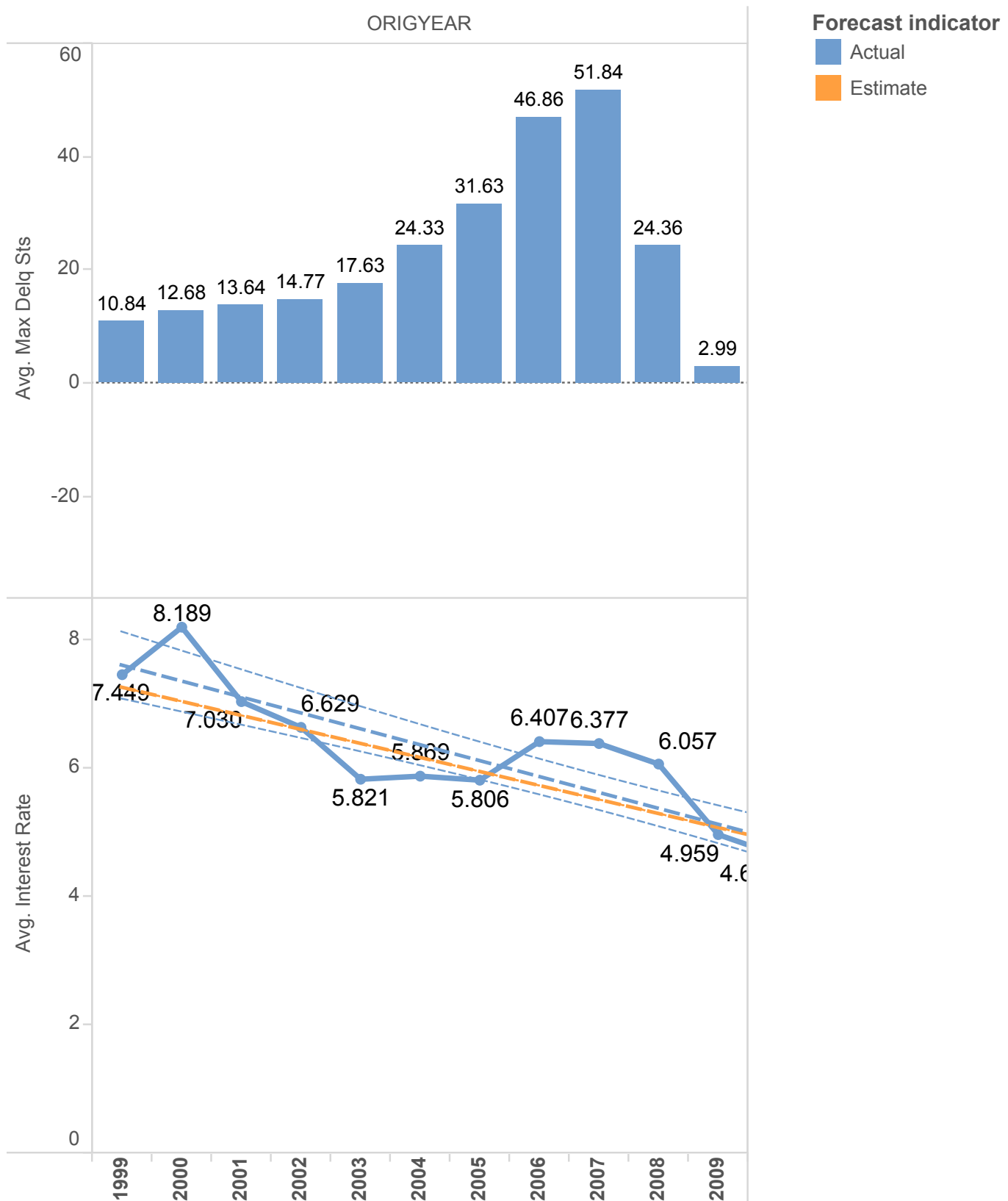
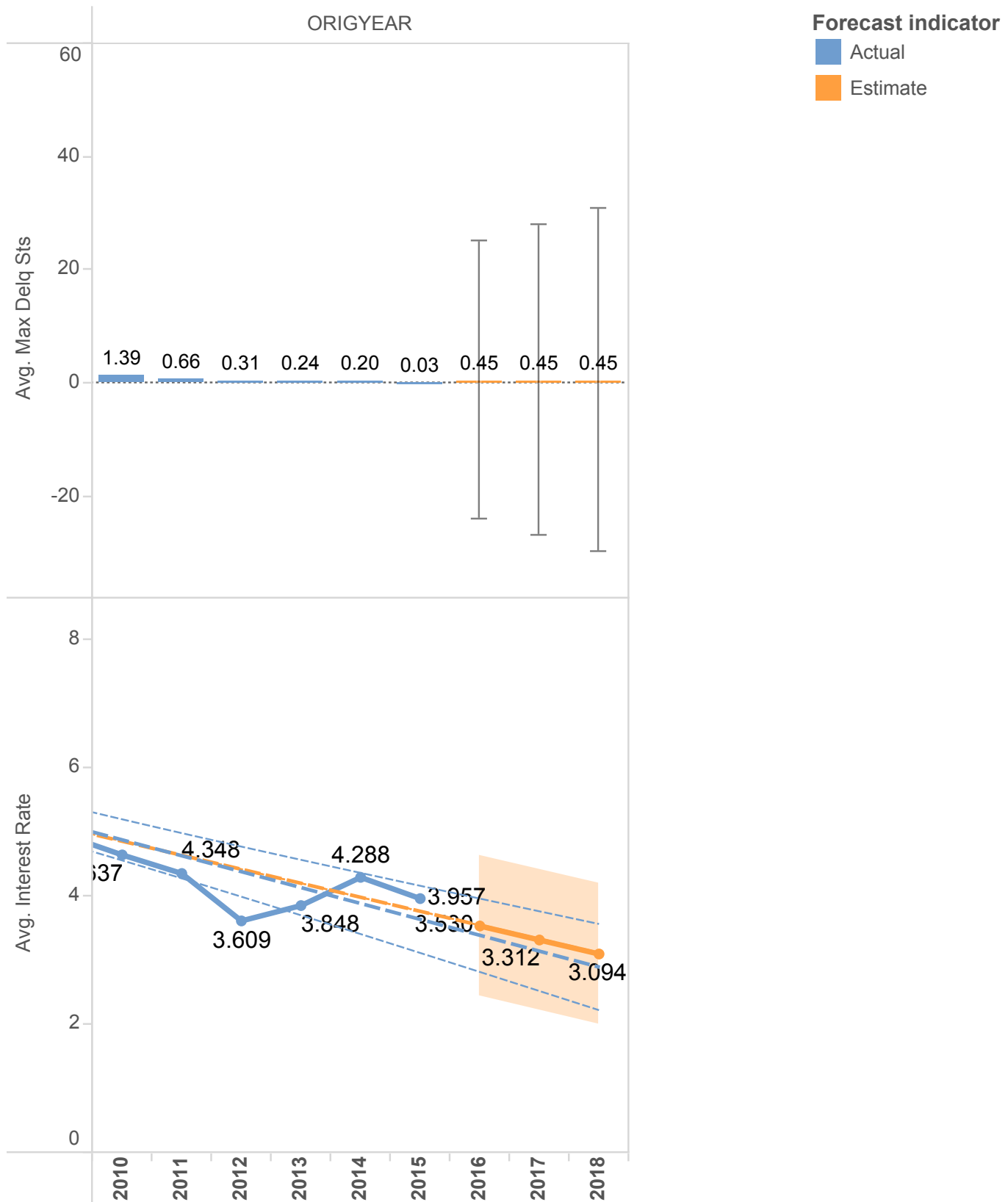


