



Datawrapper hacks

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This session is for people who are comfortable with the basic settings on Datawrapper but looking for more ways to upscale their visualizations. Some basic HTML knowledge is preferred but not necessary.

Resources for this session:

- All data for this session lives in [this Google sheet](#).
- Everything else can be done in [Datawrapper](#)

bit.ly/NICAR25-Datawrapper-Hacks

Questions? Email us!

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Adding tabs, html and CSS to visualizations

[Datawrapper tutorial](#)

[Final version of this map](#)

- Go to Datawrapper and create a choropleth map
- In the search box in the “Select your map” section, search for “USA states” and click on the map that says “USA » States” then hit “Proceed”
- In the “Add your data” section, scroll down to the button that says “connect google sheet” and paste the sharing link into the box and hit “connect.” Yay! You should have data in the preview now. Click “Proceed”
- Make sure, in the dropdown next to “Select column for Name:” that the “State” column is selected. Next to “Select column for Values:” select “Girl Rank 1.” Hit “Proceed.”
- Yay! Everything looks good. Hit “Proceed” again.
- We have a map! Refine as needed. Un-check “show color legend”
- Use these colors for the different name categories:
 - #ff0071
 - #ff4e6c
 - #ff7166
 - #ff8d61

```
#ffa55e
#ffbc5f
#ffce9e
```

- Then, scroll down and hit “Proceed” or click on the “Annotate” tab at the top.
- Title your map:
Most popular baby girl names by state
- Leave the description blank for now.
- Add in the source and byline

ADDING HTML AND TABS

- In the description box, paste this chunk of code: (note: the extra spaces between lines here will not translate into new lines in the description. For that, you need break tags:
)

```
In 2023, the most popular baby girl names in each U.S.
state were
```

```
<span style="font-weight: bold; background-color:#ff0071;
padding: 2px; color: white;">Amelia</span>,
```

```
<span style="font-weight: bold; background-color:#ff4e6c;
padding: 2px; color: white;">Ava</span>,
```

```
<span style="font-weight: bold; background-color:#ff7166;
padding: 2px; color: white;">Charlotte</span>,
```

```
<span style="font-weight: bold; background-color:#ff8d61;
padding: 2px; color: white;">Emma</span>,
```

```
<span style="font-weight: bold; background-color:#ffa55e;
padding: 2px; color: white;">Evelyn</span>,
```

```
<span style="font-weight: bold; background-color:#ffbc5f;
padding: 2px; color: white;">Isla</span>
```

and

```
<span style="font-weight: bold; background-color:#ffce9e;
padding: 2px; color: white;">Olivia</span>.
```

Click on or hover over a state below to see the top 5
names in each state.

```
<br><br>
```

Click to toggle:

```
<a target="_self" href="TKTKTK" style="background:#ff0071;
padding:3px 6px; border-radius:5px; color:#ffffff;
font-weight:700; box-shadow:0px 0px 7px 2px
rgba(0,0,0,0.07); cursor:pointer;" rel="nofollow
noopener">Girl names</a> &nbsp;
```

```
<a target="_self" href="TKTKTK"
style="background:#429ddd80; padding:1px 6px;
border-radius:5px; color:#ffffff; font-weight:400;
cursor:pointer;" rel="nofollow noopener">Boy names</a>
&nbsp;
```

- Scroll down to “Customize tooltips:

In [STATE], the most popular baby girl name in 2023 was [girl_rank_1].
[BREAK TAG]

The second most popular baby girl name was [girl_rank_2], followed by [girl_rank_3], [girl_rank_4], and [girl_rank_5].

- Replace the purple text with the column names and HTML/CSS
- Make a copy of this map
- Change the title of the copied map to:

Most popular baby boy names by state

- In the Refine tab, change the “Select column” dropdown to Boy Rank 1
- Use these colors for the different name categories:

#0000b5
#2431c2
#3551ce
#416fd9
#4c8de3
#57abea
#66c9ed
#81e7e5

- Then, scroll down and hit “Proceed” or click on the “Annotate” tab at the top.
- Title your map:

Most popular baby boy names by state

- In the description box, paste this chunk of code: (Or you can manually change the names and styling yourself!)

