

CHCF Data Viz Exploration

PROJECT UPDATE

Friday, July 10, 2015

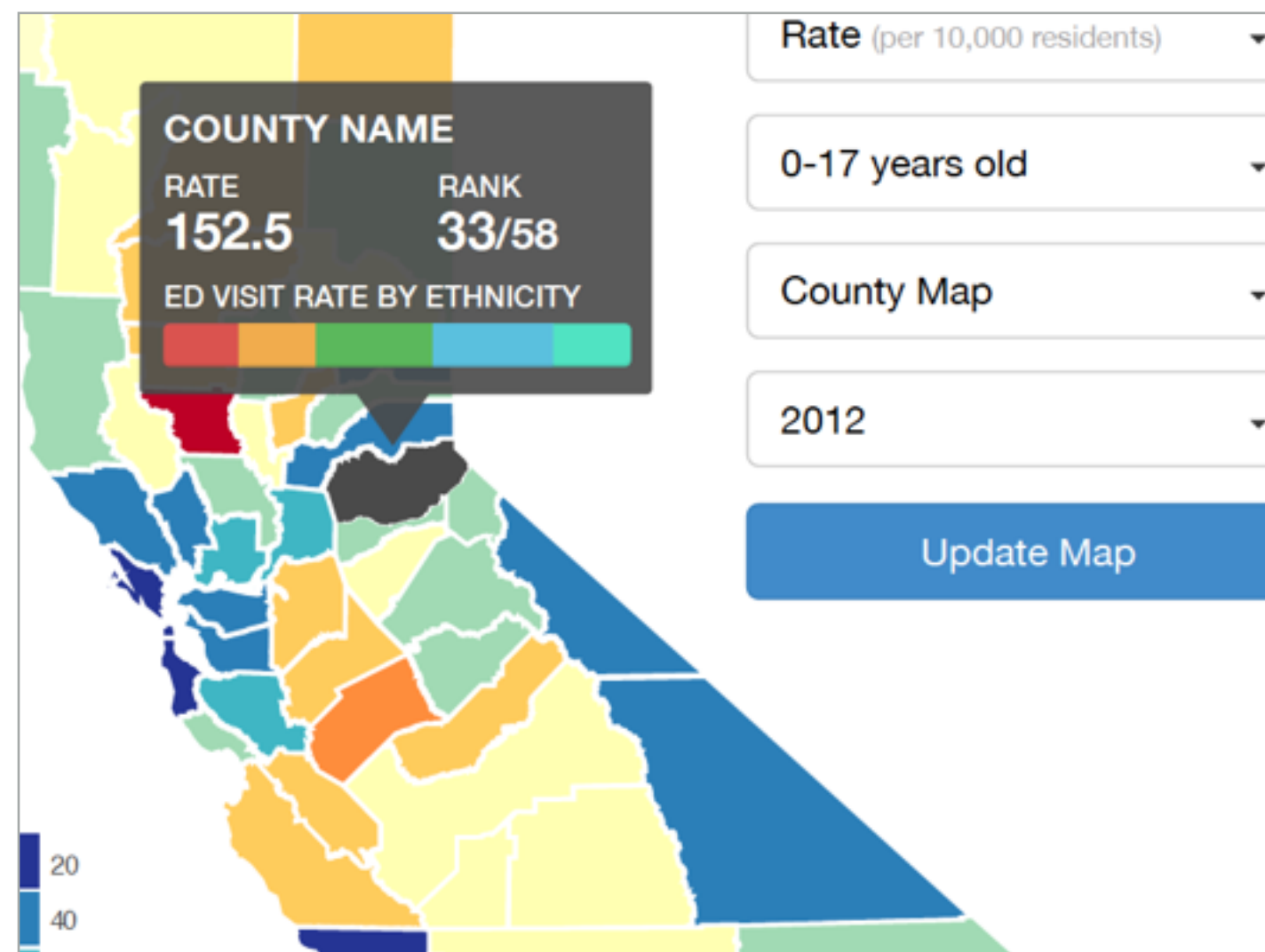
Project **Summary**

Develop an app to visualize one of 39 Let's Get Healthy California indicators: emergency room visits for asthma by county and zip code.