Interest Rate and Delinquency analysis



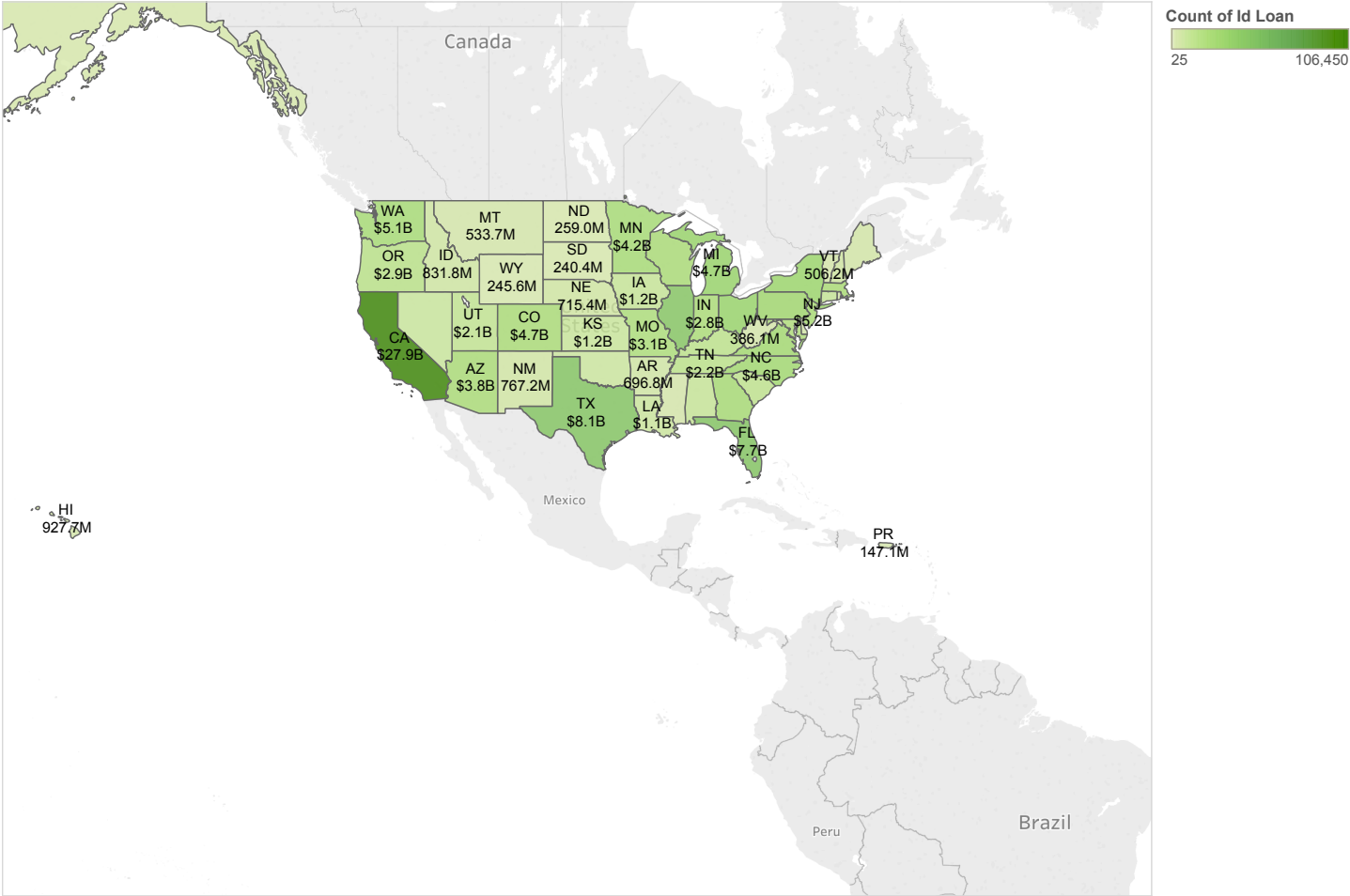
The trends of average of Max Delq Sts (actual & forecast) and average of Int Rt (actual & forecast) for ORIGYEAR Year. Color shows details about Forecast indicator. For pane Average of Max Delq Sts (actual & forecast) : The marks are labeled by average of Max Delq Sts (actual & forecast) . For pane Average of Int Rt (actual & forecast) : The marks are labeled by average of Int Rt (actual & forecast) . The view is filtered on ORIGYEAR Year, which keeps 18 of 18 members.

