Ticket Buyers Analysis

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Agenda:

1. Data Setup
2. Demographics Visualization
   - What do ticket buyers look like in terms of their make-up and financial situation?
3. Lifestyle Visualization
   - What are NYCFC ticket buyers spending on and what does their consumption look like?
4. Business Insights
5. Q&A

Columns to clean

- State (need to clean into 2-letter abbreviation format)
- City
  - Contains misspelling and incorrect information, decide to focus on state level
- Discretionary Income Index
  - 488 null value, dropped when creating dashboard
- Rfm grade
  - Correct 'S' to 'B'

State - errors in abbreviations

Wrong Abbrev.	State
Conne	CT
MASSA	MA
MICHI	MI
n	NY
new	NY; for Rahway, NJ
New J	NJ
New Y	NY
NJ -	NJ
North	NC; some are cities in NY

Wrong Abbrev.	State
NUEVA	NY
ONTAR	ON
PENNS	PA
TEXAS	TX
VIRGI	VA

Use zip code range to assign correct state abbreviations. Reference: https://www.structnet.com/instructions/zip_min_max_by_state.html

Also, we want to exclude rows with Null in Zip code

<ticket buyers demographics>
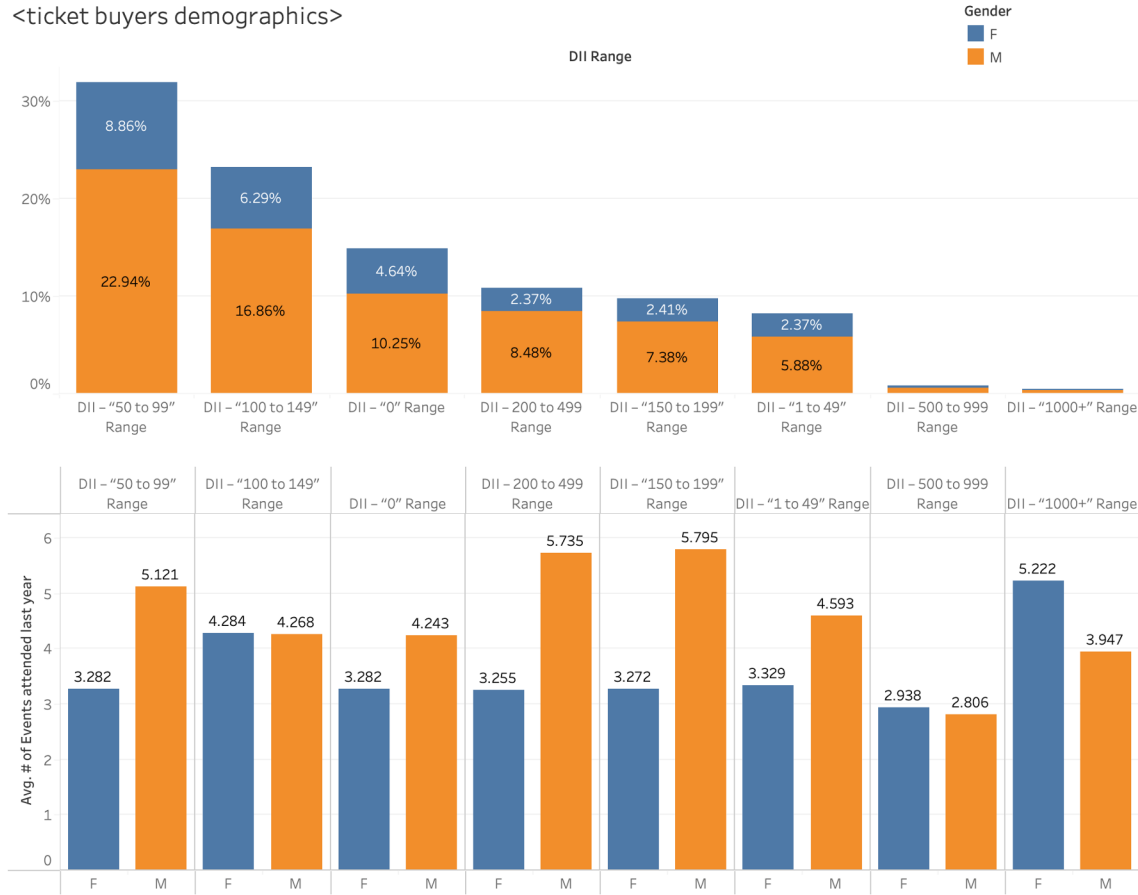
- Most of ticket buyers come from DII-"50-99" range and DII "100 to 149" range.

