

# Reflection

When I started my own design, I knew first I wanted the emphasis to be on the map like in design-2. I quickly came up with the idea of a map based color coded so that one color tone would be below the mean gas price, and another tone would be for states above the mean national gas price. I google searched for map infographics inspiration, and found a good map with a blue color spectrum. I ended up using these blues in my map. Then I needed reds. I just google searched for red gradient, and derived my own 6 red colors from that. I made sure such that the red were similar yet distinctive enough such that the viewer can easily filter states by precise red colors on the map. The next logical step was the bar chart corresponding the state gas prices. I realized a bar chart was nothing special, but it is the ideal representation for this kind of information. I decided the color scheme should be exactly the same as the map, so that people can draw a relationship between the map and the chart. Finally, I added the key. As far as the bar chart is concerned, I wanted to do something vertically long since the map was horizontally long, so this would give variety. Also, this allowed the state names to be labeled horizontally.

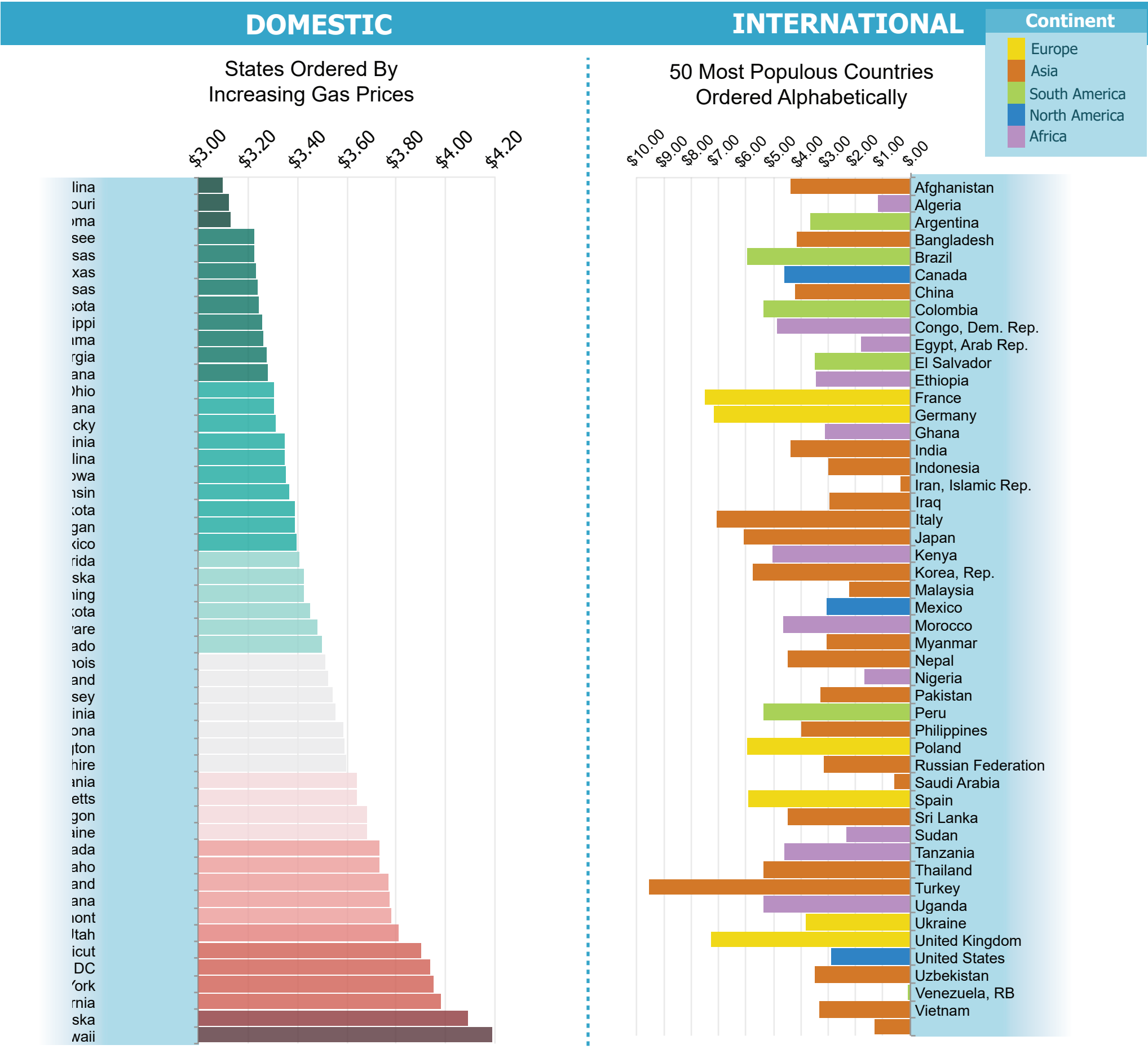
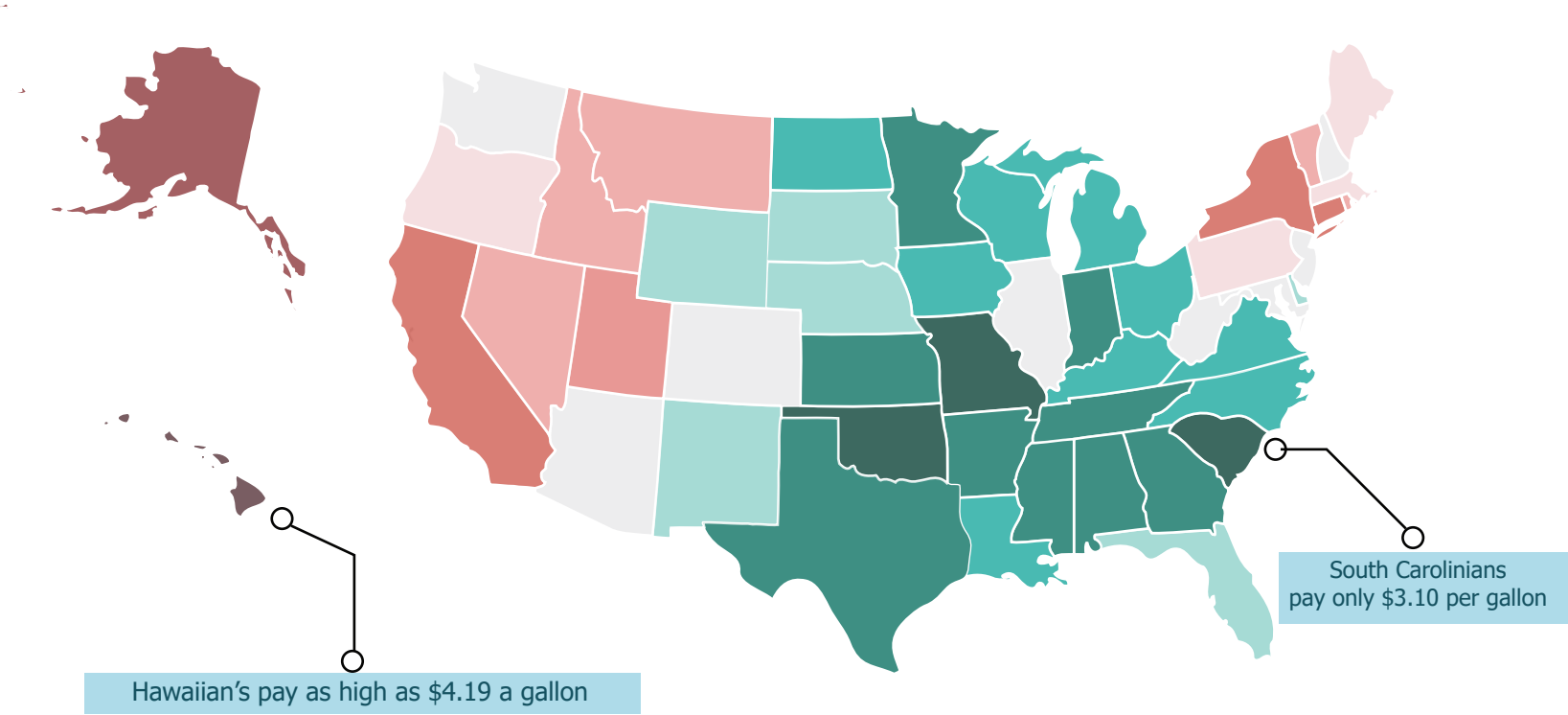
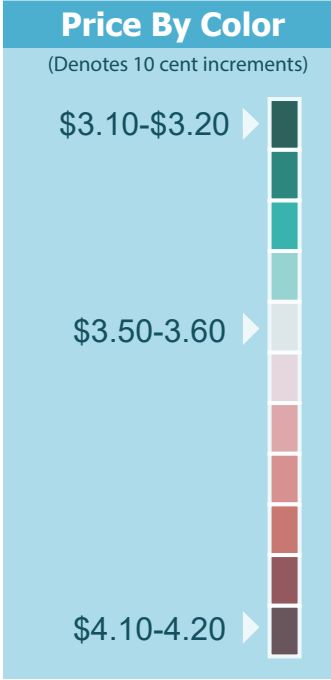
At that stage in the design process, I hadn't yet to consider hierarchy, and organization in my own design. One thing I knew I wanted in my design was more color, best typography, more layering/hierarchy, and more consistency than the "professional designs". I went off their clean minimalism because after looking at the data, I realize there is not a lot of textual information or images. The general layout would be charts / graphs / etc. I decided I wanted; still, to emphasize the map. However, I then considered how to organize the other data pieces. I decided first what I wanted to do. I knew I had to do a data representation for various countries, one for the US gas prices throughout the years, and one about the price composition of gasoline. After having placed the bar charts of the US states, there was a lot of empty vertical space. Instead of trying to cram two smaller data representations here, I thought I can utilize the foreign countries as contrast. And so for symmetry with the 50/51 us states, I chose 50 countries from the list. Which 50 countries you might ask? I thought population would be a good number to go by, because it would include countries that are more well known. Furthermore, I knew this would have a diverse representation of countries in different continents. And finally, filtering by population meant their would be a wide spectrum of countries with varying economic status. This would be interesting with respect to gas prices. And So I made the country bar chart parallel to the US states. I already had a color scheme for the US states map and the US states bar chart, and did not want to use the same color scheme. I had remaining, yellow, orange, purple, etc. With this color set, I chose to go with labeling countries by the continent they are in. This would add to the effect of "layering", such that if people wanted to see only countries in Africa, they can easily filter other countries out in the data.

