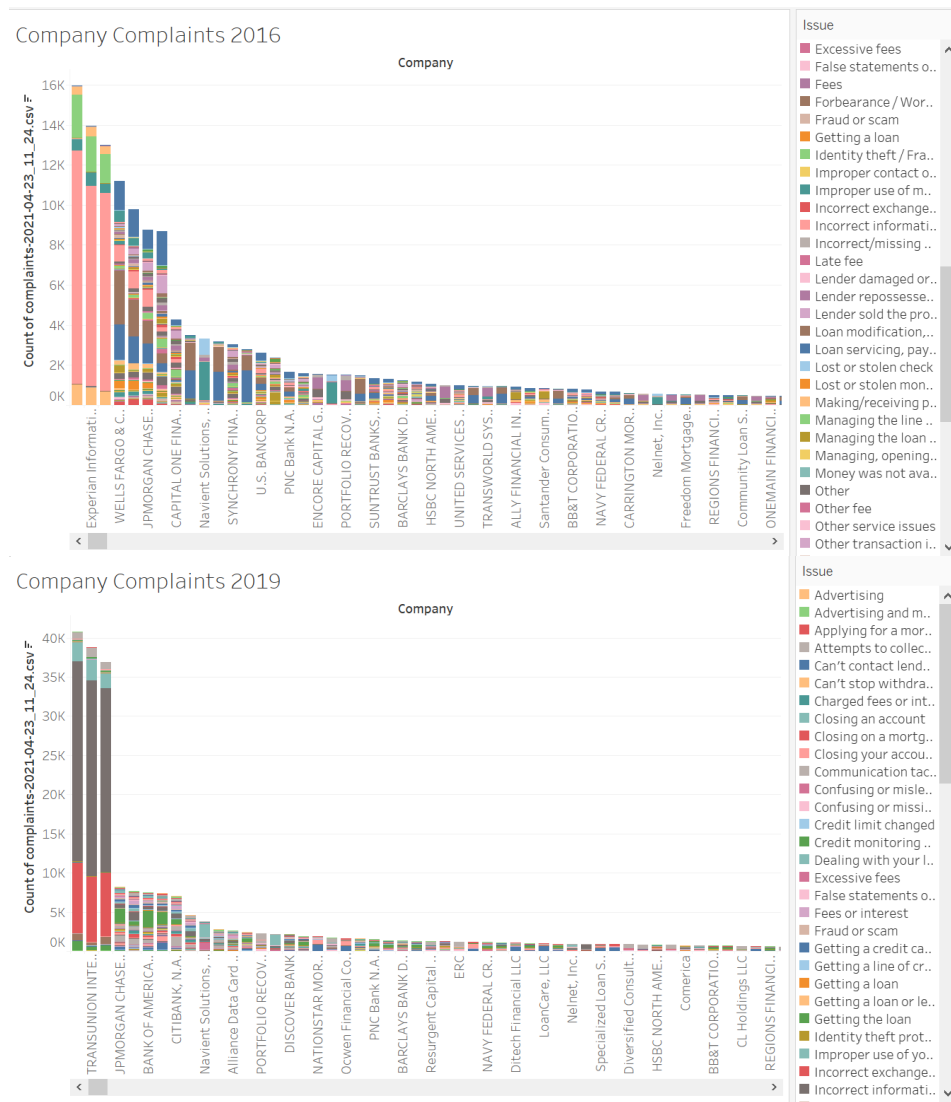


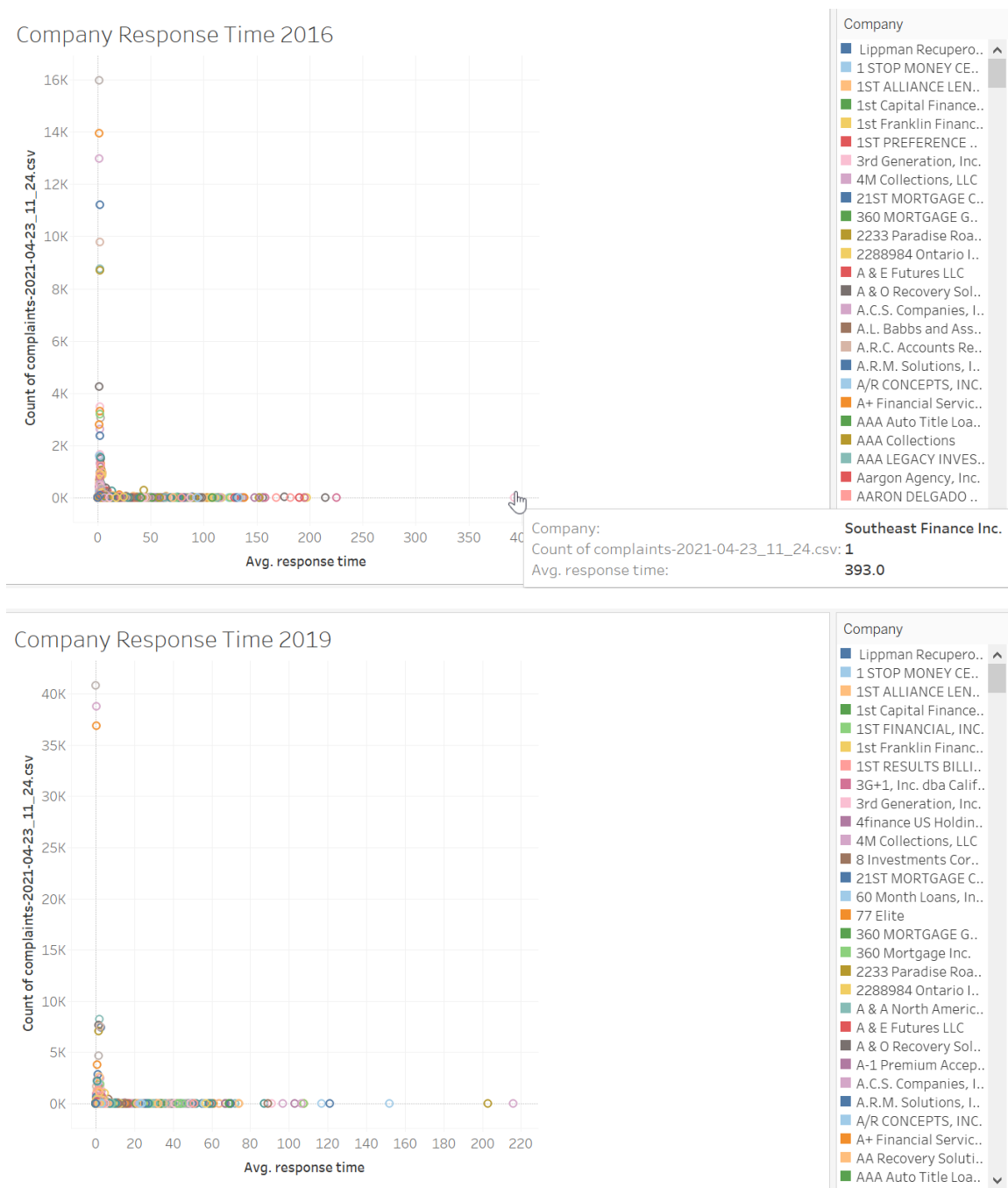
## Consumer Complaint Tableau Visualization