- For DII - "1000+", DII - "500 to 900", and DII - "100 to 149", female buyers attended more events last year, on average.

- Across all DII ranges, # of male buyers is 2-3x # of female buyers
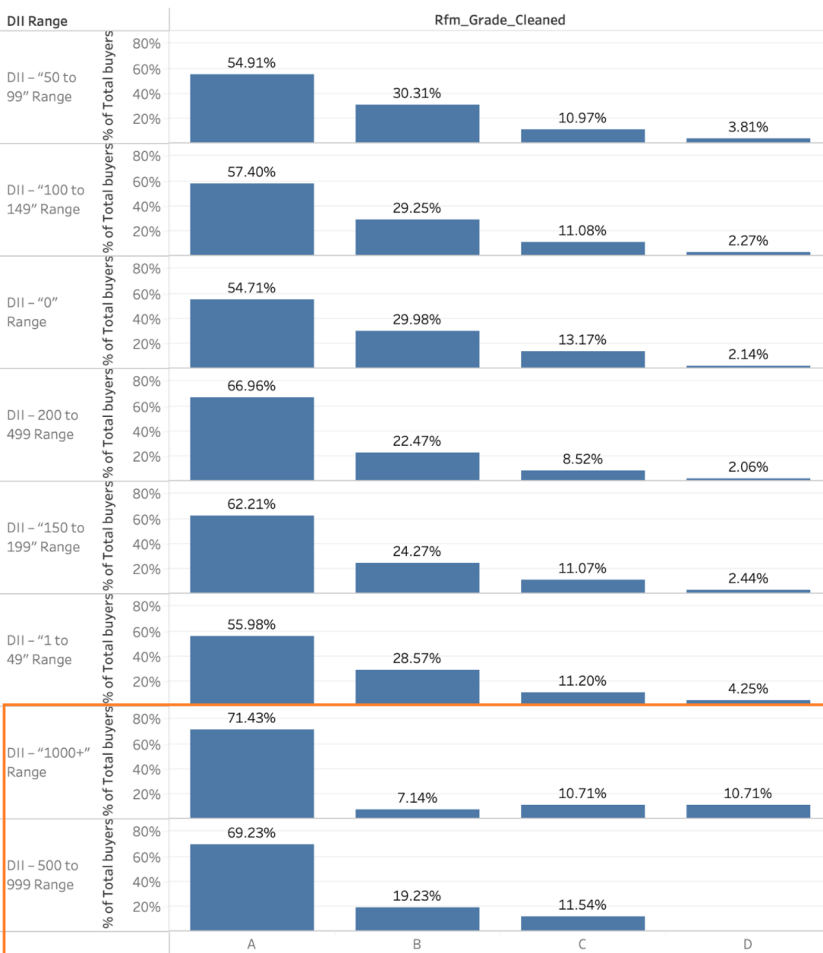 - But, female buyers are almost as engaged as male buyers attending last year event.