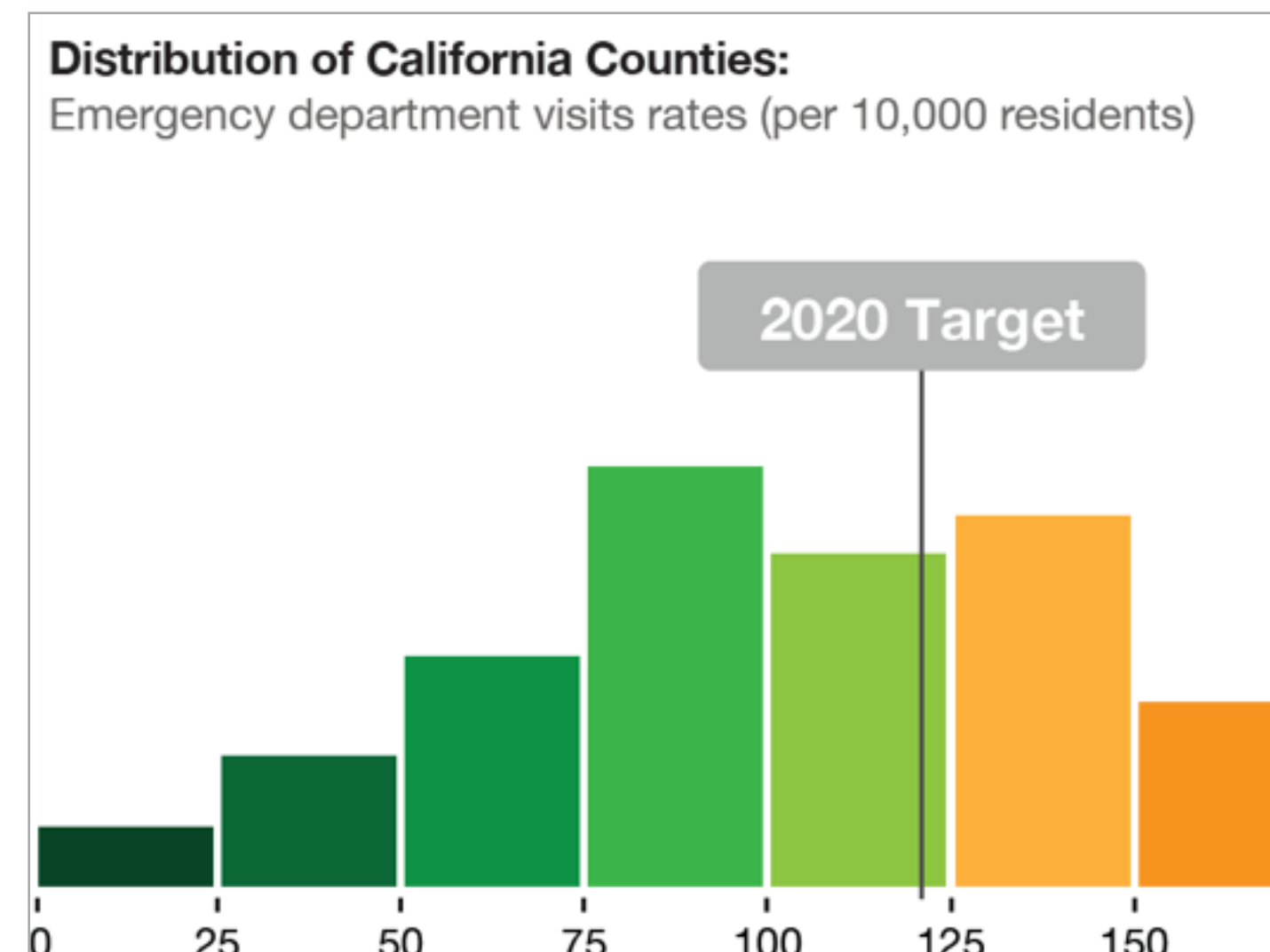
In-Process Deliverables

Based on our deep review of the asthma emergency department visits data set, outreach to key stakeholders and research into best practices of large scale data visualization projects, we have developed an initial set of wireframe concepts and a demonstration of possible data mapping technology.