In 2023, the most popular baby boy names in each U.S. state were

```
<span style="font-weight: bold; background-color:#000094;
padding: 2px; color: white;">Elijah</span>,
```

```
<span style="font-weight: bold; background-color:#2431c2; padding: 2px; color: white;">Henry</span>,
```

```
<span style="font-weight: bold; background-color:#3551ce; padding: 2px; color: white;">John</span>,
```

```
<span style="font-weight: bold; background-color:#416fd9; padding: 2px; color: white;">Liam</span>,
```

```
<span style="font-weight: bold; background-color:#4c8de3; padding: 2px; color: white;">Noah</span>,
```

```
<span style="font-weight: bold; background-color:#57abea; padding: 2px; color: white;">Oliver</span>
```

```
<span style="font-weight: bold; background-color:#66c9ed; padding: 2px; color: white;">Theodore</span>
```

and

```
<span style="font-weight: bold; background-color:#81e7e5; padding: 2px; color: white;">William</span>.
```

Click on or hover over a state below to see the top 5 names in each state.

```
<br><br>
```

Click to toggle:

```
<a target="_self" href="TKTKTK" style="background:#ff007180; padding:1px 6px; border-radius:5px; color:#ffffff; font-weight:400; cursor:pointer;" rel="nofollow noopener">Girl names</a> &nbsp;
```

```
<a target="_self" href="TKTKTK" style="background:#416fd9; padding:3px 6px; border-radius:5px; color:#ffffff; font-weight:400; box-shadow:0px 0px 7px 2px rgba(0,0,0,0.07); cursor:pointer;" rel="nofollow noopener">Boy names</a> &nbsp;
```

- Scroll down to “Customize tooltips and change all the “girls” to “boys”
- Now comes the fun part! Hit publish on both maps.
- Copy the “visualization only” link to your “baby girl names” map and paste it in the first “a” tag in your description in both maps.

- Do the same for the “baby boy names” map, but paste the link into the second “a” tag in both maps.
- Republish both maps
- Now, if you open either map, you should be able to toggle between them!

Adding images

[Datawrapper tutorial](#)

[Final version of this map](#)

Creating a locator map of the National Mall, adding markers for museums with images in tooltips, and adding custom map symbols.

- Open Datawrapper and select **Locator map** as the map type
- In the **Images** tab of the [Google Sheet](#), copy a set of coordinates
- In Datawrapper, go to **Add markers**, paste the coordinates in the search bar and click + to add to your map
- The map will zoom in to the newly placed marker – let’s adjust the view
 - **Zoom: 14**
 - **Rotate: -90°**
- Go to **Design map** and click the **Earth** style to make building outlines more visible
 - Uncheck the box next to **Labels** to declutter the map a bit
- Return to **Add markers** and adjust the icon placement if needed
- Replace the **Text** field with the museum name, *Hirshhorn Museum*
- Click **Symbol** and select an icon and customize the color
- Add an image on hover
 - Click the dropdown arrow next to **Advanced options**
 - We are going to paste in some HTML from our Google sheet into the **Tooltip Text** box
 - Ex: ``
- Repeat this process to add more museum locations
- Let’s add an image as a marker, this time it will be at the Capitol’s location
 - Copy and paste the Capitol coordinates from the [Google Sheet](#)
 - Under **Symbol**, select the circle with the dotted line... this removes the default icon
 - Replace the **Text** field with ...

- Movies in phase one of Marvel Cinematic Universe
- Click **Publish & Embed** to publish your table!
 - Your table is now customized with Markdown for images, bold and italic text! 🎉

Adding custom keys

[Datawrapper tutorial](#)

[Final version using code](#)

[Final version using custom image](#)

Making a grid map of the U.S. of fireworks laws by state, adding a custom legend with code and/or using a custom image.

- Open Datawrapper and create a Choropleth map
- Search **USA squares** and select **USA → States with DC (squares)**. Click **Proceed**
- Copy and paste the data from the **Custom key** tab in the [Google Sheet](#)
 - Make sure to map:
 - **Names** → **State**
 - **Values** → **Legend**
- Go to **Visualize**
- Under **Refine**, adjust the colors
- Under **Annotate**, add the title
 - Consumer fireworks laws by state
 - Toggle on **Show labels** → **by column** → select **Abbreviation**
- Current legend is boring, let's make it ✨ fun ✨ using HTML to add [Unicode characters](#)
 - Toggle off **Show color legend** under the **Refine** tab
 - Paste the following into the **Description**

```
<b style="color:#1d81a2;
vertical-align:text-top; font-size: 24px">★</b>
Allows some/all fireworks
```

```
<b style="color:#ffca76;
vertical-align:text-top; font-size: 24px">★</b>
Allows only sparklers/noveltyies
```

```
<b style="color:#c71e1d;
vertical-align:text-top; font-size: 24px">★</b>
Bans all fireworks
```
- Instead of using HTML, you can also upload a custom legend as an image
- Host your image somewhere (e.g., your newsroom's CMS) and get the **image URL**
- Replace the URL in the following code and paste it into the **Description**

```
<b style="float:left; width: 100%; height:
60px; background:
```



```
url(https://assets1.cbsnewsstatic.com/hub/i/2025/02/24/525f4370-6bb4-47cf-8a22-33b975c3c605/legend-nicar.png); background-size: contain; background-repeat: no-repeat; margin-top: 2px;"></b>
```

- Click **Publish & Embed** to publish your map!

✨ **BONUS: Hacking Scatter plots** ✨

[Examples of Datawrapper scatter plots](#)

[How to make a timeline](#)