In understanding the complexity of complaints made to the *Consumer Financial Protection Board (CFPB)* in the years 2016 and 2019, several key ideas become clear. In both reported years, the majority of complaints were regarding the three credit reporting bureaus: Experian, Equifax, and TransUnion.



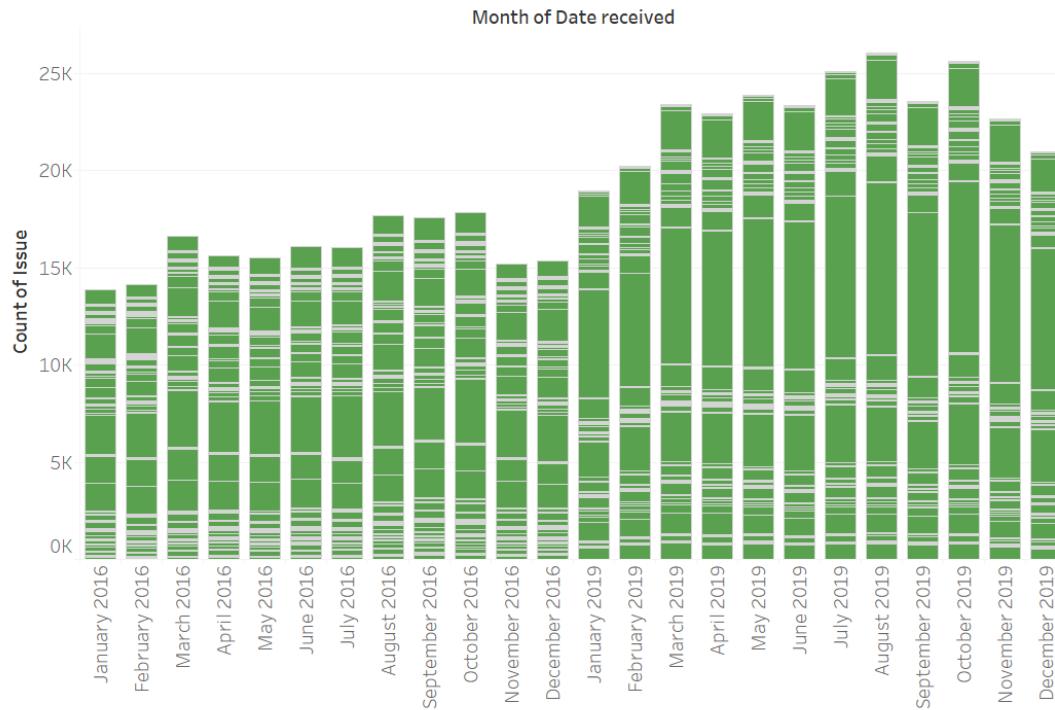
The complaints regarding the credit bureaus more than doubled from 2016 to 2019, however it is of note that the complaint totals for other businesses actually decreased during the same time period.

Although the number of complaints increased for the credit bureaus, the resolution time and response rate overall decreased and more cases were closed in 2019 as compared to 2016.

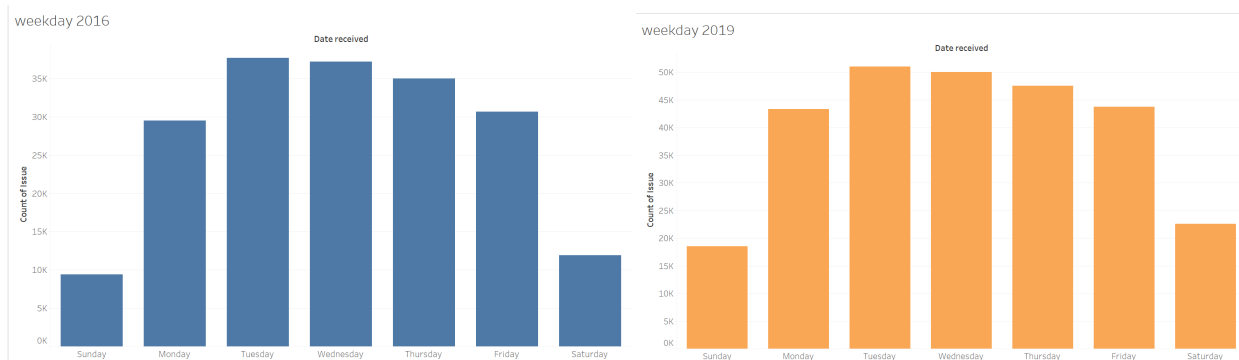


Companies with large complaints tended to respond quickly on average to those complaints when compared to companies with much fewer complaints. Although complaint totals more than doubled from 2016 to 2019, the average response time was reduced overall. There is one outlier in the 2016 data that is skewing response time (see plot below).

In general, the complaint patterns were consistent month to month and by day of the week from 2016 to 2019.



