Successful Implementation of Smaller Community Resilience: The City of Santa Monica, California

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Smaller Community Resilience

Mitigation (& Policy)

• Seismic Retrofit

• Smaller Community
Smaller Community Resilience

Smaller Community

- “Community”
- Residential Dwellings
- Resources?
- Resilience: Mitigation
Smaller Community Resilience

Smaller Community

- **California**: ~39.8M
- **540 Jurisdictions**: ~28.6%
  - (15) Population > 250K
  - (58) > 100K - < 250K
  - (467) < 100K: ~71.4%
CITY OF SANTA MONICA

POPULATION 93,000
Smaller Community Resilience

Seismic Retrofit Program

1. Assessment Seismic Hazard

2. Community Outreach & Ordinance Development

3. Program Implementation
Smaller Community Resilience

Seismic Retrofit Program

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Standards for Seismic Retrofit

- 2016 CA Existing Building Code
- ICC 2015 Int’l Existing Building Code
- ASCE 7-10 Minimum Design Loads for Buildings
- ASCE 41-13 Seismic Evaluation and Retrofit Existing Buildings
CITY OF SANTA MONICA
SEISMIC RETROFIT PROGRAM

Property Owner’s Guide to Retrofitting an UNREINFORCED MASONRY BUILDING
Smaller Community Resilience

Seismic Retrofit Program

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## City of Santa Monica Retrofit Timelines

### Potentially Seismically Vulnerable Building Type

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Timeline to Complete Retrofit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unreinforced Masonry Building</td>
<td>2 Years</td>
</tr>
<tr>
<td>Concrete-Masonry Flexible Diaphragm</td>
<td>3 Years</td>
</tr>
<tr>
<td>Soft-Story Building</td>
<td>6 Years</td>
</tr>
<tr>
<td>Non-Ductile Concrete Building</td>
<td>10 Years</td>
</tr>
<tr>
<td>Steel Moment Frame Building</td>
<td>20 Years</td>
</tr>
<tr>
<td>Single-Family Dwelling Cripple Walls Sill Plate</td>
<td>Voluntary</td>
</tr>
</tbody>
</table>
Santa Monica adopts nation's most extensive earthquake retrofit plan

By Rong-Gong Lin II | Contact Reporter

The Santa Monica City Council on Tuesday passed the nation’s most extensive seismic retrofitting effort, which will require safety improvements to as many as 2,000 buildings suspected to be vulnerable in an earthquake.
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THANK YOU!

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