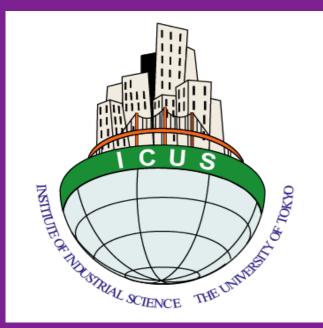
#### **Urban Planning and Engineering for Social Safety System**



ICUS

## Kato Takaaki Lab. (ICUS) [Establishing Social Safety System]

International Research Center for Urban Safety

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

**Social Safety System** 

Department of Urban Engineering

### **Considering Social Safety System**

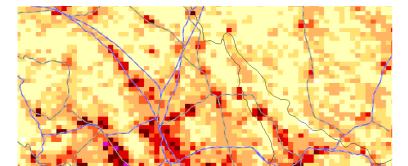
Our researches cover the optimization of urban system as hardware and social system as software which supports citizens' lives from the viewpoint of urban safety. We set our research themes on all phases of disaster measures such as disaster urban mitigation, response for disaster, and post-disaster urban rehabilitation and reconstruction. They have been studied in both practical and theoretical approaches. Our final goal is to achieve safety and amenity city. We will establish "Social Safety System" as an integrated academic field through our research activities.

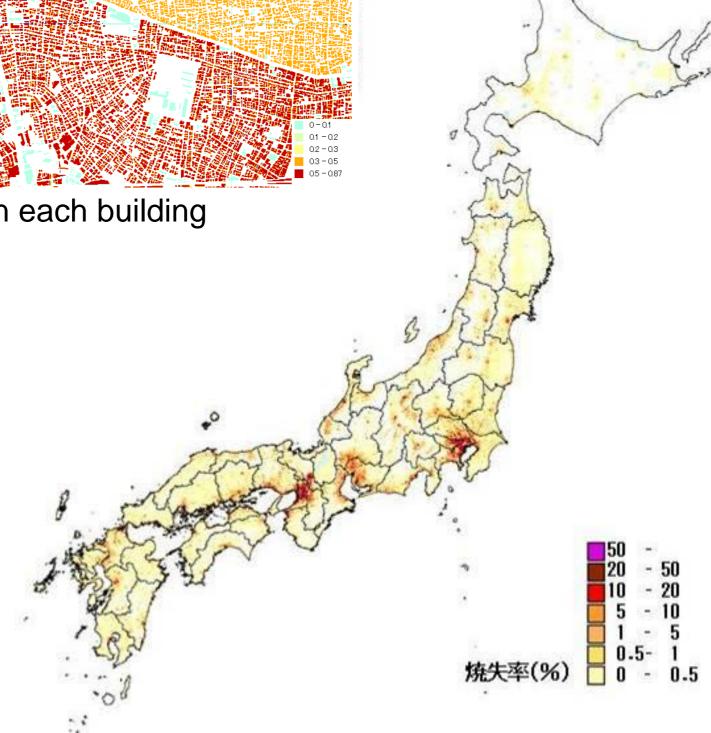
#### A. Evaluating vulnerability in urban areas

Natural disaster vulnerability assessment in urban areas A study on earthquake fire risk assessment method

Calculating earthquake fire risk in building, regional and national scale

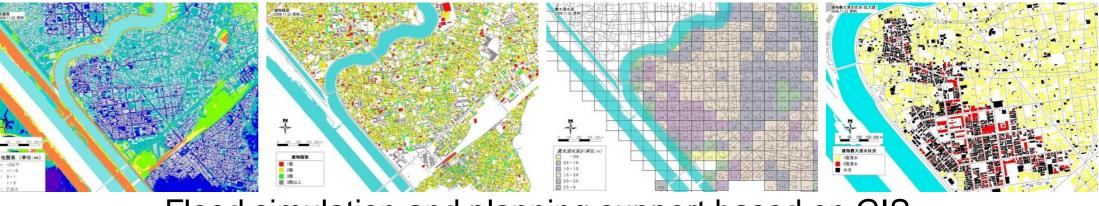






B. Considering countermeasures with community
Adaptation measures in cities for climate change
Methodology for disaster prevention machidukuri
Theory for disaster prevention urban planning
Planning with citizens in "Below-sea-level City"