spend_per_event
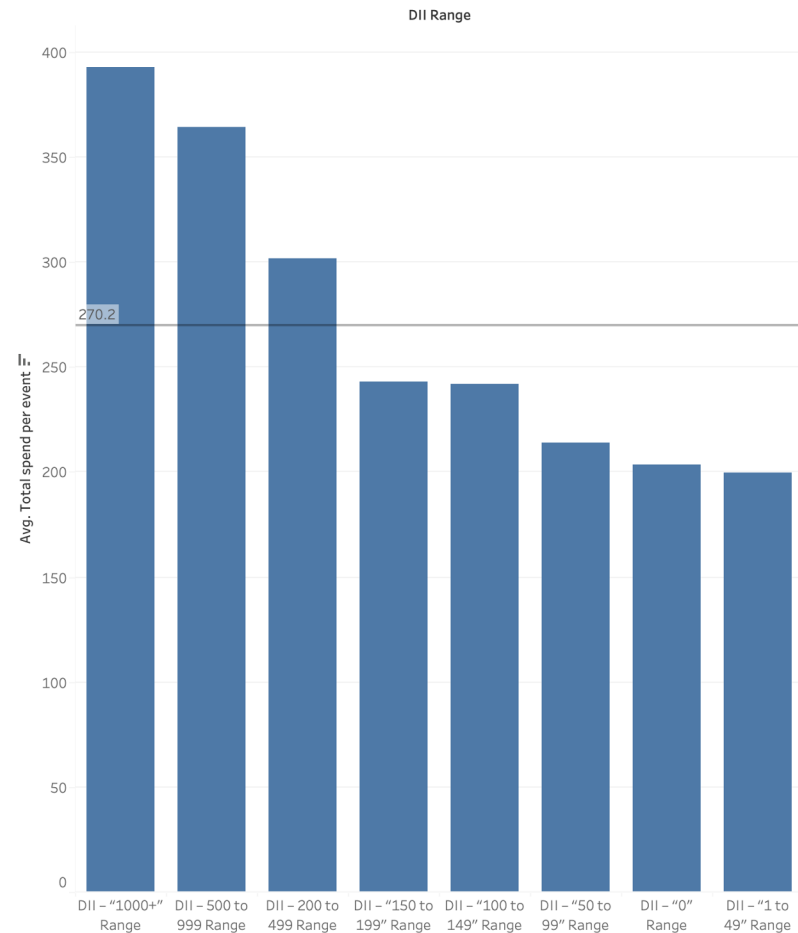
DII Range

Average of Total spend per event for each DII Range. The view is filtered on DII Range, which excludes .

- DII - "1000+" range has $ spend per event 2 times higher than the lowest spend per event at DII - "1-49" range.

- DII - "1000+" range, DII - "500 to 999" range, and DII - "200 to 499" range all have higher than the average spend per event for all DII ranges.
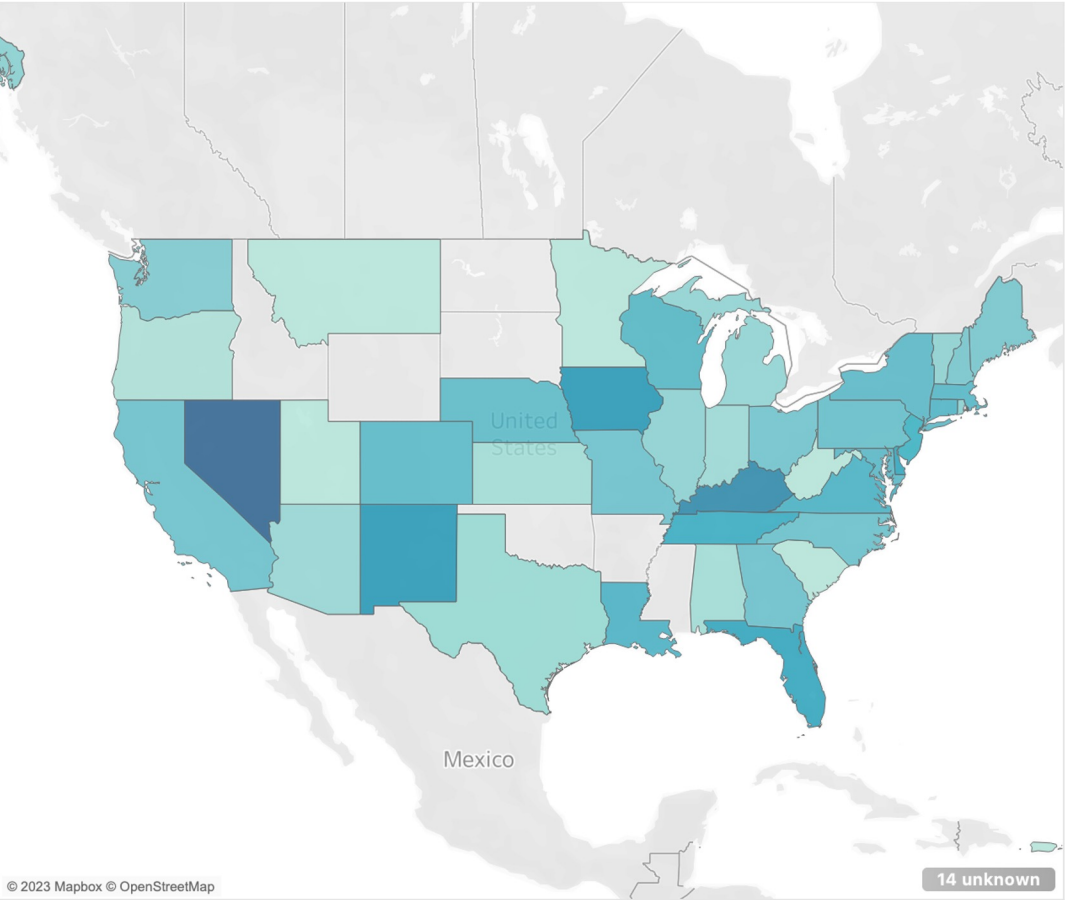
\<DII Range by Rfm Grade\>

