

Splendor Analytics Insurance

A comprehensive documentation outlining data sources, methodologies
and actionable insights.

Description

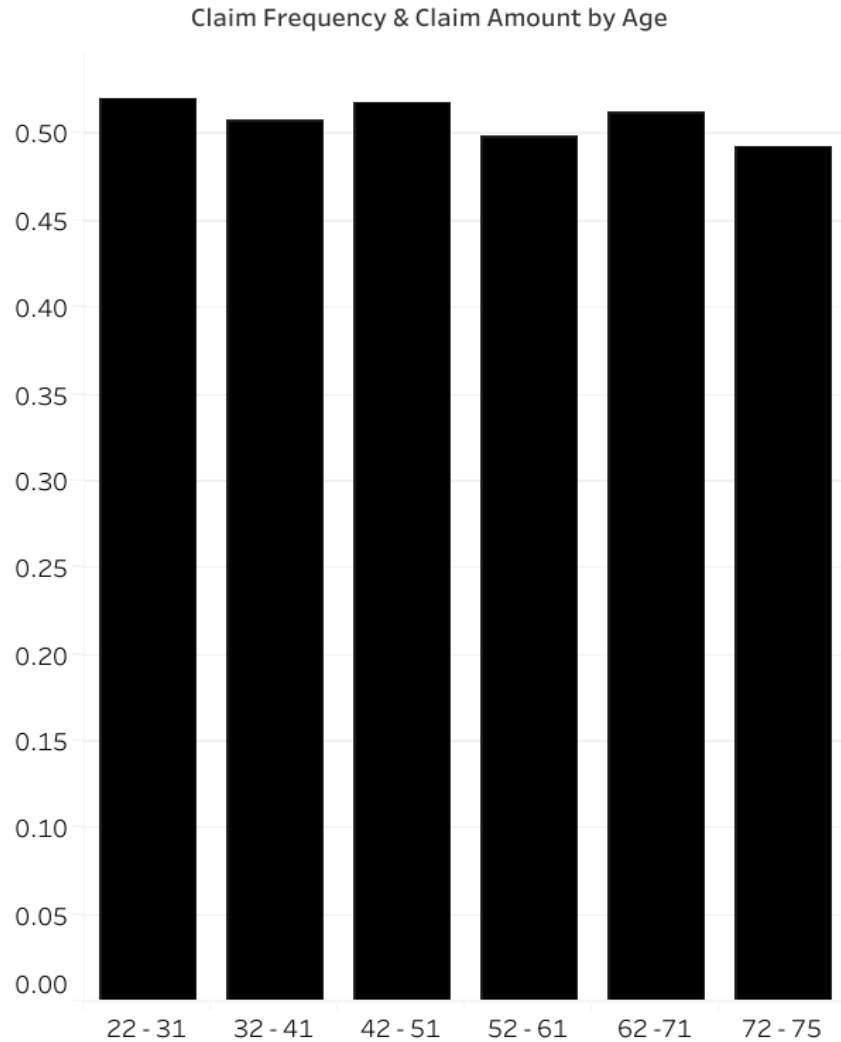
Splendor Analytics Insurance is a company specializing in offering a variety of insurance products to its customers. The company's portfolio includes auto insurance, which covers losses or damages related to vehicles. The provided dataset contains anonymized information about the policyholders, their vehicles, and their claim histories. The goal of this project is to analyze this dataset to uncover insights that can help Splendor Analytics Insurance improve its services, optimize premiums, and reduce claim costs.

Total Policy Holders
37,542

Total Claim Amount
1,878,170,476

Total Claim Frequency
19,158

Avg Household Income
147,247



Methodology: Used a bar chart to visualize the claim frequency and claim amount by age.

Insights: Younger age groups (22-31) have a higher claim frequency compared to middle-aged groups (42-51, 52-61). - Older age groups (62-71, 72-75) show lower claim frequencies but higher claim amounts, possibly due to higher repair costs.

Actionable Recommendations: Tailor insurance products for younger age groups (22-31) while ensuring comprehensive coverage for older age groups (62-75) to manage higher repair costs effectively.

