>
<td>1/1/1990</td>
<td>UBC 1988</td>
</tr>
<tr>
<td>Buckling-restrained braced frame (Types S2 &amp; S2a)</td>
<td>1/1/2008</td>
<td>IBC 2006</td>
</tr>
<tr>
<td>Light metal frame (Type S3)</td>
<td>1/1/2008</td>
<td>IBC 2006</td>
</tr>
<tr>
<td>Steel frame w/ concrete shear walls (Type S4)</td>
<td>12/28/1995</td>
<td>UBC 1994</td>
</tr>
<tr>
<td>Steel plate shear wall (Type S6)</td>
<td>1/1/2008</td>
<td>IBC 2006</td>
</tr>
<tr>
<td><strong>Reinforced concrete moment-resisting frame (Type C1)</strong></td>
<td>12/28/1995</td>
<td>UBC 1994</td>
</tr>
<tr>
<td>Tilt-up concrete (Types PC1 &amp; PC1a)</td>
<td>7/1/1999</td>
<td>UBC 1997</td>
</tr>
<tr>
<td>Precast concrete frame (Types PC2 &amp; PC2a)</td>
<td>1/1/2008</td>
<td>IBC 2006</td>
</tr>
<tr>
<td>Reinforced masonry (Type RM1)</td>
<td>7/1/1999</td>
<td>UBC 1997</td>
</tr>
<tr>
<td>Flexible diaphragms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinforced masonry (Type RM2)</td>
<td>12/28/1995</td>
<td>UBC 1994</td>
</tr>
<tr>
<td>Stiff diaphragms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seismic isolation or passive dissipation</td>
<td>7/1/1992</td>
<td>UBC 1991</td>
</tr>
</tbody>
</table>
Older concrete buildings

(SEAONC, 2019)
How the draft inventory maps to which buildings are "in" vs exempt

Number of Buildings

Buildings in the Concrete Database by Height and Use Type

- Exempt
- Some exempt
- Retrofit or show compliant

Legend:
- Residential
- Non-residential

Number of Stories:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8+
- Missing Info
How the draft inventory maps to which buildings are "in" vs exempt

Square footage (correlates with retrofit cost)

Floor area in the Concrete Database by Height and Use Type

Retrofit or show compliant

- Residential
- Non-residential
Q+A

5 minutes
What level of retrofit?
Example criteria for compliance shown in January

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Relative level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum requirement:</strong></td>
<td>Approximately 70% of new building standard [77% of BPOE structural]</td>
</tr>
<tr>
<td>Collapse Prevention in 475-year earthquake motions</td>
<td></td>
</tr>
<tr>
<td><strong>Voluntary higher standard:</strong></td>
<td>Approximately 90% of new building standard [100% of BPOE structural]</td>
</tr>
<tr>
<td>Collapse Prevention at the BSE-2E level (BSE-2E = 975-year motions in San Francisco.)</td>
<td></td>
</tr>
</tbody>
</table>
## Prior comments and questions related to "What level of retrofit?"

### Comments and Questions from Working Group (Meeting 3)

#### Comments:
- Support proposal of providing different levels of incentives for going above the base level of retrofit.
- Exempt from additional building code triggers where possible. Americans with Disabilities Act upgrades will be triggered because it is Federal.
- Prioritize retrofits affecting the outside of the building where possible to avoid losing space in units.

#### Questions:
- Will pounding of adjacent buildings need to be considered?
- How will soil conditions be accounted for?
## Recommended criteria for compliance

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Relative level</th>
</tr>
</thead>
</table>
| **Option (a)**  
Structural Collapse Prevention at the BSE-1E level (225-year earthquake motions), AND address specific deficiencies | Approximately 54%(+) of BPOE structural objective |
| **Option (b)**  
Comply with Section 304.4.3  
(Collapse Prevention at the BSE-2E level—975 year motions)  
(Same requirements as SFEBC triggered retrofit, such as from non-structural alterations on 2/3 of floors) | 100% of BPOE structural objective |
Additional requirements

- **Non-structural retrofit.** Limited to unreinforced masonry: partitions in primary egress routes, and chimneys.

- **Masonry infill.** Concrete frames with masonry infill walls are included in the program, and effect of the masonry must be considered (not exempt).

- **Concrete podium levels.** For buildings with wood-frame or steel-frame upper stories and concrete lower stories (above grade), the building is included in the program (not exempt), but retrofit is not required at the wood-frame and steel-frame stories.
Additional requirements

- **Flexible floor and roof diaphragms.** Compliance with SFBC Appendix A2 deemed to comply for wall anchorage and collectors. Potential exception for complete concrete beam systems.