Interest Rate and Delinquency analysis



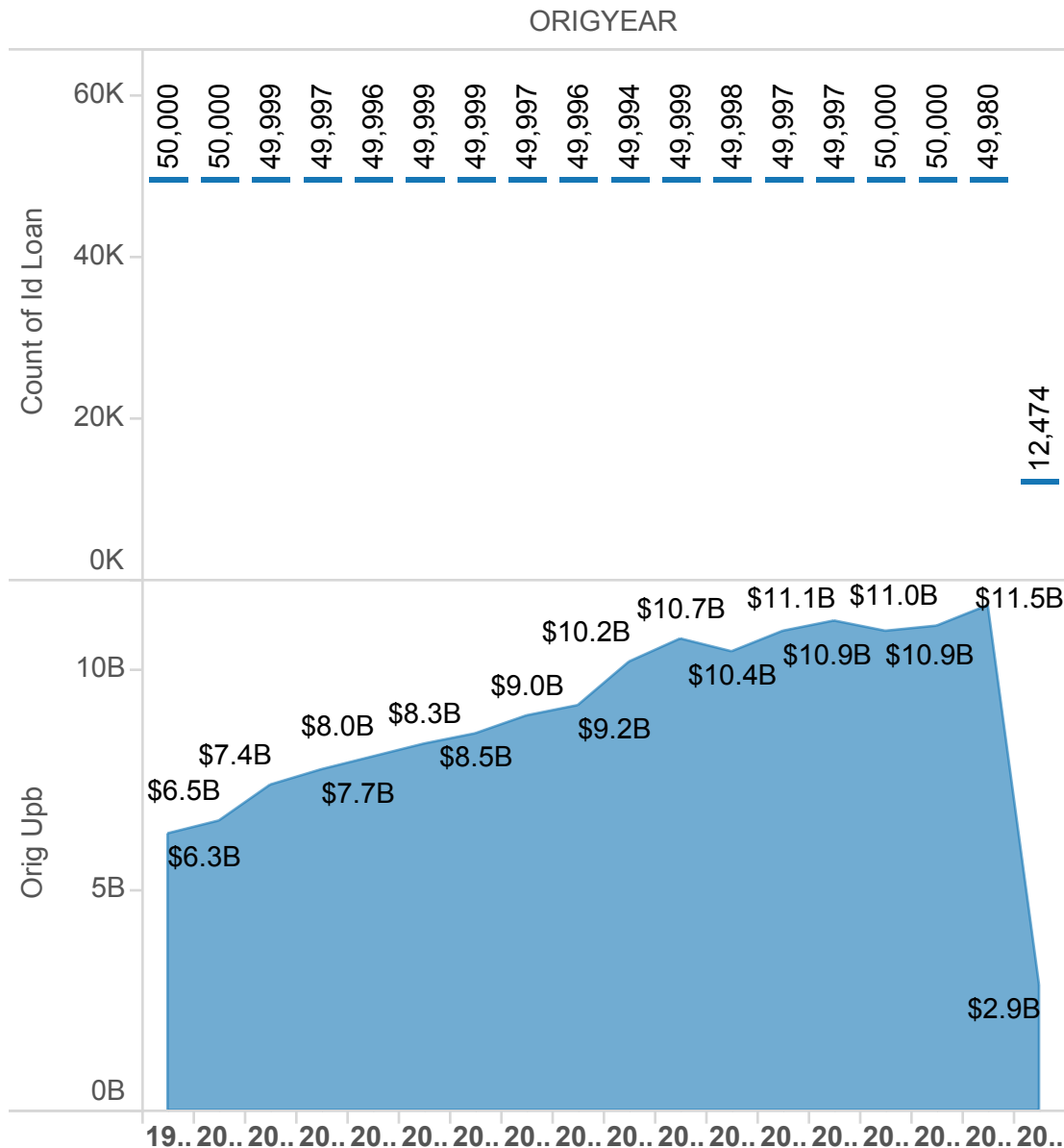
The trends of average of Max Delq Sts (actual & forecast) and average of Int Rt (actual & forecast) for ORIGYEAR Year. Color shows details about Forecast indicator. For pane Average of Max Delq Sts (actual & forecast) : The marks are labeled by average of Max Delq Sts (actual & forecast) . For pane Average of Int Rt (actual & forecast) : The marks are labeled by average of Int Rt (actual & forecast) . The view is filtered on ORIGYEAR Year, which keeps 18 of 18 members.

Sum of Original UPB Amount by Location



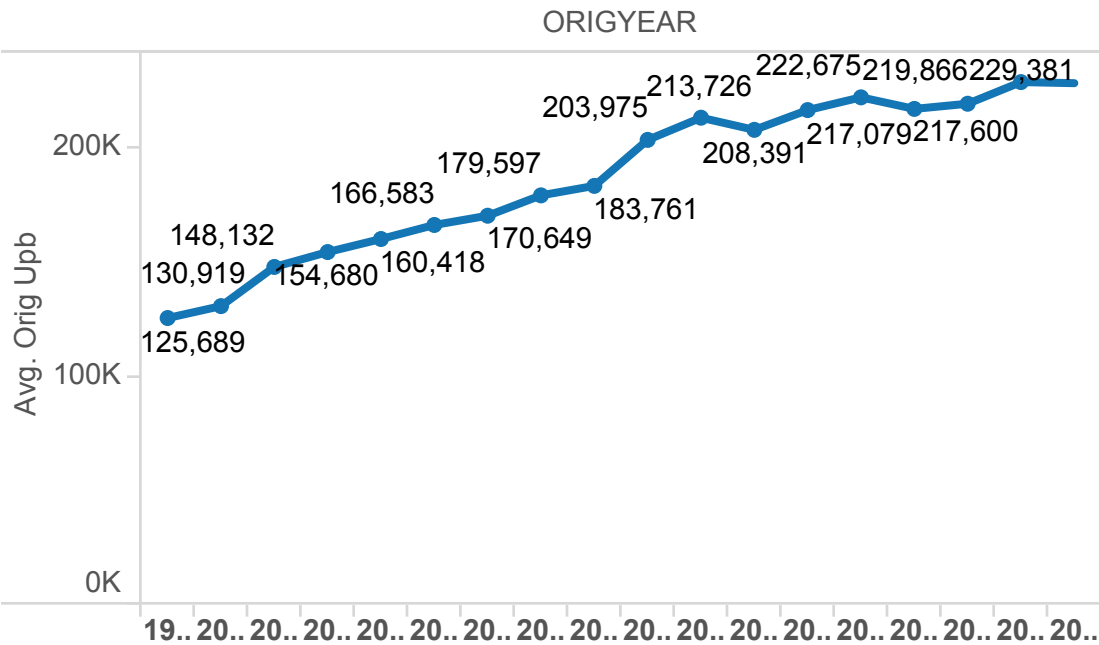
Map based on Longitude (generated) and Latitude (generated). Color shows count of Id Loan. The marks are labeled by State and SUM of Unpaid Principle Balance details are shown for State.

