Open Data Actions in Japan

Sep. 7, 2016

Deputy Director Naoki TATSUZAWA

National Strategy Office of ICT

Cabinet Secretariat

Overview of Open Data Actions in the Government

2011 ▶ Mar. The Great East Japan Earthquake (Our open data initiative)

2012 ▶ Jul. The e-Government Open Data Strategy was adapted

2013 ▶ Jun. Declaration to be the World’s Most Advanced IT Nation /
Roadmap for Open Government Data promotion

▶ Dec. Government open data catalog site “DATA.GO.JP” (trial version) was launched

2014

▶ Jun. Government of Japan Standard Terms of Use（Version1.0）

▶ Oct. “DATA.GO.JP” (full version) launched

2015 ▶ Feb. Open Data Guideline and handbook for local government

▶ Jun. Declaration to be the World’s Most Advanced IT Nation revised/
Action for encouraging New Open Data

▶ Dec. Government of Japan Standard Terms of Use（Version2.0）Revised

2016 ▶ May. Open Data 2.0 was adopted

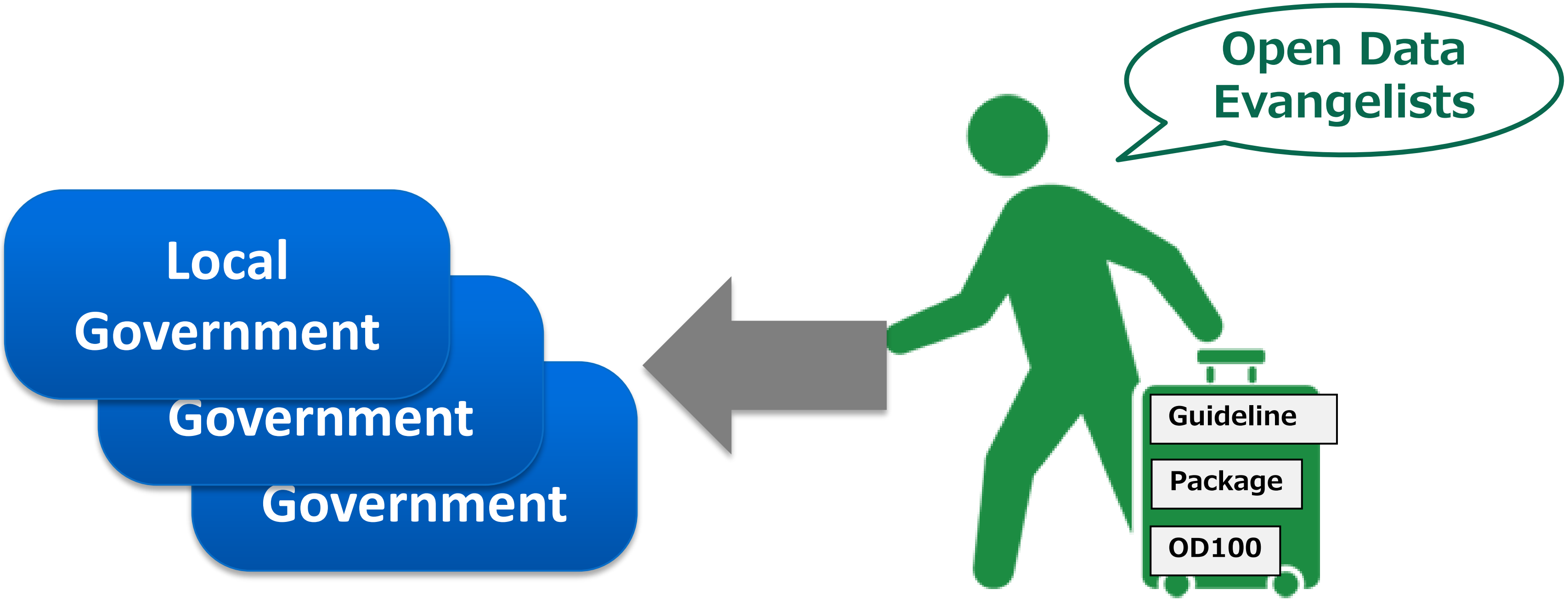
Open Data in the Government

Ministries and Agencies	# of Datasets (Mar. 2015)	# of Datasets (Jun. 2015)	# of Datasets (Sep. 2015)	# of Datasets (Mar. 2016)	Increase from Mar. 2015	Increase rate from Mar. 2015
合計	12970	13038	14731	16308	3338	25.7%
Ministry of Land, Infrastructure, Transport and Tourism	3202	3211	3416	3619	417	13.0%
Ministry of Economy, Trade and Industry	1512	1512	2165	2347	835	55.2%
Ministry of Education, Culture, Sports, Science and Technology	1299	1331	1431	1477	178	13.7%
Ministry of Health, Labour and Welfare	1096	1065	1268	1488	392	35.8%
Ministry of the Environment	1025	1035	1035	1037	12	1.2%
Cabinet Office	812	812	1186	1417	605	74.5%
Ministry of Finance	765	745	774	1166	401	52.4%
Ministry of Internal Affairs and Communications	746	748	721	849	103	13.8%
Ministry of Agriculture, Forestry and Fisheries of Japan	536	536	536	543	7	1.3%
Ministry of Justice	531	556	565	584	53	10.0%
The National Police Agency	388	407	463	422	34	8.8%
Ministry of Defense	278	287	307	326	48	17.3%
Financial Services Agency	152	154	163	228	76	50.0%
Japan Fair Trade Commission	129	130	136	145	16	12.4%
The National Personnel Authority	122	124	141	197	75	61.5%
Ministry of Foreign Affairs of Japan	120	122	126	131	11	9.2%
Imperial Household Agency	93	93	96	121	28	30.1%
Cabinet Secretariat	63	65	71	74	11	17.5%
Consumer Affairs Agency	53	57	82	83	30	56.6%
Cabinet Legislation Bureau	37	37	38	43	6	16.2%
Reconstruction Agency	11	11	11	11	0	0.0%

Open Data Evangelists

- Appointed eight experts as “Open Data Evangelists” and started to send them to local governments this year.