The above graph shows that there were more complaints for each corresponding month from 2016 to 2019. However, there are some similar trends in the year patterns. The beginning and ending months for each year have less complaints than middle months (March to October).



The weekly complaint trend also holds from 2016 to 2019. The weekends have much lower complaint volumes and Tuesday is the day of the week most likely to have a complaint submitted.

## Geography

Issue

- Account opening, c...
- Account terms and ..
- Adding money
- Advertising
- Advertising and m...
- Advertising and m...
- Advertising, marke...
- Application proces...
- Application, origin...
- Applied for loan/di...
- Applying for a mor...
- APR or interest rate
- Arbitration
- Attempts to collec...
- Balance transfer
- Balance transfer fee
- Bankruptcy
- Billing disputes
- Billing statement
- Can't contact lender
- Can't contact lend...
- Can't repay my loan
- Can't stop charges ..
- Can't stop withdra...
- Cash advance
- Cash advance fee
- Charged bank acct ..
- Charged fees or int...
- Charged fees or int...

© 2021 Mapbox © OpenStreetMap

Geography issue

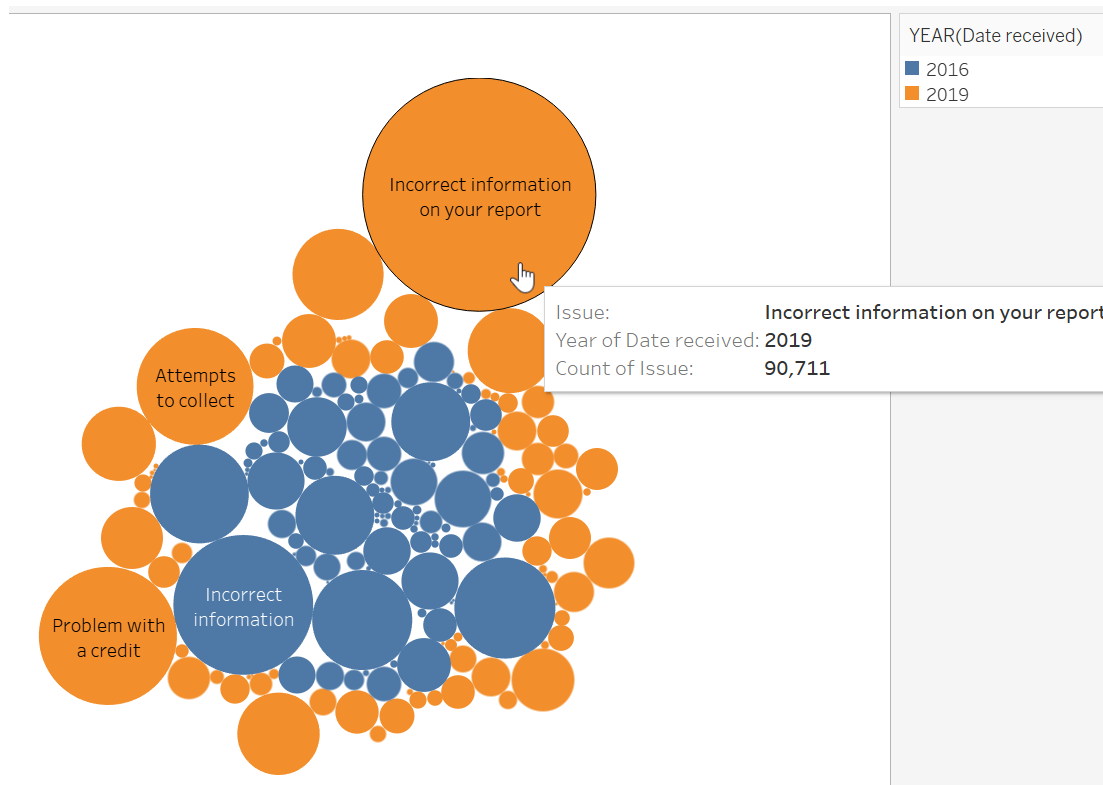
Issue

Mapbox © OpenStreetMap

Problem with a purchase or transfer

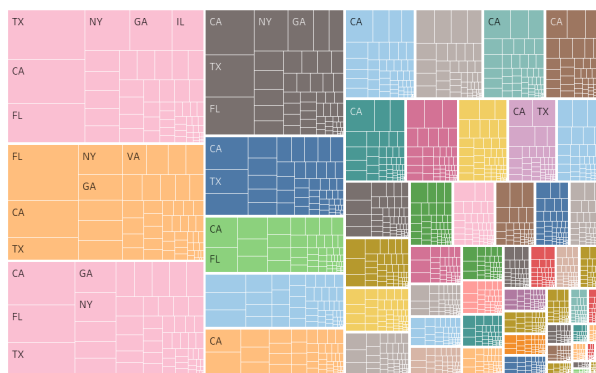
✓ Keep Only × Exclude

Finally, complaint issue and sub-issue categories were consolidated into fewer categories from 2016 to 2019.

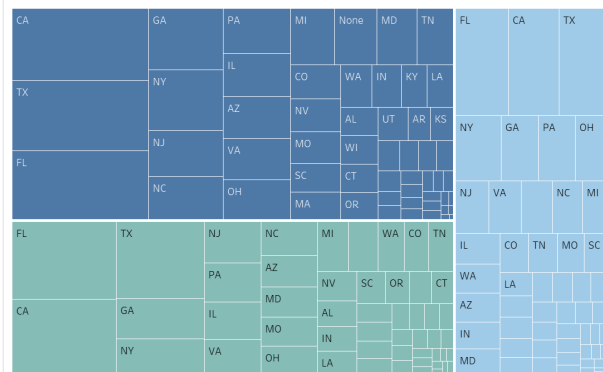


In 2016, there was a more diverse category selection for consumer complaints (a larger number of bubbles that are also closer in size). In 2019, many categories were consolidated, making larger issue counts for select categories. However, 2019 had a substantially higher complaint total.