UPB and FICO time analysis



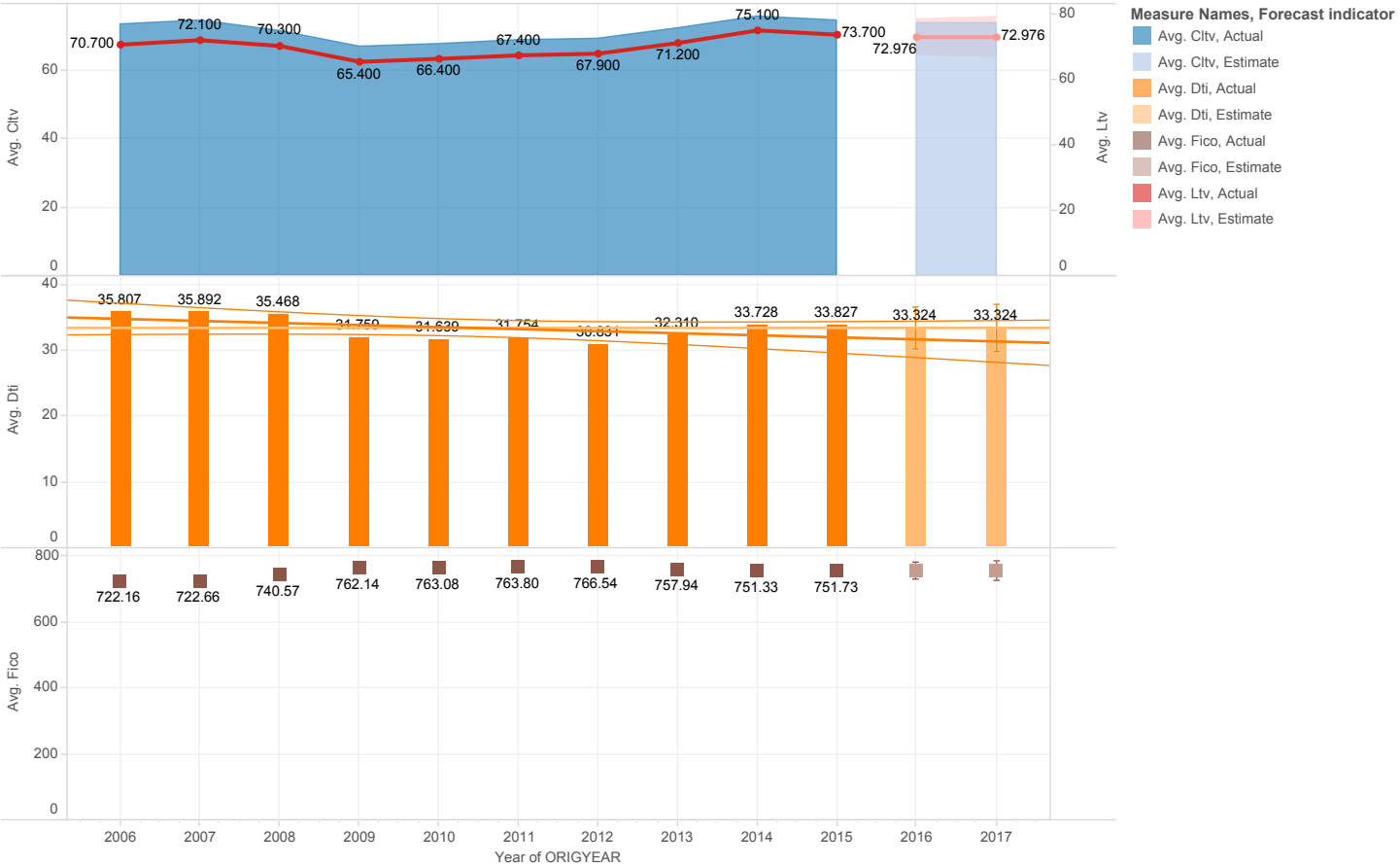
The trends of count of Id Loan, sum of Orig Upb and average of Orig Upb for ORIGYEAR Year. For pane Count of Id Loan: The marks are labeled by count of Id Loan. For pane Sum of Orig Upb: The marks are labeled by IF SUM([Orig Upb])>=1000000000 THEN "\$"+STR(ROUND((SUM([Orig Upb])/COUNT([Orig Upb])),2))) ELSE "0.00". For pane Average of Orig Upb: The marks are labeled by average of Orig Upb. The view is filtered on ORIGYEAR Year, which keeps 18 of 18 members.