Steps

1. Develop youth-oriented insurance packages and promote proactive risk management.
2. Enhance coverage options for older customers to align with their higher claim amounts.
3. Implement personalized customer engagement strategies based on demographic insights.

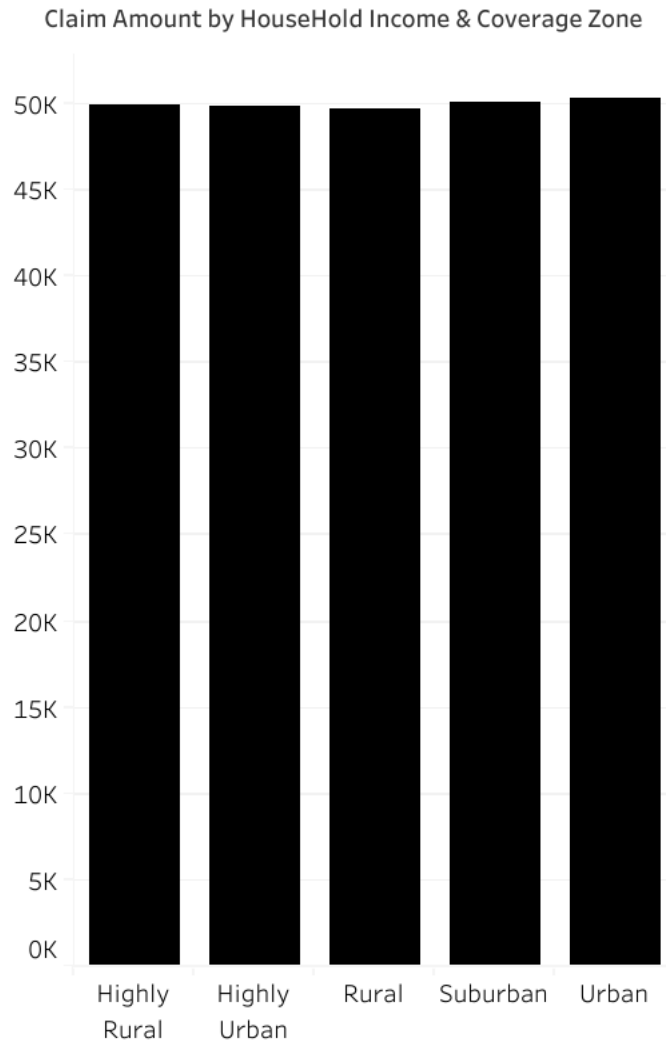
Claim Frequency & Amount by Car Make		
Car Make	Claim Amt	Claim Freq
Ford	165,583,317	1,694
Chevrolet	147,856,359	1,457
Dodge	92,912,361	933
Toyota	90,161,716	861
GMC	87,396,330	854
Pontiac	67,933,997	737
Mitsubishi	71,807,527	709
Mercedes-Benz	67,023,199	690
Volkswagen	61,800,396	690
Mazda	68,891,691	680
Nissan	58,173,742	628
BMW	55,917,502	573
Buick	49,003,399	494
Honda	48,674,958	483
Audi	49,407,972	465
Mercury	40,354,442	436
Cadillac	33,952,409	434
Lexus	42,543,210	376
Volvo	34,682,692	367
Hyundai	33,828,069	366
Subaru	30,961,710	348
Chrysler	35,021,530	333
Lincoln	32,881,691	324
Suzuki	28,404,000	313
Acura	32,162,639	293
Infiniti	26,664,830	286
Land Rover	23,868,738	271
Jeep	25,325,937	259
Kia	24,214,448	258
Porsche	24,008,611	219
Isuzu	17,436,404	199
Oldsmobile	21,931,059	197
Jaguar	16,328,471	171
Plymouth	16,295,551	160
Saab	18,381,711	153
Saturn	12,034,997	133
Lotus	11,073,707	127
Bentley	12,474,808	123
Maserati	11,313,241	123
Lamborghini	9,823,358	115
Aston Martin	9,555,693	112
Hummer	7,678,522	100
Scion	6,998,869	87
Geo	5,634,200	82
Maybach	6,764,821	68
Eagle	5,334,423	50
Ferrari	4,938,395	49
MINI	6,055,927	42
Rolls-Royce	3,075,991	34
Daewoo	2,747,052	28
Spyker	2,089,277	20
Alfa Romeo	1,967,627	15
Morgan	959,530	15
Austin	1,491,202	12
Holden	1,300,454	10
Ram	2,081,916	10
Bugatti	518,962	9
Corbin	615,555	8
Fiat	944,040	8
Merkur	221,774	8
Panoz	634,100	8
Studebaker	801,076	8
Smart	995,244	7
Daihatsu	1,047,168	5
Jensen	406,497	5
Peugeot	462,986	5
Tesla	651,061	5
Foose	529,908	4
Citroën	904,313	3
Fillmore	201,423	3
McLaren	436,207	2
Aptera	380,915	1
MG	268,816	1
Rambler	83,019	1
Renault	98,355	1
Fairthorpe	115,180	0
Hillman	237,148	0
Shelby	430,102	0

