

## Credit Default in the US told through Prosper Loan Data

Version 1:

[https://public.tableau.com/profile/kevin.turner#!/vizhome/Tableau\\_Prospers\\_Dataset\\_v1/ProsperLoanData](https://public.tableau.com/profile/kevin.turner#!/vizhome/Tableau_Prospers_Dataset_v1/ProsperLoanData)

Version 2:

[https://public.tableau.com/profile/kevin.turner#!/vizhome/Tableau\\_Prospers\\_Dataset\\_v2/ProsperLoanData](https://public.tableau.com/profile/kevin.turner#!/vizhome/Tableau_Prospers_Dataset_v2/ProsperLoanData)

Version 3:

[https://public.tableau.com/profile/kevin.turner#!/vizhome/Tableau\\_Prospers\\_Dataset\\_v3/ProsperLoanData](https://public.tableau.com/profile/kevin.turner#!/vizhome/Tableau_Prospers_Dataset_v3/ProsperLoanData)

### Summary

The story takes us through debt and credit default in the US as told through Prosper loan data. The visuals convey delinquencies, in US dollars, across the country. The main finding of the story is that an overwhelming number of loans Prosper has originated has been intended for debt consolidation. Of these types of loans, the majority of borrowers complete them successfully or remain current on them.

### Design

When I first started with this dataset, I wasn't sure of the path I wanted to take, however after digging in I noticed that there was a lot of information available. The dataset not only included many internal factors for Prosper, but more importantly many data points from borrowers credit histories. From this I made connections as to why people borrow money.

- I chose to use a map of the US to help visualize the distribution of total delinquencies across the country by state, adding an overlay of the average debt by state to show that although larger population states show higher delinquencies they are on par with the average.
- The second slide is a series of bar charts to show the spread of average delinquencies in several categories. As income earning rises average amount of delinquencies rise and home owners tend to have higher average delinquencies were interesting findings here
- The third slide I went with a scatter plot showing the average amount loans were originated for and month/year they were originated in. Utilizing color, we can show the reason these loans were taken out and size we can see the number of loans taken out in the time frame by reason.
- The fourth slide is a pie chart and table for the Debt Consolidation category to show that most debt consolidation loans are completed successfully or are still open and current.

After soliciting some feedback, I modified my final slide to include more visual elements. I did receive some feedback regarding the first slide and the average delinquencies. Tooltips already included

information regarding Total Number of Borrowers, Total Delinquencies, and Average Delinquencies so no changes were made.

After receiving feedback from my initial submission, I made several changes

- I've updated the caption boxes in the story to more accurately reflect the findings
- I've removed the \$0-dollar bar from the Income bar chart as it does not have much meaning. How does one earn \$0?
- I've updated my summary to be more explicit with my findings.
- Updated the design section to more clearly explain my reason behind the chosen chart types.

## Feedback

"On the overview by Credit Default graph is there any way to get a sense of population in the states? It's a bit odd that Cali has so much debt but so little avg debt. I think a pop statistic may be a good way to reconcile the two."

"compared to your other graphs the "Can Debt Consolidation be the answer?" graph looks odd since your other ones are so in depth."

### Initial reviewer feedback:

"No findings were documented, yet."

"I suggest you include your findings in the Caption boxes, briefly."

"In the Bar chart, what do you mean by 0\$?"

"Your summary must include the interesting findings that you've reached from your visualization. After exploring your dataset, what did you find out? at least one finding is required."

"You have to explain the reasons behind chosen chart types. Why did you choose a bar chart? what does it help you in?"

## Resources

Prosper Loan Data provided by Udacity:

<https://s3.amazonaws.com/udacity-hosted-downloads/ud651/prosperLoanData.csv>

Prosper Loan Data – Variable Definitions:

[https://docs.google.com/spreadsheets/d/1gDyi\\_L4UvIrLTEC6Wri5nbaMmkGmLQBkYx3z0XDEtI/edit#gid=0](https://docs.google.com/spreadsheets/d/1gDyi_L4UvIrLTEC6Wri5nbaMmkGmLQBkYx3z0XDEtI/edit#gid=0)