2016 Sub-Issue by state



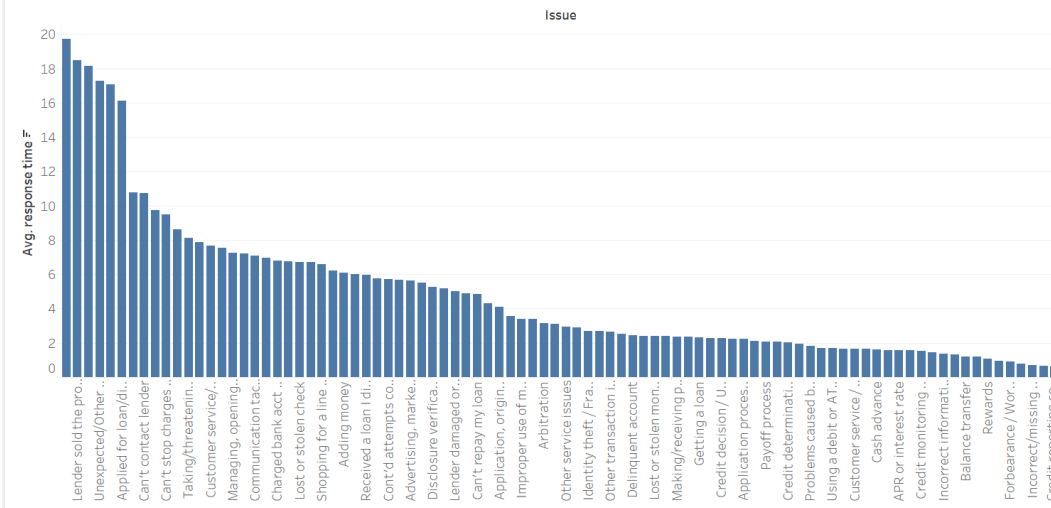
2016 Sub Issue by state



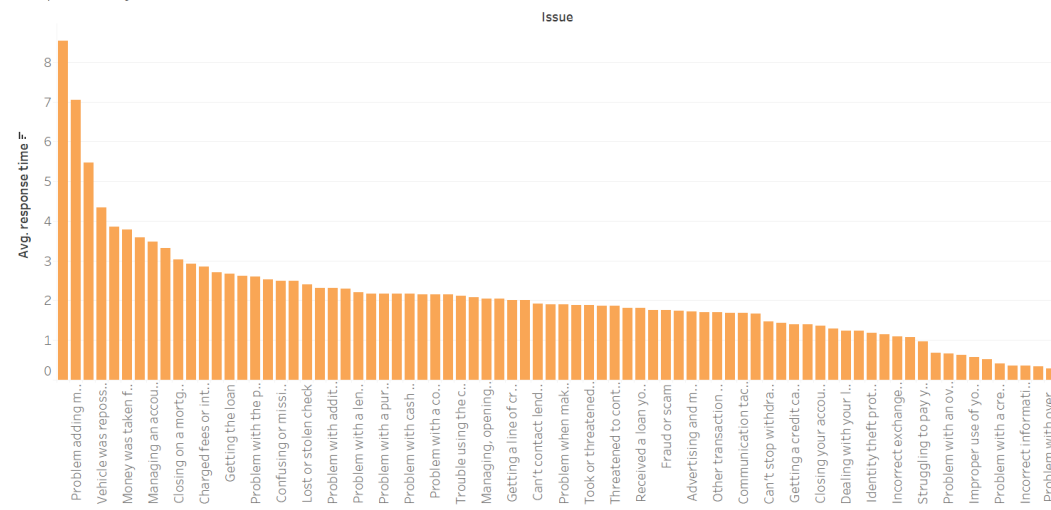
There is quite a bit of consolidating of sub-issues as well from 2016 to 2019. This can be seen in the above chart in the significant reduction of category colors.

## Appendix - Additional Plots

Response by Issue 2016

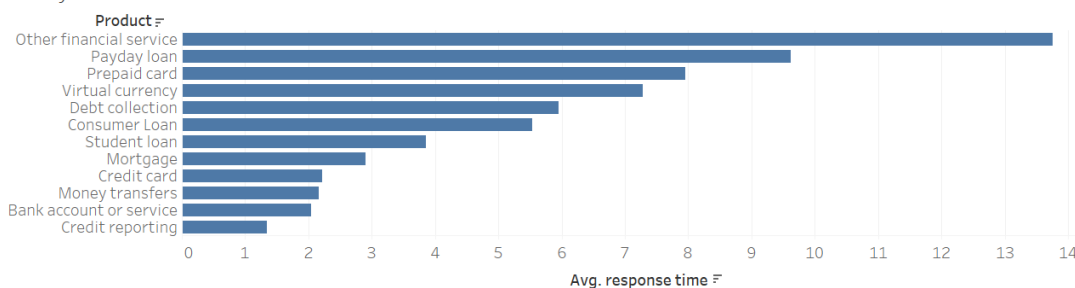


Response by Issue 2019

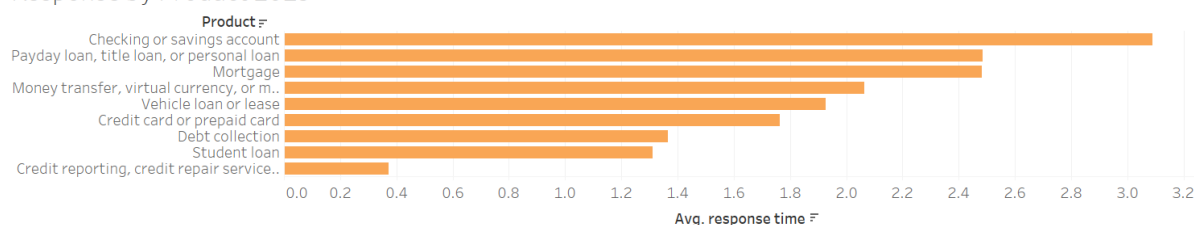


The issues that took the longest to respond to did not remain consistent from year to year and the average response time was much faster overall in 2019.