Methodology: Used a Text table to visualize the claim frequency and claim amount by Car make.

Insights: Ford and Chevrolet owners have the highest claim amounts and frequencies. - Volkswagen and Mercedes-Benz have lower claim frequencies and amounts

Actionable Recommendations: Develop specialized insurance plans for Ford and Chevrolet owners to meet their specific needs.

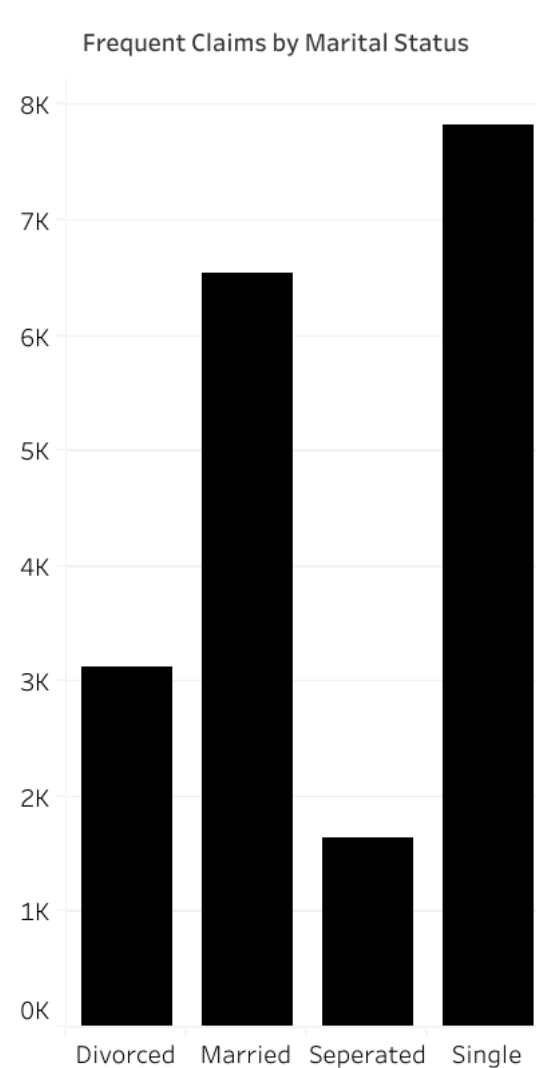
2. Review and streamline insurance options for Volkswagen and Mercedes-Benz and other car makes to sustain lower claims.



Methodology: Used a bar chart to visualize factors that are indicative of high-risk policy holders.

Insights: Higher household income correlates with higher claim amounts and Lower-income households have lower claim frequencies. The Urban zone has the highest claim amount and household income.