At this stage, I had simple dotted lines separating the logical section of the space. I also had white header text for each data section. But this was boring, and I soon came up with a blue title background with white font. I thought using this consistently throughout would provide both hierarchy and organization. As you can see in the design, you can quickly filter out headers, data, annotations, citing sources, labels and keys. I liked the blue color scheme in the professional sample design. So I decided to use that blue as the theme of my design. That meant that I had to avoid using the same blue in my data for the confusion. (The exception being the graph of the US gas prices by year). Having the header blue bars with white text in place, I made them all-caps. This allowed further layering and grouping of elements. Then from this, I came up with the typography scheme. Black text is just general comments about the data. Light blue background with dark blue text are labels. And italicized grey text is citations. I think you can see for yourself how I use text for hierarchy and layering.

You may noticed my implementation of the US gas prices by year graph. I thought it was overly crowded to display months, and days, and year. Instead, I just the same data June 02nd for all the years, and added a footnote about it. I didn't want the data to only include these points, but the months in between the year because it allows people to examine seasonal trends / spikes. Most of my design work was figuring out placement, and organization. I went off with the cleanliness of the professional designs, and capitalized on white space. I see where they were going, which worked and made sense with this data. Except, I felt I did a better job in terms of hierarchy, typography, and variety. I feel my design is much less boring then theirs incorporation more colors, a more consistent and lively layout, much more data, and more color! After all, I criticized them in my analysis in their shortcomings. And it is exactly those shortcomings I focused on when I was doing my design. One final comment is that the color blue I chose isn't very significant other than the fact that it is modern. It isn't evoking or encoding per se. Though I used color encoding consistently throughout my design.