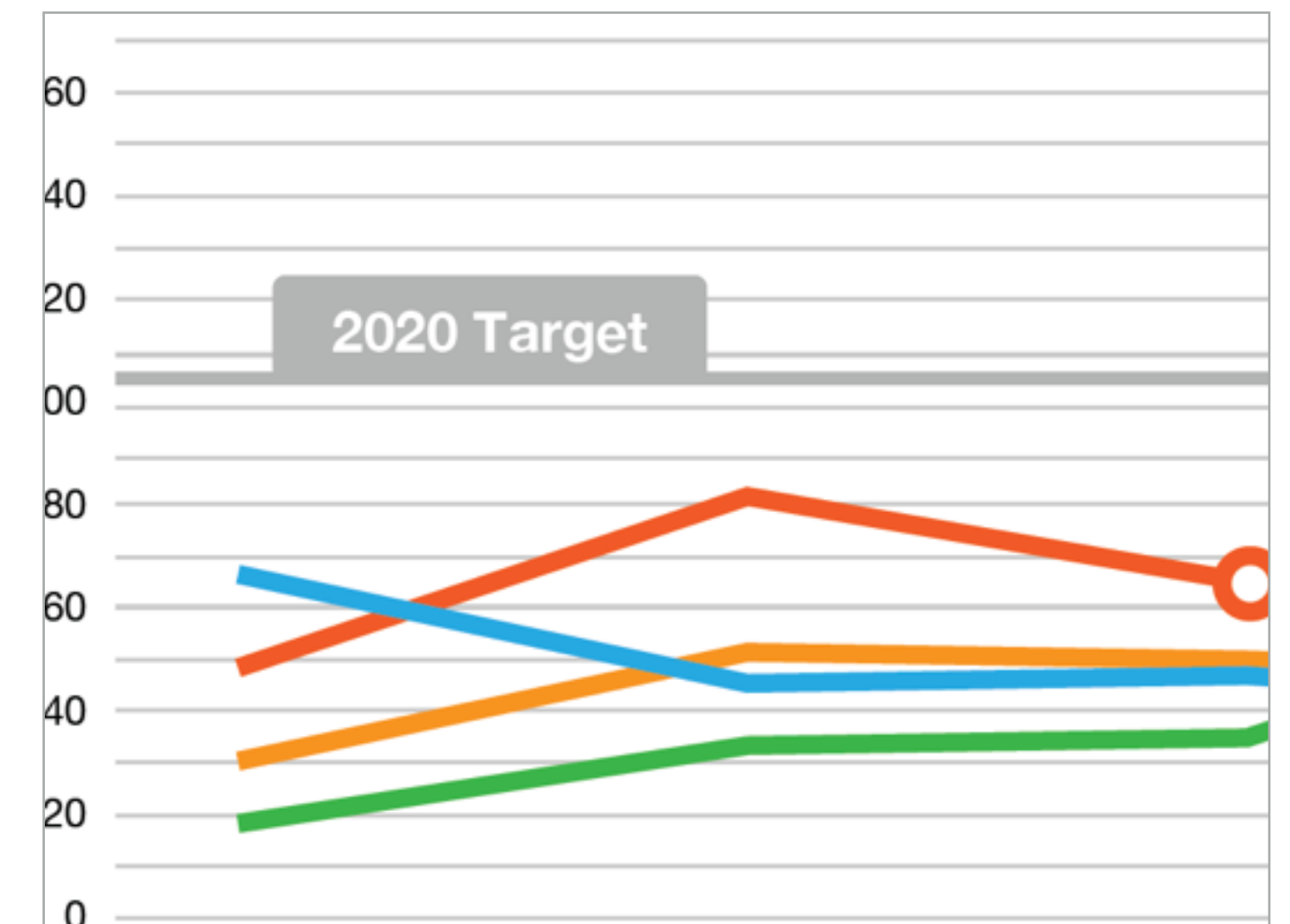
Initial Concepts



Existing Dataset



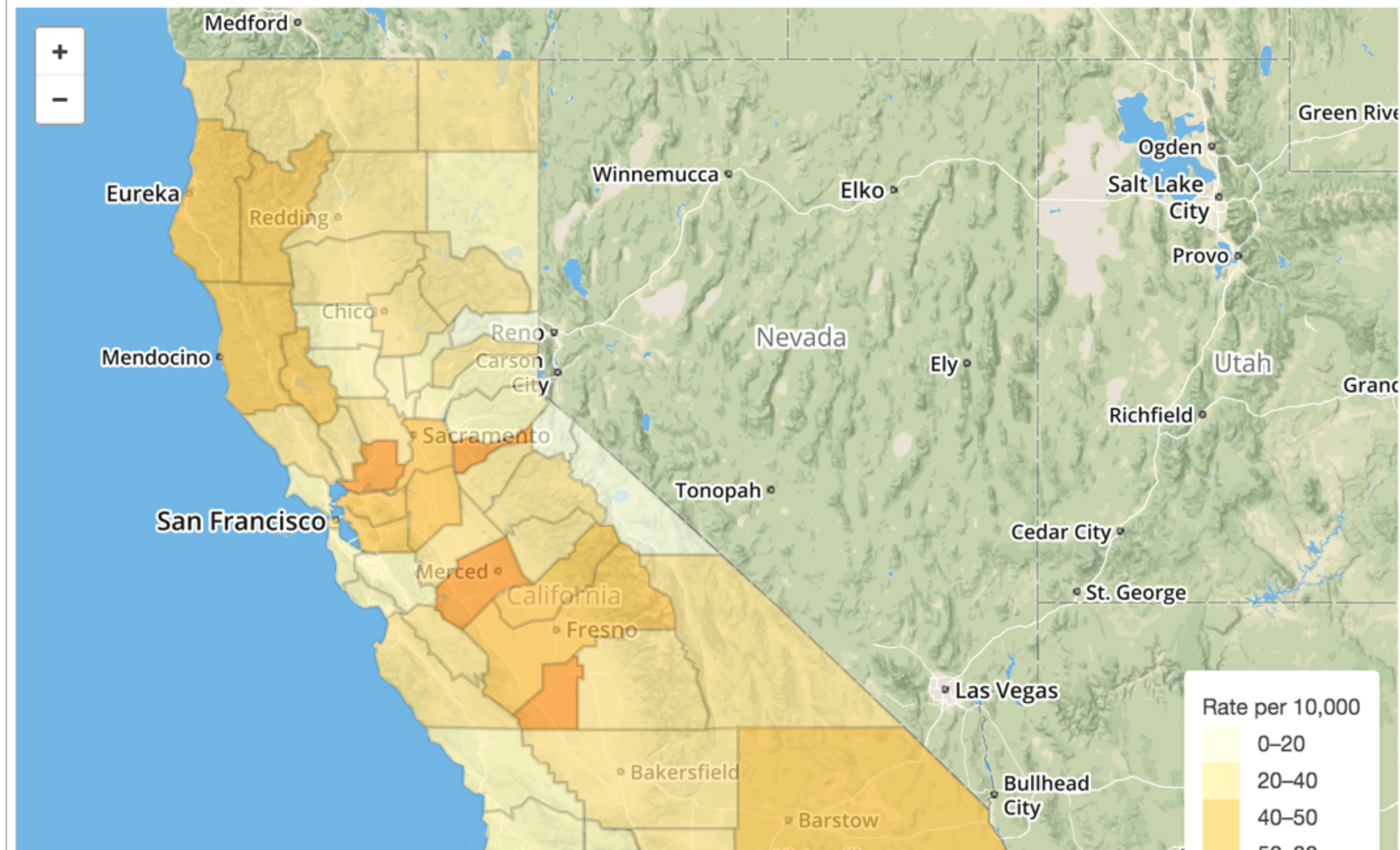
Expanded Datasets



In-Process Deliverables

Asthma Emergency Department Visits

Test v1.0



Map Tool Demo

VIEW IT ONLINE:

<http://idmlo.co/chcf/chcf-test-v1/index.html>

- Displaying real asthma ED visit rate data from the CDPH Data Portal
- Tool is responsive - functions on desktops, tablets and mobile devices
- Future enhancements: county and zip code maps, geo-select tool to view/export data for individual regions or groups of regions

Key Audiences

Our working design brief places emphasis on two key user groups

Engaged Public

This audience wants to be educated about the dataset before they can appreciate it's importance. Any data visualization tool needs to address why, how and by whom this data collected, what the deeper story and meaning behind the data is and how it impacts them on a personal level.

Local Health Officials

This audience wants to understand the data at the most granular level possible. They are less concerned with statewide comparisons and aggregated data and analysis. They want to be able to zoom in on their regions only and review/export custom selections of the overall dataset.

Data Viz Walkthrough

1. Introduce the dataset with simple stats and descriptions

Asthma is a complicated disease and requires a multifaceted approach to reduce its burden on the people of California.

Deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat.