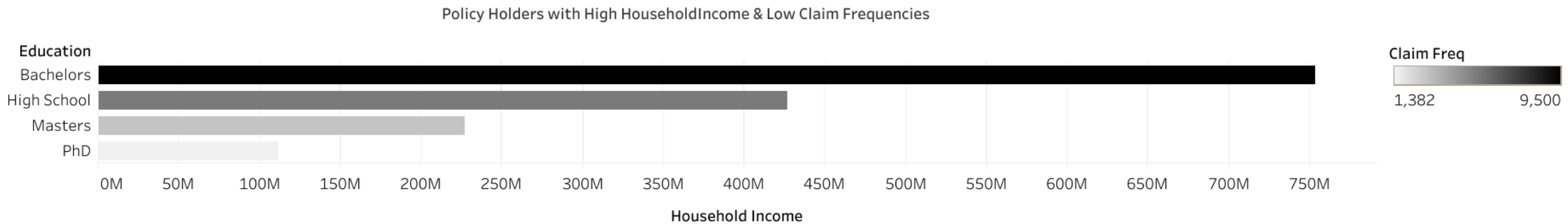
Actionable recommendation: Focus on developing tailored insurance products and risk assessment models for urban policyholders with higher household incomes to effectively manage higher claim amounts and enhance customer satisfaction.



Methodology: Used a bar chart to visualize policy holders who make frequent claims.

Insights: The Single policy holders from the chart has the highest claim frequency followed by Married policy holders.

Actionable recommendation: Implement targeted customer support and proactive claim management strategies for single policyholders, followed by married policyholders, to improve claims handling efficiency and customer satisfaction.

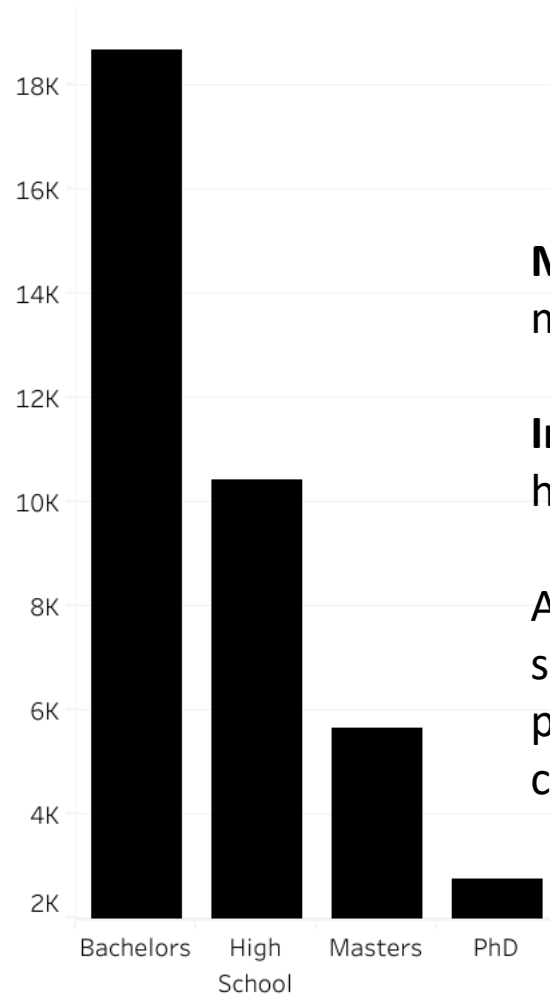


Methodology: Used a bar chart to visualize policy holders with high household Income and Low claim frequency

Insights: PhD and Masters degree policy holders has the lowest claim frequency but with a high household income. And also the Bachelors are seen as high value customers with a high income.

Actionable recommendation: Develop specialized insurance packages and personalized services tailored for policyholders with PhDs and Masters degrees, focusing on their low claim frequency and higher household income demographics. Also focus on marketing to the bachelors they are regarded as high value cause of their high income.