# GAS PRICES IN THE U.S.

The average price for gas in the United States is \$3.48 per gallon (as of October 29, 2012)

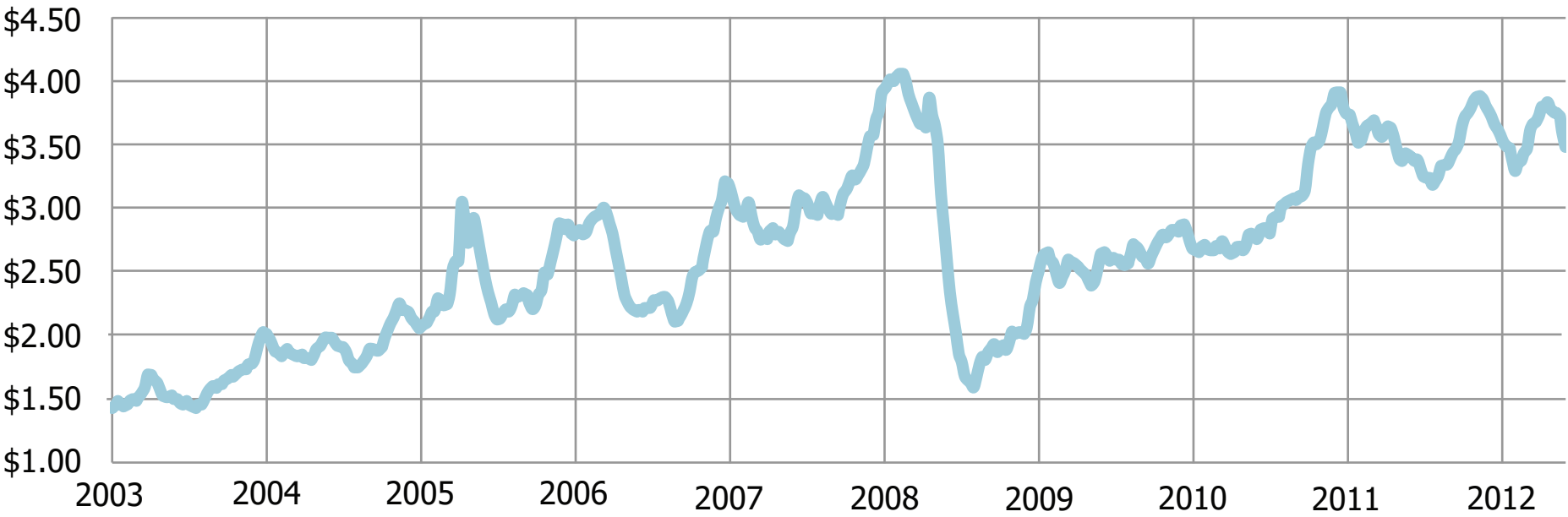


October 2012, [http://www.gasbuddy.com/GB\\_Price\\_List.aspx](http://www.gasbuddy.com/GB_Price_List.aspx)

<http://data.worldbank.org/indicator/EP.PMP.SGAS.CD>

## IN THE PAST

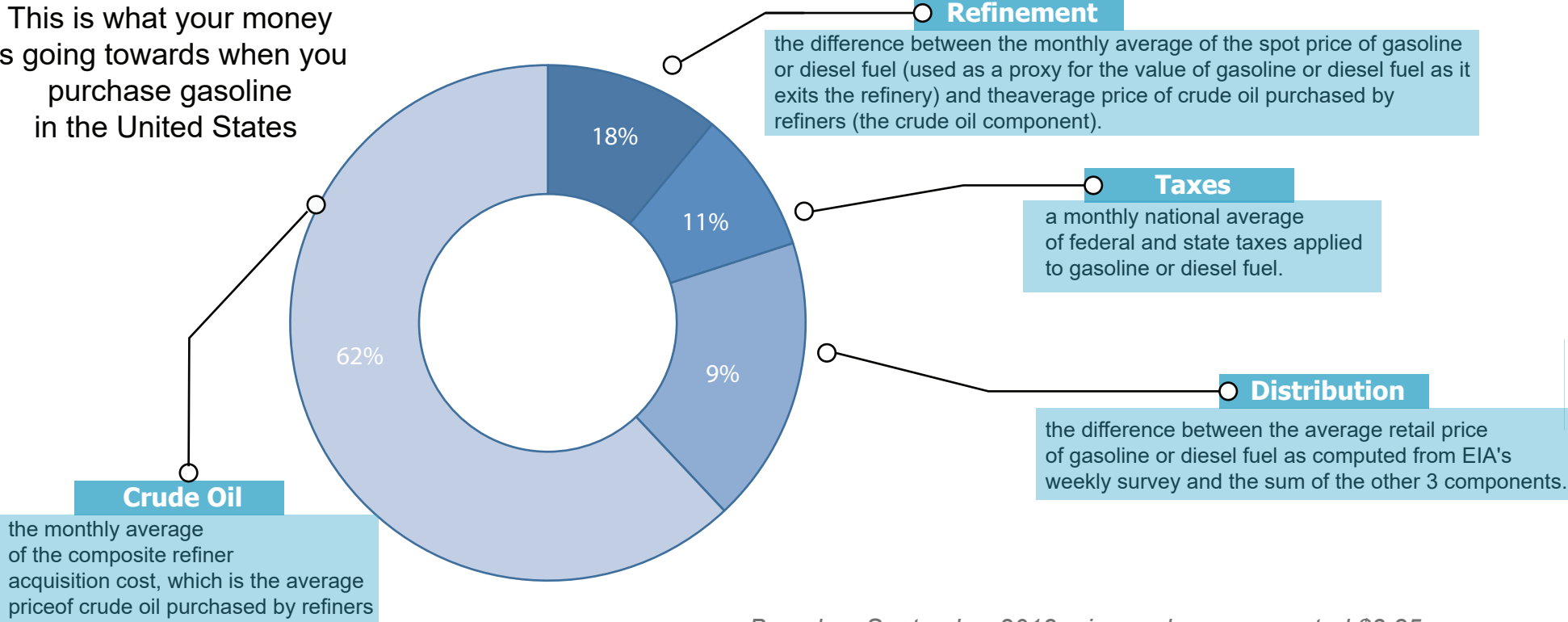
Average Price of Gas in The United States from 2003 to 2012.