UPB and FICO time analysis



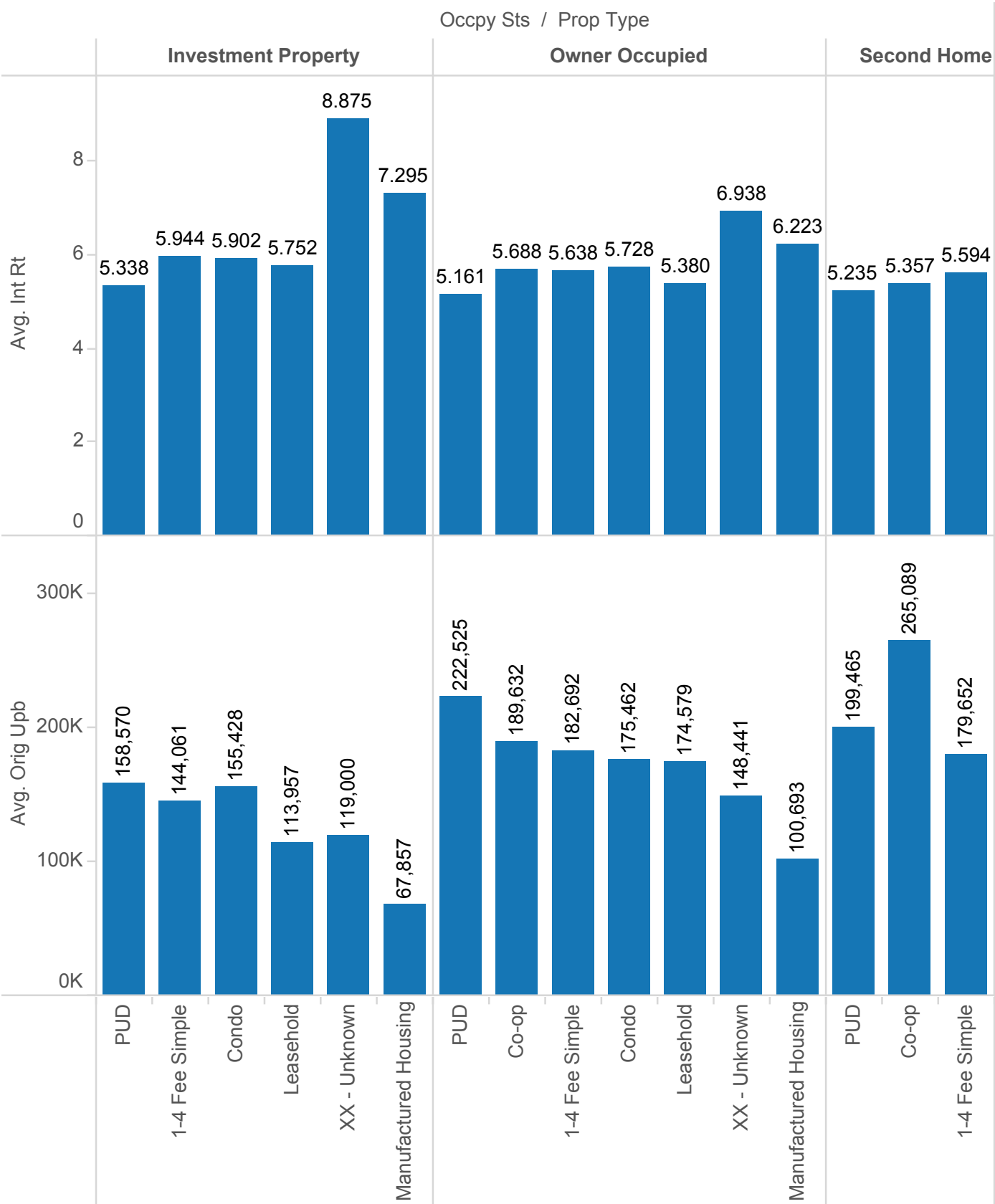
The trends of count of Id Loan, sum of Orig Upb and average of Orig Upb for ORIGYEAR Year. For pane Count of Id Loan: The marks are labeled by count of Id Loan. For pane Sum of Orig Upb: The marks are labeled by IF SUM([Orig Upb])>=10000000000 THEN "\$"+STR(ROUND((SUM([Orig For pane Average of Orig Upb: The marks are labeled by average of Orig Upb. The view is filtered on ORIGYEAR Year, which keeps 18 of 18 members.

Combined Loan-to-Value, Loan to Value, Debt-to-Income and Interest Rate Time Series and Forecasting



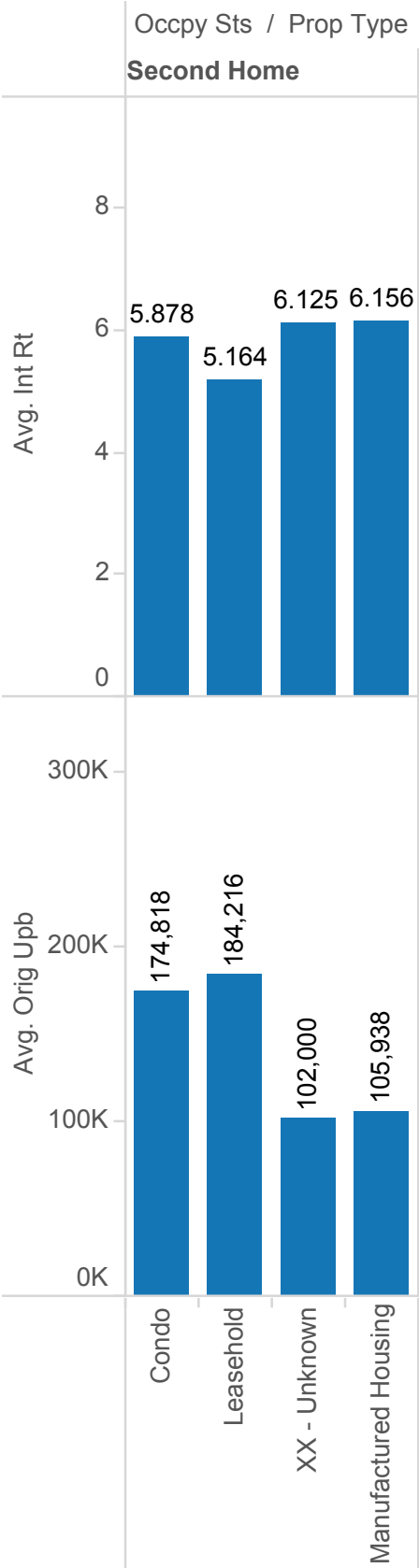
The trends of Avg. Cltv, Avg. Ltv, Avg. Dti and Avg. Fico for ORIGYEAR Year. Color shows details about Avg. Cltv, Avg. Ltv, Avg. Dti, Avg. Fico and Forecast indicator. For pane Average of Ltv (actual & forecast) : The marks are labeled by ROUND(AVG(Ltv),1) (actual & forecast) . For pane Average of Dti (actual & forecast) : The marks are labeled by Avg. Dti. For pane Average of Fico (actual & forecast) : The marks are labeled by average of Fico. The data is filtered on ORIGYEAR Year and Action (YEAR(ORIGYEAR)). The ORIGYEAR Year filter keeps 18 of 18 members. The Action (YEAR(ORIGYEAR)) filter keeps 18 members. The view is filtered on ORIGYEAR Year, which ranges from 2005 to 2016.