- Each evangelist promotes the utilization of Open Data and helps local governments set up Open Data portal sites together with “Open Data Guideline and handbook for local government”, where national initiatives are summarized, “Open Data Package for Local Governments” and “Open Data 100 (Use Case)”.

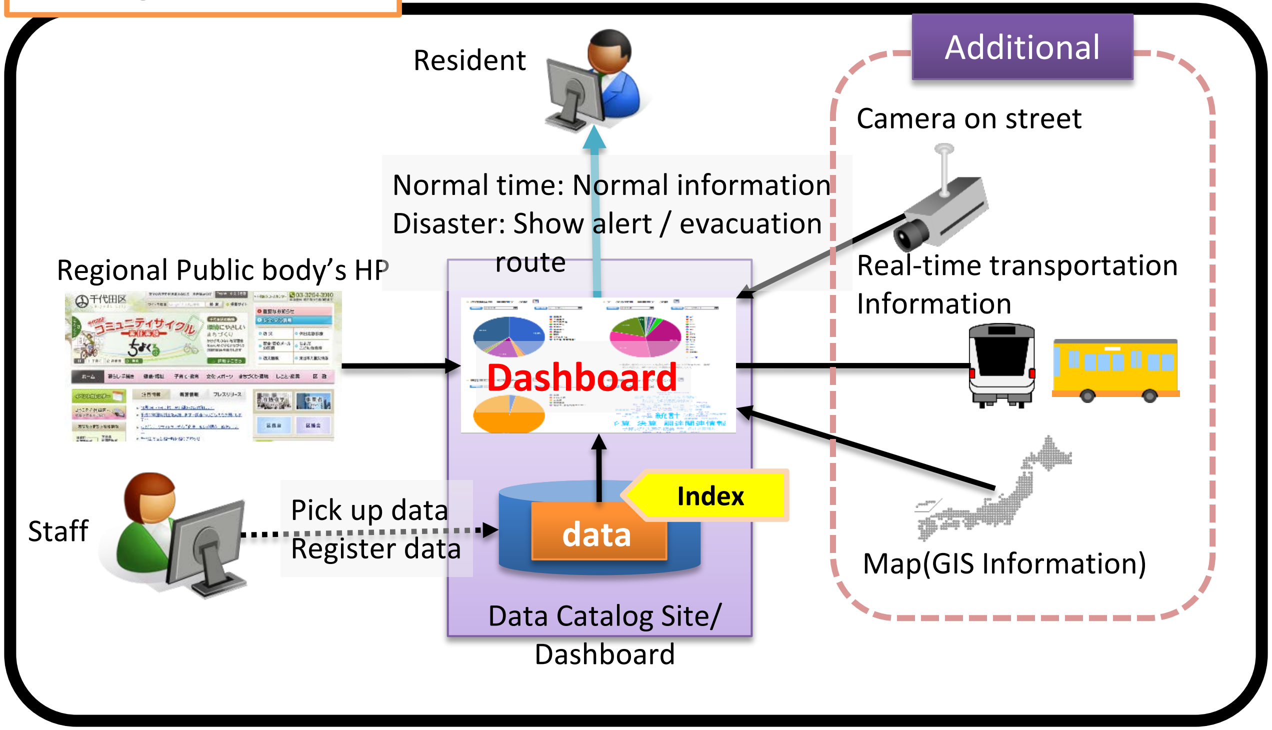

Open Data Evangelists
Local Government
Government
Government
Guideline
Package
OD100

Open Data Package for Local Governments

Provide Package to Accelerate the Action of Open Data in Local Governments

To support local governments that do not know hot to take a first step toward open data, we will provide package that consists of open data catalogue and dashboard application using this open data. We will assist local governments to take action for open data and have the fundamental to apply this package to other local governments.

Package Contents



Resident

Normal time: Normal information
Disaster: Show alert / evacuation route

Regional Public body's HP

Dashboard

Index

data

Staff

Pick up data
Register data

Data Catalog Site/ Dashboard

Additional

Camera on street

Real-time transportation Information

Map(GIS Information)

