enabling low friction sharing, discovery and analysis of heterogeneous civic data

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we want a society so great
everyone’s dancing in the streets!

- better schools
- lower crime
- improved health care
- cleaner water
- decreased poverty
- trust in government


public sector is resource constrained


overflow of data
and lots of folks willing to roll up their sleeves

data as a utility

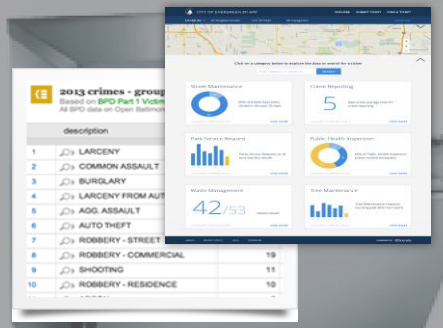
public sector data

.csv | .xlsx

databases

911 | 311 systems

portals and dashboards



apps and analysis

devs, analysts and syndication

External Data Consumers

Laura – Local Resident
“How safe is my neighborhood?”

Aaron – Community Advocate
“I want to see trends in social housing.”

Dave – App Developer
“I need real-time API access to 911 data.”

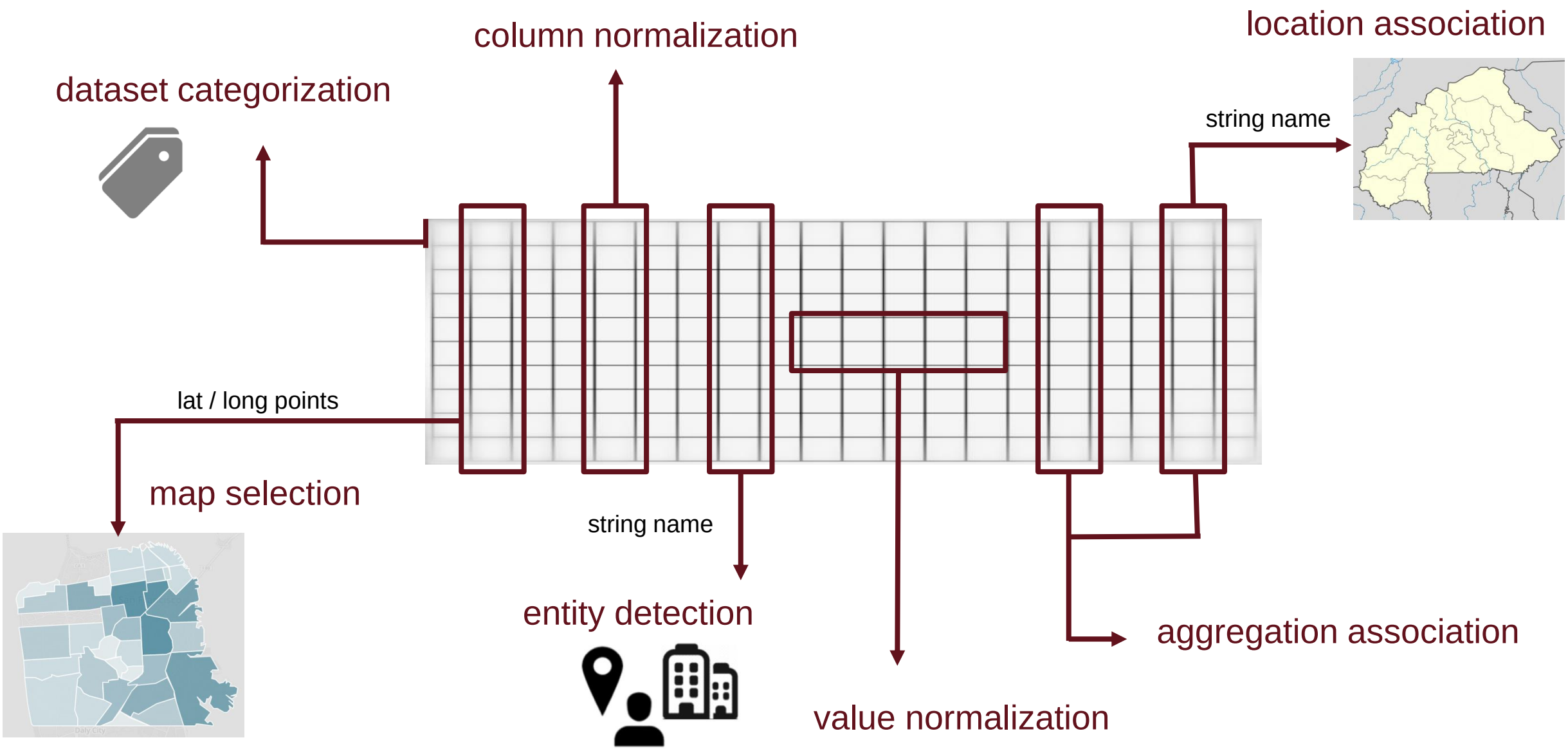
Government Data Publishers

Dora – The Chief Data Officer
”How do we connect our data to the web?”

Pam – Mayor’s Office
“How do we share data to make better decisions?”