Response by Product 2016

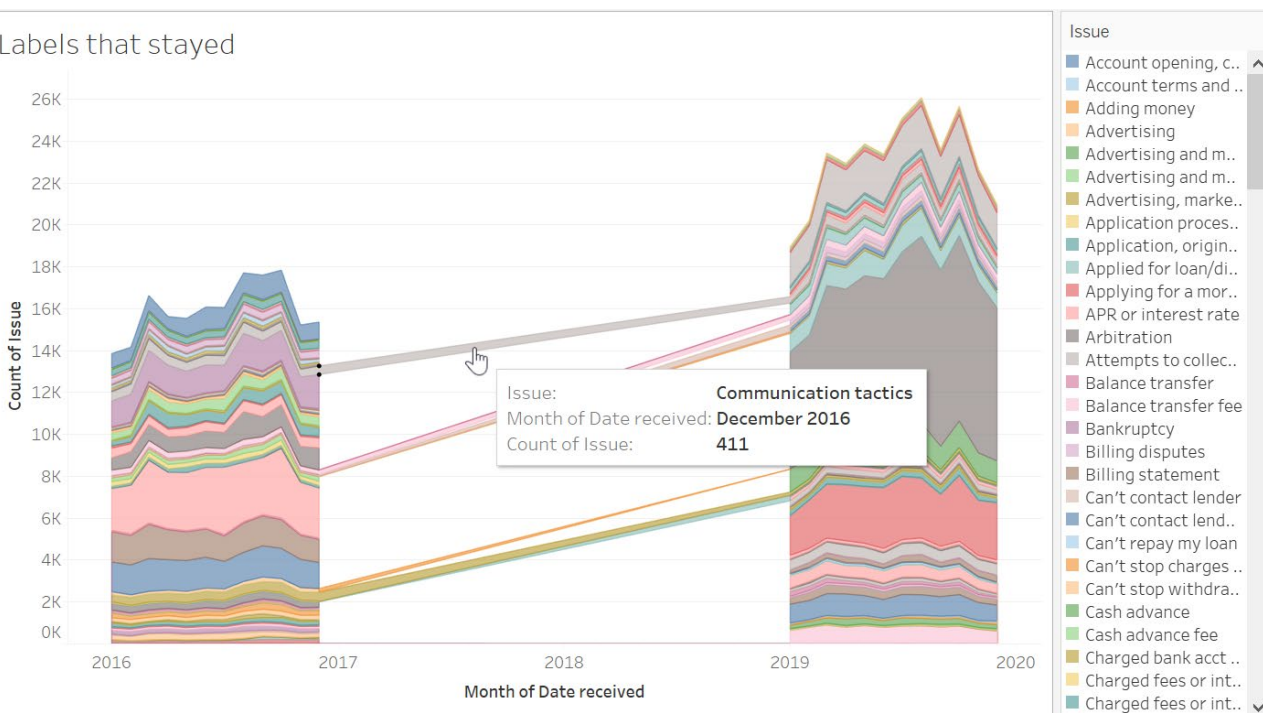


Response by Product 2019

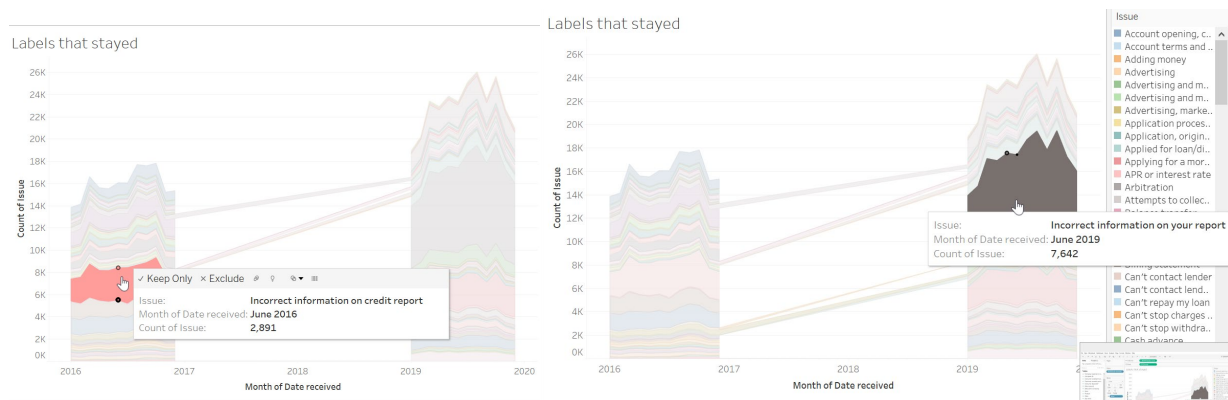


The average response time over all categories shortened considerably from 2016 to 2019 across all product categories. Some categories were consolidated in the 2019 data.

