# Inter-Ministry Information System for Official Statistics



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### **Outline of Inter-Ministry Information System for Official Statistics**

Past situations

In Japan's decentralized statistical system, statistical information systems were developed and operated by respective ministries.

- This resulted in duplicate costs for developing and operating such information systems.
- Also, users have had to get access to respective ministries concerned when they needed statistical tables compiled from statistical censuses/surveys.

Integration of ministries' information systems

Development of the portal site which encompass statistical tables etc. of all ministries.

Inter-Ministry Information System for Official Statistics was developed and started on 1 April 2008

- ① Reduction in costs for development and operation of information systems
- ② Improvement of user convenience

### **Outline of Inter-Ministry Information System for Official Statistics**

Subsystems of Inter-Ministry Information System for Official Statistics are used at the stages of planning, preparation, survey, scrutiny (editing) and publication.

### Composition



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### **Online Survey system**

Online surveys have various advantages, including:



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### Portal Site of Official Statistics (e-Stat)

Portal site for statistical tables of the results of censuses/surveys conducted by ministries

- " e-Stat " developed in 2008 provides statistical tables of ministries in a centralized and integrated fashion.
- > Core statistics and major non-core statistics are stored in databases.



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### **Browse Statistics**

### e-Stat major functions (1) Statistical Table Management System

Users can download statistical tables compiled by the government and published in spread sheets (Excel etc.) or in CSV format.



### **Browse Statistics**

### e-Stat major functions ② Statistical Information Database

Data in the Statistical Information Database can be narrowed down by specific items, region etc. and provided in a table format.

e-Stat	Statistics of Japan e-Stat is a portal site for Japanese Government Statistics	Contact us   Help   Ja								
Portal Site of Official Statistics of Japan			Viev	v Statistical Table	/Graph					
Browse Statistics Visual	sations & Tools Resources Links		Statistic	s name	Consumer Price	Index 2015-Base	Consumer Price Inde	0K		
Top Page / Browse S	Statistics / Database		Table n	imber	1					
Filtered by: Database	× / Consumer Price Index ×	Back to Statistics list (Clear all)	Table ti	le	2015-Base Con	sumer Price Index				
3 data	Datasets 🗸 Enter keyword	×Q		📰 Statistical ta	ble		📶 Graph	•	0	🛓 Download 🛛 😋 API
Data Type		Search help.		Filler February	lanen an					_
a Database	3 Consumer Price Index	View in list form	select dis	AREA All Japan Items Bread		×		Y		Apply 1 Leased
E File	5,941 Consumer Price Index	Update date	play item		index Ch pre cal	ange from the vious year (fis year , month) i n PSI	Change over the y ear in [74]	Weight (Actual)	Weight (Per 1000 0)	
Filter by Statistics n	ame 🗙	2019-07-19		Jun. 2019	102.9	-0.3	1.5	26,314,850	84	
	2010-Base Consumer Price Index[1datasets]	2017-01-27	Tabi	May 2019	103.3	0.1	1.9	26,314,850	84	
Consumer Price Index	[3] X		e Lay	Apr. 2019 Mar. 2019	103.2	0.0	1.5	26,314,850	84	
Filler by Thomas (ma	2005-Base Consumer Price In 11datasets]	2012-01-27	Et.	Feb. 2019	103.1	-0.2	1.7	26,314,850	84	
Filter by Theme (ma	lor		>	Jan. 2019	103.3	-0.3	1.5	26,314,850	84	
				2018	102.7	1.1		26,314,850	84	
				Dec. 2018	103.6	0.0	1.9	26,314,850	84	
				Nov. 2018	103.6	0.0	1.9	26,314,850	84	
	<b>&gt;</b> [			Oct. 2018	103.6	0.4	2.1	26,314,850	84	
List of datasets				Aug. 2018	102.4	0.5	0.8	26,314,850	84	
Back to survey results		View								
Statistics name	Consumer Price Index									
Dataset category0	2015-Base Consumer Price Index	$\checkmark$								
Table number	Statistical table Survey date U	pdate date View / Download								
1 2015-Base C	onsumer Price Index - 2	019-07- 0 → DB 9 API								

#### **Browse Statistics**

### e-Stat major functions ② Statistical Information Database

Moreover, such charts as population pyramids and scatter diagrams can be retrieved, and data can be downloaded in XLSX and CSV formats.