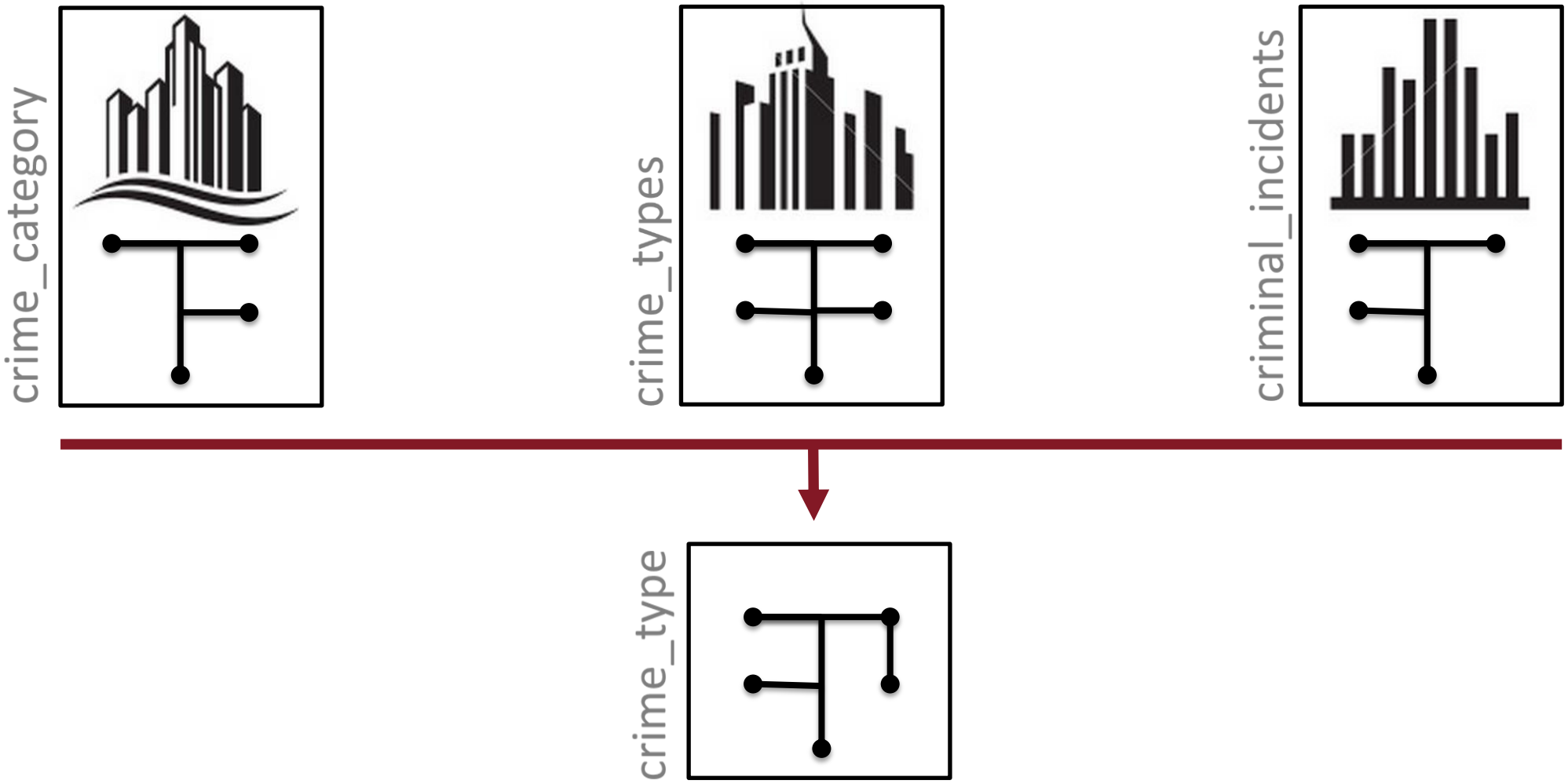
Sammy – Department Head
“I need to shift to self-service digital channels.”

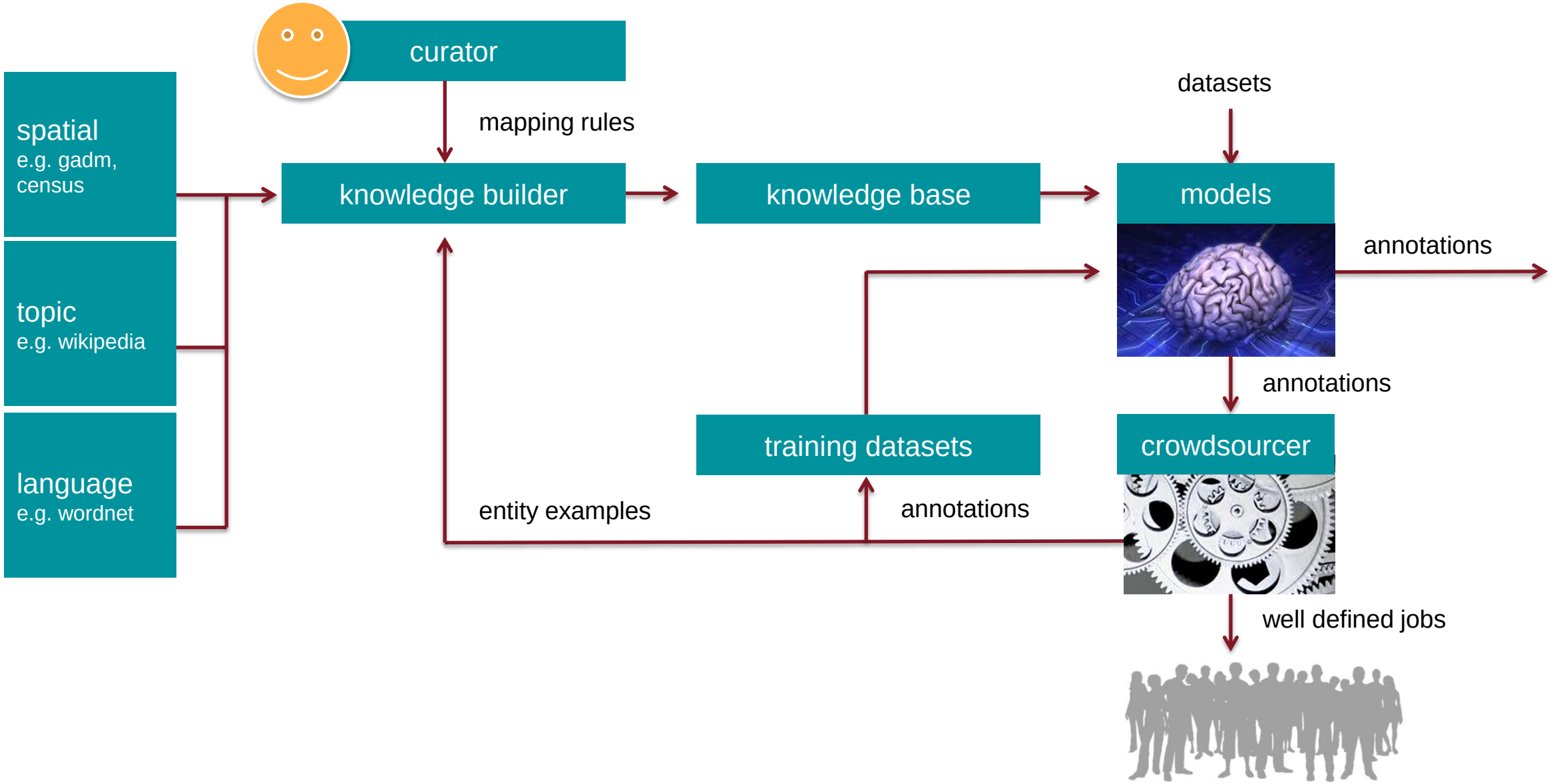
who uses socrata? constituents, publishers, analysts, developers