Included in this package

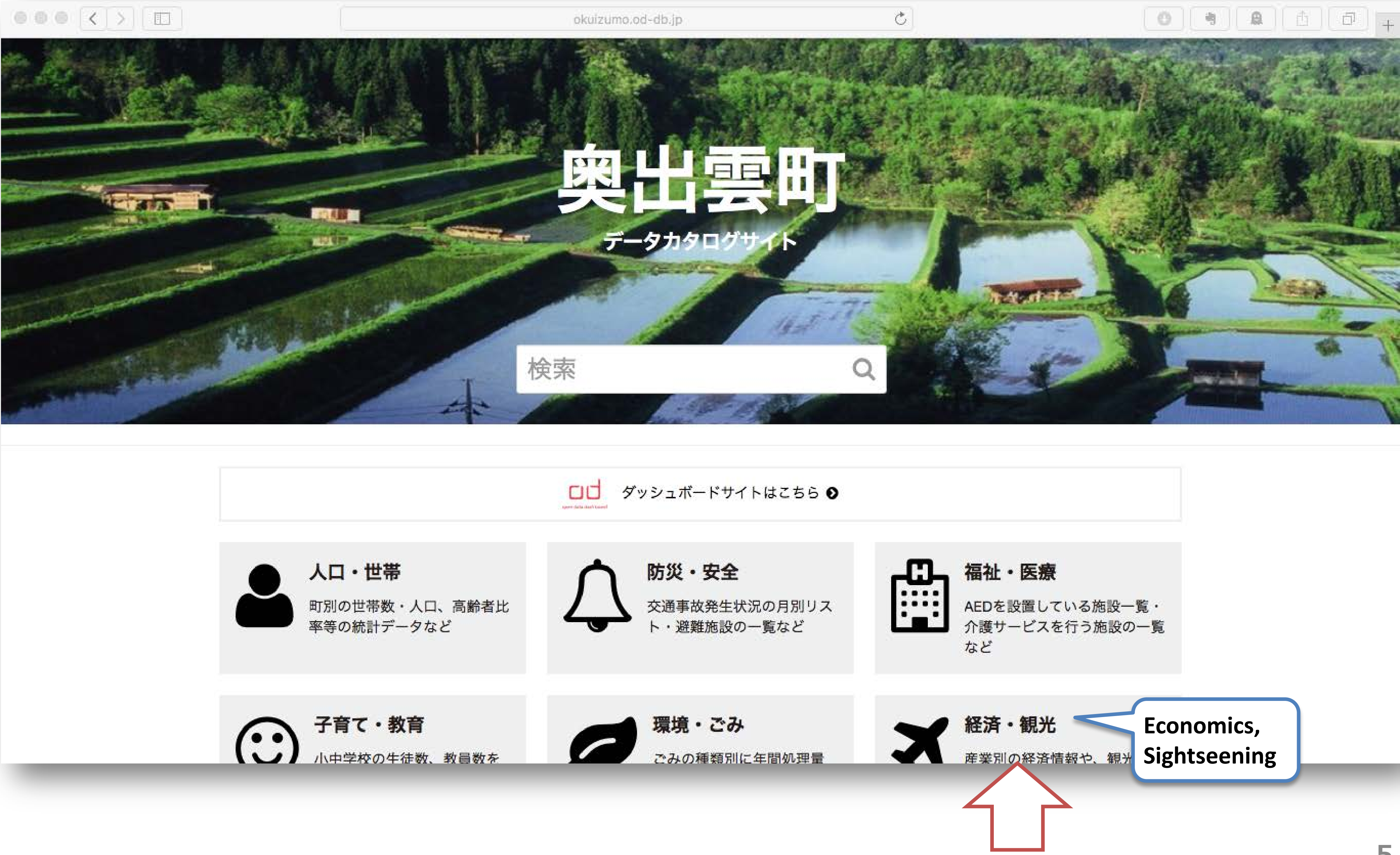
- Data Catalogue for open data
- Dashboard using open data

Effect expected

- Help solve problems faced by regional public bodies by opening data related to regional issues such as disaster prevention, decreasing birthrate and aging society etc.
- Make it easier to start open data by providing package focusing both on the availability and the use of data
- Provide example of standard format for registering data

⇨Translating into English to deploy globally.