#### XLSX

Statistics name :	2015–Base Consumer Price Index			
Table Number :				
Title :	2015–Base Consumer Price Index			
Implementation date :	-	-		
Cities, Towns and Villages :	_			
AREA:	13A01	Ku–area		
Items:	0001	All items		
			201800	0000
Tabulated variable Code	Tabulated variable	/Time	2018	Annotation
Tabulated variable Code	Tabulated variable Index	/Time	<b>2018</b> 100.9	Annotation
Tabulated variable Code 1 2	Tabulated variable Index Change from the previous year (fiscal year , month) in[%]	/Time	2018 100.9 0.9	Annotation
Tabulated variable Code 1 2 3	Tabulated variable Index Change from the previous year (fiscal year, month) in [%] Change over the year in [%]	/Time	2018 100.9 0.9 ₩₩₩	Annotation
Tabulated variable Code 1 2 3 4	Tabulated variable Index Change from the previous year (fiscal year, month) in [%] Change over the year in [%] Weight (Actual)	/Time	2018 100.9 0.9 ₩₩ 256,632,267	Annotation
Tabulated variable Code 1 2 3 3 4 5	Tabulated variable         Index         Change from the previous year (fiscal year, month) in [%]         Change over the year in [%]         Weight (Actual)         Weight (Per 10000)	/Time	2018 100.9 0.9 ₩₩ 256,632,267 10,000	Annotation
Tabulated variable Code 1 2 3 4 5	Tabulated variable         Index         Change from the previous year (fiscal year, month) in [%]         Change over the year in [%]         Weight (Actual)         Weight (Per 10000)	/Time	2018 100.9 0.9 ₩₩₩ 256,632,267 10,000	Annotation
Tabulated variable Code 1 2 3 4 5 *₩*	Tabulated variable         Index         Change from the previous year (fiscal year, month) in[%]         Change over the year in[%]         Weight (Actual)         Weight (Per 10000)         Figure is not available.	/Time	2018 100.9 0.9 **** 256,632,267 10,000	Annotation

CSV

Statistics name :	2015-Base	Consumer P	rice Index					
Table Number:	1							
Title :	2015-Base	Consumer P	rice Index					
Implementation date :	-	-						
Cities, Towns and Villages :	-							
жжж	Figure is no	t available.						
							1	
Items Code	Items	AREA Code	AREA	Time Code	Time	/Tabulated variable	Index	Annotation
1	All items	0	All Japan	2018100000	2018		101.4	
1	All items	0	All Japan	2018000000	2018		101.3	
1	All items	0	All Japan	2017000000	2017		100.4	
1	All items	0	All Japan	201 6000000	2016		99.9	
1	All items	0	All Japan	2015000000	2015		100	
1	All items	0	All Japan	2014000000	2014		99.2	
1	All items	0	All Japan	2013000000	2013		96.6	
1	All items	0	All Japan	2012000000	2012		96.2	
1	All items	0	All Japan	2011000000	2011		96.3	
1	All items	0	All . bran	201000000	201.0		96.5	

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#### Outline

Statistics Dashboard is a website to provide key statistical data included in monthly economic reports and other documents in a visually intelligible manner such as graphs in order to help casual use of statistical data.



About 5,000 statistical data are organized into 17 fields; 55 graphs are posted.						
Field	Statistical data	Graph title				
National land/weather	Total area, forest area, natural park area, etc.	_				
Population/househol ds	Total population, # of births, # of foreign nationals entering/leaving Japan, etc.	Population, Births/Deaths, Immigration, Number of households, Number of general households				
Labor/wage	Number of employed people, unemployment rate, total cash earnings, etc.	Workers, Regular/non-regular staff/employees, Unemployment rate and job openings ratio, Pay, Total actual working hours, Wage index, Change of labour force status during the past year				
Agriculture, forestry and fisheries	Agricultural production, # of farm households, cultivated area, catch, etc.	_				
Mining & manufacturing industries	Industrial production index, industrial operating rate index, industrial water quantity, etc.	Mining/manufacturing industry production capacity index				
Commerce/service industries	Service industry sales, retail sales, etc.	Tertiary industry, Sales of service industry, Persons working in the service industry, Retail sales value				
Enterprises/househol ds/economy	Cases of Bankruptcy, consumer price index, consumer spending, GDP, etc.	Machinery orders, corporate bankruptcies, private enterprises, Financial market, Stock prices, Exchange rates Money stock, Corporate goods price and export/import prices, CPI, Regional difference indexes of consumer prices, Economic trend, Consumer spending, household economy consumption index, Household income, Average consumption propensity, GDP in yen, GDP in US dollar, GDP deflator, Report on Prefectural Accounts, Number of establishments, Number of employees, Savings and debts, Household durable goods 15				