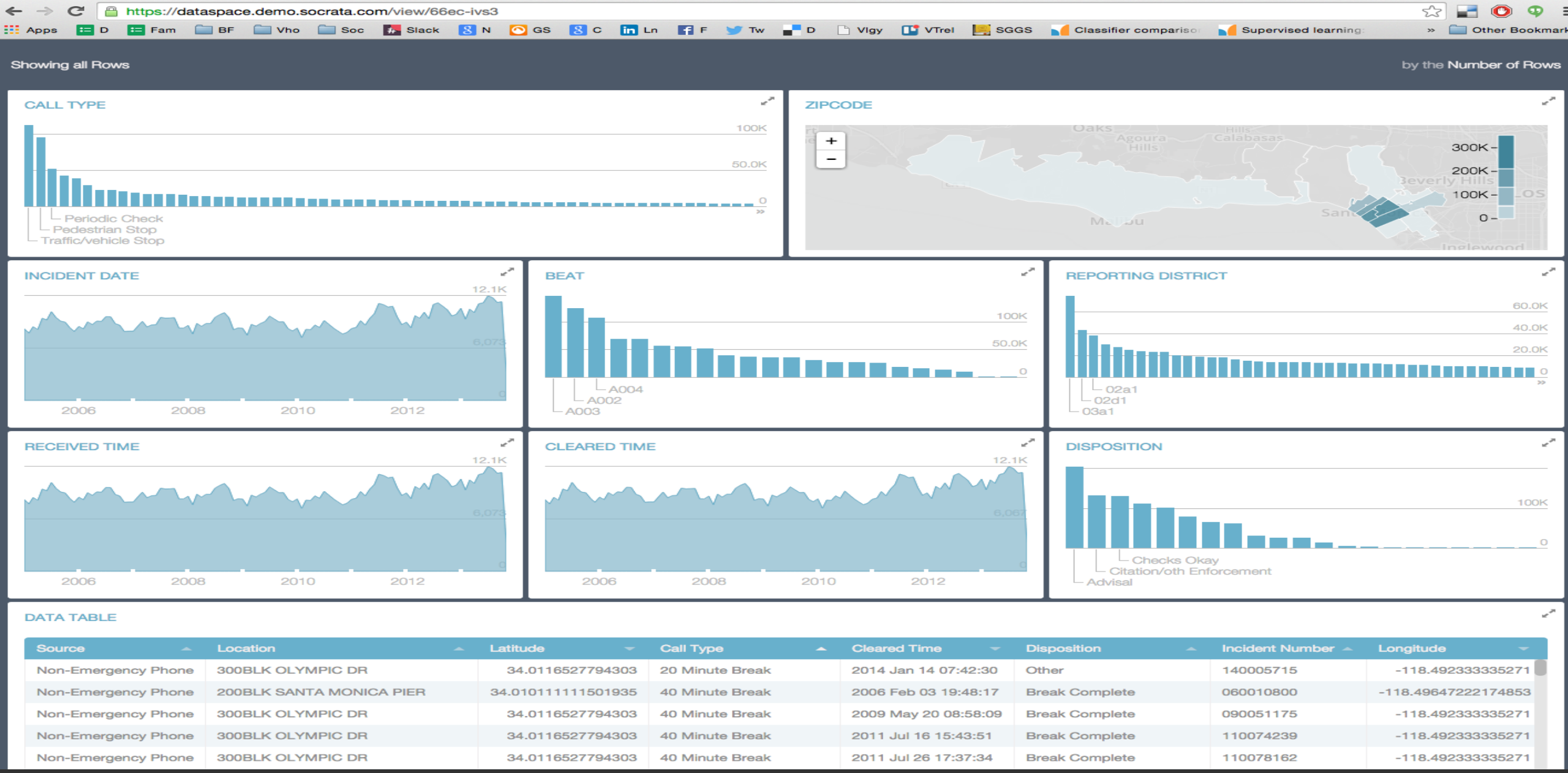
dataset annotations

normalizing data structure and values

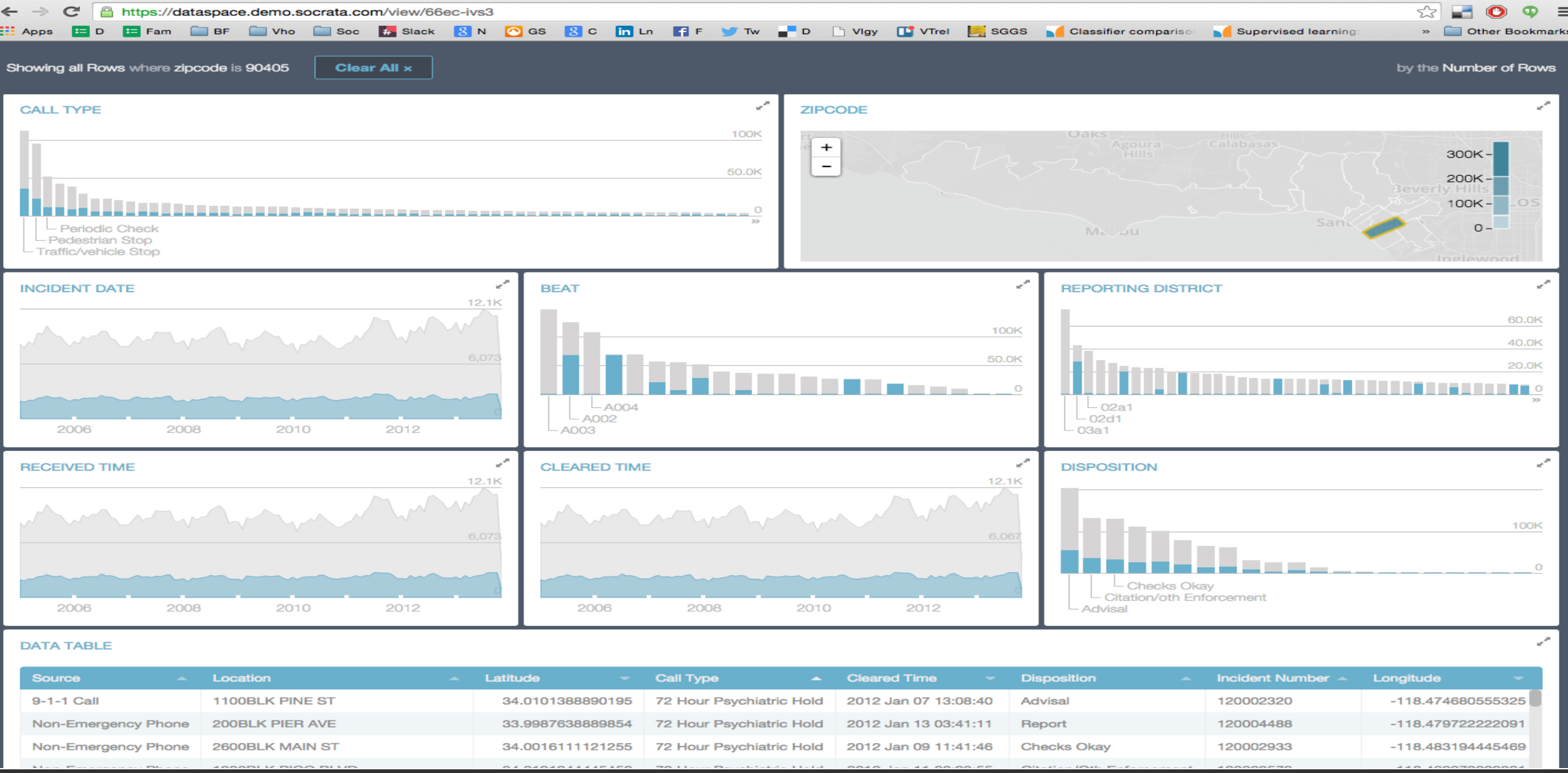




model construction feedback loop



data lens - minimal context: flat table > column visualizations



data lens - minimal context: constraints applied

https://data.seattle.gov/view/tm7v-dpcn

Apps | D | Fam | BF | Vho | Soc | DataLens URLs | Slack | N | GS | C | Ln | F | Tw | D | Vlgy | VTrel | SGGS | Classifier comparison

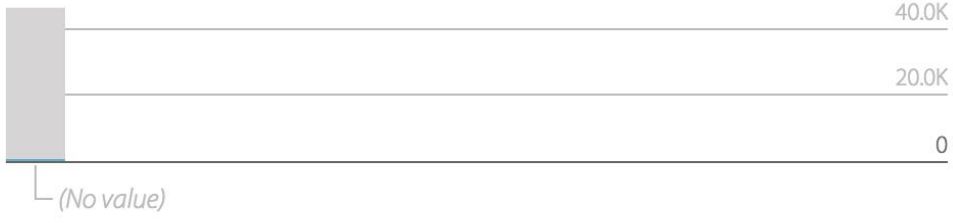
Showing the number of rows where issue date is 2015 January 01 to 2015 June 01 and zip codes is 98117

