

## Appendix 10: Literature List Related to Fragility Function (tentative)

Title	Organization / Author	Year
国・自治体の地震被害想定における被害予測手法の調査（平成 25 年度調査）／Survey for the Damage Calculation Method on the Earthquake Risk Assessment by the National Government and Local Government	損害保険料率算出機構／General Insurance Rating Organization of Japan	2014
南海トラフ巨大地震の被害想定について／Damage Assessment on Nankai Megathrust Earthquakes	内閣府／Cabinet Office, Government of Japan	2013
Predicting Collapse of Steel and Reinforced-Concrete Frame Buildings in Different Types of Ground Motions	Song, Shiyan	2012
Prediction of Collapse from PGV and PGD	Song, Shiyan	2012
Vulnerability Study of Electric Power Grid in Different Intensity Area in Wenchuan Earthquake	Liu, Rushan	2012
Seismic Assessment Method for Indoor Injury Risk and its Application	Endo, Tomoya	2012
Developing vulnerability and risk theory for seismic risk management	Bogdanova, et al.	2007
Analytically derived fragility curves for unreinforced masonry buildings in urban contexts	D'Ayala, D Kishali, E	2012
Proposed Damage Function for Existing RC Residential Buildings in Almaty, Republic of Kazakhstan	Inoue, Akira	2012
Development of Analytical Seismic Fragility Curves for Ordinary Highway Bridges in Turkey	Ö, AvSAR.	2012
Development of Seismic Fragility Curves for Hospital Equipment	Zolfaghari, Mohammad R	2012
Fragility Estimates for RC and PT Flat Slab-Column Connections Subjected to Lateral Drifts	Narayanan, A R Vijaya	2012
Seismic vulnerability of RC buildings considering SSI and aging effects	Fotopoulou, S	2012
Use of regression analysis for the construction of empirical fragility curves	Ioannou, I Rossetto, T Grant, D N	2012
Analytical formulations of fragility functions with applications to probabilistic seismic risk analysis	Lu, D G Yu, X H Jia, M M	2012
Earthquake Vulnerability Assessment of Buildings for Catastrophic Risk Analysis in Urban Areas	Hurtado, A I	2012
Development of f Fragility y Functions for Seismic Damage Assessment Using Kernel Smoothing Methods	Noh, H Kire, A S	2012
Rubbed stone masonry wooden floors stiff floors	Michel, C	2012
Evaluation of Seismic Damage for Tehran Hospitals by HAZUS Methodology	Salehi, Esmaeil	2012
Seismic Risk Assessment of an Industrial Steel Building Part 2: Fragility and Failure Probabilities	Petruzzelli, F Iervolino, I Corte, G Della	2012
Predicting Damage of Wooden Houses Considering the Characteristic of Earthquake Response Spectra and the Frequency Characteristic of Wooden House	Ikemoto, Toshikazu	2012
Vulnerability functions for buildings due to liquefaction	Nino, Mauro	2012
Scaling bias and record selection for fragility analysis	Mehdizadeh, M. Mackie, K.R. Nielson, B.G.	2012
Development of Damage Fragility Functions for URM Chimneys and Parapets	Krawinkler, H, et al.	2012
Evaluation of analytical methodologies used to derive vulnerability functions	Silva, V, et al.	2014
Seismic Fragility Functions of Stone Masonry Buildings	Tsionis, Georgios	2012
A global building inventory for earthquake loss estimation and risk management	Jaiswal, et al.	2010
WHE-PAGER Project: A new initiative in estimating global building inventory and its seismic vulnerability	Porter, et al.	2008
An empirical model for Global Earthquake fatality estimation	Jaiswal, et al.	2010

Creating a Global Building Inventory for Earthquake Loss Assessment and Risk Management: U.S. Geological Survey Open-File Report	Jaiswal, K.S. Wald, D.J.	2008
Probabilistic Modeling System for Assessing Flood Risks, Natural Hazards	Apel, H., Thieken, A.H., Mertz, B., and Bloschl, G.A.	2006
Comparative Risk Assessments for the City of Cologne –Storm Floods, Earthquake, Natural Hazards	Grunthal, G., Thieken, A.H., Schwaz, J., Radtke, K. S., Smolka, A. and Merz, B.	2006
Flood Risk Curves and Uncertainty Bounds, Natural Hazards	Mertz, B. and Thieken, A.H.	2009
Development of Sysytem for Producing Flood Risk Curve	Fujimi	2010
Study on Alteration of Flood Risk Curve by River Improvement	-	2013
Methodology for Flood Risk Assessment in Tokyo Metropolitan Area	-	2013
Flood Risk Assessment based on Flood Risk Curve in Tokyo Metropolitan Area	-	2013
Guideline for Analysis of Flood Damage Indicators (trial version in 2013)	-	2015
Assessment of Flood Inundation Risk and Mitigation Effect based on Response Scenarios for River-Structures Group System for Various Flood Scale	-	-
Study on Regional Comprehensive Disaster Prevention	-	-

Source: JICA Project Team