# Making Use of Data in the Marin County Open Data Portal

## TABLE OF CONTENTS

- 1. View and Filter Data Using Portal
- 2. View and Filter Data Using a Browser and the API
- 3. Export All Data or Filtered Data into a Spreadsheet
- 4. Sample HTML App That Uses the Open Data API
- 5. Socrata's Open Data API Help
- APPENDIX I Sample API Queries

APPENDIX II – HTML Sample App That Uses API Queries

#### 1. View and Filter Data Using Portal

- 1.1. Access Portal data.marincounty.org
- 1.2. Choose a Dataset and View All Data
  - 1.2.1.Click the "View Catalog" button on the portal's Home page.
  - 1.2.2.Click on the link for a Dataset, e.g., click on "Food Facility Inspections"





1.2.4. Review all data in the scrollable, tabular view. You can sort columns by clicking in the column title area.

Fo	od Facility Inspection	ns			9 f 7 2			
De	tailed information about ea	acii 1000	🥒 Ed	it 🗱 Manage	∞ More Views 🝸 Filter			
	Business Name	6 ≡	Business ID	0 ≡	Inspection Date			
1 🗄	SAN ANSELMO SWIRL			5826	04/15/2014			
2 🗄	SAN ANSELMO SWIRL			5826	04/15/2014			

- 1.3. View and Save Filtered Data
  - 1.3.1. When you are viewing all data, click on the "Filter" button (shown above)
  - 1.3.2. Click on the "Add a New Filter Condition" button



1.3.3.Click on the dropdown list and select a filterable column. Here we selected "City/Town."

Select a column to filter by:	Sort & Roll-Up
Business Name	▲ <sup>ilter</sup>
🔄 Business ID	ilter this dataset based on conte
Inspection Date	► <u>City/Town</u> ▼ is ▼
Inspection ID	
Address	+ Add a New Filter Condition
✓	~

- 1.3.4.Add another filter condition. Click on the "Add a New Filter Condition" button (see above).
- 1.3.5.Save Filter for Future Use
  - 1.3.5.1. Once you have the filter you want, click on the 'Save As..." button. If you are not logged into the data portal you will be asked at this point to first create an account.

Unsave	d View	Save As		
Based on Detailed	Food Facili	ty Inspection: about each	s food	)
Busi	ness Name	е	0 ≔	Busin

1.3.6. Access Saved Filter

1.3.6.1. View the data by following steps 1.1 through 1.2.3 above.

1.3.6.2. Click on the "More Views" button. Click on the view you created earlier. The above example was saved as "Latest Food Inspections San Rafael."

🗢 More Views 🍸 Filter	[⊻`	/isualize 🔀 Export 💭 Discuss 📢 Embed 🔇 About
Inspection Date		More Views
•		Search views
04/17/2014	^	Cal Latest Inspection Only Point Map
04/17/2014		A month ago by OD Marin
04/17/2014		Detailed information about each food facility
04/17/2014		VIOLFOUND" Violations During Rod
05/13/2014		A month ago by OD Marin
05/13/2014		
05/22/2014		Yellow or Red Placard Latest Inspect
05/22/2014		Detailed information about each food facility
10/01/2014		Latest Inspection Before 6/1/2016
12/08/2014	-	13 days ago by OD Marin Detailed information about each food facility
12/08/2014		
12/08/2014	-	Latest Food Inspections San Rafael
12/00/2014	_	Detailed information about each food facility
12/08/2014	~	

#### 2. View and Filter Data Using A Browser and the API

- 2.1. Get Dataset Identifier for a Dataset
  - 2.1.1.View the data of a dataset by following steps 1.1 through 1.2.3 above.
  - 2.1.2.Click on the "Export" button, and then click on the "SODA API" button.

<b>T</b> Filter	M	Visualize	C Export	P Discuss	() Embed	👔 Abou	ıt
ate		Expor	t				×
^		SODA A	PI			4	-
		OData				4	
		Print				4	
		Downlo	ad			•	
		Downl forma	load a cop t	y of this <mark>d</mark> a	itaset in a s	tatic	

2.1.3.Click on the "API Docs" button.

Access this fil	tered view via SODA
The Socrata (	Open Data API (SODA) provides
programmati	ic access to this dataset
including the	ability to filter, query, and
aggregate da	ta. For more more information
view the API	docs for this dataset or visit ou
developer po	ortal

2.1.4.On the web page that appears, in the "About This Dataset" section, record the Dataset Identifier. It is "cbtd-eg6v" in this example.

### About This Dataset

Dataset Identifier: cbtd-3g6v Total Rows: 21259 Source Domain: data.marincounty.org Created: 2/1/2017 3:32:17 PM Last Updated: 3/15/2017 5:00:18 AM

- 2.2. View all data using Browser and API
  - 2.2.1.Enter the following URL in your browser. Note that the URL needs the Dataset Identifier. The data will either appear in the web page, or open in an application, depending upon your browser and browser settings.

https://data.marincounty.org/resource/cbtd-3g6v.json

- 2.3. View Filtered Data using Browser and API
  - 2.3.1.Bring up the API Docs web page for a dataset, by following steps 2.1 through 2.1.3 above.
  - 2.3.2.Go to the bottom area of the Docs page to get the API column names for the different data columns. For example, "business\_name" is the API column name for the "Business Name" column below.