Clear All ×

Number of rows by
Zip Codes

Number of rows by
Status

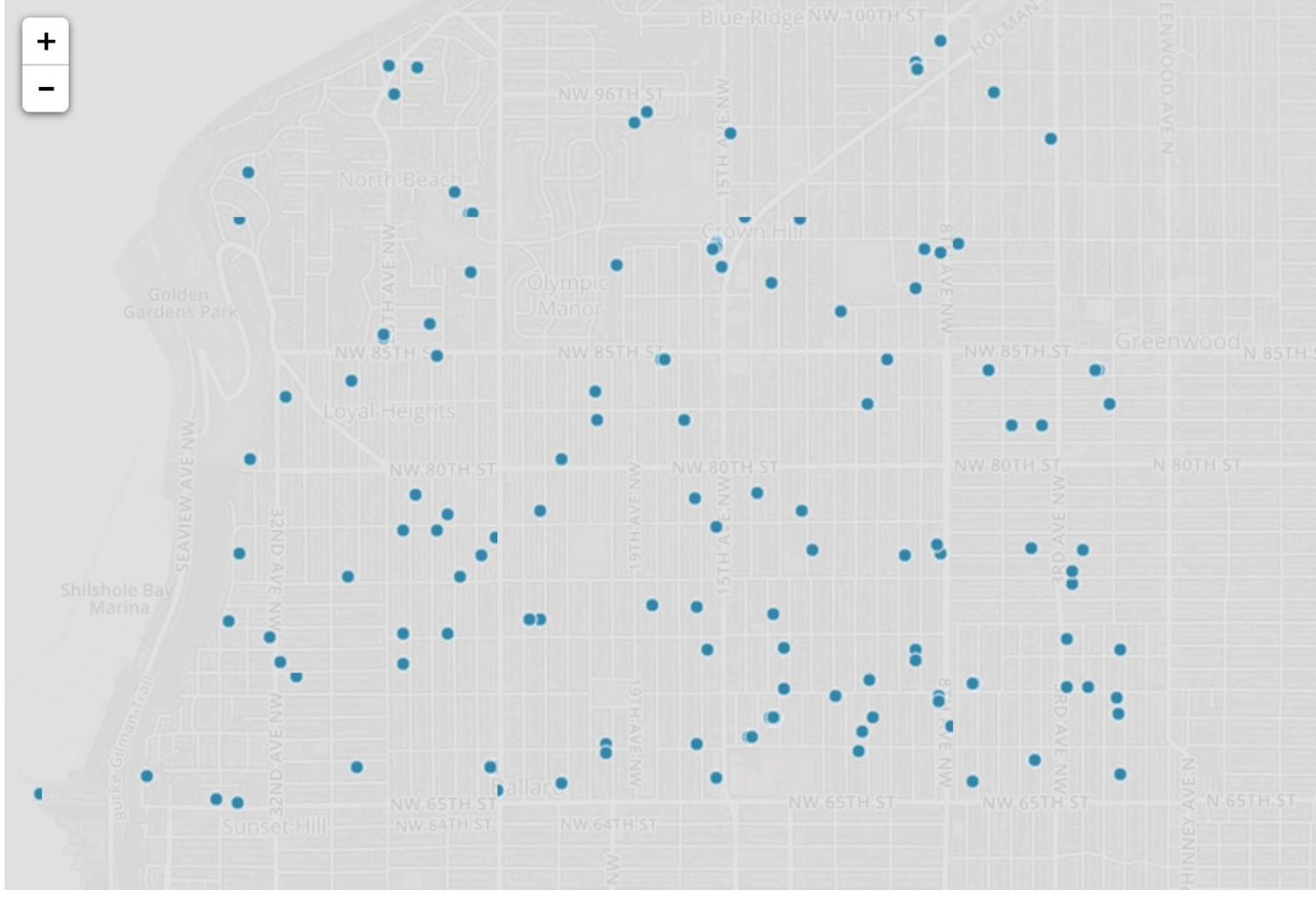
The current status in the application/review/inspection lifecycle. Indicates the last process step that was fully completed.

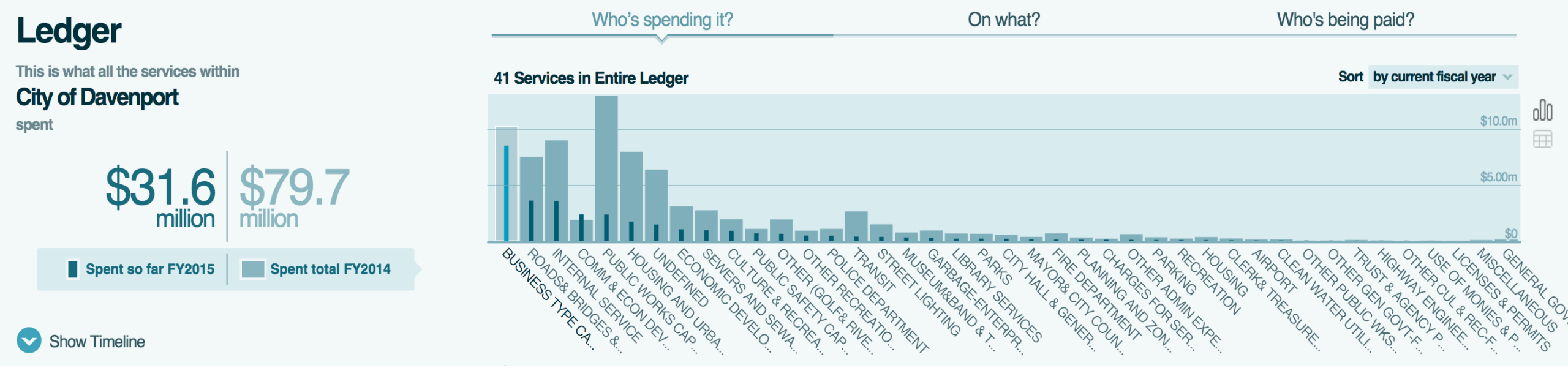


Number of rows by
Action Type

Location

Mapping coordinates for the permit address.





financial app - moderate constraints: schema constrained, dictionary not

Ledger

This is what all the services within

City of Davenport

spent

$31.6 million | $79.7 million

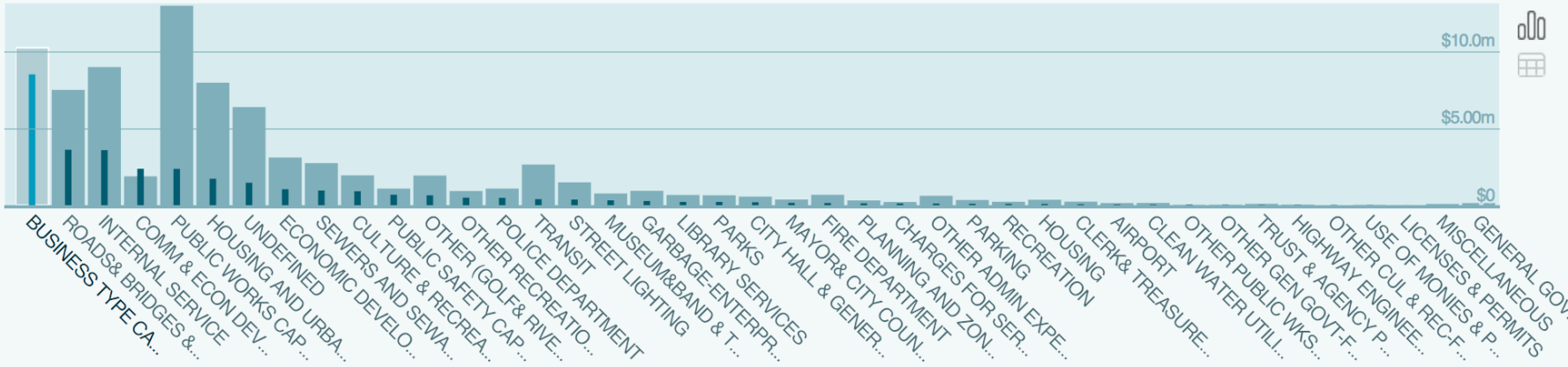
Spent so far FY2015 | Spent total FY2014

Show Timeline

Who's spending it? | On what? | Who's being paid?

