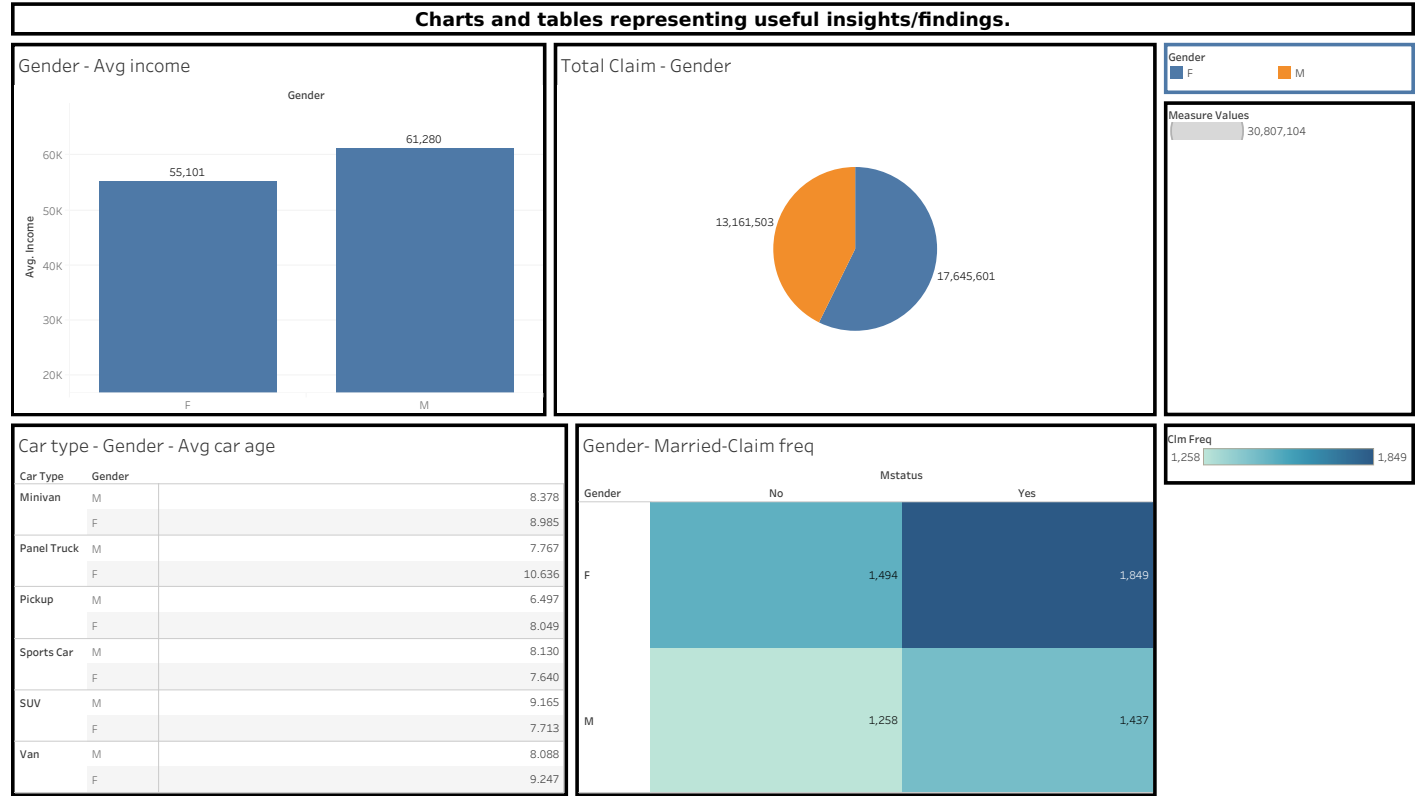# Car Claim Insurance

Average income of males are higher than females. Majority of the customers are female and Married females are the ones with maximum claims.

Maximum claims are made by the customers who born during 1948 - 1964. Customers with Panel truck have highest average claim amount of 2106. Manager hasILeast average travel time of 30.69.