2,034,408

CA ASTHMA PATIENTS



348

TOTAL ED VISITS



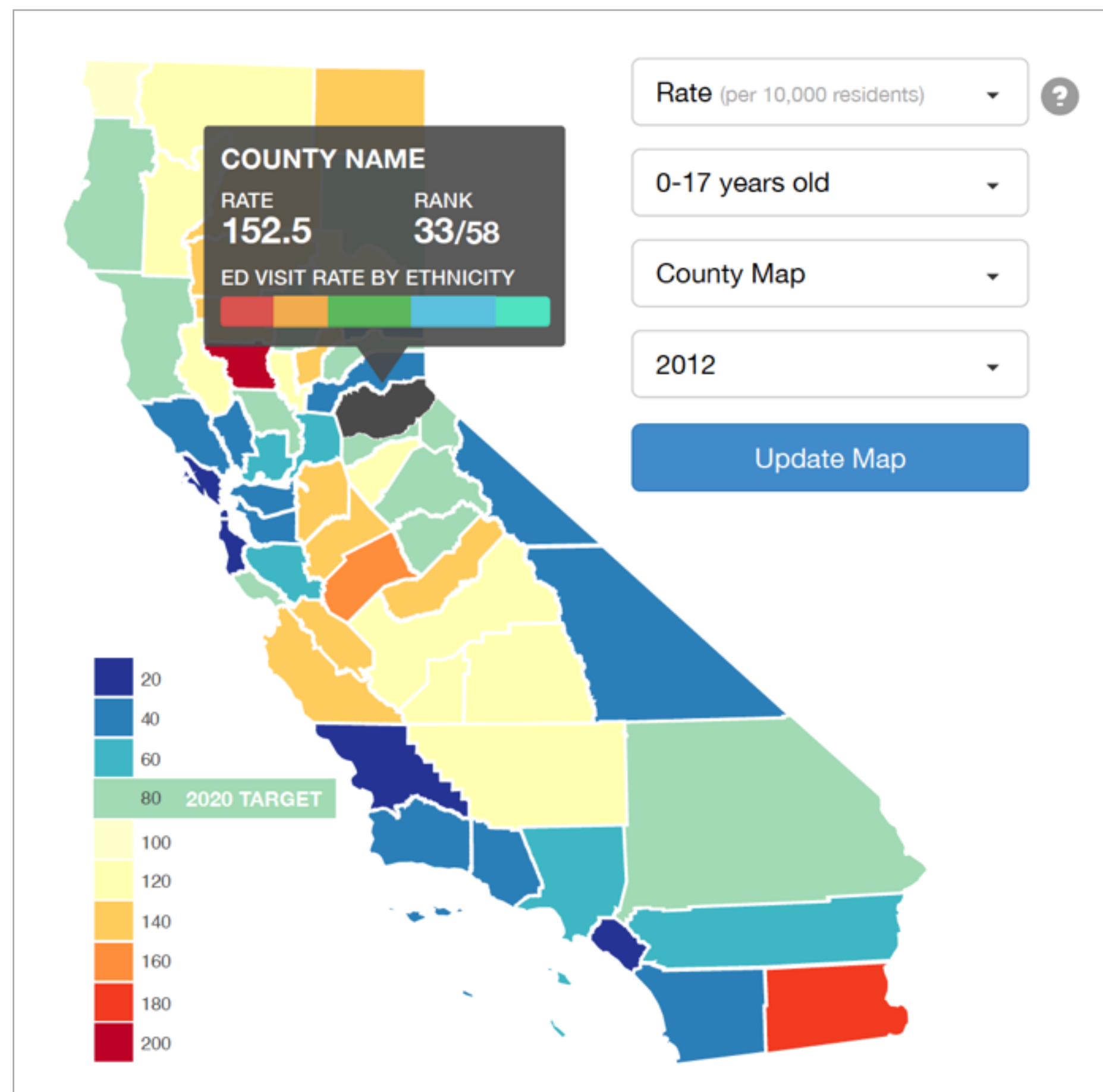
8,382

TOTAL VISITS PER DAY

Data needs a story. A reason for existing. Each indicator page should begin with a compelling introduction that helps the audience understand why it's important and what it means.