- **Liquefaction or landslide.** Not required to address.

- **Building separation.** Building separation limitations (in SFBC and ASCE 41) need not be considered.

304.4.3 Seismic forces. Buildings and structures shall comply with the reduced seismic forces, as defined in Section 304.3.2. The building separation limitations of Section ASCE 7-16 Section 12.12.3 need not be considered.
Compliance Option (b)

Comply with SFEBC Section 304.4.3 = Collapse prevention in 975-year (BSE-2E) earthquake motions

(Same requirements as SFEBC triggered retrofit, such as from non-structural alterations on 2/3 of floors)
Compliance Option (a)

Collapse prevention in 225-year (BSE-1E) earthquake motions, AND show that the following deficiencies do not exist or address them by retrofitting:

<table>
<thead>
<tr>
<th>Deficiency</th>
<th>Criteria for Identifying</th>
<th>How to address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak Story</td>
<td>ASCE 7 irregularity table</td>
<td>Use Compliance Option (b)</td>
</tr>
<tr>
<td>Discontinuous elements</td>
<td>ASCE 7 irregularity table</td>
<td>Use Compliance Option (b)</td>
</tr>
<tr>
<td>Moment frame</td>
<td>Seismic system definition</td>
<td>Retrofit to meet selected requirements of ACI concrete code</td>
</tr>
<tr>
<td>Slab punching shear at columns</td>
<td>Lacks floor beams and integrity reinforcement</td>
<td>Retrofit for punching shear (e.g. column collar).</td>
</tr>
<tr>
<td>Shear governed columns or wall piers</td>
<td>ACI code requirements</td>
<td>Retrofit with shear strengthening (e.g. FRP) or supplemental supports, or show existing supplemental load path or moderate stress in wall piers.</td>
</tr>
<tr>
<td>Inadequate bearing supports for beams or slabs</td>
<td>ACI code requirements</td>
<td>Retrofit to increase bearing length</td>
</tr>
<tr>
<td>Flexible floor or roof diaphragms</td>
<td>Flexible diaphragm definition</td>
<td>Attachment of diaphragm to wall for Appendix A2 forces</td>
</tr>
</tbody>
</table>
Non-ductile: Weak-story moment frame
Non-ductile: Slab punching shear
Non-ductile: Column shear

Northridge Earthquake 1994

Western Honshu Japan, 2007
Non-ductile: Weak-pier story mechanism
Non-ductile: Weak-pier story mechanism
2010 Chile earthquake
Principles behind compliance criteria

- Pragmatic/feasible: The program is practical and feasible to implement.
- Program products are usable.

- Life Safety: Protect Life and Public Safety.
  - No building will collapse catastrophically.
Principles behind compliance criteria

- The program is practical and feasible to implement
- Program products are usable

- Pragmatic/feasible

- Protect Life and Public Safety
  - No building will collapse catastrophically
  - Disaster Recovery

- Life Safety
2010 Chile earthquake
Principles behind compliance criteria

- Pragmatic/feasible
  - The program is practical and feasible to implement
  - Program products are usable

- Life Safety
  - Protect Life and Public Safety
  - No building will collapse catastrophically
  - Speed Earthquake Recovery

- Economy
  - Protect the Economy
  - Businesses and the economy will quickly return to functionality
  - We identify incentives (monetary and non-monetary)
Principles behind compliance criteria

- **Pragmatic/feasible**
  - The program is practical and feasible to implement
  - Program products are usable

- **Environmental sustainability/historic preservation**
  - Preserve City vitality and Character
  - The City's sense of place will be preserved

- **Economy**
  - Protect the Economy
  - Businesses and the economy will quickly return to functionality
  - We identify incentives (monetary and non-monetary)

- **Life Safety**
  - Protect Life and Public Safety
  - No building will collapse catastrophically
  - Speed Earthquake Recovery
5-minute Break
What is the timeline and schedule categories?
## Feedback from Working Group (Meeting 4)

- In many cases, complex retrofits and high-occupancy buildings are the same buildings.
- More complex retrofits should have more time to plan and secure funding (later deadline)
- Higher-occupancy buildings should be retrofitted first to reduce risk to life safety (sooner deadline)
- Residential retrofits should be spread across multiple deadlines so that the housing market is not hit all at once
- Some working group members want to shorten the overall program timeline
- A longer program timeline may allow for the return of a more favorable market and interest rate environment
- Consider timelines of other City programs
Example timeline for compliance