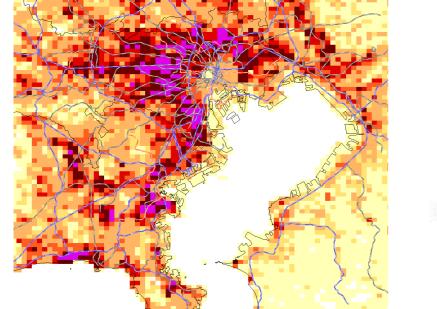
Establishing risk communication method based on objective information Attempting area management by "New Public Sector"



Flood simulation and planning support based on GIS







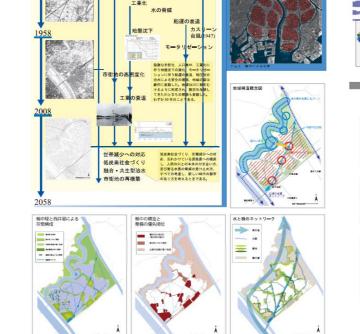
Burn probability spatial distribution in regional scale Burnt probability spatial distribution in national scale

#### C. Preparing for disasters from the position of planner

A study on rehabilitation and reconstruction of cities Establishing an image training method for post-disaster planning

#### Supporting community-based activities in Tohoku





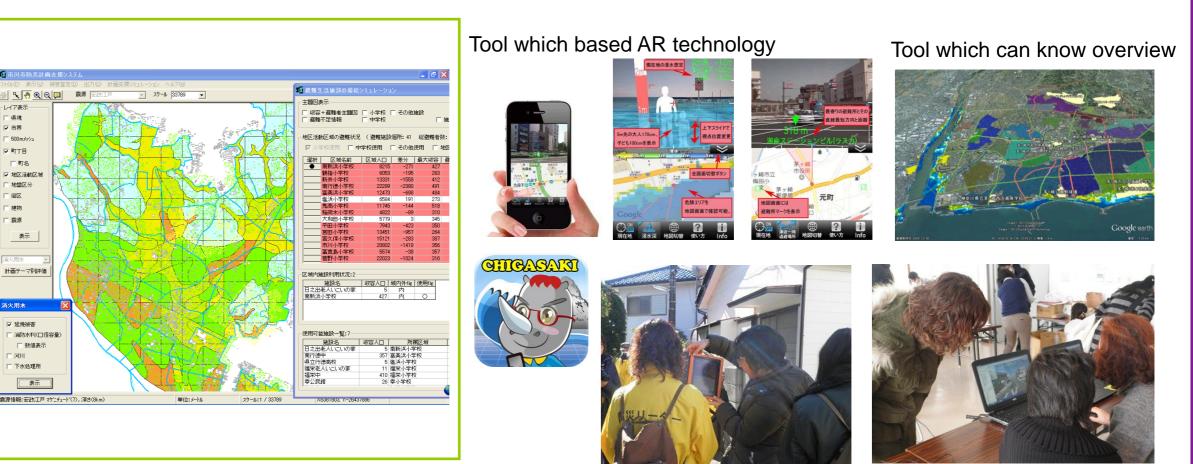


Bw 603 • Cw801

Planning workshop with residents

Drawing visions "Below-Sea-Level City 2058 Plan

# D. Technically supporting to achieve safety society Turning into practical use and upgrading the techniques Developing support system and technologies for urban planning and community-based activities for disaster mitigation and response.

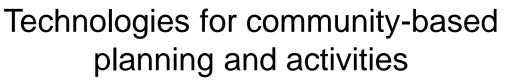






Support of recovery activity by civic group

#### Planning supporting system for disaster prevention plan



**Institute of Industrial Science**