Data Viz Walkthrough

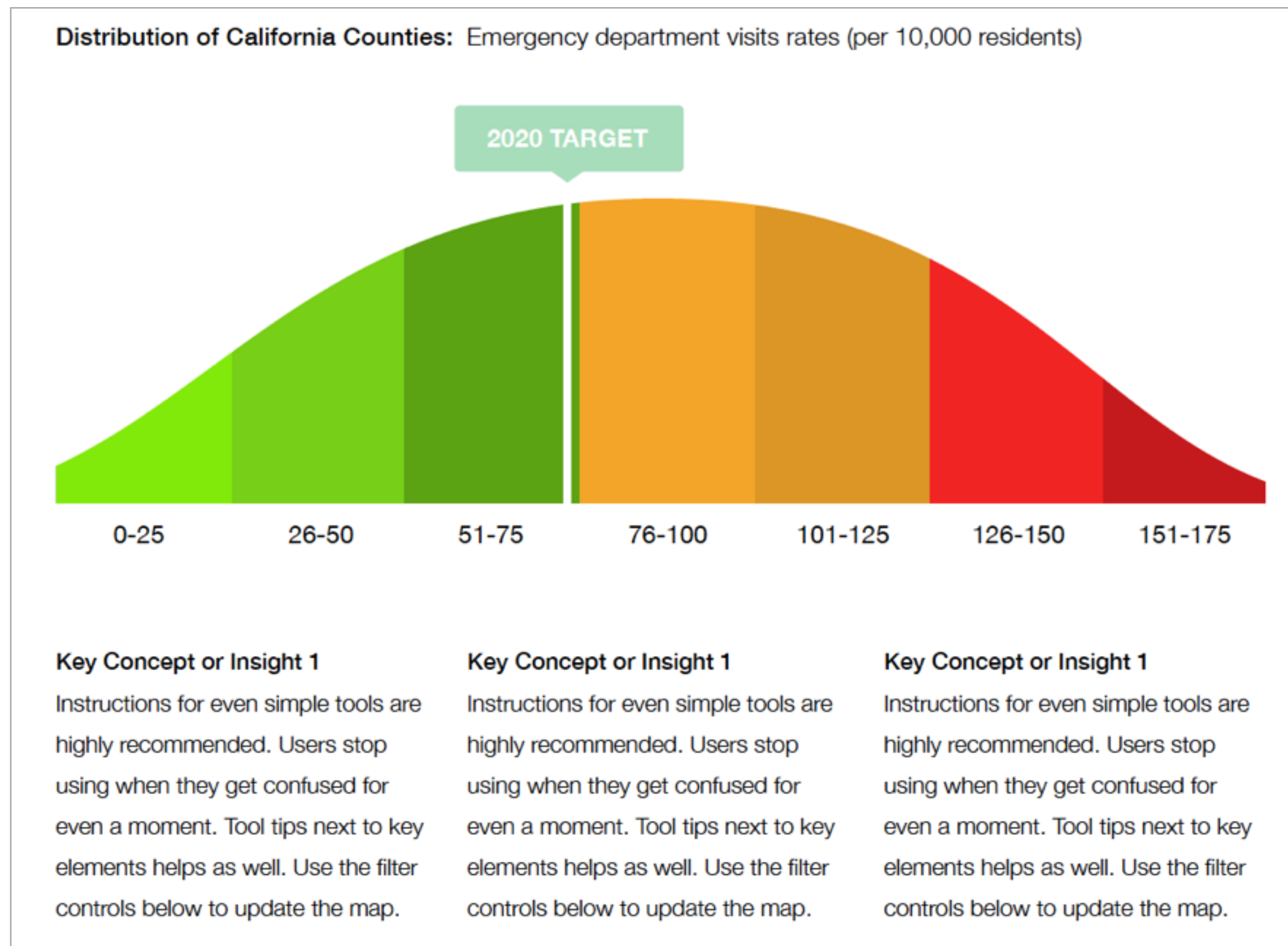
2. Layer up the story around the data and make it relatable



Displaying data geographically not only allows for quick comparisons and analysis, but also helps the audience relate to the data. How does the data affect them, their families?

