

Berkeley MIDS Program

W209 - Data Visualization

Final Project - Ramya Balasubramaniam, Chris Beecroft, Timothy Alt

Project Name

HIV/AIDS: A Comprehensive National and State-Level Analysis

Project Group

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Project URL

http://people.ischool.berkeley.edu/~timothymalt/w209_final/

Who Did What

Task	Ramya	Chris	Tim
Data Sourcing, Cleaning	33%	33%	33%
Mockups	30%	20%	50%
Midterm Presentation	33%	33%	33%
User Interviews	30%	30%	40%
Coding	50%	50%	
Testing	33%	33%	33%
Final Presentation	30%	30%	40%
Final Paper	30%	30%	40%

User Testing and Modifications from mid-term mockups

We wanted to include the feedback from our user testing, their priorities, and whether they were implemented (using the MoSCoW prioritization method):

Most important:

- Toggle between rates and sums of new infections, and have the rates be Cases-per-100,000 people - Done.
- Have the default "home screen" be very simple, then let the user click around to discover the functionality - Done.
- Color scheme and legend should be more uniform and closely linked - Done.
- Simplify the parallel graph - Done.
 - Add in a selection legend where users can hide/show variables, preferably by variable and group (gender, age, ethnicity, transmission method) - Done.
- A wow factor - I think this was done with the redesign - the graphics and utility of the graphs is much more appealing.
- Parallel - add additional instructive text on brushing State and Year legends - Done.

- The bar charts depicting year-wise distribution to be arranged in chronological order - Done.

Should have:

- A table that shows the numbers, once cross filters are applied - Done.
- One area for years that filter all bar charts at once. - Sort of done...we separated the demographics into distinct pages.
- The bar charts depicting state-wise distribution to arranged in decreasing order of number of new diagnoses cases, since people would be interested in knowing where the infection rates are higher. - Done.

Could have:

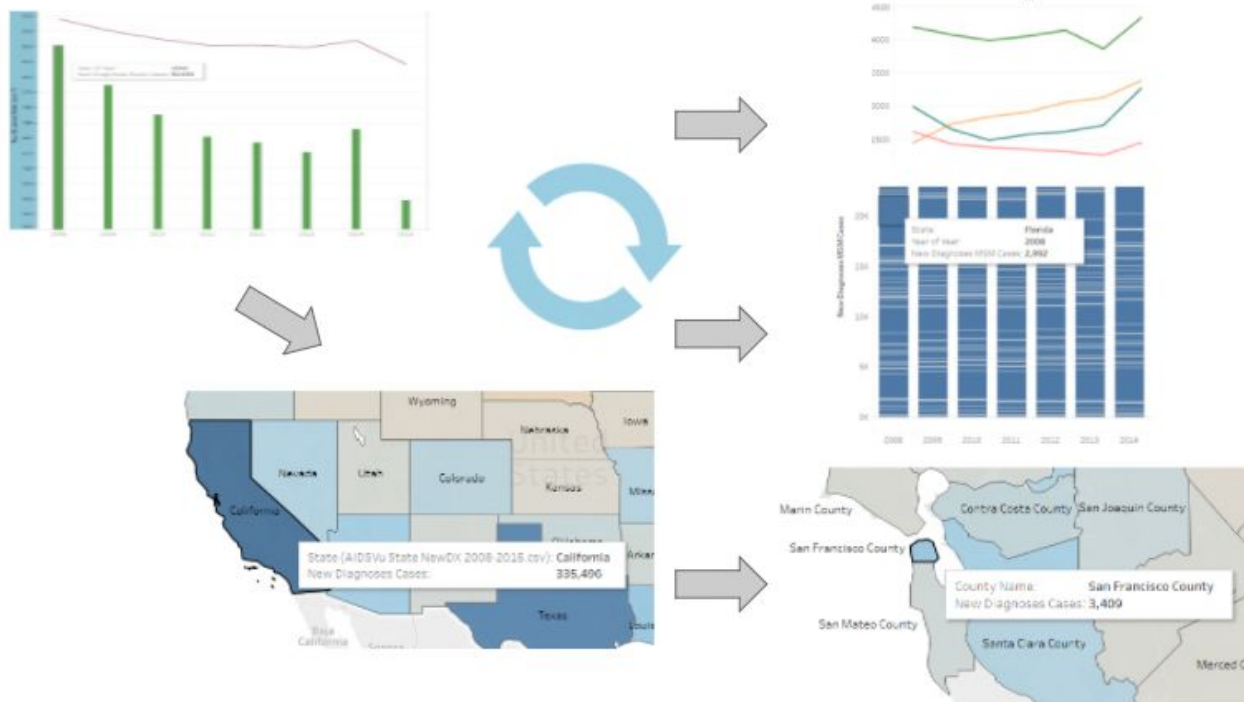
- A small summary table holding all the data required to answer a given question. This data might have got accumulated by applying the different filters to the data in order to answer a single question - Done. (the full data can be downloaded, plus the filtered data can be viewed/copied)
- The order in which these stacked bars are arranged horizontally should be user configurable. At least the bar that appears at the bottom - Done.

