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**Summary of the Field Survey and Research on
“The 2011 off the Pacific coast of Tohoku Earthquake”
(the Great East Japan Earthquake)**

National Institute for Land and Infrastructure Management (NILIM)
Ministry of Land, Infrastructure, Transport and Tourism, Japan

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Preface

A magnitude 9.0 earthquake occurred off the coast of Sanriku, Japan at 14:46 JST on Friday, March 11, 2011 and triggered extremely destructive tsunami waves. The earthquake and tsunami destroyed, damaged, or washed away a number of buildings, houses and structures in Northeast Japan, including Iwate, Miyagi, Fukushima, Ibaraki, and Chiba prefectures. The highest Japanese seismic intensity scale of 7 was recorded at Kurihara city in the northern part of Miyagi prefecture. The earthquake was named the 2011 off the Pacific coast of Tohoku Earthquake (the Great East Japan Earthquake) by the Japanese government.

In order to learn lessons from the unprecedented disaster and contribute to the improvement of disaster mitigation measures, the National Institute for Land and Infrastructure Management (NILIM) and the Building Research Institute (BRI) has sent staff members to the affected regions and conducted extensive surveys on the damage to buildings and residential lands caused by the earthquake, tsunami and subsequent fires. The types and parts of buildings on which these surveys have been conducted include wood houses, reinforced concrete buildings, steel buildings, residential lands, non-structural components and seismically isolated buildings. In addition, NILIM and BRI have conducted scientific researches on the earthquake and tsunami and analyzed the recorded earthquake motions on various sites across Japan.

This report consists of the main results from these surveys and researches. We hope that this report will be informative in developing effective measures to mitigate damage from future earthquakes and tsunamis in Japan and other earthquake-prone countries in the world.

Finally, we would like to express our deepest condolences to those who lost their families and those who are suffering from the disaster. In addition, we would like to express our heartfelt appreciation to people from around the world for their warm support and cordial friendship.

September, 2011

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Table of Contents

Chapter 1	Introduction	1
Chapter 2	Outline of Research and Field Survey	3
2.1	Outline of Research	3
2.2	Outline of Field Survey	4
Chapter 3	Overview of Damage	7
3.1	Distribution of JMA Seismic Intensity	7
3.2	Casualties and Damage to Buildings and Utilities	9
3.3	Regions Affected by Tsunami.....	11
3.4	Inspections of Damaged Buildings and Residential Lands	13
3.5	Temporary Housing	14
3.6	Building Restrictions	15
Chapter 4	Outline of Earthquake and Tsunami	17
4.1	Earthquake Mechanism	17
4.2	Relocation of Earthquakes	18
4.3	High Frequency Energy Radiation Duration of and its Corresponding Magnitude	19
4.4	Tsunami	20
Chapter 5	Earthquake Motions and Strong Motion Observation in Buildings	27
5.1	Distribution of Seismic Intensities	27
5.2	Characteristics of Earthquake Motions	27
5.3	Results of BRI Strong Motion Observation Network	29
Chapter 6	Damage to Buildings by Earthquake Motions	41
6.1	Policy on Earthquake Damage Investigation for Buildings	41
6.2	Damage to Wood Houses	43
6.3	Damage to Reinforced Concrete Buildings	69
6.4	Damage to Steel Gymnasiums	89
6.5	Damage to Residential Land	101
6.6	Damage to Nonstructural Components	109
Chapter 7	Damage to Buildings in Inundation Areas Induced by Tsunami	119
7.1	Introduction	119
7.2	Classification and Discussion of Damage Patterns	119
7.3	Database for Investigated Buildings	126
7.4	Damage to Wood Buildings	127

7.5	Conclusion	140
Chapter 8	Damage of Buildings, etc. due to Fire	141
8.1	Objective of Survey	141
8.2	Damage by Fire due to Tsunami	143
8.3	Damage by Fire due to Earthquake Motions	146
Chapter 9	Response of Seismically Isolated Buildings	149
9.1	Outline of Surveyed Buildings	149
9.2	Behavior of Seismically Isolated Buildings	151
9.3	Results of Survey	161
Chapter 10	Concluding Remarks	163

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