Grid lines sampled at June 2nd of their respective year  
<http://www.eia.gov/petroleum/gasdiesel/>

## INPUT COSTS

This is what your money is going towards when you purchase gasoline in the United States



Based on September 2012 prices, where gas costed \$3.85  
<http://www.eia.gov/petroleum/gasdiesel/>



## First Impressions

Let's call the left professional design design-1 and the right design design-2 since we will constantly referring to them throughout.

I like the cleanliness of the design-1. In terms of conveying information, it does a good job. It also uses a variety of information displays including bar charts, pie charts, graphs, and simple numbers. The content is logically separated into 5 sections, each concerning a particular question and its respective opinion. But the design is nothing innovative or impressive. I feel this kind of design suffices, and stops at that: it wouldn't be worthy of being featured on design blog, in my opinion. If I were to spend more than 10 seconds looking at this design outside of class, it would be because I am more interested in the content itself rather than the design alluring me to content.

Design-2 on first glance seems interesting. And this is due to the maps, which at first reminded me of a virus or zombie outbreak or something, possibly also due to the color. It definitely is not mundane or boring as I mentioned design-1 was. It also conveyed information pretty well, in that after a few seconds I understand bigger circles mean more oil spills. But for me looking at these social / political issues, I prefer to be exact and quantitative. One of the problems as I had was figuring out the scale / magnitude of these circles relative to the volume. I mean 1 million gallons might sound like a lot, but it is something relative. The charts as the bottom were also intuitive.

My impression of both is that they are good, but not amazing. I imagine this to be on the same level as something in a textbook, where there is hundreds of designs that must be made and so the designer does not have the time to make a spectacular novel design. I would not be excited to share these on Facebook, or save it into my folder of "inspirations" on my computer.

## Visual Hierarchy

Looking at design-1, I looked at the top two charts/graphs and then the bottom 3 pieces of information in sequential order. The reason for this is that no single piece of information stood out too much, and so the obvious thing to do is examine it sequentially (like reading a page filled with all text, the obvious thing to do is to read it sequentially). The general theme is 5 square regions, each with a header and then the corresponding chart. Beyond this, there is the title and footnotes. I guess this equal weight representation of each region makes sense, since they each answer a unique question on the subject matter. Again, nothing clever in terms of interesting in terms of directing my attention, insofar as the designer is concerned.

Design-2 has an emphasis on the map, and this is reflected in the hierarchy. The main reason for this is that the map is obviously the largest. So good, the part of the design unique to this design is the map and it gets direction directed to it next. Then the 3 charts below are secondary information, and since they each span a equal area they have equal representation. Nothing special, but it gets it job done. Most importantly, unlike the design in the previous exam with the winding road, it doesn't confuse. A simple body section, with 3 equally represented secondary sections. One thing is that all the colors were monotone here, so other there size to emphasize importance, there is nothing else.