41 Services in Entire Ledger

Sort by current fiscal year



This is what the departments in

BUSINESS TYPE CAPITAL PROJECTS

spent

$8.43 million | $10.2 million

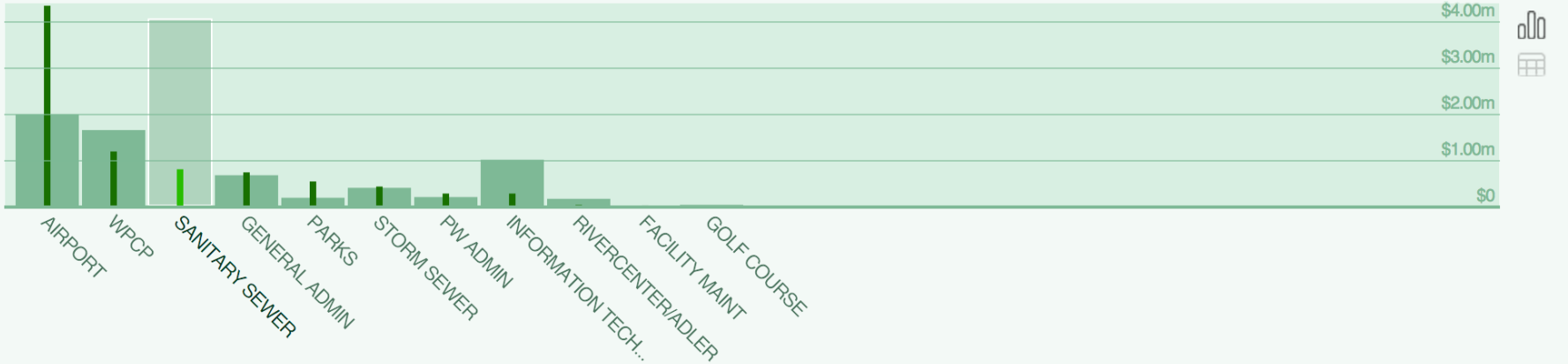
Spent so far FY2015 | Spent total FY2014

Show Timeline

Who's spending it? | On what? | Who's being paid?

11 Departments in BUSINESS TYPE CAPITAL PROJECTS

Sort by current fiscal year



financial app - moderate constraints: hierarchical structure understood

These are all the invoices sent to

LATERAL SEWER REPAIRS

$131,338 | $837,691

Spent so far FY2015 | Spent total FY2014

Show Timeline

Invoice Items | On what? | Who's being paid?

