

Top Links

happyplace.some...

Top Search Terms

funny birthday cards

create your own ec...

someecards

Charlie Guthrie

Data Visualization Engineer,

Business Intelligence Group

People Who Should Have Checked Th...

What Happens When You Park In ...

The New York Times

18 engaged visits out of 42

Follow along at



# INTHISTALK

Why dashboards?

Making a basic bar chart

Bring it to life with live data

# WHY DASHBOARDS?



Less email guilt

Easier to find and maintain

# OUT OF THE BOX?

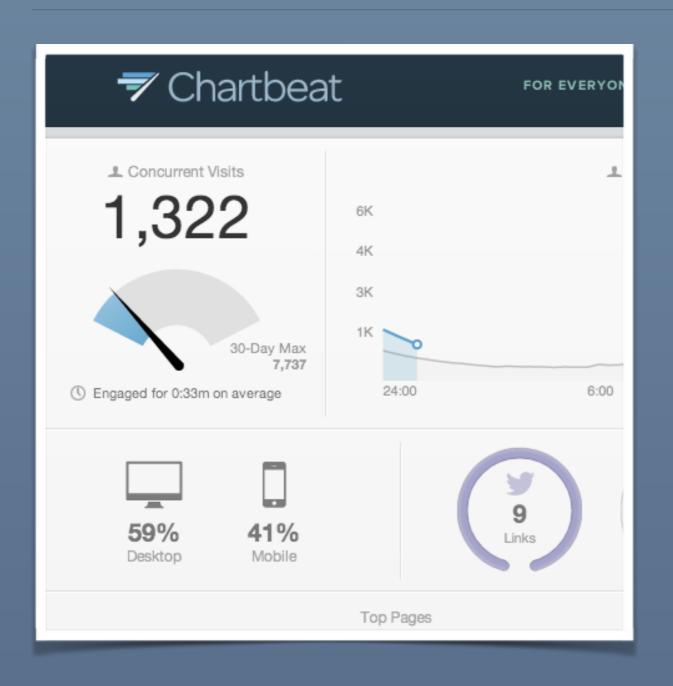
Google Analytics

**WebTrends** 

**Localytics** 

**Datadog** 

### ONTO FRESHER DATA



"The next big thing after big data is fresh data" - Jason Sundram, Facebook

real-time data visualization and analysis

**Streamtools** 

**Chartbeat** 

# GETTING IN ON THAT SWEET ACTION

- I. First, we make a static bar chart
- 2. Then bring it to life with streaming data

# STATIC BAR CHART



#### What People Are Reading Right Now (Static, Fake Data) Top 10 Articles by Concurrent Page Views 99 Obama Spends Another Night Searching Behind White House Paintings For Safes 78 Report: Average American Consuming 4 Ounces Of Cheese Right Now Colorado Legalizes Medicinal Fireworks 77 64 15-Second Meals 35 Statshot: Why Aren't We Going To Prom? 33 Report: U.S. Still Leads World With Highest Density Of Kevins 29 Xylophonist Shredding It 28 Man Has Story For Every Stain On Pants 25 Music Playing In Bar Could Stand To Be Louder, Worse

Grandfathers Accidentally Switched At Hospital

Headlines borrowed from theonion.com

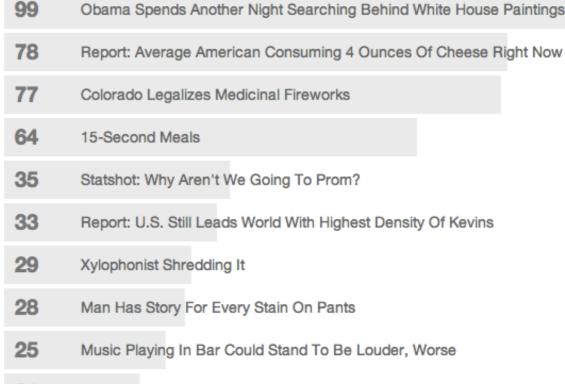
# STATIC BAR CHART



#### **Functions:**

- l. setup(targetID)
  - set size and scales, create svg element inside target
  - returns settings object. why?
- drawChart(settings,dataset)
  - create chart row, attach rectangles, categories, value labels
- 3. pullData(settings,callback)
  - loads data file asynchronously, then calls formatData() and drawChart()
- 4. formatData(data)
  - sort descending and take the top 10 articles