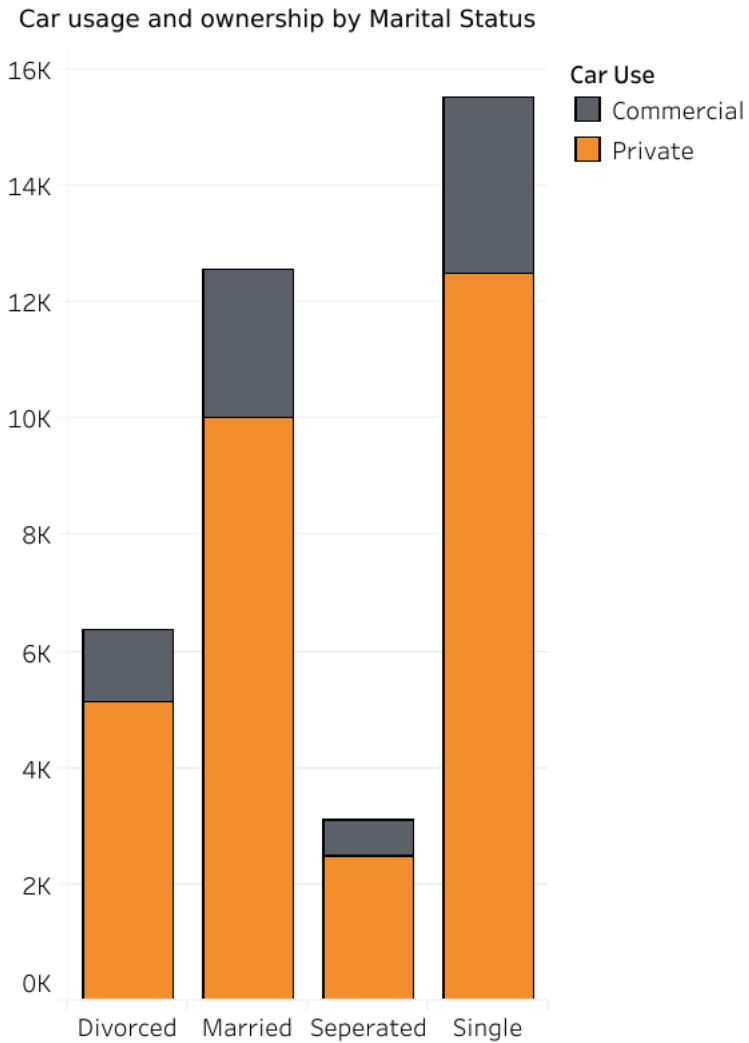
Distribution by Education



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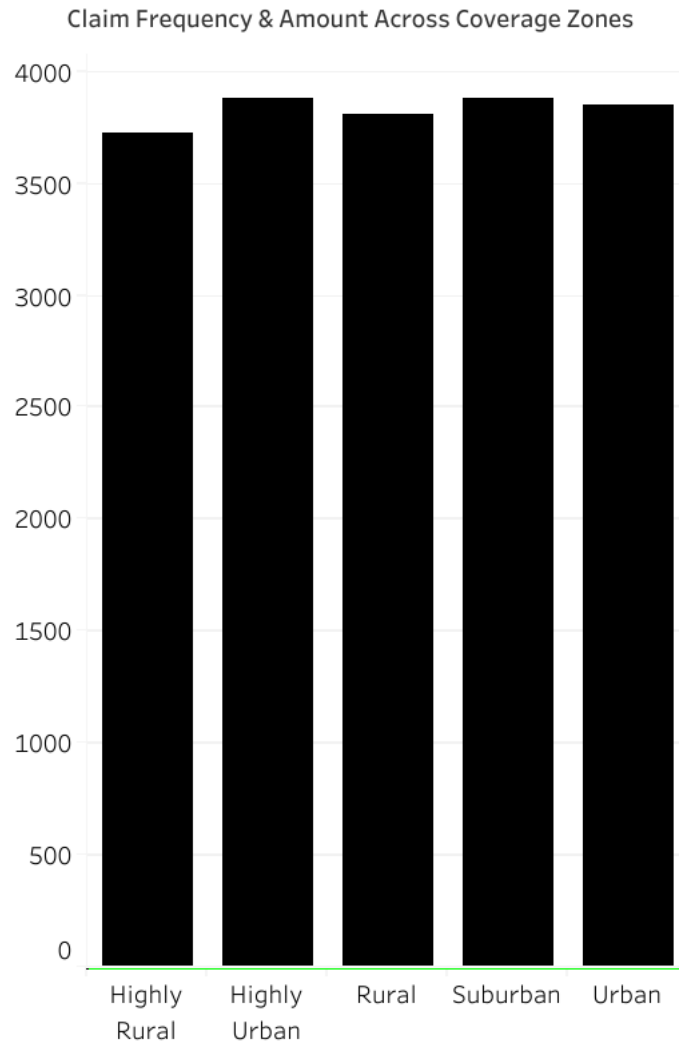
Actionable recommendation: Implement targeted customer support and proactive claim management strategies for single policyholders, followed by married policyholders, to improve claims handling efficiency and customer satisfaction.