Invoice lines that paid for LATERAL SEWER REPAIRS

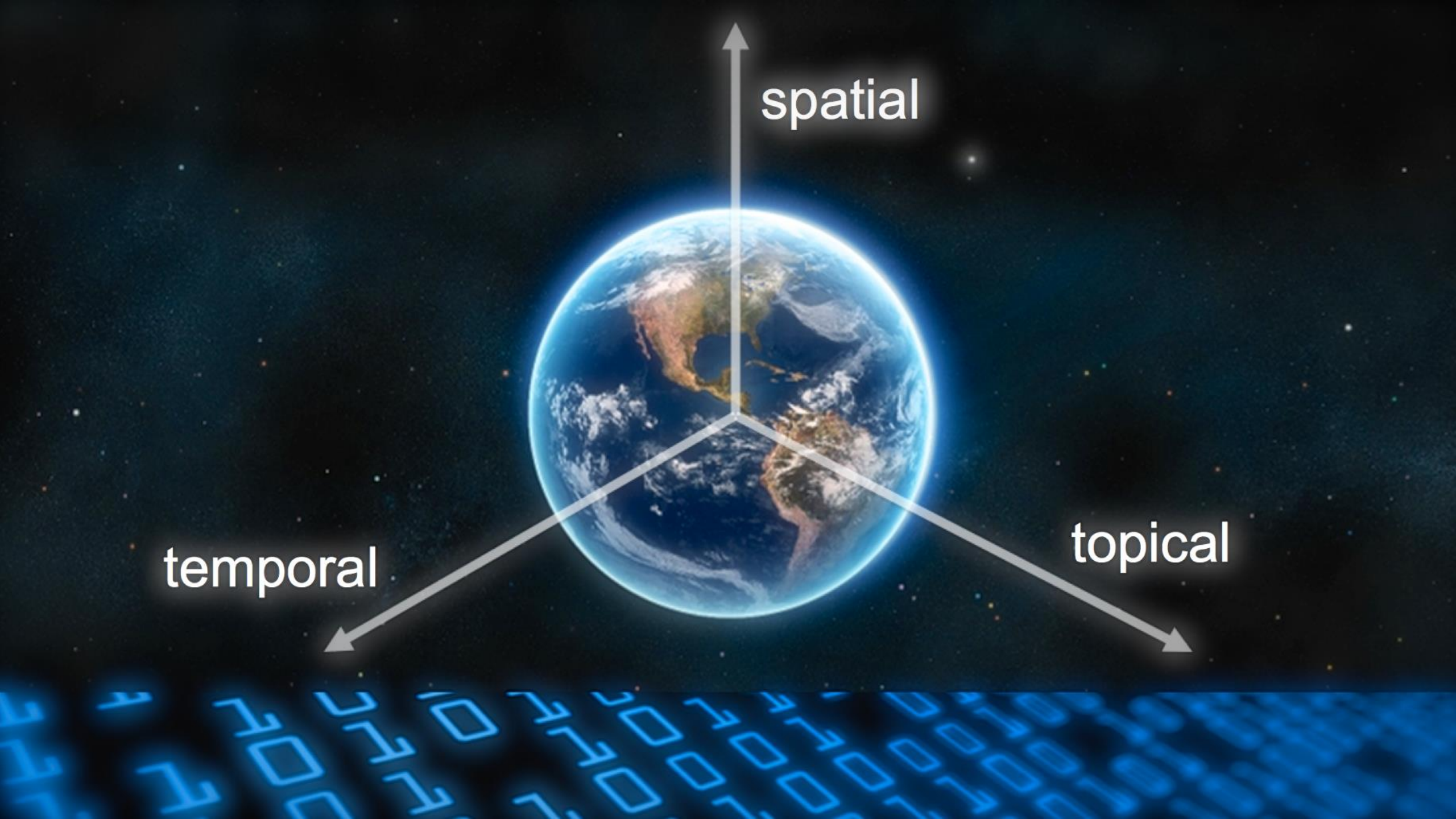
Between start date and end date

Description	Vendor	Invoice Date	Amount
INV 01-1401/2727 E LOCUST ST	HAGERTY EARTHWORKS LLC	11/29/2013	$15,692.88
INV 65574/1437 W 12TH ST	HOMETOWN PLUMBING & HEATING CO Inc	08/29/2014	$14,759.90
SLR/INVOICE 117446D/969 IROQUO	PETERSEN PLUMBING & HEATING CO INC	03/25/2014	$14,158.64
SLR - 510 S LINCOLN ST	B D T INC	10/09/2013	$13,679.74
INV 64287/SLRP 2039 PERSHING A	HOMETOWN PLUMBING & HEATING CO Inc	10/16/2013	$12,959.42
SLP - 2224 N DIVISION/INV 1207	PETERSEN PLUMBING & HEATING CO INC	07/07/2014	$11,904.90
SEWER LATERAL - 2902 MIDDLE RD	B D T INC	08/18/2013	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Download Raw Data