These visual hierarchies are not bad, they just don't have anything special in terms of directing my attention or controlling my train of thought that someone interested in design might appreciate. Though, they don't confuse like the design from the previous midterm, and this is good. The main piece of information that gets noticed first is directly relevant to the main idea of the information being conveyed.

## Layering

Design-1 does not any overlapping elements, and I don't see much layering here. The organization of design elements are achieved via position / spacing. It is simple to separate the header of each information piece, from the information itself, but it is due to the fact that one design element is text and the other is some kind of chart. When I think of layering, I think of similar design elements but with distinguishable features such that one can more easily scan. Here, there is not much different between the text content amongst itself. I can distinguish the title text, from the data header, from the foot notes, but this is due to font usual and not layering per-se.

Design-2 also does not incorporate much layering. We can see a charts/map layer, and a text layer for the header of each chart, and then a annotation layer. Again, not many overlapping layers because this design utilizes spacing and positioning like the left design.

The two designs apply very simple layering. Then again, the design themselves utilized white space and positioning such that a complicated layering scheme was not necessary. Maybe this is why I thought the designs were mundane. It impresses me that a designer can take a complicated design concept, and applying layering to it such that it is not confusing. Here, the designers avoided that problem but then deprive themselves of the chance to show design abilities with layering. I myself would probably go with this white space design because it is much easier to create, and one does not have to worry too much about coloring and other methods to emphasize one layer over another.

## Coloring

Design-1 uses white, black, and blue. White and black is the default because black text contrasts well on a white background. Then blue colors represent the data elements. Why blue? Who knows, I guess the designer was feeling blue that day, since blue can be substituted for green or red and the design analysis would essentially be the same. Again, clean, good, but not impressive (as far as design analysis goes).

Design-2 uses a very drab color for the map, and even the spill areas which are supposed to be highlighted. This design also went with ordinary, but proven, white background and black text contrast. The coloring of the map isn't necessarily bad, its just not eye catching. Actually I lied, I looked at the map because it looked like a zombie outbreak map. Instead, it turned out to be about boring oil. The yellowish color isn't exciting, so I guess it makes sense for some news article about oil. I can't figure out what tone the designer is trying to set...

The designs used the proven template of white background and black text. This has good contrast / readability (without having to test in grayscale) but brings nothing new to the table in terms of design. Color was not much used to encode or highlighted here. Instead, color was used to indicate "this is not text or background", but that's obvious with or without color. I felt blue was arbitrary, and hence no purposeful tone in design-1 as far as color is concerned. And I don't know what tone design-2 is trying to set if any. The designers used color here because it was necessary (black and white is boring), but didn't do anything creative with it. Personally, I like black and white minimalist design, so I would probably do the same. However, it still impresses me when people use color well, and here I was not impressed (note that this does mean I think the color usage was bad)

Design-1 uses sans-serif throughout. Makes sense considering the theme of cleanliness so far. I noticed this sans-serif font usage is usually more modern, and it makes sense with the blue colors aswell. There is 3 key types of text used. The header text, obviously big and semi-bold. Then the header text for each data piece, also bold, but in smaller font-size. Then the graph/chart labels with light-weight font. One subtle area is the white font, which i used in the bar chart because there was no space to display it outside / to the right of the bars. Using a black font here would have been hard to read, so the designer gave up the consistency for readability. I would have thought of it, and done the same on my own, so not too impressed. One thing that was weird for me is how big the footer details are. I didn't like this. Against, nothing special.

Design-2 uses sans-serif in the bottom half of the design, and serif at the top half. This is stupid, because I'm trying to figure out why the distinction and there is none really. You can make some adhoc claim that the top section is "different" from everything else, but I feel there is different means to achieve distinction. The textual hierarchy isn't great in this design. Font sizes are all over the place, so for a given hierarchy layer in terms of font-size, there may be annotation details, graph labels, foot notes, overall explanation all at the same font level. The designer highlights the city, state name with all-caps in the map annotation details, just weird for me considering the header title didn't use all caps, and neither the other graph headers. Footer note size wasn't too big here, and it occupies one line, which is good. Didn't like that YOAKUM, COUNTY TEX spanned two lines. Also, the state abbreviations were stupid. "TEX" and "OKLA". For this design, there was text everywhere, yet the artist did not capitalize on it as part of design. Instead, it was just information that needed to be placed there and not much thought seemed to be put into it. In summary, bad hierarchy / organization / distinction / consistency of text.

