## Lucas Mwai

# **Udacity Nanodegree**

# Create a Tableau Story: Visualizing different variables in the loan dataset from Prosper

## Version 1

https://public.tableau.com/profile/lucas5126#!/vizhome/project 161/Story1

## Revised version after feedback

https://public.tableau.com/profile/lucas5126#!/vizhome/projectrevision1/Story1

## **Summary**

My visualization covers a lending institution called Prosper, it is a peer to peer lending marketplace and they use funds from investors to give loans to borrowers. I want to tell the story of the factors that Prosper considers in order to give loans to potential borrowers and I will explore which states the majority of their lending takes place and the combination of factors that Prosper considers in their lending decisions.

## Design

I showed the location of the borrowers using the Geographical role to indicate the borrowing/lending activity in various states. To show various comparisons and relationships within the dataset I also utilized additional utilities including

**Horizontal bars**: I utilized these to show comparisons among various categories of the data

**Tree maps**: I used these to show the comparison in size in various fields relative to the other fields in the group

**Scatter plots:** I used these to cow comparison in various categories of data and indicate possible correlation within the fields

**Lines:** I used these to indicate the distribution over time of various items in the dataset

**Histograms:** I used these to indicate relationships of various fields in the data categorized into bins

**Packed bubbles:** I used this to show the relationship in size of various fields and compare the differences

I had to transform several visualizations because the feedback I got indicated that there was no clarity on some visualizations I had created, I also had to transform the maps feature because it was showing too many areas that were not involved in the dataset

## Feedback

**Feedback**-The visual showing the years and prosper rating has some null values from 2005 to 2009 that doesn't make sense

**Correction**-I corrected this by excluding the years from 2006 to 2009 when prosper had not developed their proprietary rating system.

**Feedback**-The maps showing the states is showing too many areas that are not part of the area covered by the data

**Correction**-I corrected this issue by excluding the areas of the map which had no relationship to the data and kept the lower portion of the map to indicate the lower 49 states where the majority of the lending activity occurs

**Feedback**- The null values on the borrower states and loan amounts stands out and seem to throw off the visual showing the distribution

**Correction-** I eliminated the null values in this category since they had no effect on the total numbers of various states.

Feedback-The worksheets may need renaming to show what information they convey

**Correction-** I renamed the worksheets and dashboards to depict the information they carry

**Feedback**-The labels and bubbles that are comparing income ranges don't seem to match the percentages indicated on the visual

**Correction-** I reformatted the income range Packed bubbles to indicate the size according to the values and show percentages on hover feature.

#### Resources

**Udacity: Data Visualization with Tableau** 

https://www.prosper.com/

https://en.wikipedia.org/wiki/Prosper Marketplace

#### **Data Files**

Loan data from prosper

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