Non-ductile concrete

Schedule Category 1
Schedule Category 2
Schedule Category 3
Schedule Category 4
Schedule Category 5
Schedule Category 6
Exempt

Operative date of ordinance
Submit data form
Submit seismic evaluation or “intent to retrofit”
Submit permit application for retrofit
Complete retrofit construction

Years after effective date of ordinance
Most likely superseded

Schedule Categories Proposal A

<table>
<thead>
<tr>
<th>Schedule Category</th>
<th>Buildings included</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Non-residential; 1948* or later</td>
</tr>
<tr>
<td>2</td>
<td>Non-residential; before 1948</td>
</tr>
<tr>
<td>3</td>
<td>Residential; 1948 or later</td>
</tr>
<tr>
<td>4</td>
<td>Residential; before 1948</td>
</tr>
</tbody>
</table>

Shown previously as an example to working group

- 4 categories, 1948 year divider
- Residential last

1948 SFBC was completely re-written.
## Schedule Categories Proposal A

<table>
<thead>
<tr>
<th>Schedule Category</th>
<th>Buildings included</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Non-residential; 1948* or later</td>
</tr>
<tr>
<td>2</td>
<td>Non-residential; before 1948</td>
</tr>
<tr>
<td>3</td>
<td>Residential; 1948 or later</td>
</tr>
<tr>
<td>4</td>
<td>Residential; before 1948</td>
</tr>
</tbody>
</table>

Most likely superseded
## Schedule criteria not recommended

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Reason(s) for rejection</th>
</tr>
</thead>
</table>
| Occupant load (per SFBC Section 1004) | • Requires calculations.  
• Not familiar to engineers completing screening forms.  
• Doesn’t typically represent the expected average number of occupants on a daily basis. |
| Floor area                       | • Doesn’t necessarily represent the number of occupants.  
• Not necessarily a good idea to retrofit all the bigger buildings first.                |
| Site class (Soil $v_{s_30}$)     | • Not yet clear if we have an objective map to define this. (CGS map no longer produced.) |
Judgment on **average** structural vulnerability vs. year of construction

Note: This is an oversimplification of vulnerability, based on engineering judgment, used for the purpose of grouping buildings into schedule categories for the Concrete Building Safety Program. There is building-by-building variation within each of these categories. The only way to know an individual building’s risk is to by and assessment from a qualified structural engineer.

- **Vulnerable**
  - “Silent & Greatest Generation” buildings
  - Prior to 1956

- **More Vulnerable**
  - “Baby Boomer & Gen X” buildings
  - 1956 - 1984

- **Vulnerable**
  - “Millennial” buildings
  - 1985 - 1999
## Considerations for Determining Non-ductile Concrete Schedule Categories

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Measure</th>
<th>Criteria (Year Built / Use)</th>
</tr>
</thead>
</table>
| Risk to Life Safety           | Structural vulnerability* | • Built ‘56-’84: Most likely to be structurally vulnerable  
• No buildings to be addressed will have low vulnerability. |
| Feasibility for Implementation| DBI throughput         | • Relatively equal numbers in each category  
• Relatively smaller first tier to allow ramp up  
• Similar buildings in each category |
| Complex conditions            |                        | • Older buildings  
• Residential: Temporary tenant relocation, multiple owners (condos)  
• Commercial: Downtown economic recovery |
| Social Vulnerability          | Avoid displacement     | • Residential: Temporary tenant relocation |

*Structural vulnerability is a judgement estimate and will vary from building to building
## Schedule Categories Proposal B

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-residential 1956-1969</td>
<td>319</td>
</tr>
<tr>
<td>3. Non-residential 1930-1956</td>
<td>603</td>
</tr>
<tr>
<td>4. Non-residential prior to 1930</td>
<td>1,513</td>
</tr>
<tr>
<td>6. Residential prior to 1956</td>
<td>624</td>
</tr>
</tbody>
</table>

**Characteristics and rationale:**

- 6 categories, multiple year dividers
- Most vulnerable first (assumed to be 1960s and 1970s buildings)
- Smaller first group to allow DBI to ramp up
- Residential last
### Schedule Categories Proposal C

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-residential 1956-1969</td>
<td>319</td>
</tr>
<tr>
<td>4. Non-residential prior to 1930</td>
<td>1513</td>
</tr>
<tr>
<td>6. Residential prior to 1956</td>
<td>624</td>
</tr>
</tbody>
</table>