Average Interest Rate and Original Unpaid principle balance by Occupancy Status



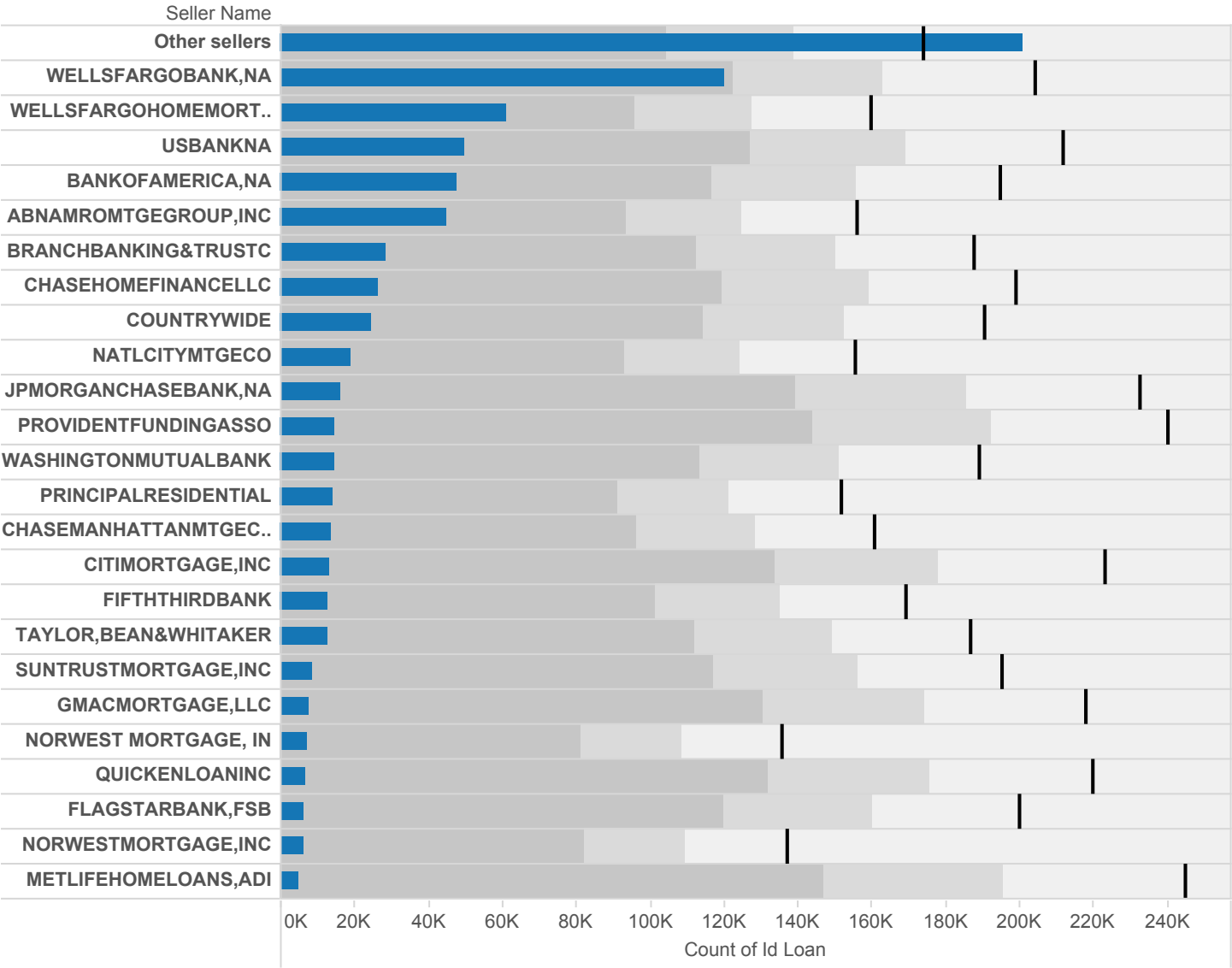
Average of Int Rt and average of Orig Upb for each Prop Type broken down by Occpy Sts. For pane Average of Int Rt: The marks are labeled by average of Int Rt. For pane Average of Orig Upb: The marks are labeled by average of Orig Upb. The data is filtered on Action (Seller Name), which keeps 103 members.

Average Interest Rate and Original Unpaid principle balance by Occupancy Status



Average of Int Rt and average of Orig Upb for each Prop Type broken down by Occpy Sts. For pane Average of Int Rt: The marks are labeled by average of Int Rt. For pane Average of Orig Upb: The marks are labeled by average of Orig Upb. The data is filtered on Action (Seller Name), which keeps 103 members.

