In the information age humanity has found that it is no longer the case that a lack of information is a significant obstacle to accomplishing goals. Today we are awash in information, but are often so overwhelmed by the shear amount of it that very little of it is ever translated into useful knowledge. A new problem has arisen; absorbing the modern flood of data available at our fingertips and distilling it into something more easily digested by us humans.  
  
NJI Media is here to help.

Our design and development teams are tackling this problem with a tool called [D3](https://d3js.org/), which stands for Data Driven Documents.

D3 is a Javascript library built to make the creation of web friendly data visualization far easier. It makes it possible us to build visually stimulating, interactive, and informative depictions of data that can reveal actual knowledge to viewers rather than plain numbers that the human mind struggles to contextualize, or boring charts that are more likely to increase boredom in the world instead of knowledge.   
  
But “viewers” is actually the wrong term. D3 allows us to invite users as active participants. We can empower our users and allow them to navigate the sea of data they have access to, explore the areas that are of most interest to them. In doing so we not only make it possible for them to much more rapidly learn from the data, but we also make it much more enjoyable for them to do so. The data becomes much more impactful, and users are far more likely to share our D3 crafted projects that they found to be so engaging.

And not just to prove my point that awesome D3 projects are more likely to be shared; here’s one of the most beautiful and informative data visualizations that have ever graced the Internet with their presence, all of which, use D3:

[The NY Times’ 2013 Federal Budget breakdown](http://www.nytimes.com/interactive/2012/02/13/us/politics/2013-budget-proposal-graphic.html?_r=0)

This D3 project is a work of art. It has a powerful message that would need a thousand words and way too much patience to try to straight up read, and which can be more easily and fully comprehended through a couple of minutes playing with this presentation instead. Users are able to grasp multiple dimensions of the data at once, seeing both the size of various spending groups and whether they would grow or shrink, and they can actually understand what the numbers mean relative to one another, which is nearly impossible otherwise when just comparing numbers with so many zeroes behind them.   
  
The users are then further empowered by being able to break down the information in various ways and they are practically sucked into the presentation as their curiosity grows about what type of spending each bubble represents, and which areas grow or shrink the most, and how the visualization changes as they change it’s view.

This is exactly the kind of tool that I would like to offer to NJI’s clients.

D3 makes it surprisingly easy to build impressive data visualizations. In fact, with no significant prior experience with D3, and less than a year of experience with web development, I was able to build the following interactive chart in *less than a week*.

I built this as a personal project using publicly available data from the Energy Information Administration. It depicts the total energy consumption of each state and the District of Colombia.

As a personal project, it most definitely lacks the elegant touch of NJI’s design team. However, it does successfully visualize 71,604 data points, which itself is a number so high that it would need its own D3 presentation to impress upon the reader just how much information that is.  
  
Users can dive deep into the data using this chart by selecting which states they would like to examine further, which types of energy that they are most interested in, and to select which time frame to examine. They are even able to change the entire chart to reflect whether the energy consumption measurements take into account state population levels.  
  
With the input of NJI’s creative design team, we’ll be able to make exciting new D3 projects, which will be just as captivating as anything that the New York Times produces, for NJI’s clients. This is an exciting time to be a part of the NJI team.