About 5,000 statistica	I data are organized into	17 fields; 55 graphs are posted.
------------------------	---------------------------	----------------------------------

Field	Statistical data	Graph title
Dwellings, land, construction	# of new housing starts, public works order received, # of dwellings, area per dwelling, etc.	Housing starts, Orders received for construction, Number of dwellings
Energy, water	Electric light power consumed, gasoline sales, population with access to a water supply, etc.	_
Transportation, tourism	Sales of new cars, passengers carried, average road traffic, total number of guests, guest room occupancy rate, etc.	Sales of new cars, Total number of guests
Information communication/ science & technology	Telephone subscribers, TV receiving contracts, etc.	_
Education, culture, sports, living	# of elementary schools, # of kindergarten students, # of important cultural properties, sports participation rate, average sleeping hours, etc.	# of schools, # of students, Facilities for pre-school children, Living hours
Administration and public finance	Total administrative investments, # of taxpayers, voter turnout of election of Lower House election, etc.	_
Judiciary, safety, environment	# of lawyers, " of recognized criminal offenses, # of ambulance responses, Total amount of municipal solid waste discharged, etc.	_
Social security, hygiene	Advanced elderly medical expenses, # of Facilities Covered by Public Aid Providing Long-Term Care to the Elderly, # of hospitals, medical facilities, # of medical doctors, etc.	# of medical facilities, # of medical workers
International	Current account balance, financial account balance, etc.	Balance of payments (in yen), Balance of payment (in US dollar)
Other	Employment opportunities, earning power	Regional industry/job creation chart

You will see 12 graphs already displayed on the top page. Click "View All" and all 55 graphs will be displayed. Select "Data" and you can retrieve data. [Graphs displayed on the top page 1/2]



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[Graphs displayed on the top page 2/2]

#### Construction starts of dwellings

New construction starts of dwellings (Number of dwelling units) (Total) 76,034





#### Sep. 30, 2019 update

#### **Gross Domestic** Product (GDP) (Yen)

Seasonally Adjusted Gross Domestic Product (Expenditure approach) (Nominal) (2011 base)

### 556,526.4

[billion yen] Japan Apr.-June2019





Time use • Primary activities

2006

641

[minutes]

Japan 2016

2016

Sep. 15, 2017 update

Time use

640 -

638 -

636

1996



Regional radar chart and 劔 ranking (Japanese version only.)

You can display various indicators of the selected region in radar chart and area ranking.



By selecting a graph, you can select items to be included in the graph.



From "Other Func(tion)", you can display data values and historical events on the chart. You can also download statistical data as well as add a chart to your "Favorite" from here.



You can easily compare time series variation and regional differences. You can also see explanation of the items and the title of the source statistical surveys on the graph.



Animation speed : normal

Time : 2016 🗸

Some data can be viewed more easily if their order is changed.



Changes such as population change can be viewed in animation.



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### jStat MAP (GIS)

#### Outline

• By combining statistical data and the data possessed by users and displaying them on a map, such data can be visualized.

• Area-by-area analysis based on user's needs, including disaster prevention, facilities development and market analysis, is possible.



#### **Concept: Share Information with Others via Visualization**



### Major Functions of "jSTAT MAP"

#### **①** Plotting function

Registering point data with location information on maps

- Register by clicking on the screen
- Batch-register using the address list (Geocoding)

name	Street address	Seating capacity
A school	TokyoChiyodakuOO	150
B school	TokyoChiyodaku $\Delta\Delta$	300
C school	TokyoChiyodaku🗆 🗆	230



#### **2** Area function

Registering polygon data with location information on maps

- Create polygonal shape, circle, reachable range, area within an administrative boundary
- Create a circle centered on a plot, reachable area



### **③** Graphing function

Generating graphs using statistical data and user data

• Make small-area graphs, area graphs, bar graphs, pie charts, and mesh graphs



### **④** Reporting function

#### Creating reports using statistical data and graphs

• Create a tabulation report (Simple report)