# What People Are Reading Right Now (Static, Fake Data) Top 10 Articles by Concurrent Page Views Obama Spends Another Night Searching Behind White House Paintings For Safes



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link to code →

### What's changed?

- I. drawChart() becomes
  redrawChart()
  - enter
  - update resize, reorder
  - exit
- 2. pullData() now pulls new data every 3 seconds

#### What People Are Reading Right Now (Fake Data) Top 10 Articles by Concurrent Page Views Obama Spends Another Night Searching Behind White House Paintings For Safes 74 Report: Average American Consuming 4 Ounces Of Cheese Right Now 73 Colorado Legalizes Medicinal Fireworks 15-Second Meals Statshot: Why Aren't We Going To Prom? 39 30 Report: U.S. Still Leads World With Highest Density Of Kevins Xylophonist Shredding It 28 Man Has Story For Every Stain On Pants Music Playing In Bar Could Stand To Be Louder, Worse Grandfathers Accidentally Switched At Hospital Headlines borrowed from theonion.com

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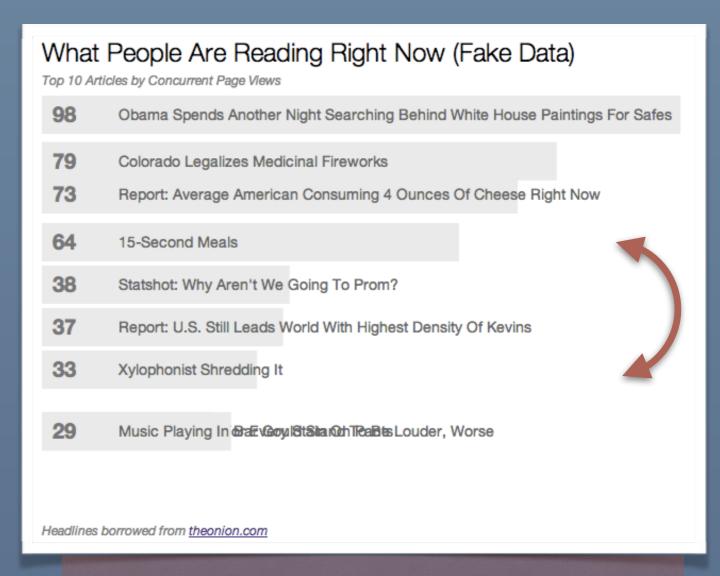
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New elements enter from the bottom with opacity zero

link to code →

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Rectangles resize and reorder

link to code →

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Articles no longer in top 10 drop out the bottom

link to code →

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## ATTACHING REAL DATA

Sorry, I can't share the link

pullData() calls internal tool xStream

### WE ARE HIRING



"After careful consideration of all 437 charts, graphs, and metrics, I've decided to throw up my hands, hit the liquor store, and get snockered. Who's with me?!" Data Vis Engineer for the BI Group

Talk to me after

or on Twitter @charlieguthrie

## THANKS

### **More Information**

On Basic Bart Charts: Mike Bostock's "Let's Make a Bar Chart"; Scott Murray's Online Tutorial

On Enter, Update, Exit: Mike Bostock's "Thinking with Joins"

On Transitions and Object Constancy: Mike Bostock's "A Bar Chart, Part II"

If you don't know anything about D3 and don't know where to begin: Bostock's "Three Little Circles"

Or ask me @charlieguthrie