Open Data Catalog Site



okuizumo.od-db.jp

奥出雲町

データカタログサイト

検索

ダッシュボードサイトはこちら

人口・世帯

町別の世帯数・人口、高齢者比率等の統計データなど

防災・安全

交通事故発生状況の月別リスト・避難施設の一覧など

福祉・医療

AEDを設置している施設一覧・介護サービスを行う施設の一覧など

子育て・教育

小中学校の生徒数、教員数を

環境・ごみ

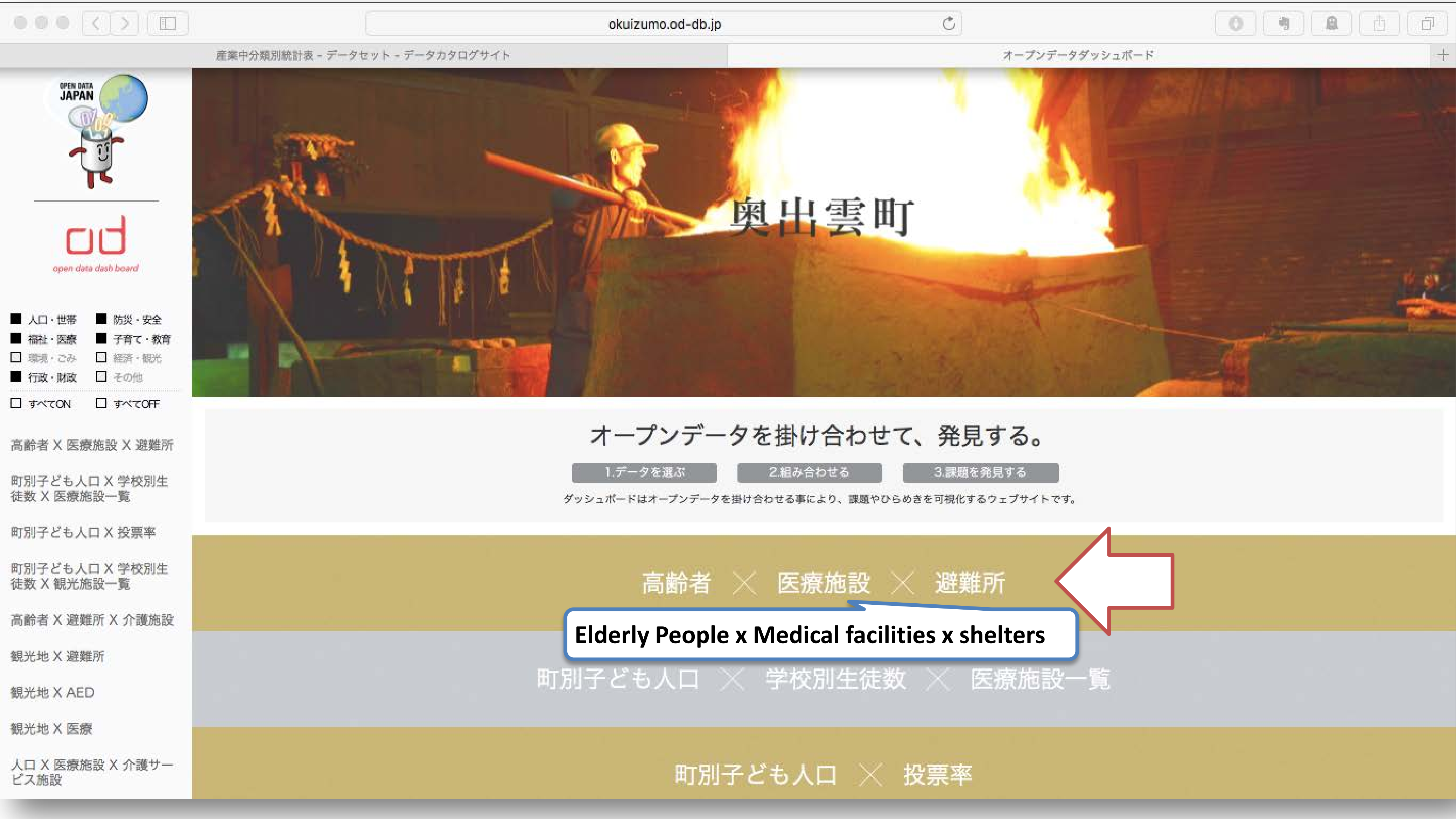
ごみの種類別に年間処理量

経済・観光

産業別の経済情報や、観光

Economics, Sightseeing

Open Data Dashboard



okuizumo.od-db.jp
産業中分類別統計表 - データセット - データカタログサイト
オープンデータダッシュボード
OPEN DATA JAPAN
od
open data dash board
奥出雲町