Methodology: Used a bar chart to visualize car usage by marital status.

Insights: The Single policy holders from the chart show ownership with the highest car usage as being private.

Actionable recommendation: Target single policyholders who primarily use their cars for private purposes with customized insurance plans that align closely with their usage patterns, ensuring comprehensive coverage and customer satisfaction.

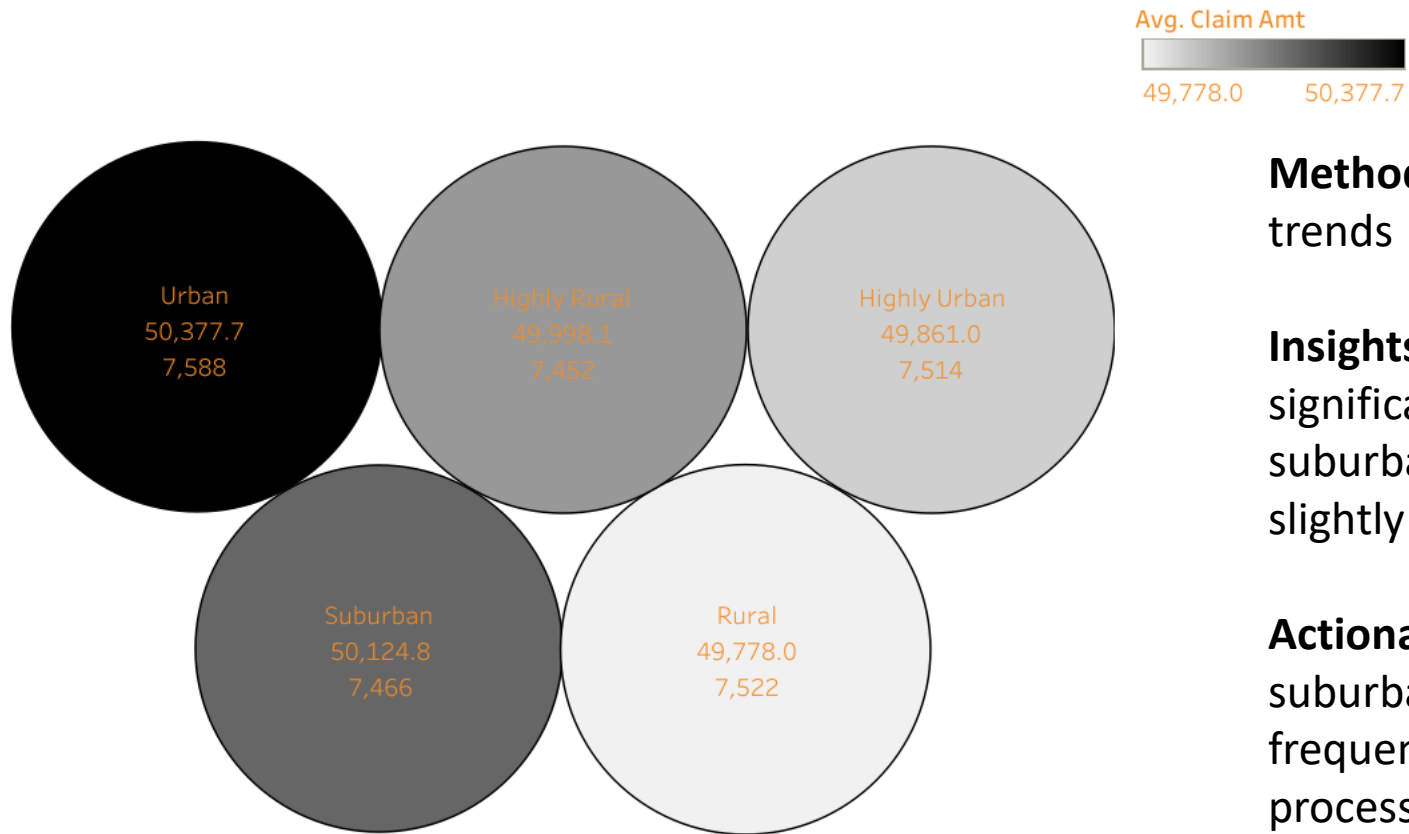


Methodology: Used a bar chart to visualize claim amount and frequency across coverage zones.

Insights: The Suburban and Urban Zones has the highest claim frequency and amounts.