**Characteristics and rationale:**

- 6 categories, multiple year dividers
- Most structurally vulnerable first, **including some residential**
- Residential spread across categories to reduce potential impact on housing market
- Smaller first group to allow DBI to ramp up
- Less structurally vulnerable residential last
## Schedule Categories Proposal D

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Non-residential 1930-1956</td>
<td>603</td>
</tr>
<tr>
<td>4. Non-residential prior to 1930</td>
<td>1513</td>
</tr>
<tr>
<td>6. Residential prior to 1956</td>
<td>624</td>
</tr>
</tbody>
</table>

### Characteristics and rationale:

- 6 categories, multiple year dividers
- Most structurally vulnerable first, including some residential in first category
- Residential spread across categories to reduce potential impact on housing market
- Smaller first group to allow DBI to ramp up
- Less structurally vulnerable residential last
Q+A
Discussion
Wrap-up and Next Steps
Participatory Program Design Timeline

Note: This timeline omits ATC-151 milestones and broader public outreach milestones for legibility.
<table>
<thead>
<tr>
<th>Meeting 5</th>
<th>Meeting 6</th>
<th>Meeting 7</th>
<th>Meeting 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>June</td>
<td>August</td>
<td>September</td>
</tr>
<tr>
<td>Non-technical</td>
<td>Technical topic</td>
<td>Non-technical</td>
<td>Final</td>
</tr>
</tbody>
</table>

**Process Streamlining**

**Temporary Tenant Relocation**

**Non-Ductile:**
- Share updated program proposal and technical recommendations

**Communication with Building Owners and Tenants**

**Financing Information and Resources**

**Final Meeting:**
- Finalize Recommendations to executive panel
## Proposed topical groups

<table>
<thead>
<tr>
<th>For discussion April 27</th>
<th>For discussion August 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process Streamlining:</strong></td>
<td><strong>Communication with Building Owners and Tenants:</strong></td>
</tr>
<tr>
<td>- Judson True, MOHCD</td>
<td>- Susan Ma, OEWD</td>
</tr>
<tr>
<td>- Lisa Gluckstein, MOHCD</td>
<td>- Jenna Wong, SFSU</td>
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<td>- Raquel Bito, BIC</td>
<td>- Charley Goss, SFAA</td>
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<td>- Neville Pereira, SF DBI</td>
<td>- Fred Sherburn/Maria Zamudio, HRC</td>
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<td>- Raymond Lui, SF DPW</td>
<td>- Roisin Isner, TSFU</td>
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<td>- Dan Sider, SF Planning</td>
<td>- Rodney Fong, SF Chamber of Commerce</td>
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<td>- Ned Fennie, CAC</td>
<td>- Patrick Hannan, SF DBI</td>
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<tr>
<td>- David Friedman, SPUR</td>
<td>- George Orbelian, Building Owner and</td>
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<td>- Lisa Yergovich, BOMA</td>
<td>CAPSS participant</td>
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<td>- Gregory Johnson, CBRE</td>
<td>- Holly Babe Faust, MOHCD</td>
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<td>- Liz Watty, SF Planning</td>
<td>- David Friedman, SPUR</td>
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<td><strong>Temporary Tenant Relocation:</strong></td>
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<tr>
<td>- Raquel Redondiez, SOMA Pilipinas</td>
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<td>- Sarah Atkinson, SPUR</td>
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<td>- Alicia Sandoval/Maria Zamudio, HRC</td>
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<td>- Holly Babe Faust, MOHCD</td>
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<td>- Heather Heppner, CCDC</td>
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<td>- David Harrison, BOMA</td>
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<td><strong>Financing:</strong></td>
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<td>- Chris Cummings, TNDC</td>
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<td>- Janan New, SFAA</td>
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<td>- Alex Bastian, Hotel Council</td>
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<td>- Johnny Jaramillo, Placemade</td>
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<td>- Matt Field, TMG Partners</td>
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<td>- Brian Main, Plant Construction</td>
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<td>- Holly Babe Faust, MOHCD</td>
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<td>- Mary Gassert, Cathedral Hill</td>
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<td>- Susan Ma, OEWD</td>
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### Topical group role:

- **Meet to determine draft recommendations** related to the topic
- **Present draft recommendations to full working group** for discussion and honing

Please reach out if you'd like to be reassigned!
Thank you!