Data Viz Walkthrough

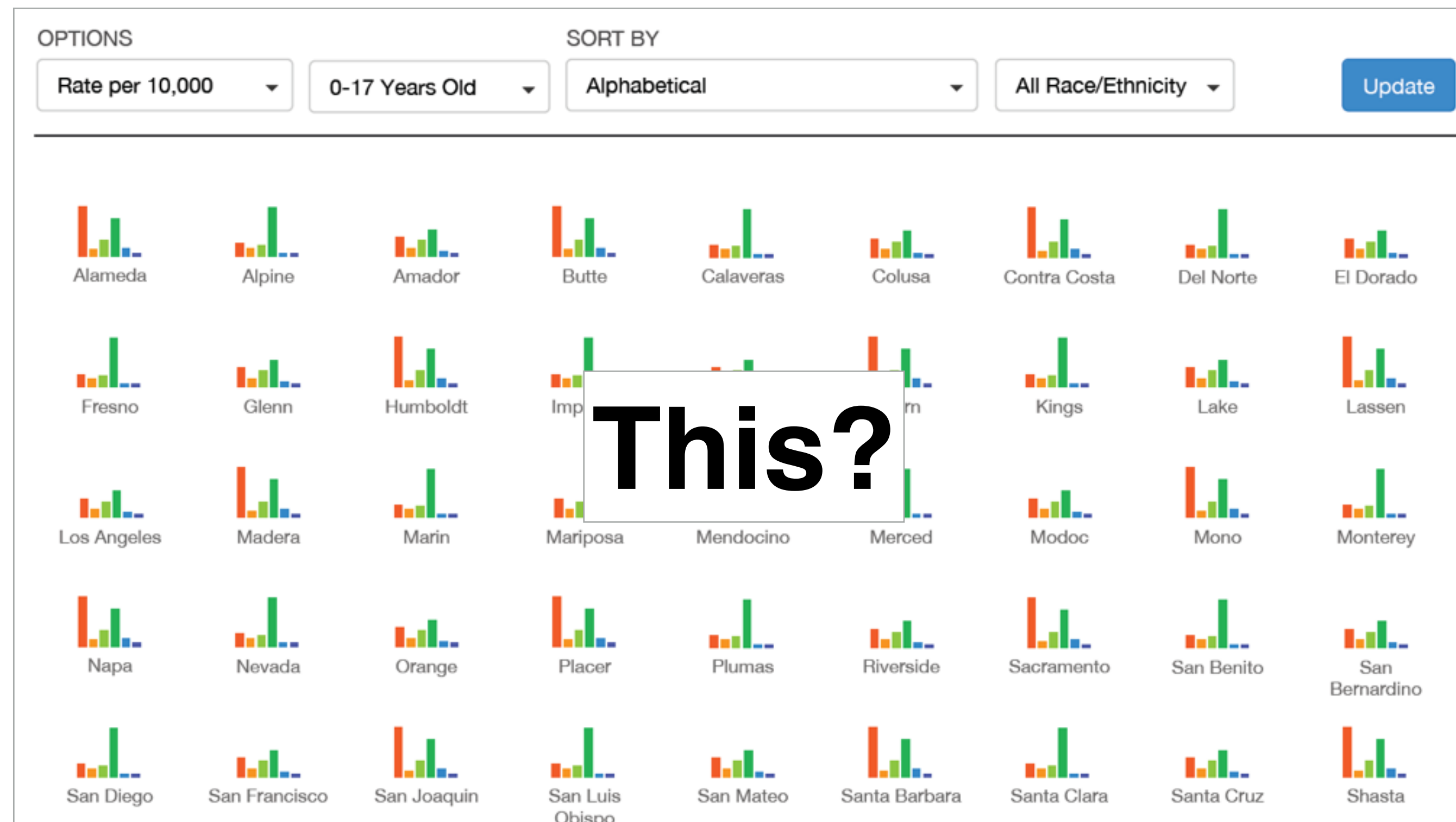
3. Provide context to the data by highlighting key insights



Help the audience understand the data from a range of perspectives. Is current performance good or bad? How does it relate to goals? What's the scale of the problem? Pull out the key stories and insight that might not be obvious from the raw data or geographic display.

Data Viz Walkthrough

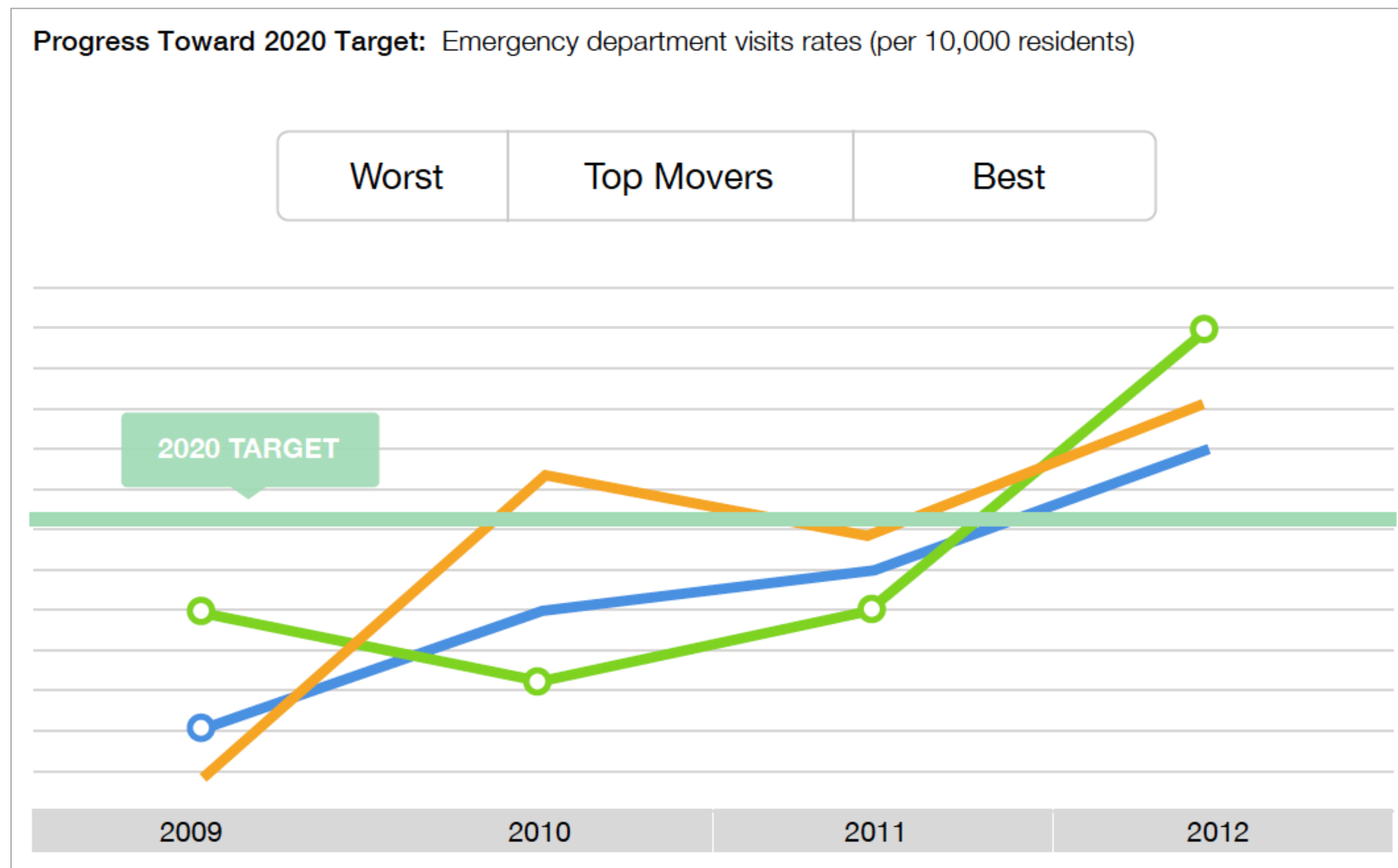
Visualizations like small multiples can help break down top line numbers into meaningful groupings such as ethnicity and displays massive tables of data in a single screen.