■ 人口・世帯 ■ 防災・安全
■ 福祉・医療 ■ 子育て・教育
□ 環境・ごみ □ 経済・観光
■ 行政・財政 □ その他
□ すべてON □ すべてOFF

高齢者 X 医療施設 X 避難所

町別子ども人口 X 学校別生徒数 X 医療施設一覧

町別子ども人口 X 投票率

町別子ども人口 X 学校別生徒数 X 観光施設一覧

高齢者 X 避難所 X 介護施設

観光地 X 避難所

観光地 X AED

観光地 X 医療

人口 X 医療施設 X 介護サービス施設

オープンデータを掛け合わせて、発見する。

1.データを選ぶ 2.組み合わせる 3.課題を発見する

ダッシュボードはオープンデータを掛け合わせる事により、課題やひらめきを可視化するウェブサイトです。

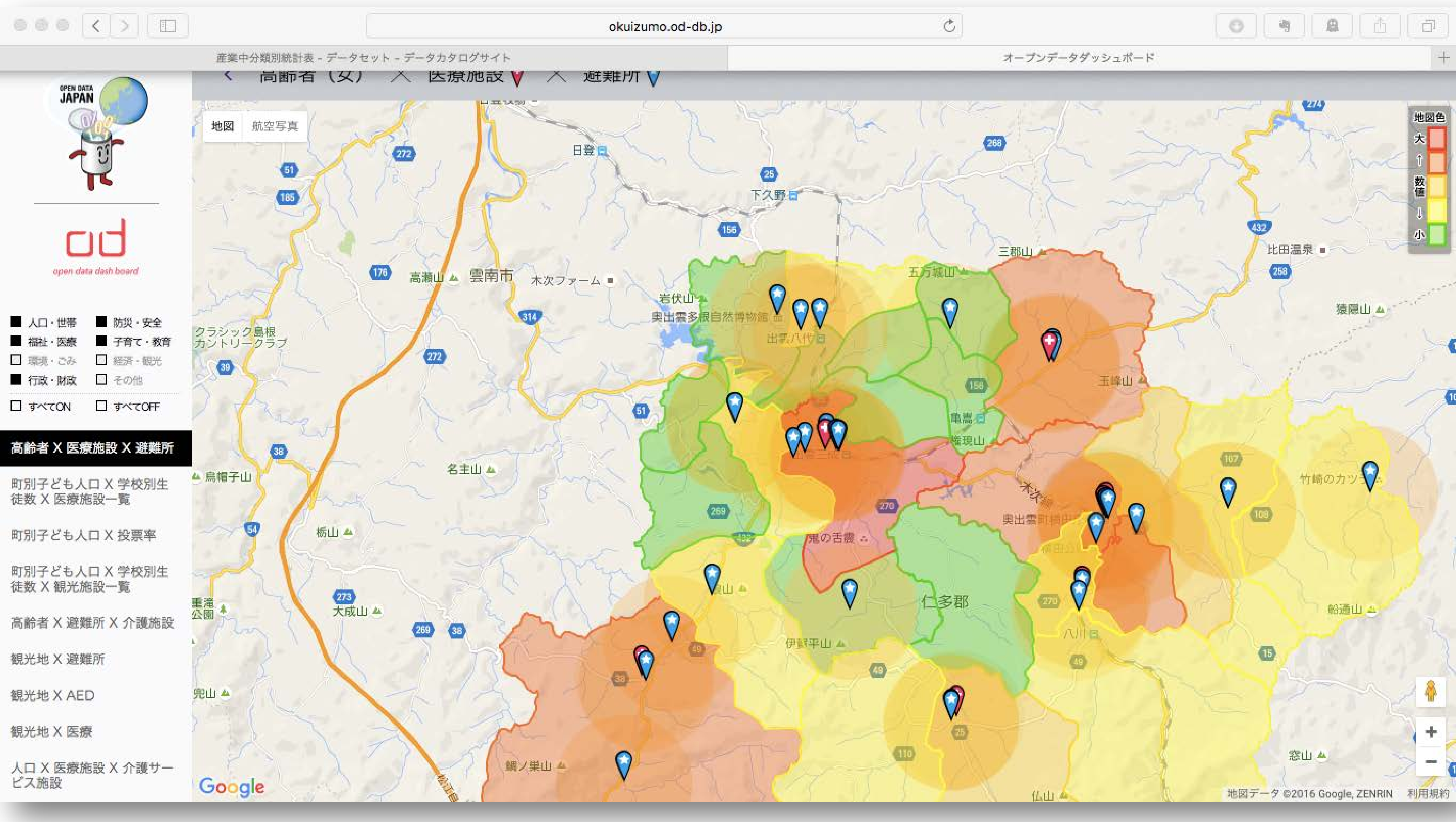
高齢者 ╳ 医療施設 ╳ 避難所

Elderly People x Medical facilities x shelters

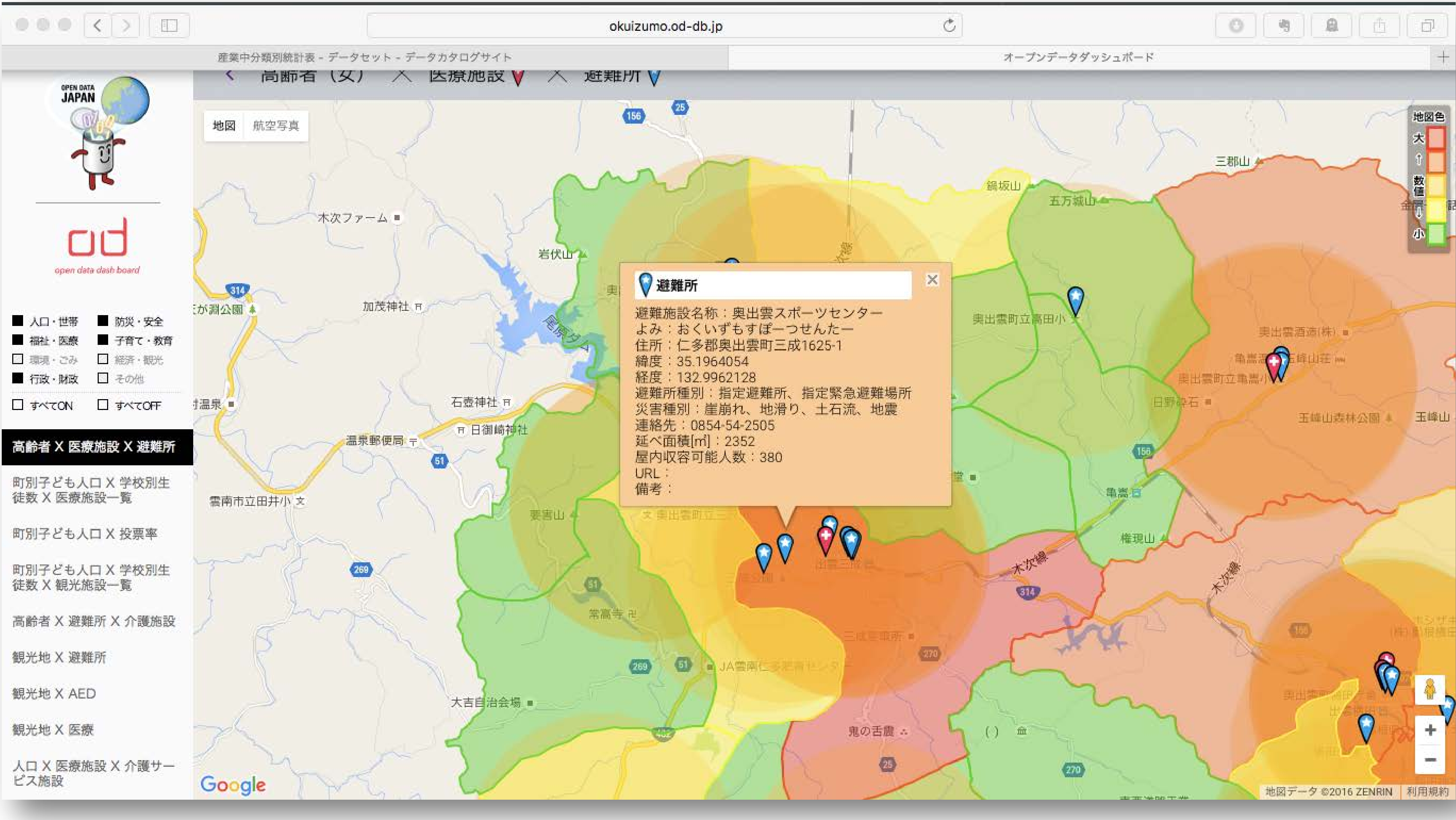
町別子ども人口 ╳ 学校別生徒数 ╳ 医療施設一覧

町別子ども人口 ╳ 投票率

Open Data Dashboard


okuizumo.od-db.jp
産業中分類別統計表 - データセット - データカタログサイト
オープンデータダッシュボード
OPEN DATA JAPAN
od
open data dash board
■ 人口・世帯
■ 防災・安全
■ 福祉・医療
■ 子育て・教育
☐ 環境・ごみ
☐ 経済・観光
■ 行政・財政
☐ その他
☐ すべてON
☐ すべてOFF
高齢者 X 医療施設 X 避難所
町別子ども人口 X 学校別生徒数 X 医療施設一覧
町別子ども人口 X 投票率
町別子ども人口 X 学校別生徒数 X 観光施設一覧
高齢者 X 避難所 X 介護施設
観光地 X 避難所
観光地 X AED
観光地 X 医療
人口 X 医療施設 X 介護サービス施設
< 高齢者（女） X 医療施設 X 避難所
地図
航空写真
地図色
大
↑
数値
↓
小
日登
下久野
三郡山
比田温泉
五方城山
猿隠山
高瀬山
雲南市
木次ファーム
岩伏山
奥出雲多根自然博物館
出雲八代
クラシック島根カントリークラブ
玉峰山
亀嵩
玉現山
名主山
烏帽子山
栃山
鬼の舌震
奥出雲町横田
竹崎のカツラ
大成山
仁多郡
伊賀平山
船通山
八川
鯛ノ巣山
窓山
仏山
Google
地図データ ©2016 Google, ZENRIN
利用規約