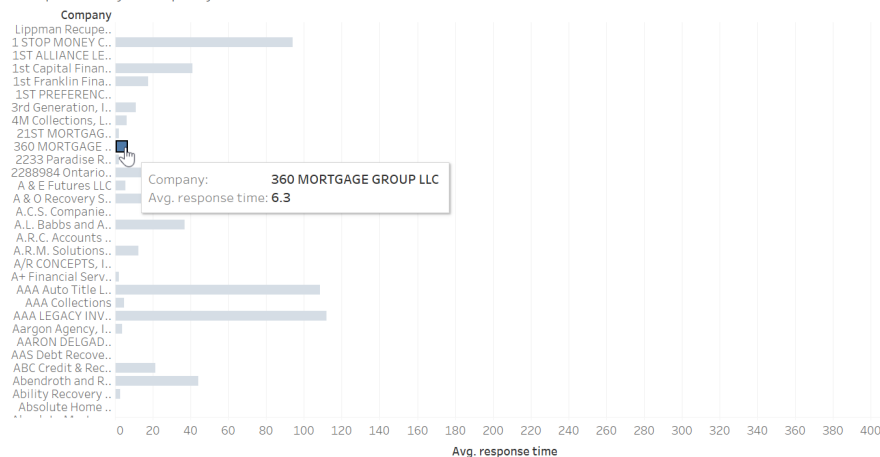
Labels that stayed



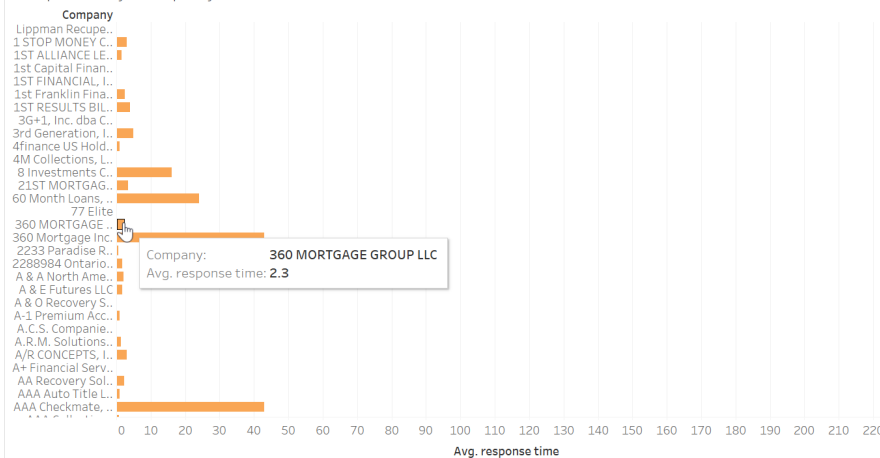
Very few category titles remained the same for issues from 2016 to 2019. The bridge area of this chart shows those titles that remained the same. However, the categories were comparable in type had similar titles (see comparison plots below).



### Response by Company 2016

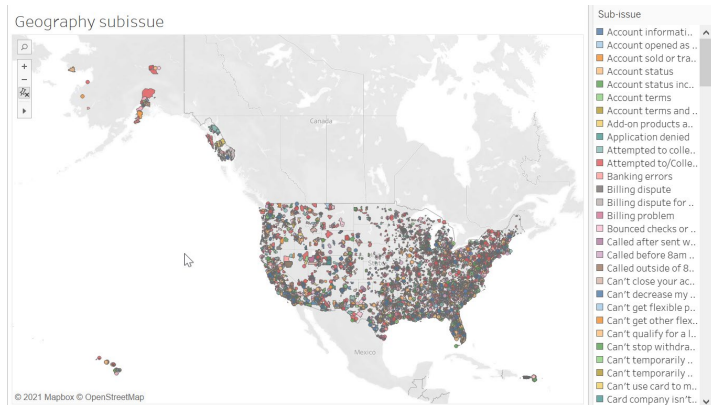


### Response by Company 2019

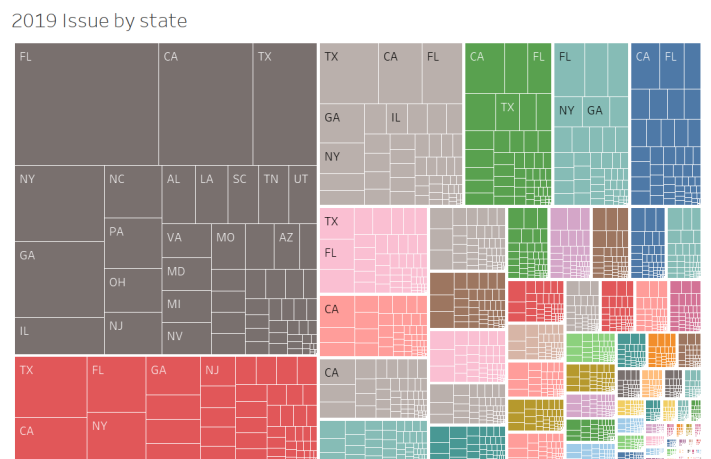
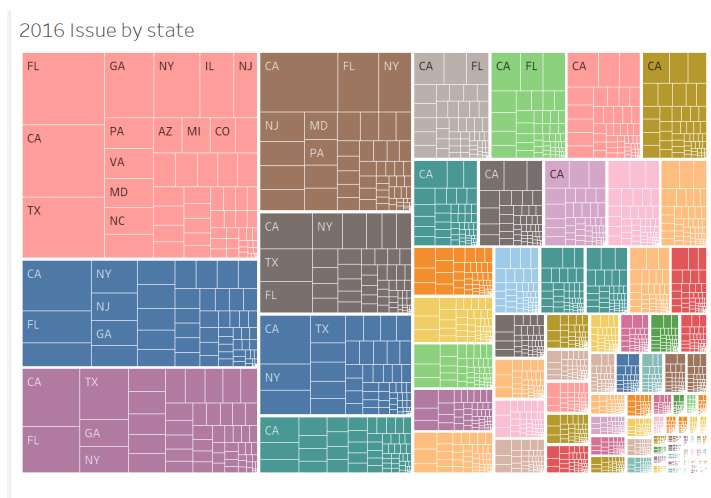


An example of this can be seen in the change of response time from 2016 to 2019 for 360 Mortgage Group LLC. It is reduced by almost two thirds.