Seller's Count of Loans vs Average UPB distribution



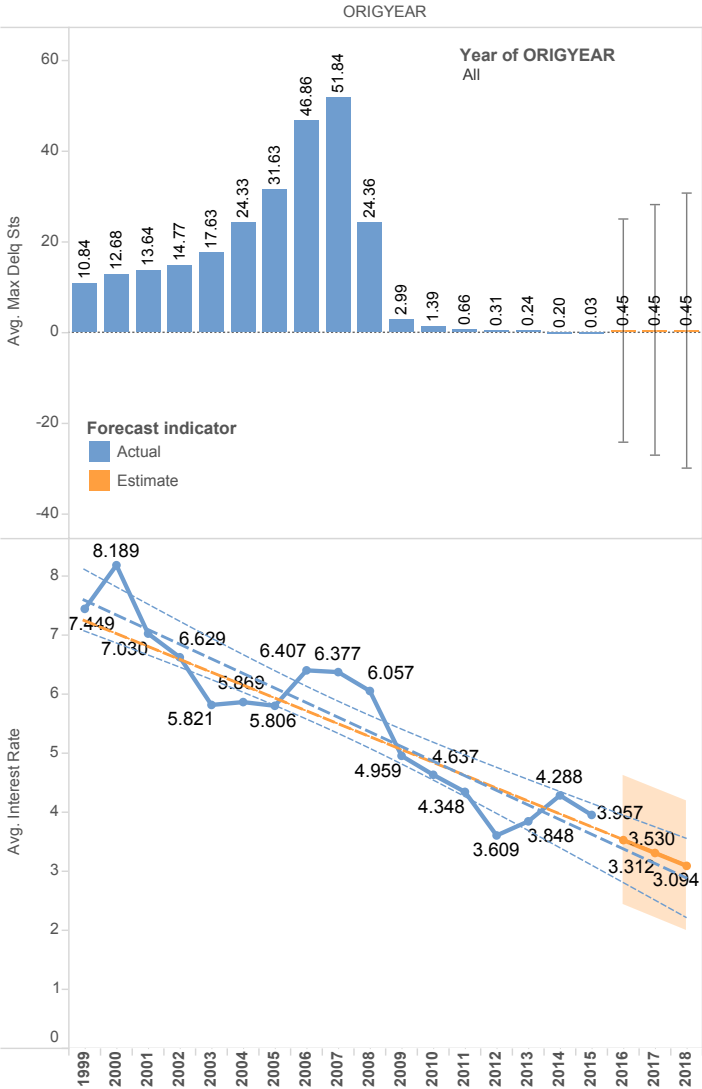
Count of Id Loan for each Seller Name. The view is filtered on Seller Name, which keeps 25 of 103 members.

Average FICO, Interest Rate, Number of Loan and Sum of Original UPB amount by channel and loan purpose

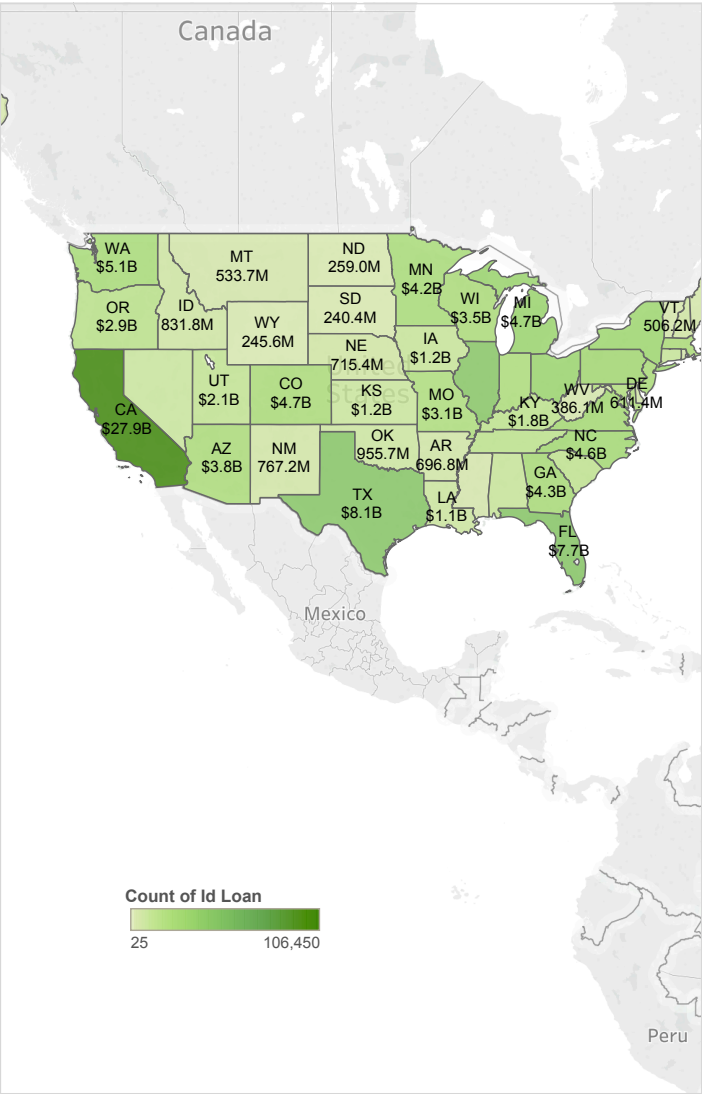
Channel	Loan Purpose	Avg. FICO	Avg. Interest Rate	Number of Loan	Sum of UPB (in Billions)
Retail	Cash-out Refinance	735	5	111,944	19
	No Cash-out Refinance	744	5	136,073	25
	Purchase Mortgage	736	6	170,210	29
TPO Not Specified	Cash-out Refinance	708	6	73,995	13
	No Cash-out Refinance	713	6	65,201	11
	Purchase Mortgage	720	7	118,779	19
Correspondent	Cash-out Refinance	751	4	30,661	7
	No Cash-out Refinance	763	4	45,505	11
	Purchase Mortgage	756	5	62,291	14
Broker	Cash-out Refinance	751	5	12,091	3
	No Cash-out Refinance	765	4	19,464	6
	Purchase Mortgage	755	5	16,208	4

Avg. FICO, Avg. Interest Rate, Number of Loan and Sum of UPB (in Billions) broken down by Channel and Loan Purpose. The data is filtered on Action (Seller Name), which keeps 103 members.

