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## **Nepal National Building Code Update**

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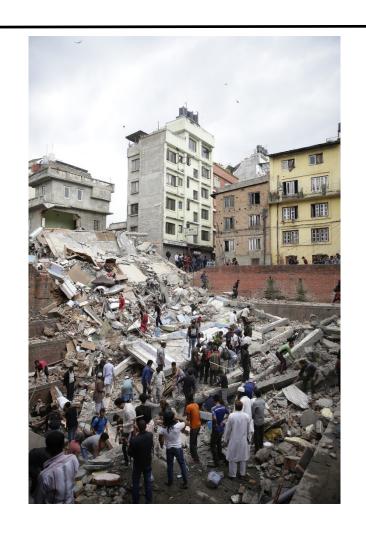
### Introduction

#### Gorkha Earthquake, April 2015

- Killed nearly 9,000 and injured nearly 22,000 people in Nepal
- Damaged and destroyed 20,000 buildings
- \$10 Billion in damage (50% of Nepal's GDP)

#### Problems

- Nepal National Building Code was written in 1994 and has not been updated.
- Building code not effectively enforced
- Majority of buildings are owner-built



April 17, 2018



## Design, Analysis & Results

- Include minimum and maximum boundaries for equations.
- Change the recurrence interval of the design earthquake from 475 years to 2500 years
- Include a seismic hazard map from the Nepali Department of Mines of Geology
- Update and clarify the formulas and methods used in the Seismic Coefficient Method and the Modal Response Spectrum Method
- Explain the purposes of the building code in the preface.
- Introduce the need for continuous development and improvement.
- Include mandate for regular code updates
- Avoid ambiguity and eliminate syntax/grammar errors
- References to Indian Standard Code and other international codes need to include section titles





#### **Conclusions & Recommendations**

- Nepali engineers qualified in seismic design should review code recommendations for implementation
- Train building officials for proper code enforcement
- Increase the awareness about the necessity of earthquake safe construction



April 17, 2018 4