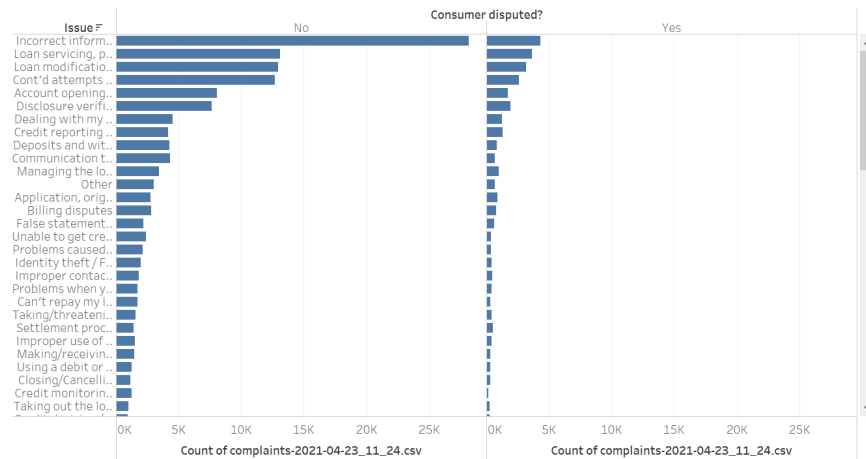




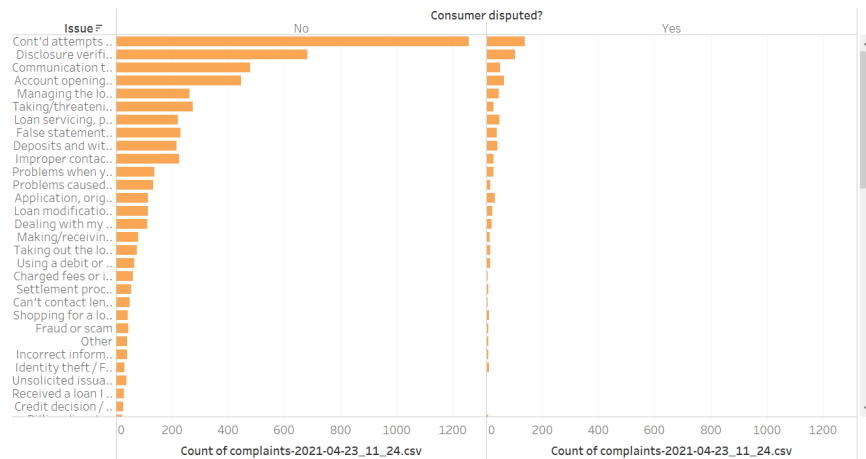
There are a few locations outside the United States (citizens residing in military installations, etc.). Issues and sub-issues appear to follow population densities (less in the mid-west, more in coastal areas).



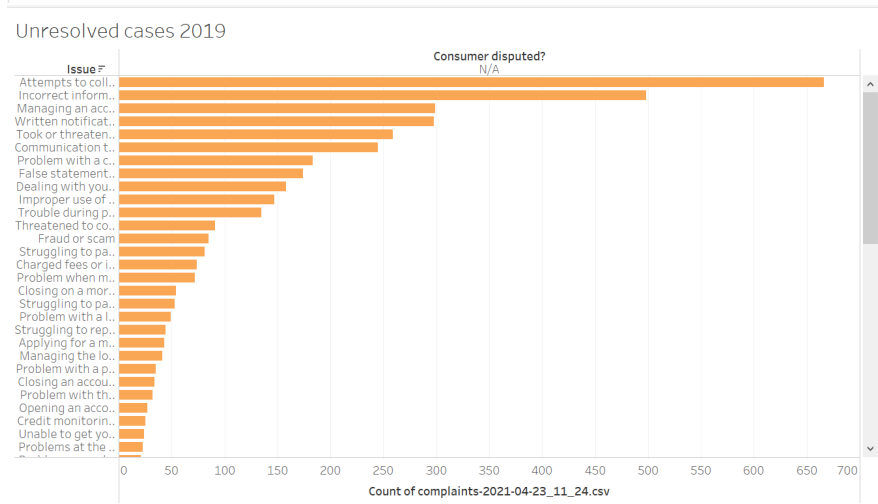
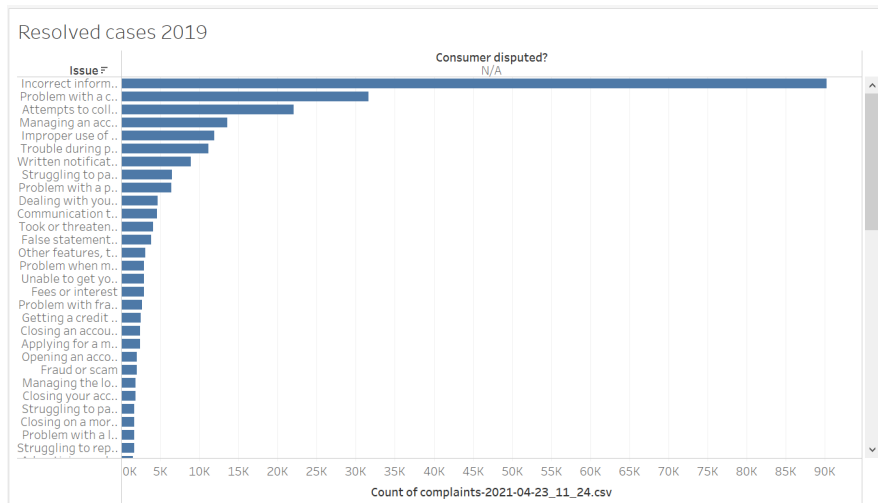
## Resolved cases 2016



## Unresolved cases 2016

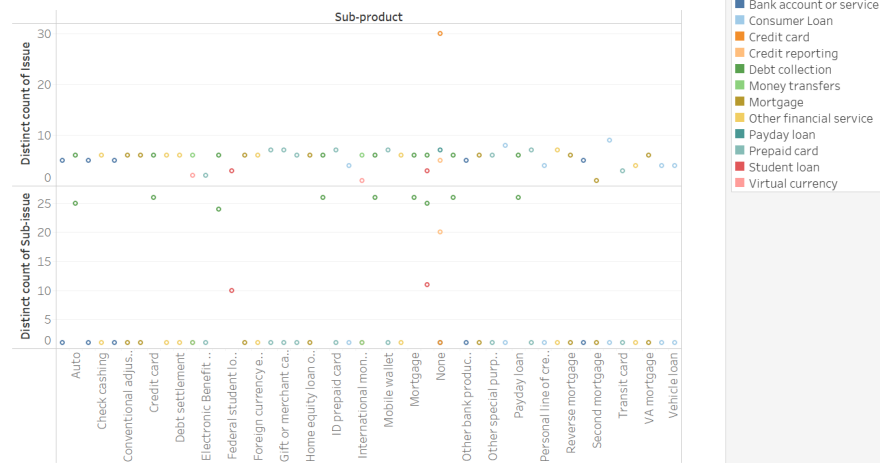


Most cases were resolved in 2016, however, unresolved cases were less likely to be disputed.

