

Kato Takaaki Lab.

[Establishing Social Safety System]



Department of Human and Social System

Department of Urban Engineering

Social Safety System

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

The local community can exist because the people live there. Community is part of life. Safety, amenity and affluence is necessary in our life. Safety is one of the most fundamental necessities of human beings. What has urbanization and modernization given us, and what have they removed 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 a community means. The continuous re-thinking and improvement is the only way we can ensure safety in our communities. Urban Planning and Engineering for Social Safety System, we consider the aggregation of urban stocks as an 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

Reflecting the characteristics of human behavior

Evacuation Simulation in the event of an earthquake fire

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

Community Planning for Disaster prevention (To continue disaster prevention while having fun)

A Workshop with Residents

preparation

Preparing for disasters from the position of planner

Recovery Image Training

Development of Reconstruction Image Training Methodology

Being the main character, he thinks about options for rebuilding his life from an individual standpoint.

From a planner's point of view, I think about the way urban reconstruction should be.

Try to balance personal life reconstruction and planner's perspective.

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 safety society

Disaster Planning Support

AR Disaster Prevention Application "Tensai Manabu Gun"

Tools based on AR technology

Visualization of Disaster Information by Google Earth

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

Administrative Organization The power of the region connects vertically.

Establishment of relations between "cooperation + public assistance"

① Inspiration Stimulus ② Correct Understanding of Natural Disaster Risks ③ Multi-Layered Community ④ Expansion of interest groups