Actionable recommendation: Focus on enhancing risk management strategies and insurance offerings specifically tailored for policyholders residing in Suburban and Urban zones to effectively address higher claim frequencies and amounts, ensuring adequate coverage and customer satisfaction.

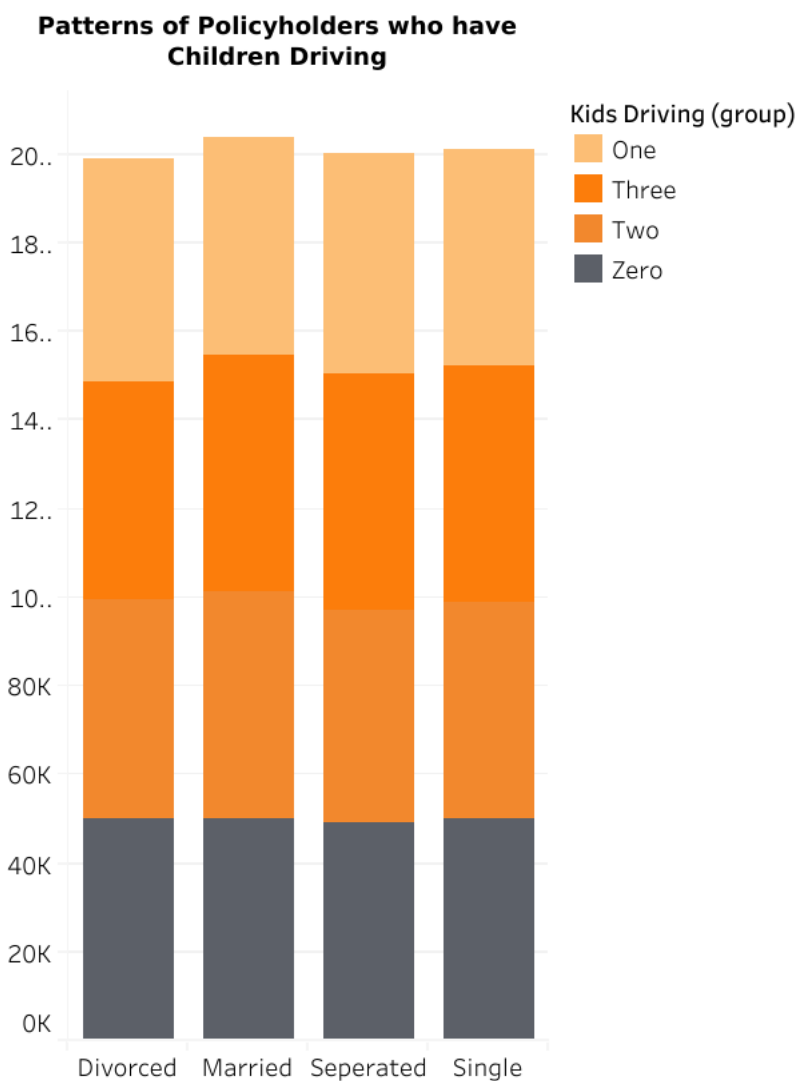
Regional Trends



Methodology: Used a bar chart to visualize the regional trends

Insights: There is a notable trend where urban areas show significantly lower claim frequencies compared to suburban and rural areas. Despite this, urban areas have slightly higher average claim amounts.