2	Alameda	2,952	84.6	0-17
3	Alameda	6,965	58.4	18+
4	Alameda	9,917	65.2	all ages
5	Alpine	0		0-17
6	Alpine	<5		18+
7	Alpine	<5		all ages
8	Amador	50	88.0	0-17
9	Amador	214	81.9	18+
10	Amador	264	83.5	all ages
11	Butte	252	54.8	0-17
12	Butte	698	42.6	18+
13	Butte	950	45.7	all ages
14	Calaveras	36	46.5	0-17
15	Calaveras	137	42.5	18+
16	Calaveras	173	43.5	all ages
17	CALIFORNIA	72,682	79.4	0-17
18	CALIFORNIA	113,149	39.6	18+
19	CALIFORNIA	185,831	49.8	all ages
20	Colusa	29	47.5	0-17
21	Colusa	52	33.8	18+
22	Colusa	81	37.3	all ages
23	Contra Costa		4.1	0-17
24	Contra Costa		5.3	18+
25	Contra Costa		6.0	all ages
26	Del Norte		1.4	0-17
27	Del Norte		1.8	18+
28	Del Norte		1.8	all ages
29	El Dorado		1.2	0-17
30	El Dorado		1.1	18+
31	El Dorado		1.5	all ages
32	Fresno	3,758	134.1	0-17
33	Fresno	3,432	51.2	18+
34	Fresno	7,190	72.6	all ages
35	Glenn	32	41.5	0-17
36	Glenn	74	36.0	18+
37	Glenn	106	37.4	all ages
38	Humboldt	221	82.8	0-17
39	Humboldt	769	72.9	18+
40	Humboldt	990	75.5	all ages
41	Imperial	762	152.5	0-17
42	Imperial	660	52.0	18+
43	Imperial	1,422	77.9	all ages
44	Inyo	32	86.7	0-17
45	Inyo	50	35.2	18+
46	Inyo	82	48.4	all ages
47	Kern	2,462	96.5	0-17
48	Kern	2,793	45.7	18+

Data Viz Walkthrough

4. Move beyond snapshots in time to trajectory and performance



Trends are key to helping audiences understand and care about the data. Are the best getting better? Where is progress being made? The trajectory of key data points begins to suggest possible required actions.

Next Steps

Gather Feedback

Are we designing for the correct audiences? If not, who should we consider and what do they want? Are we approaching the data correctly?

Different types of analysis, visualizations or browsing tools? Provide your detailed feedback via email as you are able.

Continue Development

We will move directly into our next two-week development sprint. We will seek access to additional data sets, continue to experiment with analyses and visualizations based on feedback and perform major feature development.

Deliver Prototype

At the end of this two-week sprint, we will deliver a working prototype in a web browser using available data.

We have one week planned for review, testing and discussion. Based on feedback received, we will begin a subsequent code sprint to refine the prototype.

Thank You

ASH ROUGHANI | JOEL RIPHAGEN