financial app - moderate constraints: raw data in context

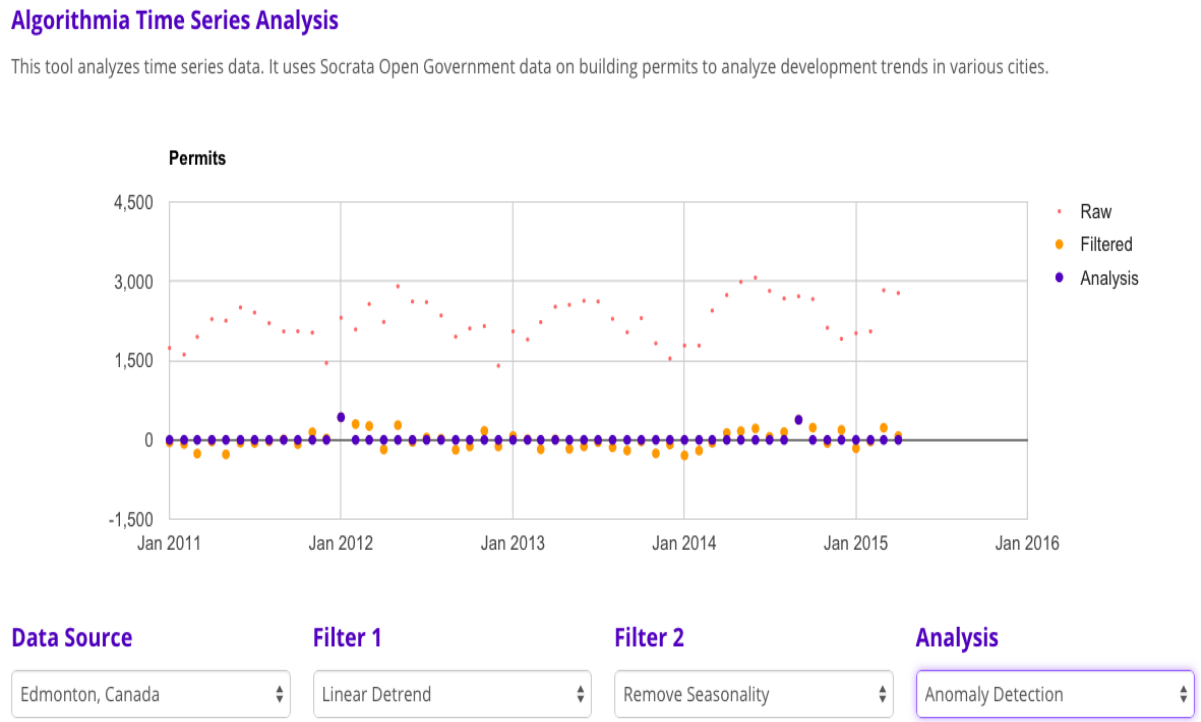
rats, rats everywhere

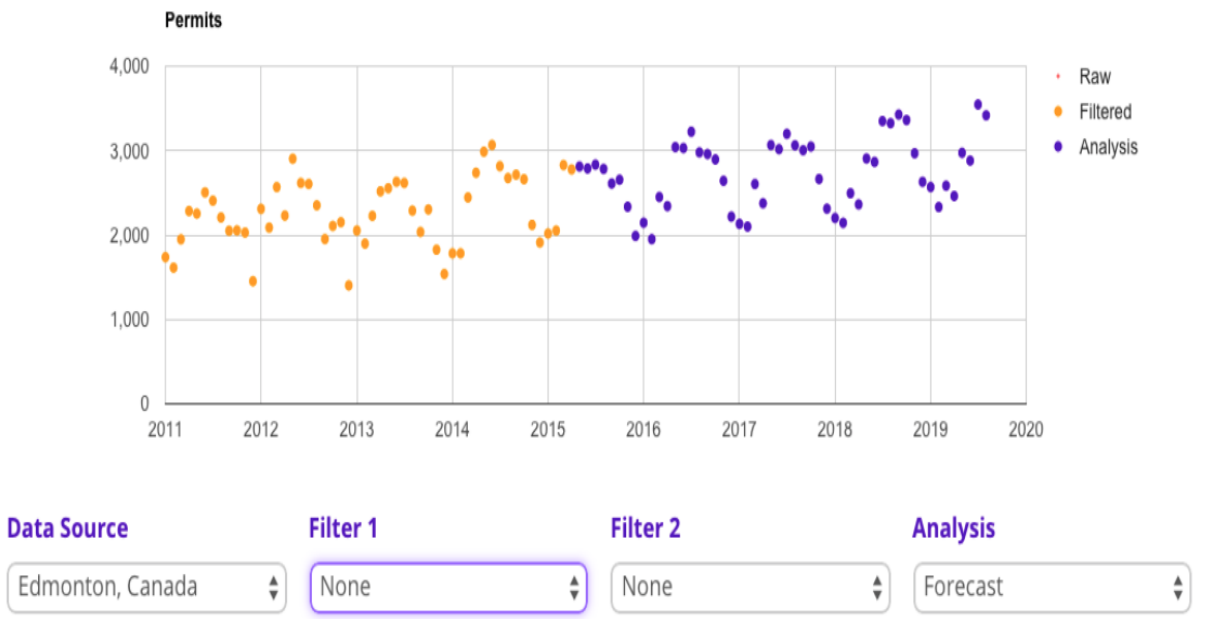

spatial
temporal
topical

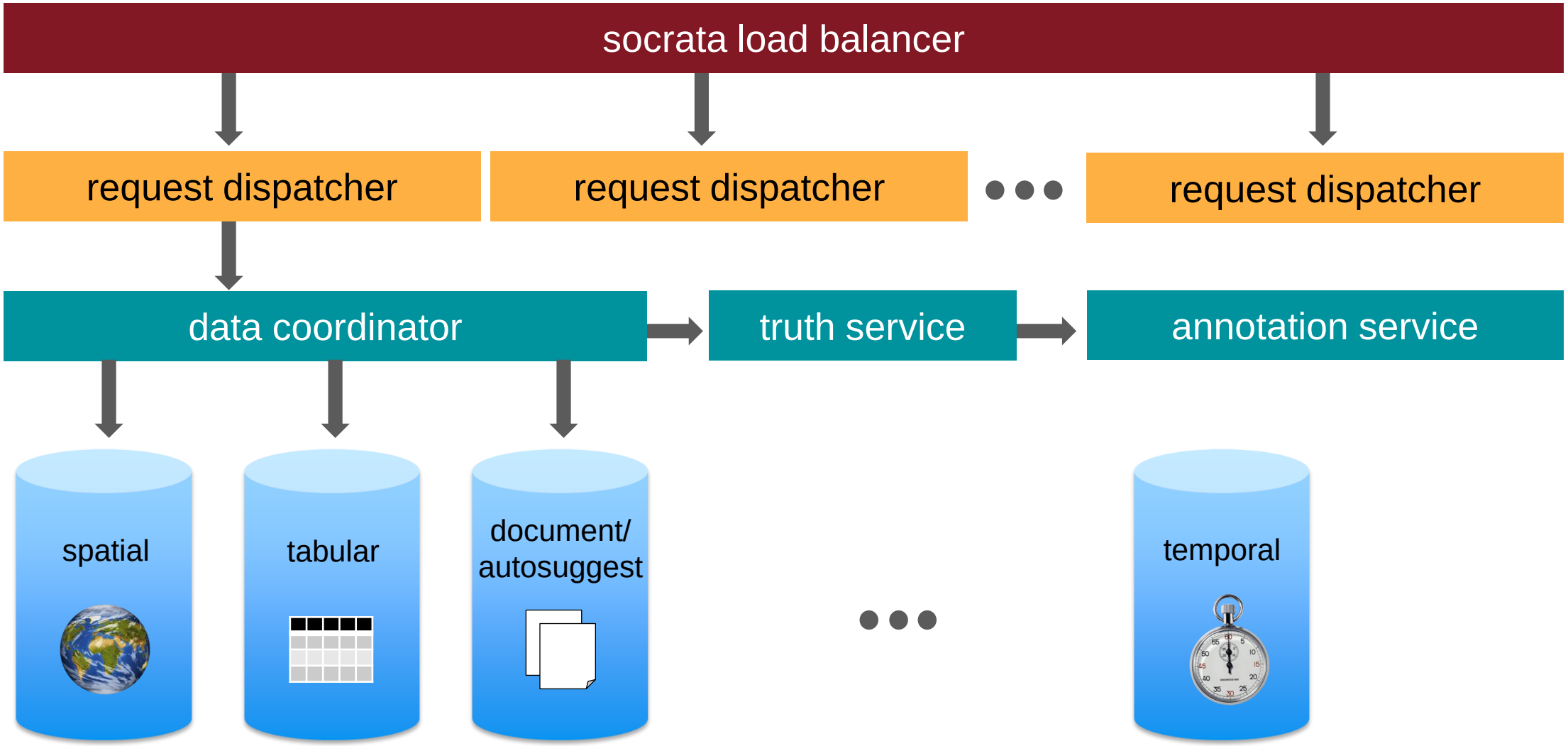
computing against living datasets

- continuously updated
- host any algorithm
- api accessible

algorithmia.com/demo/timeseries







dataset additions/updates

questions?

we're hiring! careers.socrata.com

deep dhillon | cto @ socrata | @zang0

appendix

Internal API Architecture

1. Applications, both internal and external, leverage easy to install and configure visual components.

2. Whenever high level componentry is not available or suitable, Socrata developed and external applications communicate directly with the Socrata API using either direct REST calls or a wrapper library. Application developers may replace their direct API access w/ higher level componentry as it becomes available.

3. Visual components, such as cards developed for the dataset UX form a visual api layer. These components may be developed by Socrata engineers, Socrata Customer Success developers, or external developers. All visual components use the REST API either directly or via a wrapper library. Wrapper libraries may lag REST API release and are maintained by the community at large including select input from Socrata engineers.

4. API requests are routed to appropriate back end services. Service team developers are able to easily add new API calls at their own pace, usually leading component and application developers.

5. Service team developers own their API subset of responsibility through to the REST API layer. This includes thorough and regular test coverage as well as publicly facing documentation, and demonstration UIs.