名称	事業所数-総数(A~S全産業)
上野(うえの)-0.5km円	1862
五反田(ごたんだ)-0.5km円	1885
代々木(よよぎ)-0.5km円	234
原宿(はらじゅく)-0.5km円	1698
品川(しながわ)-0.5km円	92
大塚(おおつか)-0.5km円	174
巣鴨(すがも)-0.5km円	1312
御徒町(おかちまち)-0.5km円	4803
恵比寿(えびす)-0.5km円	250
新大久保(しんおお<(ぼ)-0.5km円	233
新宿(しんじゅく)-0.5km円	482
新橋(しん(ばし)-0.5km円	574
日暮里(にっぽり)-0.5km円	138
有染町(ゆうらくちょう)-0.5km円	548:
東京(とうぎょう)-0.5km円	301

• Create a local analysis report (Detailed reports)



Name (Station)

絵鞆町3丁目公園

増市町1丁目公園

小橋内1丁目公園

小橋内2丁目公園

レインボー公園

絵鞆町2丁目2号公園

増市町1丁目2号公園

#### Plotting Function (Uploading the user's own data-Geocoding) (**1**)



### **2** Area Function

Polygonal shapes, buffer areas, circles, and reachable areas can be created.

\*Circles and reachable areas can be created for plots on a designated layer in a batch.







### **③** Graphing Function (Analysis of areas centering on plots)

The number of children living around shelters are color-coded.



The red areas are home to many children aged between 0 and 4 but have only outdoor shelters and do not have indoor shelters nearby. These areas have post-evacuation issues to be resolved, such as securement of milk and diapers.

### **③** Graphing Function (Choropleth map and pie chart)

jSTAT MAP enables multiple graphs to be overlapped and displayed.



By overlaying graphs on a map, it becomes clear which area requires greater administrative support such as patrols among areas with many elderly residents living.

### **③** Graphing Function (Split Screen)

> It is possible to split the screen for side by side comparison.



You can compare data for different years and can also see the relationship between population distribution and industrial distribution.

### **④** Reporting Function-Detailed report (Creation procedure)



### **④** Reporting Function-Detailed report (Results)

Detailed report enables output of various analysis reports in up to 11 Excel worksheets.









#### Switching between Background Maps / Displaying Boundaries



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### **Compare Regions (Region)**

> By selecting prefectures or municipalities and entering search conditions, users can display statistics for particular regions.

Select region 😮				7			
Any Regions Simila First, select the region from which to search similar regions see candidates can be narrowed down by Region classification and F	r Regions	rre similar to the region. Up to 10 conditions can b	be added. Regions	-			
1 Similar region search source							
Similar region search Change Region 26100_Kyot	o-fu Kyoto-shi				Selecti	ng pre	fectures or municipalities
2 Search condition							
Search condition1 Change Condi Required Population (0-	5, total) (62,771person)	56,493 to	69,049		Search	n condi	tions
Remaining 9 item(s) can be selected.	Clear All Conditions						
3 Regional range							
Prefecture all Special ward Special area City (Tokyo's 23 wards are Ordinance-designated city Core city (enforcement) St	e excluded) 🗹 Ward (Tokyo's 23 wards	s are excluded) 🗹 Town and village 🗌 Prefectur	ral capitals				
				🔳 Statistic	al table		네 Graph
	Execute						
4 Region candidate			Sur	vev vear 2015	Sort 00	ff Oon Ascend	Item A1405 Population (0-5 total) [nerson]
Region candidate 3 region(s)	Re	egion selected 0 region(s) (Remaining 25 can be selected)	elec			II OOII Maccila	
11100_Saitama-ken Saitama-shi 26100_Kyoto-fu Kyoto-shi 34100_Hiroshima-ken Hiroshima-shi	Select region >		t regior	<u>A1405</u> (0	Population J2! -5, total) nu [person] [nu	503 Number of ursery centers mber of establish	
			- -			ments]	
	Conselect region		261 yot	00_Kyoto-fu K o-shi	62,771	234	City No. 26100
			Select	00_Saitama-ke aitama-shi	63,586	154	City No. 11100
			display 341	00_Hiroshima- hHiroshima-shi	65,370	191	City No. 34100
Similar regions			item 🔪 Tabl	The numb there are nursery ce	ers of c large di enters a	children fference among t	aged 0-5 are similar, but es in the number of he regions.
			0				

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#### **Developers**



### Concrete efforts in official statistics for open data

- We will tackle advanced and sophisticated open data policies of official statistics.
- Concretely, the Statistics Bureau of Japan and the Statistics Center, being the core statistical agencies of the Government, will undertake the following challenges:



By doing so, we will facilitate advanced use of statistical data both in the public and private sectors, and support creation of new value added services and innovative businesses.





## https://www.e-stat.go.jp/en