2018 November Alaska Cook Inlet Earthquake
Lessons Learned
8:29 a.m. November 30th
## Mitigation (Building Codes) Works

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Magnitude</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-29-08</td>
<td>Pakistan</td>
<td>6.4</td>
<td>215</td>
</tr>
<tr>
<td>4-06-09</td>
<td>Italy</td>
<td>6.3</td>
<td>308</td>
</tr>
<tr>
<td>1-12-10</td>
<td>Haiti</td>
<td>7.0</td>
<td>100,000+</td>
</tr>
<tr>
<td>4-14-10</td>
<td>China</td>
<td>6.9</td>
<td>2,698</td>
</tr>
<tr>
<td>2-22-11</td>
<td>New Zealand</td>
<td>6.3</td>
<td>185</td>
</tr>
<tr>
<td>8-11-12</td>
<td>Iran</td>
<td>6.3</td>
<td>300</td>
</tr>
<tr>
<td>2-20-13</td>
<td>China</td>
<td>6.6</td>
<td>193</td>
</tr>
<tr>
<td>8-3-14</td>
<td>China</td>
<td>6.1</td>
<td>617</td>
</tr>
<tr>
<td>8-24-16</td>
<td>Italy</td>
<td>6.0</td>
<td>298</td>
</tr>
<tr>
<td>8-5-18</td>
<td>Indonesia</td>
<td>6.9</td>
<td>513</td>
</tr>
<tr>
<td>11-30-18</td>
<td>Alaska</td>
<td>7.1</td>
<td>0</td>
</tr>
</tbody>
</table>
Planning Works!

All – Hazard Plans VS. Scenario-specific Plans
Training, Exercise, and Outreach
Sharpening the Saw

- Continuity of Operations Drills
- Tsunami Call down Drills
- Monthly SEOC Training
- Partnerships in Practice
Lifeline Status

A lifeline enables the continuous operation of government functions and critical business, and is essential to human health and safety or economic security.

<table>
<thead>
<tr>
<th>Ease of Communication</th>
<th>Status</th>
<th>Impact</th>
<th>Actions</th>
<th>Limiting Factors</th>
</tr>
</thead>
</table>
Seismic Mitigation Dollars at work

Kodiak Island Borough School District Seismic Roof Bracing Improvements 2011

Ben Boeke Ice Arena Anchorage Wall/Roof Seismic Reinforcements 2009

2019 Spring Preparedness Conference
The Results:

- No Loss of Life
- No Major Injuries
- Most Schools Reopened within 10 days...
- Three schools closed for two academic years
- Over 100 School buildings report damage
Finance and Admin Preparedness

• IDIQ Contracts - immediate hire of contractors for response
• Training for Contracting Staff (preparation based on IDIQ contract)
• Funded Disaster Relief Fund
• Monthly SEOC training prepared Finance/Admin staff in Department
Partnerships are Paramount

- State/Local, State Agencies, Partners and Contractors
- Alaska Partnership for Infrastructure Protection
- Volunteer Organizations Active in Disasters
- Playing in the Sandbox
- Relationships form the Foundation
Alaska DOT&PF Rapid Response

- Not Road Construction Season
- AKDOT&PF Contractors Rapidly Mobilized
- Private Sector Asphalt Plant Fired up the day of the quake
Schools

• Anchorage School District: $22.39 million for repairs so far
• Mat-Su Schools: at least 50 reports of structural damage
Response Coordination Key

• Local jurisdictions and agencies responded well, and informed the State
• FEMA was here fast
• FEMA and State of Alaska — best partnership in the Nation
• State and Local Emergency Operations Centers had the right liaisons at the right time
• Coordinated planning, training, and exercising with partners works!
Disaster Assistance...Works?

• State Individual Assistance
  • 13,845 Applicants (Dec. 3- Feb. 28)
  • $982,019
  • Not well-automated
  • Limited full-time staff
  • Slow to pay
  • State-FEMA-SBA-State

• Federal Individual Assistance
  • 9,023 Applicants (Feb. 1-now. May 31 deadline)
  • $11,358,112
  • Automated (sometimes bad)
  • Fast to pay
  • Safe/Sanitary/Functional
  • SBA - $59,032,200 for 1,397 Loans
Disaster Assistance Works

- Public (Infrastructure) Assistance
- December estimate ~$48m (based on the worst we could find at the time)
- 67 Applicants (gov’t, schools, road)
- 38 Private Non-Profits

- Public Assistance = repair or rebuild to how it was
- Public Assistance + Mitigation – Rebuild with Resilience
- Fine print:
  - Reimbursable program
  - Slow....
“Flexibility”

- Initially, FEMA pays for foundation damage (they don’t inspect foundations) based on line items with fixed prices.
- Out of 67 cases, an average of $3,219

- Survivors, Local + State Officials, Congressional Delegation Request FEMA change their ways.
- FEMA policy change for this disaster pays foundation damage actuals based on private contractor estimates.
- Those 67 cases have received a new average of $20,723 for foundations
Earthquake Insurance

- High Premiums
- Higher Deductible
- FEMA doesn’t provide funding for deductibles
- The State and SBA does

- **NO** duplication of benefits.
- Insurance, FEMA grants, SBA loans, State grants cannot pay for the same damage
2018 Cook Inlet Earthquake

- Largest home and infrastructure disaster since 1964
- Combined State and federal assistance will likely exceed $250 m
- Mitigation, Building Codes, Individual and Family Preparedness works

- Nobody died
- Nobody was severely injured
- Things looked “too good” within a week
- The damage is bad throughout southcentral
- A little longer, a little stronger – a different story
Where to Find Help

- State IA (2/28) ready.alaska.gov/earthquake
  - 855.445.7131
- FEMA IA (5/31) disasterassistance.gov
  - 800.621.3362
- SBA Loans (5/31) disasterloan.sba.gov
  - 800.659.2955
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