For two designs attempting to be clean and minimal, design-1 had sufficient, not exemplary, typography and the right design had confusing text usage. I am disappointed because it shows the designers went the minimal / clean route cause its easy to make something design looking, rather than because they were good minimalist designers. I am biased in that I expect the typography to be perfect if they want to go this clean white space white.

Whilst design-1 uses a variety of different data display informations, I don't think it is all too amazing. Definitely less boring then 5 of the same charts maybe, but a lot more could have been done. I don't know why we were assigned this "professional" design because this thing could have been made in 10 minutes by a high school procrastinator doing his Polisci homework the day its due. There is unity of the 5 information pieces, in that they share the same organization: title / data, title /data, title /data... And the data were all blue, so thats consistent. The unity I see, is from the content / idea itself, rather than the design as much.

Design-2 has unity, in that the bottom 3 charts "branch" from the main map. In fact, the bottom 3 charts are dependent on the existence of that main map to make sense. They also offer variety. But the design was monotone.

I can't expect much variety from a clean minimal design, so while these designs do not offer much variety, its excusable. Unity was there, but it wasn't too prominent because the clean design naturally lends itself to this drab white/black paradigm. I feel for unity to be obvious is when there is a consistent color scheme, unique to this design, prevalent throughout the design. Here, the designs are so typical that I don't think of such a design in terms of "unity"/ self-coherence.

Design-1 used the variety of bar chart / pie chart / and straight up numbers to represent percentages which could have been interchangeably represented as the other display element. The designer did this solely for variety. I didn't like how I have to make a transition between thinking in terms of bar - > pie - > numbers , where they were essentially the same information type at the core level. The designer could have been more creative with the bottom 3 information pieces. The top two charts are ideal for conveying this particular piece of information, considering the number increase from the year 2001 to 2010, and it is best represented with this increase. Furthermore, the reader can overlap the two and make some causal relationship between "Percentage of people saying its a mistake to send groups to Afghanistan" and "US Military deaths". I think the designer is biased, and make people draw causal inferences from this chart, but then some might argue this is the purpose of design. Another paradigm on this is that design should elicit information objectively.

Design-2 uses a map, with pipelines and oil spill draws. I like that the oil spills have opacity less than 1. The map included very subtle white lines representing regions / counties? The fact that I don't know what these regional distinctions are, means I probably don't care for them, and probably that they shouldn't be there. Only the borders for the states should be left. I appreciated the pipe lines though, so as a reader one could learn where such pipeline exist. The key representing the respective volume of the circle was helpful. I feel that color or some other form should have been used on certain circles to emphasize key areas, preferably red to encode danger or hazard. Bottom 3 charts does their job, but nothing special.

## Arrangement

Design-1, as I mention a billion times already, arrange its components into the 5 main logical sections. Why are there two sections on top and three on bottom? This is probably an arbitrary reason due to space constraints, as opposed to actual wholly design reasons. Wlthin each section, they are split into header and then the data itself. The bottom left footer note should have spanned 2-3 lines, rather than 3. Each region has relatively equal representation, this is good considering no one piece of data was more informative then other and deserved to be highlighted.

Design-2 has the organization of the main map, then the bottom 3 regions. This is a good idea in that the map is the main focus and then the 3 bottom charts are branches of the main idea.

In my opinion, design-1 could have been compressed into two data pieces. One a chart, where the current top two charts can be overlapped. And then the bottom 3 pieces can represented in one single representation, since they are all percentages out of 100. The current design gets it job done, but if we are aiming for exemplary design work then what I just mentioned may be more novel. Design-2 is okay, in that the bottom 3 did not have much redundancy. You might ask why don't you just combine the two pie charts like I mentioned for design-1. I think it would be too much work for the viewer to make the though conversion to a unified representation for the two pie charts. Its not worth the confusion, just to simplify the two pieces. I mentioned it for design-1, because design-1 does literally nothing creative, so that would be something that makes design 1 stand out as far as design goes