Won't have:

- Having the viz locate the user and have their state be the default filter - Not done.

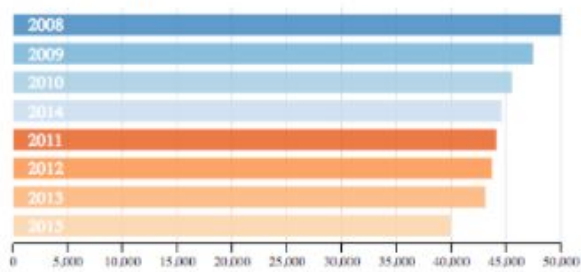
Additional Notes - Evolution of the Visualization

1. Our original mockup was used in the mid-term presentation is here (developed in Tableau), and used in our user testing:

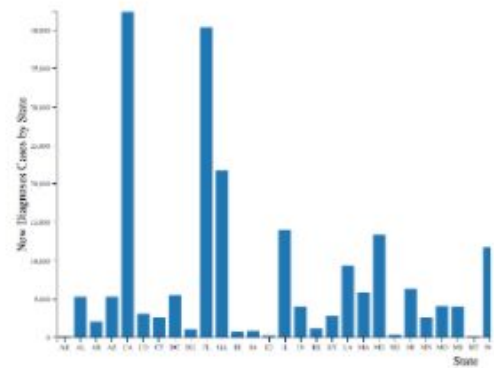


2. From there, we incorporated user feedback, which resulted in significant changes:

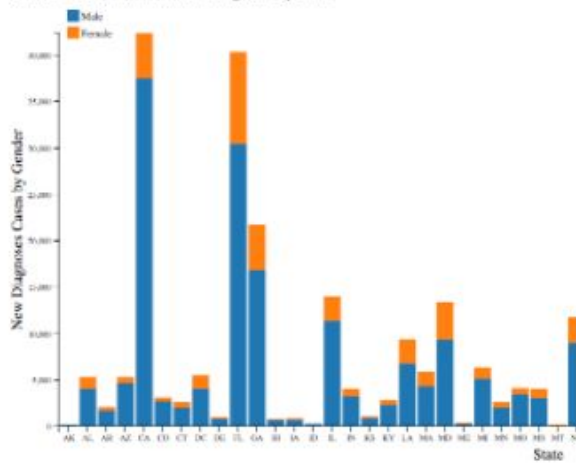
Total Cases by Year



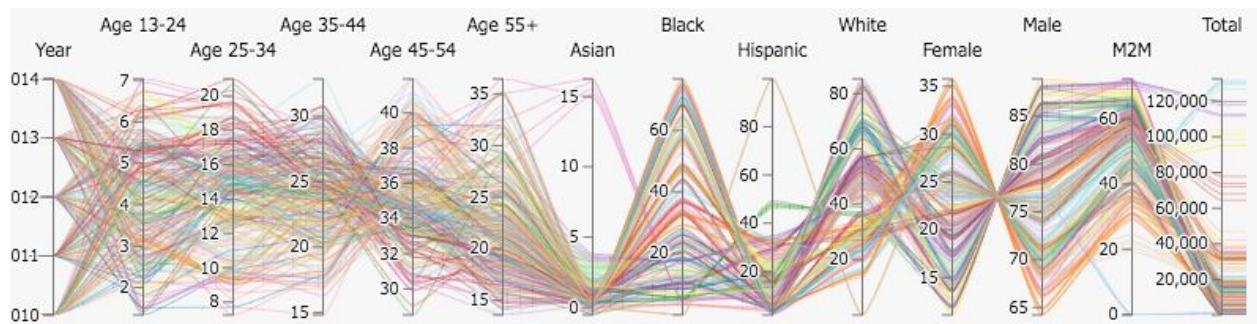
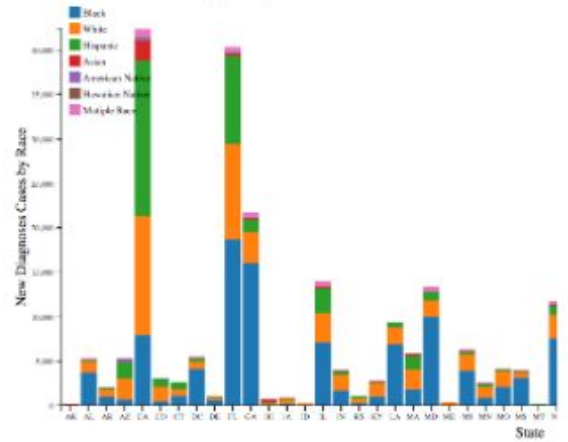
Total Cases by State



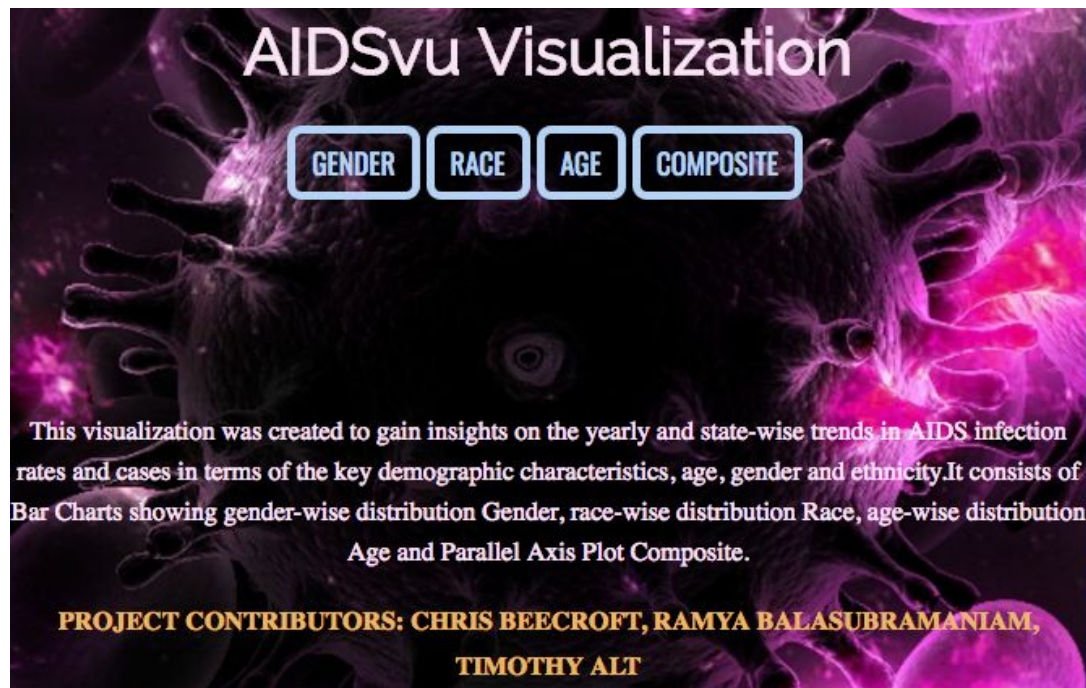
Gender-wise Distribution New Diagnoses by State



Race-wise Distribution New Diagnoses by State



3. Then, after several iterations, our final visualization homepage looks like this (and can be found at http://people.ischool.berkeley.edu/~timothymalt/w209_final/):



This visualization was created to gain insights on the yearly and state-wise trends in AIDS infection rates and cases in terms of the key demographic characteristics, age, gender and ethnicity. It consists of Bar Charts showing gender-wise distribution Gender, race-wise distribution Race, age-wise distribution Age and Parallel Axis Plot Composite.

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