

KATO LAB.

Establishing Social Safety System



Department of Human and Social Systems

Social Safety System

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<http://kato-sss.iis.u-tokyo.ac.jp/>

Community is part of life that exists because of the people who live in a place, thus creating a local community. Safety, amenity, and affluence is necessary in our life. Safety is one of the most fundamental necessities of human beings. What urbanization and modernization have given us, and what they've taken from us? We need to ask ourselves whether we take safety for granted. Today's post-urbanization era is the right time to re-consider what the safety of community means. Continuous re-thinking and improvement is the only way we can ensure safety in our communities. In Establishing Social Safety System, we consider the aggregation of urban stocks as a community entity and consider the safety of the social systems which would enable the safety of everyone.

Assessment

Evaluating vulnerability in urban areas

Estimation of Earthquake Damage Urban Disaster Prevention Plan

If a fire breaks out in a group of buildings of the same color during an earthquake, all of the buildings will be destroyed by fire.

Spread Cluster (Community of Fire Destiny)

Simulation of flood evacuation

Evacuation Simulation in the event of an earthquake fire

Reflecting the characteristics of human behavior

Implementation

Considering countermeasures with community

Safety Ensuring Plan Learn from The Depopulated Areas

Below Low-water : 31.5km²
Below High-water : 124.3km²
Below level of storm surges : 254.6km²

Sharing risks

Community Planning to cope with flooding

Review of countermeasures by workshop

A Workshop with Residents

Community Planning for Disaster prevention

Disaster Planning Support: Comprehensive Approach Based on Community

- Estimation of Earthquake Damage, Local Disaster Prevention Plan
- Estimation of Tsunami Damage, Local Disaster Prevention Plan
- Nankai Trough
- Urban Disaster Prevention Plan
- Recovery Image Training
- Safety Ensuring Plan
- River Basin Management
- Learn from The Depopulated Areas

Preparation

Preparing for disasters from the position of planner

Recovery Image Training

Development of Reconstruction Image Training Methodology

Description of assumed model of reconstruction status and optimization of reconstruction

A Study on Urban and Regional Recovery from Disasters

Technology

Technically supporting to achieve safe society

Disaster Planning Support

Tools based on AR technology

Visualization of Disaster Information by Google Earth

Establishment of Regional Disaster Prevention Technology Package (Building a New Social System)