For DII - "1000+" range and DII - "500 to 999" range:
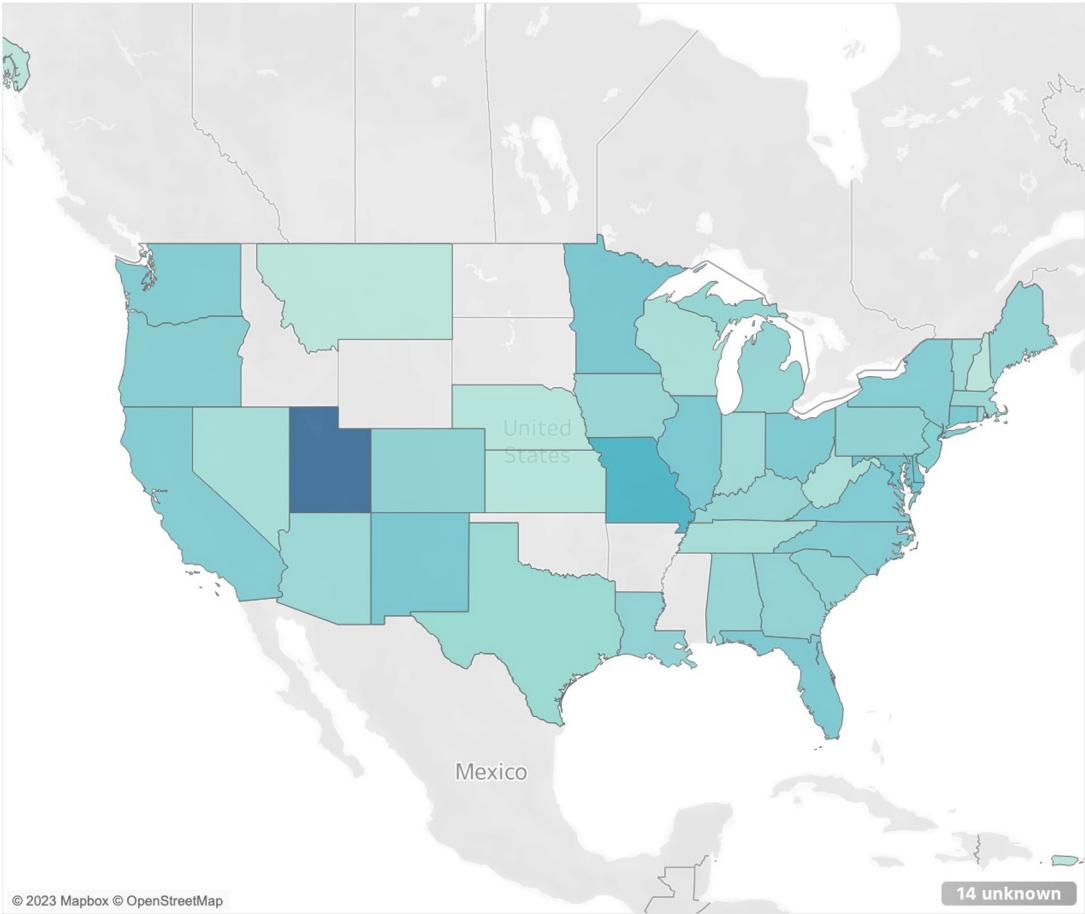- Rfm grade structure shows very different composition compared to other groups.
- Why?