<b>æ</b>	business_name	text	Business Name
Ð	business_id	number	Business ID
<b>±</b>	inspection_date	floating_timestamp	Inspection Date
́н Г	inspection id	text	Inspection ID

2.3.3.Appendix I shows working examples of various queries you can use to filter data using your browser and the API. Note that the Dataset Identifier and the API column names appear in the URL's.

#### 3. Export All Data or Filtered Data into a Spreadsheet

- 3.1.1. View the data by following steps 1.1 through 1.2.3 above. You can also bring up a filtered view at this point, or create a filtered view (refer to Section 1.3.6)
- 3.1.2.Once you see the data you want in the tabular view, click on the "Export" button, and then click on the "Download" button.

	Export		×		
	SODA API	•	^		
	OData	4			
	Print	4			
	Download				
	Download a copy of this dataset in a static format				
	Download As	i.			
	CSV				
	CSV for Excel				
	JSON				
	RDF				
	RSS				
	TSV for Excel				
*	XML		~		

- 3.1.3. If you want to view your data in Excel, click on the "CSV for Excel" link above.
- 3.1.4. Open the downloaded document using your spreadsheet.

#### 4. Sample HTML App that Uses the Open Data API

4.1. Appendix II contains the HTML code for a simple web app for Marin County's food inspections dataset. You can also access the app here:

https://www.hackathon.marincounty.org/userdata/opendata/sampleapiwebapp.html

#### 5. Socrata's Open Data API Help

5.1. Socrata provides in-depth help for their Open Data API. If you're already on the Marin County Open Data Portal, for easy access to help click on the "Developers" menu button. Or you can access the following:
<u>Socrata Open Data API Help</u>.

## **APPENDIX I – Sample API Queries**

Various API Queries using the Food Inspections dataset:

1) Show all columns of data for all records in the dataset

https://data.marincounty.org/resource/cbtd-3g6v.json

2) Show all columns of data for the latest inspection results for food facilities with a yellow placard (yellow inspection sign on window)

https://data.marincounty.org/resource/cbtd-3g6v.json?\$where=is\_latest\_inspection=1 and placard='YELLOW'

3) Show the business name, inspection id, inspection date and inspector comments columns for the latest inspection results for food facilities with a green placard in San Rafael

<u>https://data.marincounty.org/resource/cbtd-3g6v.json?\$select=business\_name,inspection\_id,inspection\_date</u>, inspector\_comments where is\_latest\_inspection=1 and business\_city='SAN RAFAEL' and placard='GREEN'

4) Get the unique business ids of all businesses last inspected during January of 2017.

https://data.marincounty.org/resource/cbtd-3g6v.json?\$query=select business\_id where inspection\_date>='2017-01-01' and inspection\_date<='2017-01-31' and is\_latest\_inspection=1 GROUP BY business\_id

5) Get the food facilities and unique dates of all inspections performed for food facilities in Tiburon. Order by food facility and then by earliest to latest inspection dates for each facility.

https://data.marincounty.org/resource/cbtd-3g6v.json?\$query=select business\_name,inspection\_date where business\_city='TIBURON' GROUP BY inspection\_date, business\_name ORDER BY business\_name, inspection\_date

### **APPENDIX II – HTML Sample App That Uses API Queries**

# *Note: Refer to Section 2 above to learn how to construct API queries on a specific dataset using URL's.*

```
<html>
<head>
<script src="https://ajax.aspnetcdn.com/ajax/jQuery/jquery-3.1.1.min.js"></script>
</head>
<body>
Show latest food facility inspections for a city/town, using Marin County's Open Data Portal.
<form>
<select id="seltown" onchange="CityTownChange()">
 <option value="" selected>[Select City/Town]</option>
 <option value="FAIRFAX">Fairfax</option>
 <option value="SAN RAFAEL">San Rafael</option>
 <option value="TIBURON">Tiburon</option>
</select>
<div id="results">
</div>
</form>
</body>
</html>
<script type="text/javascript">
  function CityTownChange() {
    //alert("onchange");
    $('#results').html("");
    var citytown = $('#seltown').val();
    var returnURL = "https://data.marincounty.org/resource/cbtd-3g6v.json?$query=select
business_city,inspection_date,business_name, inspection_id, violation_id where is_latest_inspection=1 and business_city = "" +
citytown + "'ORDER BY business name, inspection date";
    //window.location.href = returnURL;
    $.getJSON(returnURL, function(result){
     $('#results').append("<br>");
     $('#results').append("City/TownInspection
Date/TimeBusiness Namewidth='15%'>Inspection Idwidth='15%'>Violation Id);
     $.each(result, function(i, field){
      $("#results").append("" + field.business city + "" + field.inspection date + "" +
field.business_name + "+ field.inspection_id + "+ field.violation_id + "
     })
     $("#results").append("");
    })
    .fail(function() {
       $('#results').html("Data Request Failed.");
    })
    .done(function() {
      //alert("done");
    });
  }
```

</script>