Open Data Dashboard

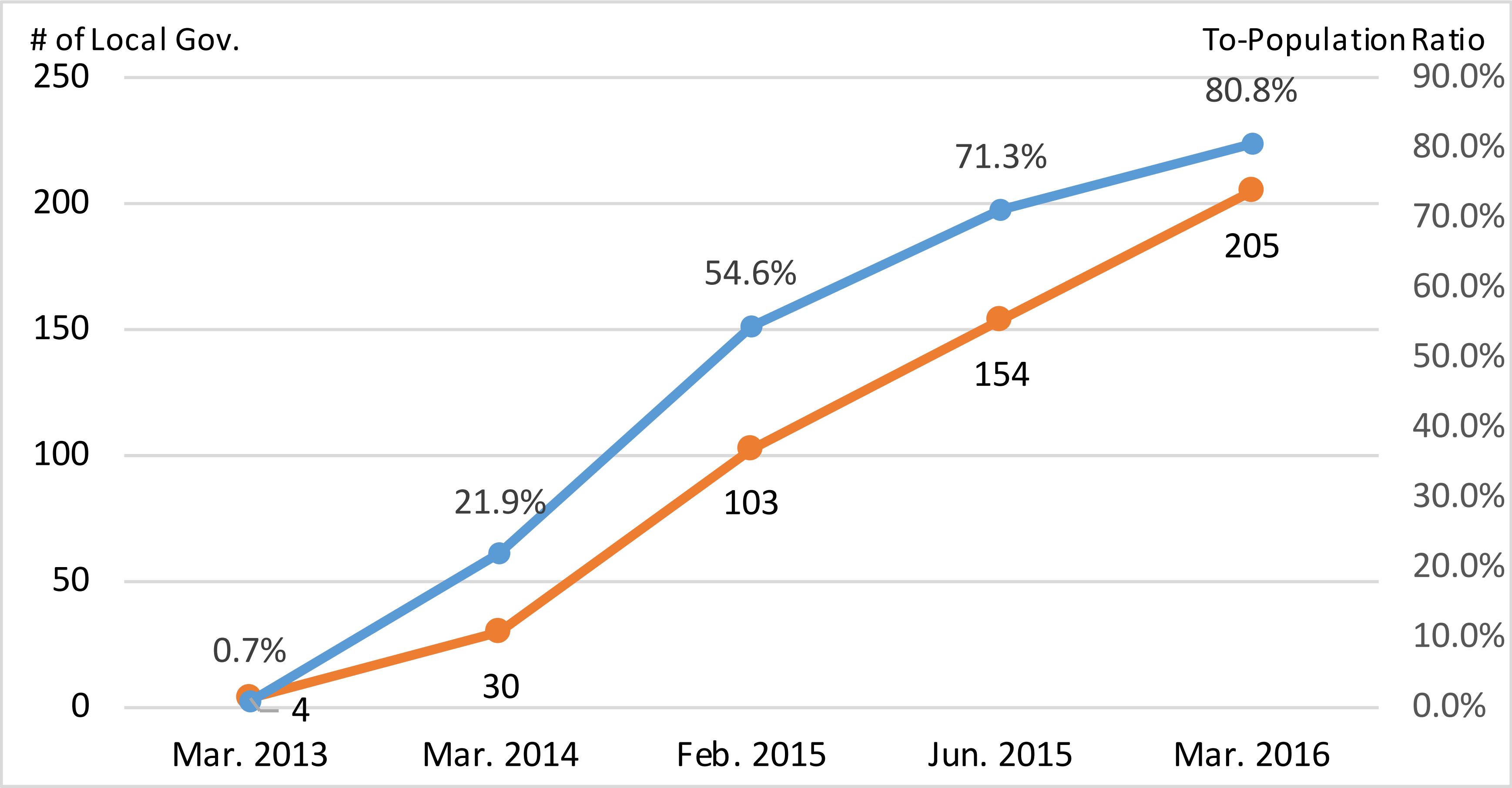

okuizumo.od-db.jp
産業中分類別統計表 - データセット - データカタログサイト
オープンデータダッシュボード
高齢者（女） X 医療施設 X 避難所
OPEN DATA JAPAN
od
open data dash board
■ 人口・世帯
■ 防災・安全
■ 福祉・医療
■ 子育て・教育
□ 環境・ごみ
□ 経済・観光
■ 行政・財政
□ その他
□ すべてON
□ すべてOFF
高齢者 X 医療施設 X 避難所
町別子ども人口 X 学校別生徒数 X 医療施設一覧
町別子ども人口 X 投票率
町別子ども人口 X 学校別生徒数 X 観光施設一覧
高齢者 X 避難所 X 介護施設
観光地 X 避難所
観光地 X AED
観光地 X 医療
人口 X 医療施設 X 介護サービス施設
地図
航空写真
地図色
大
数値
小
木次ファーム
岩伏山
加茂神社
石壺神社
日御崎神社
温泉郵便局
雲南市立田井小
要害山
常高寺
大吉自治会場
鬼の舌震
鍋坂山
五万城山
三郡山
奥出雲町立高田小
奥出雲酒造(株)
玉峰山荘
奥出雲町立亀嵩小
日野砕石
玉峰山森林公園
玉峰山
亀嵩
権現山
木次線
Google
地図データ ©2016 ZENRIN
利用規約

避難所

避難施設名称：奥出雲スポーツセンター
よみ：おくいずもすぽーつせんたー
住所：仁多郡奥出雲町三成1625-1
緯度：35.1964054
経度：132.9962128
避難所種別：指定避難所、指定緊急避難場所
災害種別：崖崩れ、地滑り、土石流、地震
連絡先：0854-54-2505
延べ面積[㎡]：2352
屋内収容可能人数：380
URL：
備考：

The Transition of Local Governments Tackling Open Data

The Number of Local Governments Tackling Open Data and To-population Ratio



※Based on the study in National Strategy Office of ICT, Cabinet Secretariat
All the prefectures and municipal governments are targeted.

