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My City Forecast: Urban Planning Simulator for Citizens

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Background

Need of Flexible Urban Management with Public Involvement

Open Data Movement in Japanese local governments

Sophisticated **data utilization/ visualization technologies**

citizens, local authorities, company, academic organizations, NPO

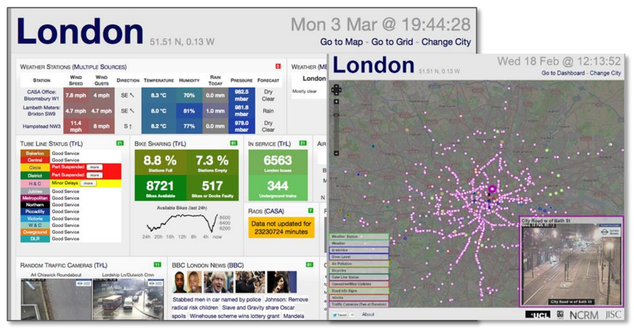
Solutions for regional problems utilizing local datasets

①Public involvement　②Transparency　③ Efficiency

Development of tools to understand your city

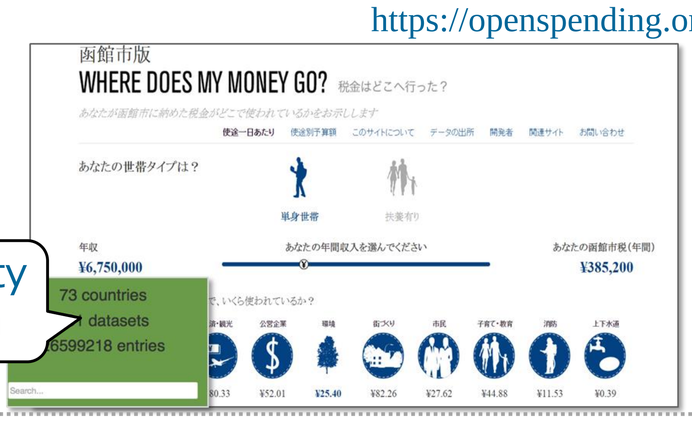
http://citydashboard.org/london/

- Real-time city information visualization



https://openspending.org/

- Public spending open data visualization



Global community driven platform

Aim of Research

Lack of communication opportunities in urban planning field

Urban Planners

- "Publication of **master plans** (booklet or pdf)
- Explanation of how the city will be **as a whole**

Orientation

Opinion + evaluation

Citizens

- What they really want to know **is effect to their daily lives**
- **Anxiety** and **repulsion** due to lack of information

<Our Aim>

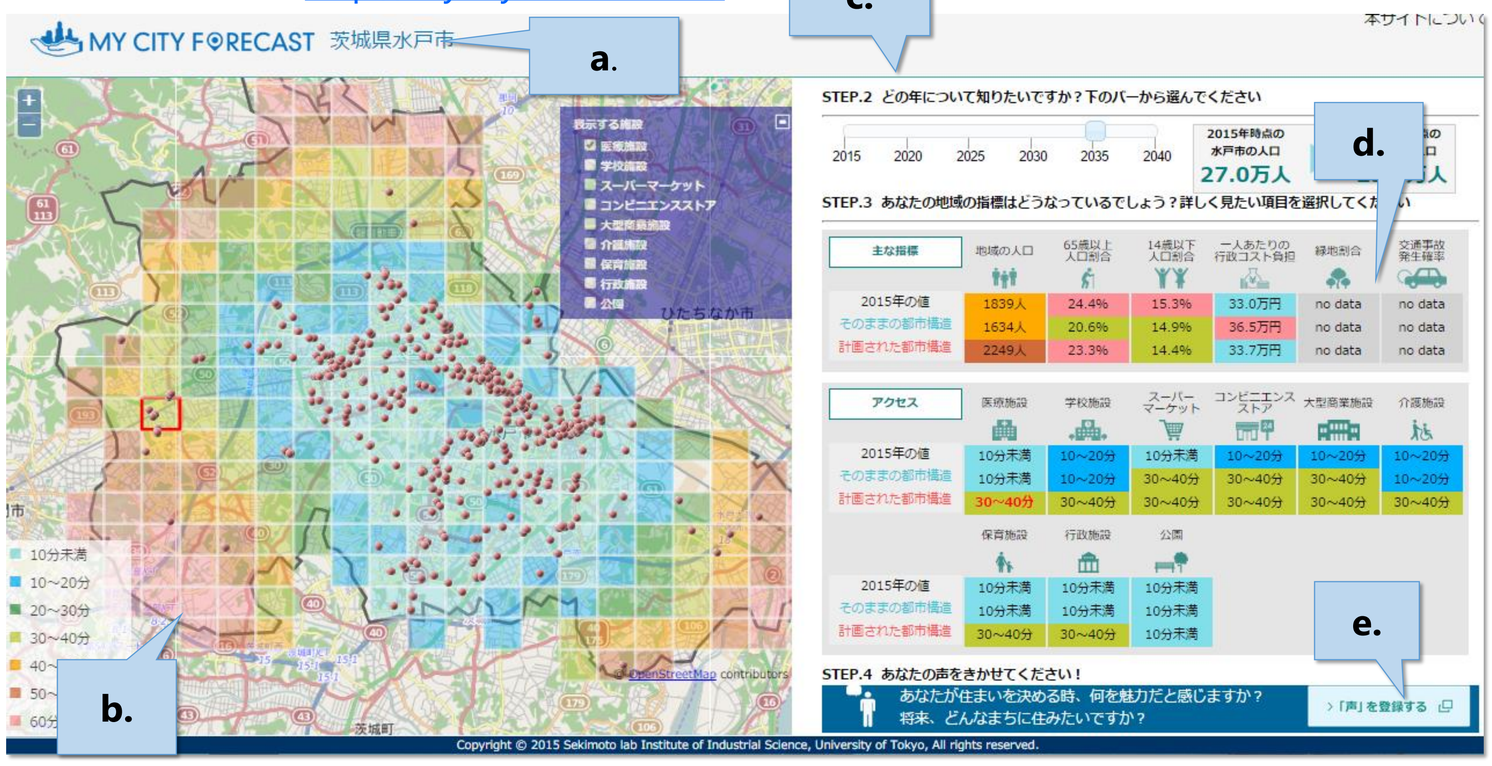
To develop a tool **for citizens** that shows info about the future of their city **to enhance their awareness and communication with urban planners.**

Urban planners (Local gov.)
: **Can positively obtain public opinion for city management**

Citizens
: **Decide whether to agree or disagree to plans in the view of their living**

Developing Web-App: 'My City Forecast'

Have a look at : http://mycityforecast.net/



<Simulation flow>

6 fundamental datasets that illustrates the urban structure

- ■ Population distribution
- ■ Urban facility distribution
- ■ Public transportation system
- ■ Green land distribution
- ■ Land use plans
- ■ Administrative cost information

input

Population distribution model
- Cohort estimation
- Change of residential areas

Urban facilities dirtribution model
- Withdraw based on population density threshold

Administrative cost
- Change according to population and number of urban facilities

output

15 indicators of living environment

a: title　b: city map for area selection and visualization　c: scroll bar for year selection d: Estimation result of 15 indicators, comparing current, BAU case, and compact city case　e: link to questionnaire page