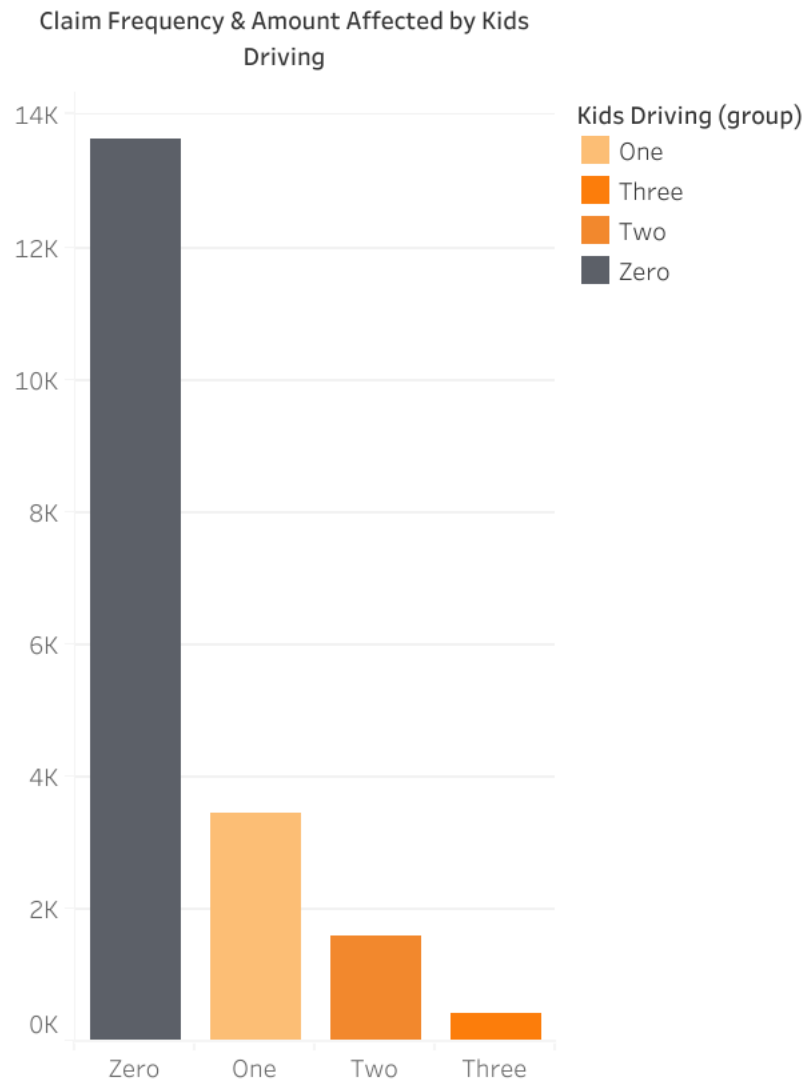
Actionable recommendation: Focus marketing efforts on suburban and rural areas to address higher claim frequencies, while optimizing claims management processes in urban areas to handle potentially higher-value claims efficiently.



Methodology: Used a bar chart to visualize policy holders who have kids driving

Insights: Married policy holders with 1-3 kids driving have higher claim amount and divorced policy holders with 1 kid driving have high claim amounts.

Actionable recommendation: Develop targeted insurance packages for married policyholders with 1-3 kids driving, emphasizing comprehensive coverage options. Additionally, tailor offerings for divorced policyholders with 1 child driving to address their specific risk profiles and potentially higher claim amounts.



Methodology: Used a bar chart to visualize claim frequency and amount affected by Kids Driving.

Insights: Kids who are not driving show higher claim frequency and claim amounts compared to those who are driving.

Actionable recommendation: Implement targeted risk management strategies and insurance products that account for the impact of children who are not driving, focusing on reducing claim frequency and managing higher claim amounts effectively.

THANK YOU.