Data Utilization Case #1.　Disaster IT：Traffic performance map

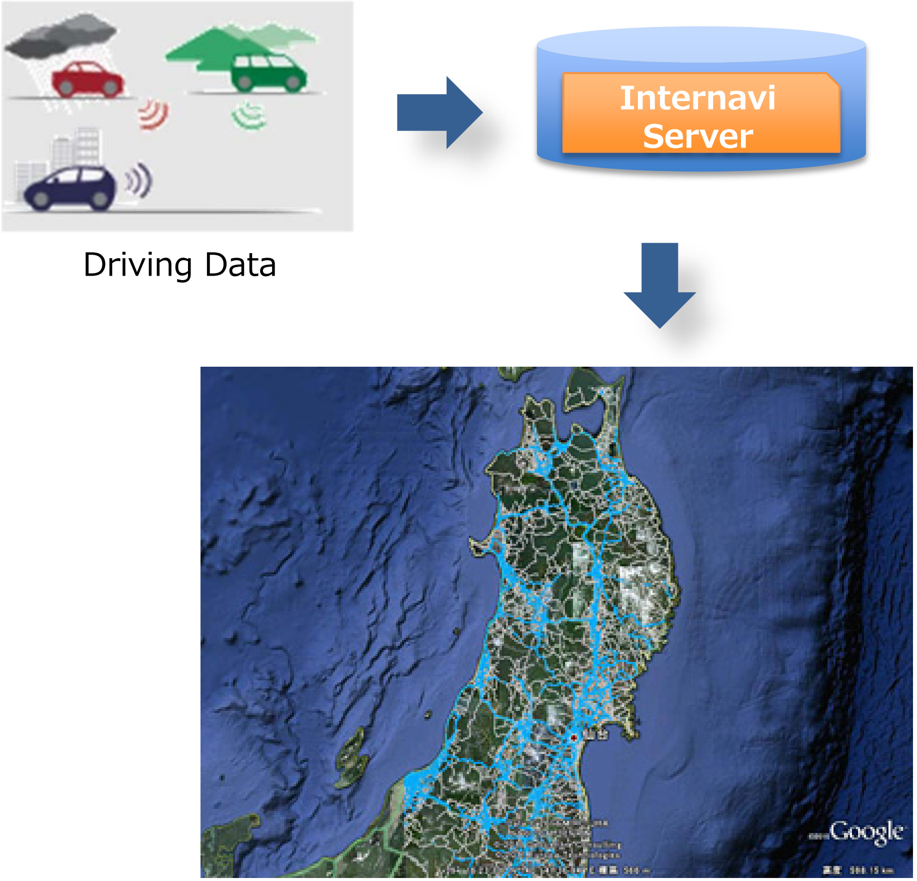
After the Great East Japan Earthquake (2011), traffic performance map was generated and released by using traffic performance data, gathered from automobiles attached with navigation system.

【Outline】

- Honda provided traffic information based on traffic performance data, automatically collected from automobiles attached with navigation system "Internavi".
- Right after the earthquake, Google visualized the availability of each road in devastated areas as "Google Crisis Response".

【Results】

- Contributed to support people in devastated areas quickly. E.g. helped volunteers deliver relief goods smoothly.
- Same action was taken in the 2016 Kumamoto earthquake.



Driving Data

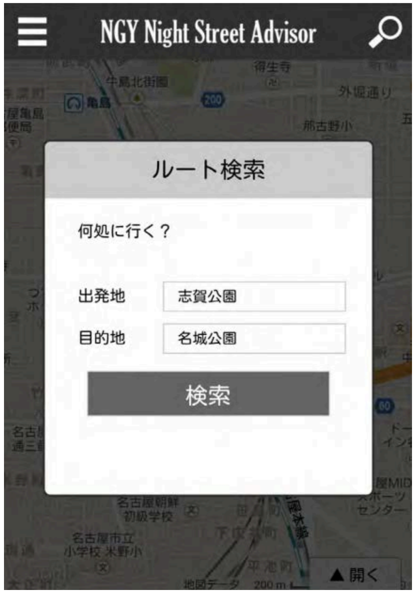
Internavi Server

Data Utilization Case #2. Crime Prevention：Night Street Advisor

College students have created a heat map about street lamp locations by means of street lamp location data owned by local government (open data).

【Outline】

- ● Akashi college’s “Code for KOSEN” team developed the application using street lamp location data provided by the local government (Nagoya City).
- ● The application indicates street lamp locations on the map and recommends well-lighted route to prevent crimes, based on the fact that crime rate increases in the dark night street.



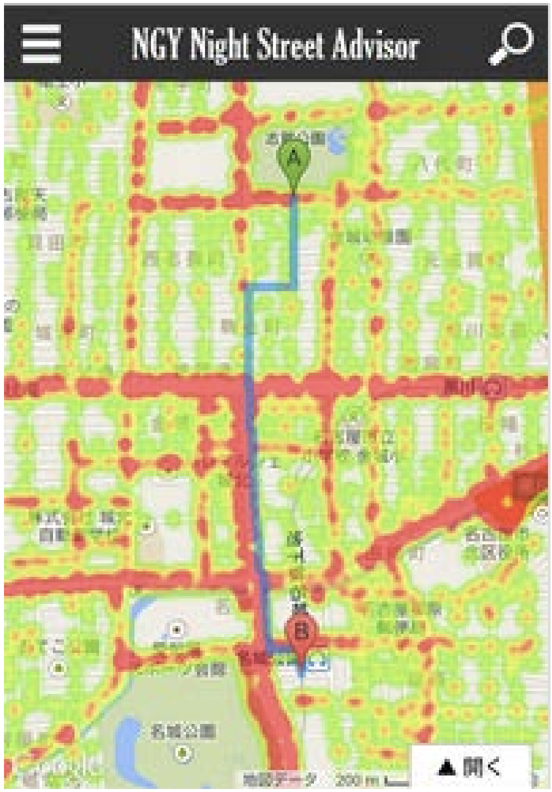
ルート検索

何処に行く？

出発地 志賀公園

目的地 名城公園

検索



【Results】

- ● Citizens can get to their destinations safely avoiding dark night street.
- ● The same system is being deployed to Shizuoka prefecture.