% of Total Distinct count of Acct Id for each Rfm_Grade_Cleaned broken down by DII Range. The view is filtered on DII Range, which excludes .

<NYCFC ticket buyers spending by State and category >

Avg. Selected Spending
50.3 ▬▬▬▬▬▬▬ 742.0

Spending Category
| Money Spent on Sports ▼ |

UT has the highest average $ spending of sports tickets.

© 2023 Mapbox © OpenStreetMap

14 unknown

<Card usage breakdown>

Card type

% of Total Distinct count of Acct Id

35% — 35.56% (Retail/Dpt Store Credit Card)

30% — 30.44% (Mastercard)

25% — 24.47% (Visa Card)

20%

15%

10%

5% — 6.48% (Amex Card)

0% — 3.06% (Multiple)

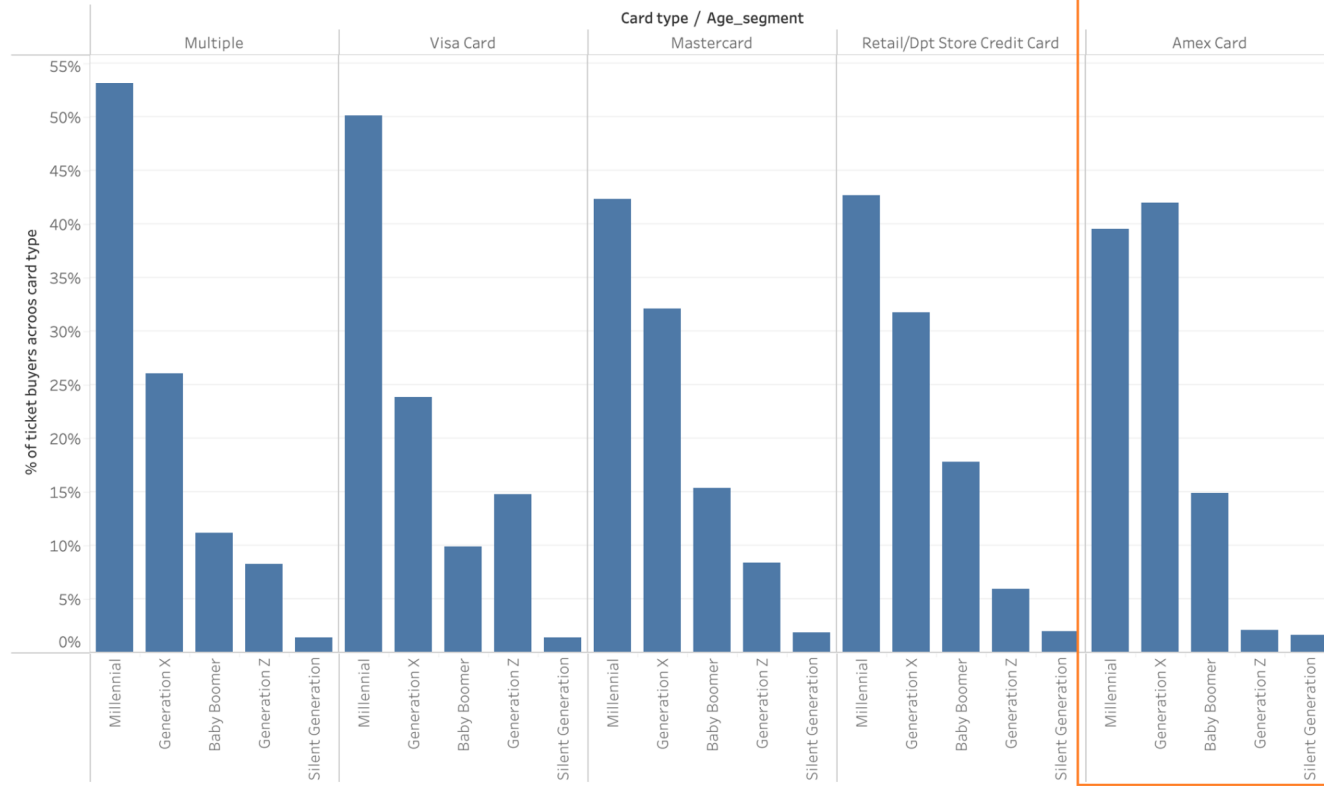Retail/Dpt Store Credit Card | Mastercard | Visa Card | Amex Card | Multiple
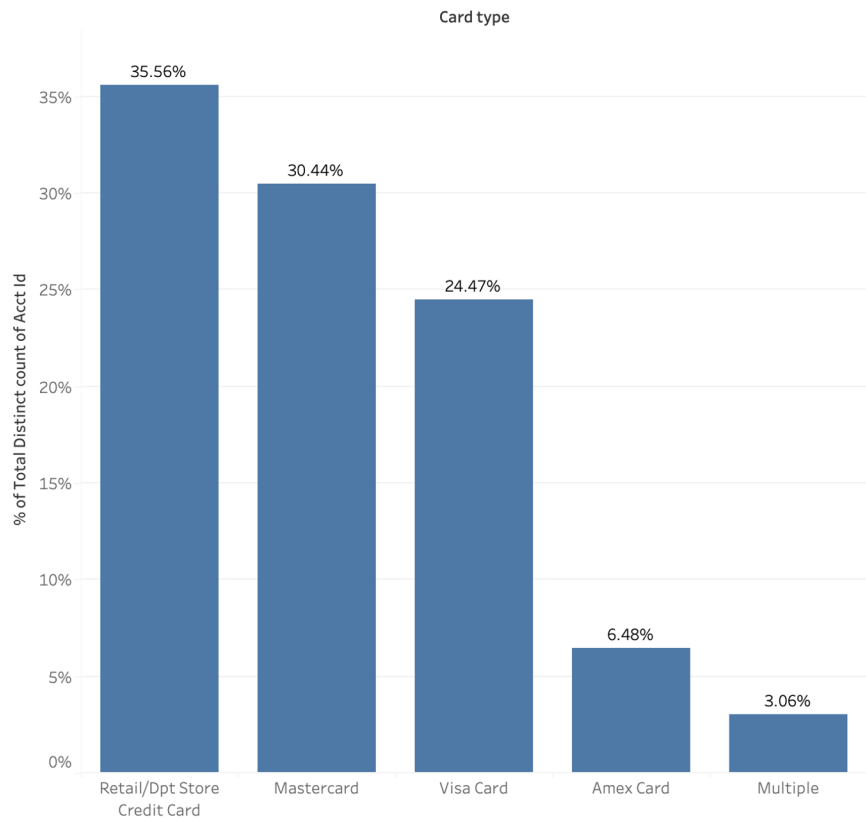
% of Total Distinct count of Acct Id for each Card type.

Amex card is used less frequently by ticket buyers. However, I found some account in the dataset with two and more card types.

The age composition for buyers using Amex card is different from other buying options.

Insights

- Ticket buyers have different spending patterns for sports tickets and concerts tickets.
    - Correlation between average $ spent on sports and average $ spent on concerts is around 0.27.
    - Maybe group state by college/league division, compute a weighted average based on # of buyers, and the pattern could be different.
- Across all DII ranges, # of male buyers is 2-3x # of female buyers
    - But, female buyers are almost as engaged as male buyers attending last year event.
    - Potential opportunities of promoting tickets to this group of ticket buyers
- The age composition for buyers using Amex card is different from other buying options.
    - If we want to have campaigns on Amex card, we should focus on different age group than the other card.

Q&A