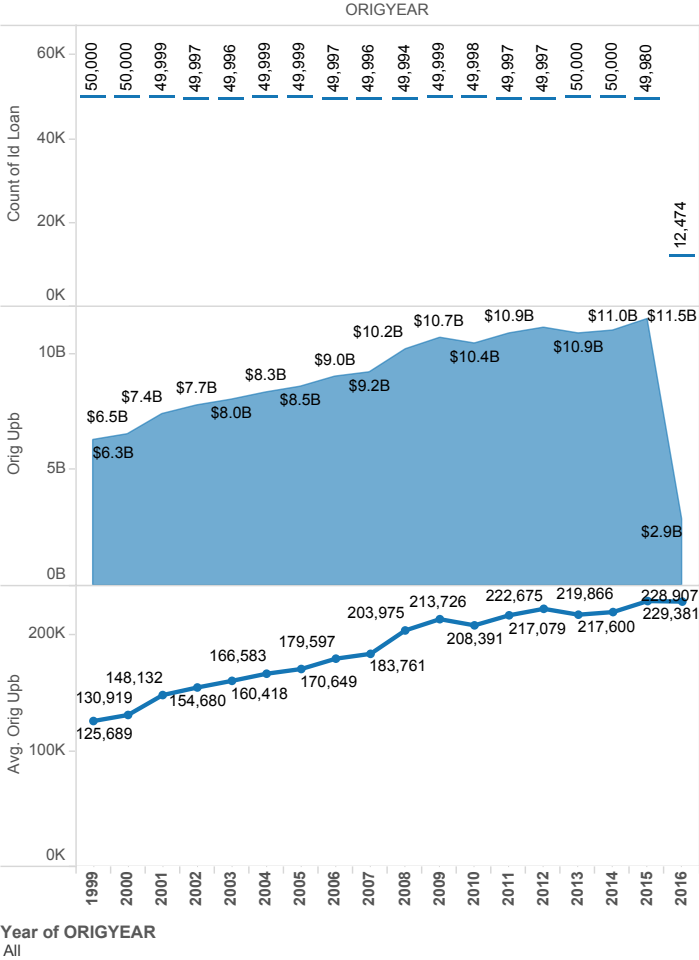
Interest Rate and Delinquency analysis



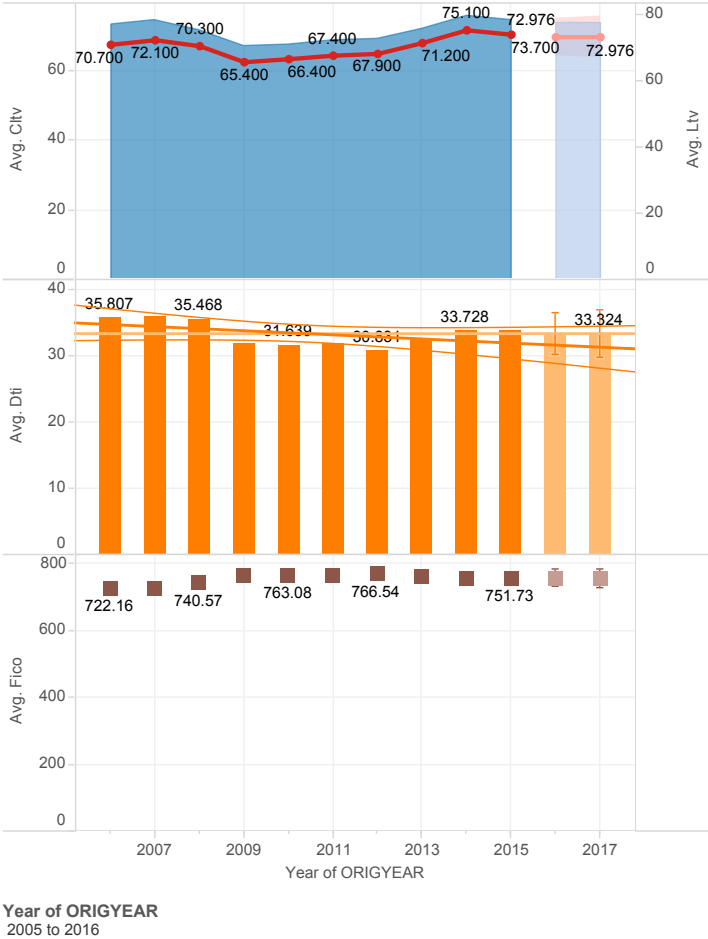
Sum of Original UPB Amount by Location



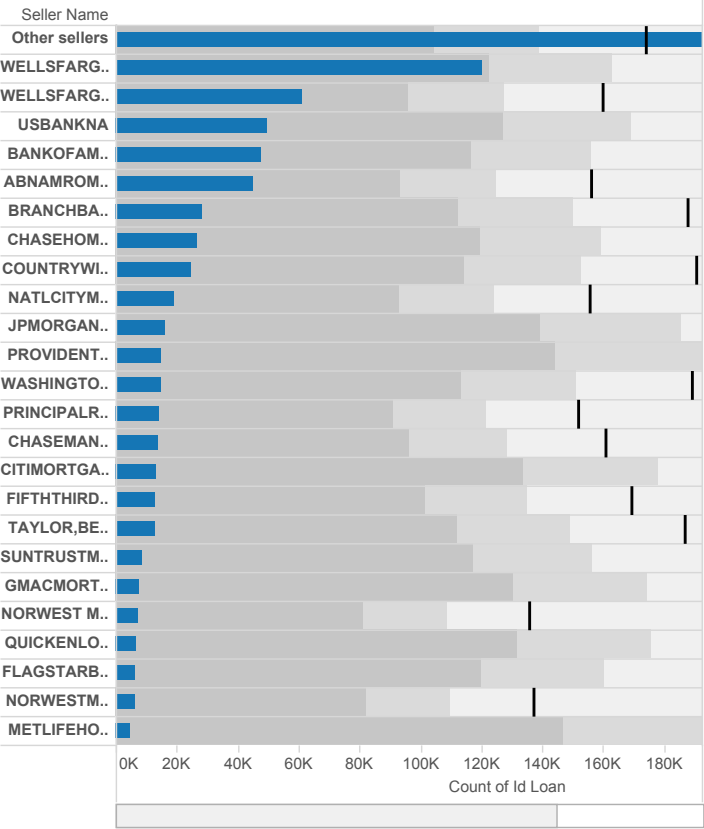
UPB and FICO time analysis



Combined Loan-to-Value, Loan to Value, Debt-to-Income and Interest Rate Time Series and Forecasting



Seller's Count of Loans vs Average UPB distribution



Seller Name
All

Limit
Top 25 by COUNT([Id Loan])

Average FICO, Interest Rate, Number of Loan and Sum of Original UPB amount by channel and loan purpose

Channel	Loan Purpose	Avg. FICO	Avg. Interest Rate	Number of Loan	Sum of UPB (in Billions)
Retail	Cash-out Refinance	735	5	111,944	19
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Average Interest Rate and Original Unpaid principle balance by Occupancy Status