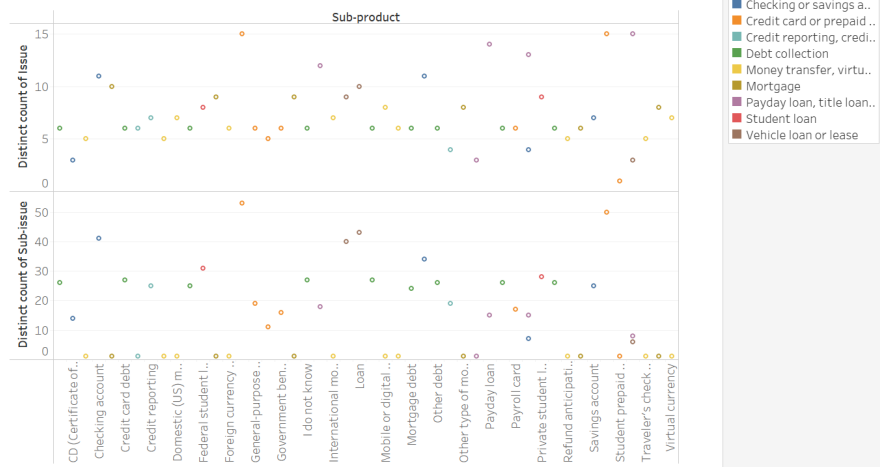


There is no customer dispute data for 2019, but the number of unresolved cases is significantly reduced relative to the 2016 number of unresolved cases.

Amount of issues with Products 2016

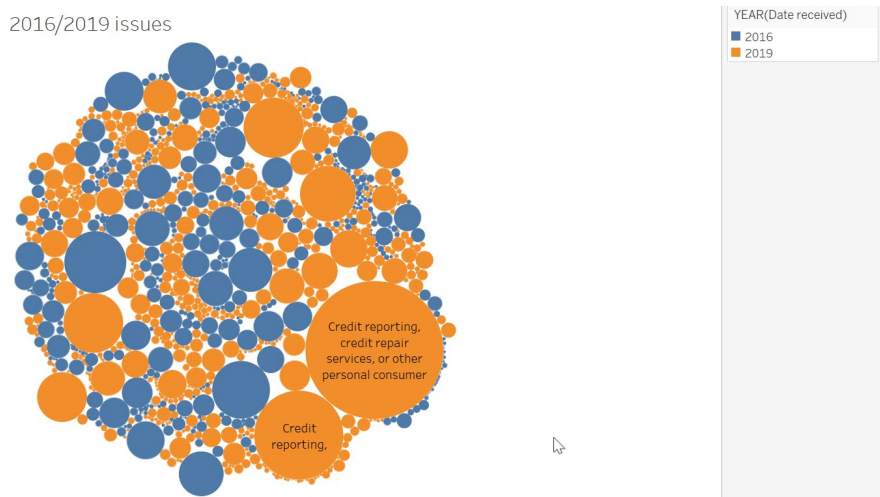


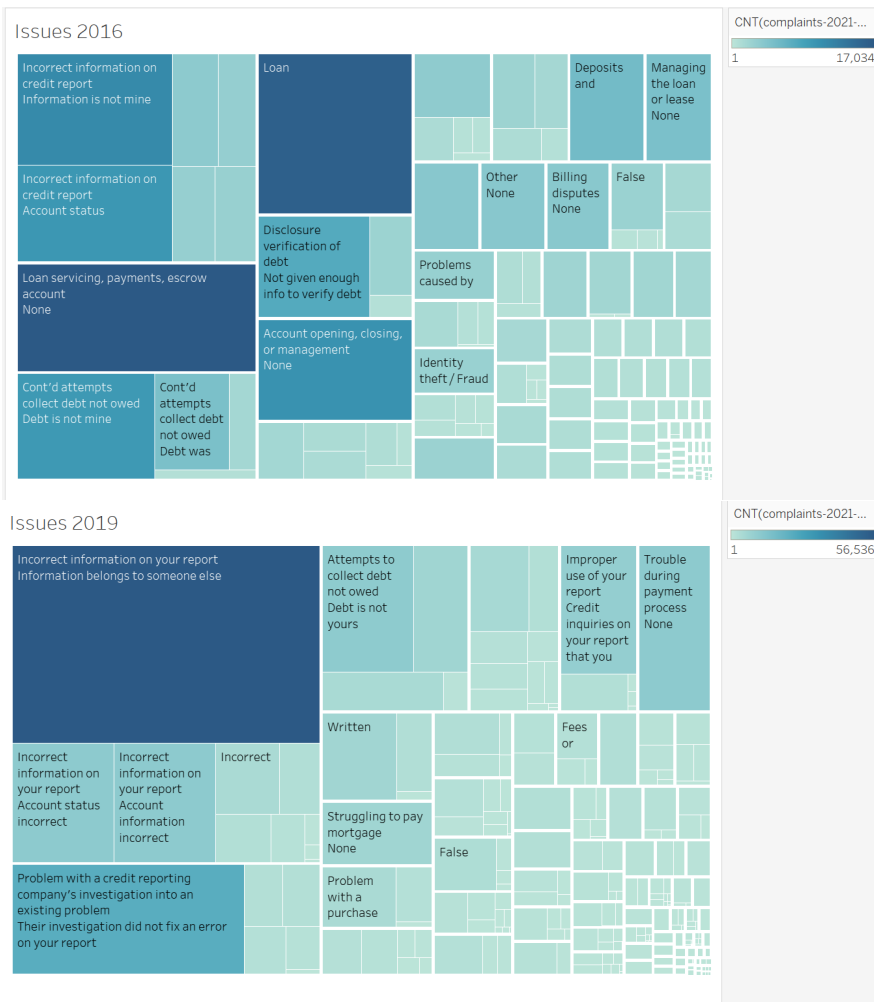
Amount of issues with Products 2019



Product categories were more consolidated in 2019 compared to 2016. Issue categories were more evenly spaced in 2016 implying a more linear (even) distribution compared to the 2019 data. This is apparent in the following chart as the bubbles for 2019 are widely varying in size compared to 2016.

2016/2019 issues





Some of the issue categories (incorrect credit report information, payment process trouble, etc.) appear to have more consolidated sub issues from 2016 to 2019 and some categories like loans and loan servicing were incorporated into other categories.