

Study on the Assessment of China Earthquake Losses in 2006–2020

XIAOQING WANG¹, XIANG DING¹, QIFU CHEN¹, JIFU LIU²

¹Institute of Earthquake Science, China Earthquake Administration, Beijing, 100036, China ²Institute of Geophysics, China Earthquake Administration, Beijing, 100081, China

For the middle and long term national development planning, the possible economic and life loss in the time interval is one of factors which must be considered. As an macro-decision making requirement, the conventional earthquake losses assessment method by using the detailed buildings and infrastructures vulnerability research results is obviously uneconomical. The earthquake loss assessment models based on macro-economic indices such as Gross Domestic Product (GDP) are proposed in the situation Chen Yong et al (1999, 2001, 2002). In this paper, the improved vulnerability model is proposed and the empirical parameters are obtained according to the practical field damage and losses investigation data. By collection of population and economic data of each country, and prediction of their distribution in space in the forthcoming 15 years, the economic and life losses distribution nationwide are assessed and shown in the paper.