Data Utilization Case #3. Regional Revitalization： Eagle Bus, Inc.

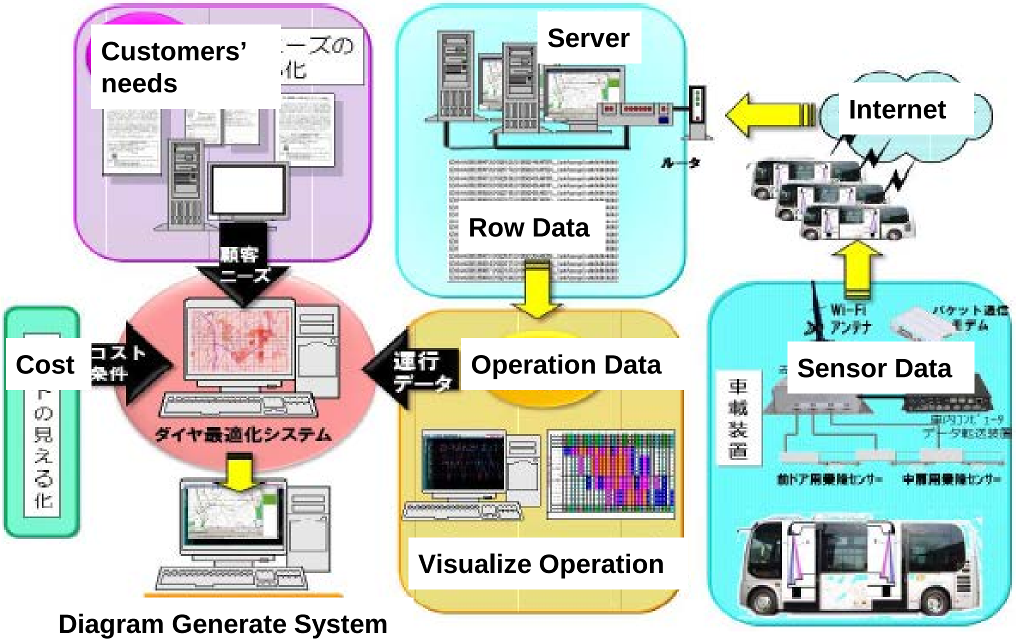
Eagle Bus, Inc. became profitable through the optimization of bus routes by using data from sensors attached to buses. Furthermore, this system contributes to revitalize local communities by setting up new hub bus stops, where community facilities are installed.

【Outline】

- Attached sensors to buses’ entrances and exits to seize vehicle occupancy anywhere anytime. (visualize service status)
- Optimized bus routes and set up new hub bus stops by setting up the best routes and revising schedule from the sensor data.
- Revitalized local communities by installing bank ATMs, convenience stores, post offices at the hub bus stops as well as optimizing its operation and improving its profitability.

【Results】

- The number of passengers has doubled or even tripled with the same number of buses.
- Improved profitability and enhance convenience for local citizens.
- Deployed the same systems in Hakodate city (Hokkaido prefecture, Japan) and Yangon city (Myanmar)


Customers' needs
Server
Internet
Row Data
顧客ニーズ
Cost
コスト条件
ダイヤ最適化システム
運行データ
Operation Data
Sensor Data
車載装置
Wi-Fi アンテナ
パケット通信モデム
前ドア用乗降センサー
中扉用乗降センサー
の見える化
Visualize Operation
Diagram Generate System

Cited from Eagle Bus, Inc. document

Future Action of Open Data

We will take a further step to implement "Solution-oriented Open Data" (built Open Data step in the process of making measures in the ministries and agencies, etc.) to shift from "Open Data to the public" to "solve social issues utilizing Open Data".

During the intensive period through 2020, the main focus will be "Promoting Dynamic Engagement of All Citizens", "Tokyo Olympic Paralympic 2020" to deepen our action of Open Data.

Open Data 2.0

Policy

① **Designate prioritized areas based on policy issues**

Promote "Open Data Cycle", where the needs of new data further open data to the public while finding and solving social issues.

② **Promote private sector open data initiatives within a defined range of areas**

Not in competitive areas, but in cooperative

③ **Actions in local governments**

Promote voluntary actions based on regional characteristics as well as the cross-regional actions such as disaster preventions

Prioritized areas

① Promoting Dynamic Engagement of All Citizens

Robust Economy, Childcare, Social security

② Tokyo Olympic Paralympic 2020

Smooth preparation and operation, create new image of Japan through Olympic and Paralympic

Others

① Deploy our initiatives at the regional level and overseas (especially in Asia)

② Enhance the structure to promote open data（Set up a structure with Deputy Directors-General for Cybersecurity & Information Technology）

③ Standardization, Promote Open Data・Develop Human Resources etc.

・Revised on June 20, 2016 IT Headquarters.

How to Globalize in the Future

Utilization Index and enhancement the collaboration in Asia

- In collaboration with OECD（OURdata Index※） or the Asian countries that are active to Open Data, we will design new index focusing on the social issues common to each country such as disaster-prevention etc. or the utilization.

※ OUR(Open, Useful, Reusable)data Index : The international open data index developed by OECD. This index is self assessment by each government, and is different from other indices given by some of the private sectors.

- ■ In order to promote open data utilization, we will consider how to build and deliver the new index focusing on the open data utilization.
  - ➢ To globalize the designed index, we will collaborate with the organizations involved.
    - ➢ We will design the index structure to seize the environment and situation of utilization.
    - ➢ We will consider how to expand this index globally.
  - ➢ Schedule
    - ➢ We had the preliminary study with experts to discuss future plan on March 28th.
    - ➢ Based on the arguments in OECD or Asia Open Data Partnership, we will decide the direction and contents cooperating with Asian countries.
    - ➢ If necessary, we have the actual investigation and wrap it up by the end of this year.