Doctors have highest average income among both males and females. Customer with income 3,67,030 has the car with highest value of 65,970. Parameter is set with top N = 8, based on the highest average income.

Charts and tables representing useful insights/findings.

Gender - Avg income

Gender

Total Claim - Gender

13,161,503

17,645,601

Gender
- F
- M

Measure Values
30,807,104

Car type - Gender - Avg car age

Car Type	Gender	
Minivan	M	8.378
	F	8.985
Panel Truck	M	7.767
	F	10.636
Pickup	M	6.497
	F	8.049
Sports Car	M	8.130
	F	7.640
SUV	M	9.165
	F	7.713
Van	M	8.088
	F	9.247

Gender- Married-Claim freq

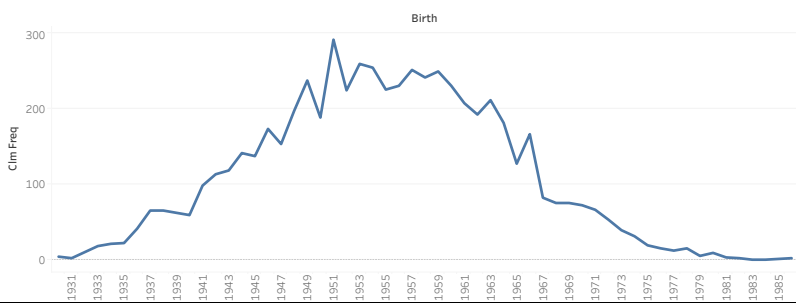|	Mstatus	
Gender	No	Yes
F	1,494	1,849
M	1,258	1,437

Clm Freq
1,258 — 1,849

Car Claim Insurance

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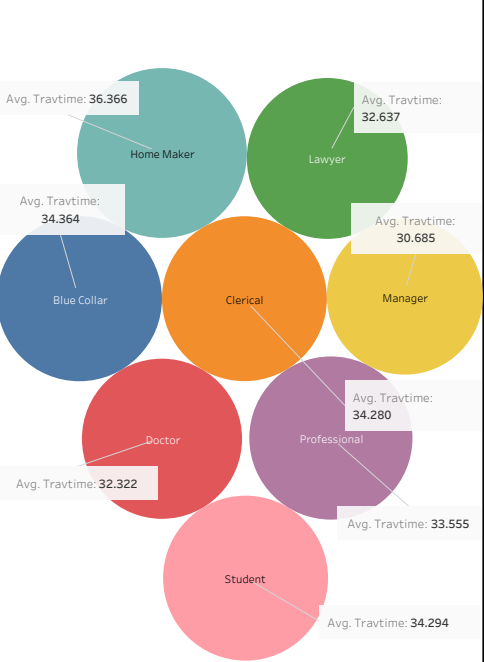
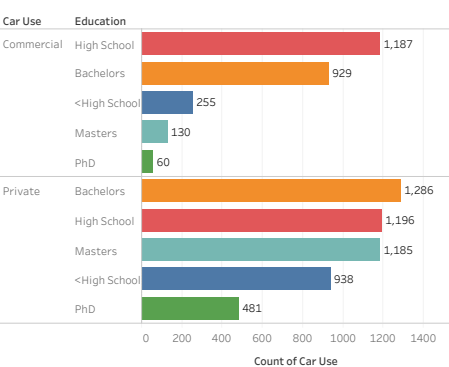## Charts and tables representing useful insights/findings.
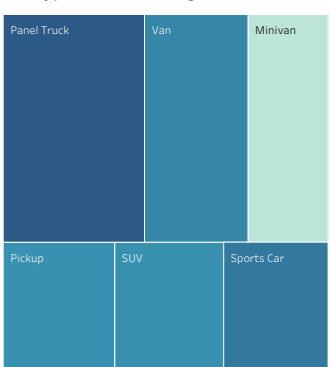
Birth date - Claim freq

Birth

Clm Freq
To Null

Occupation - Avg Travel Time

- Avg. Travtime: 36.366 — Home Maker
- Avg. Travtime: 32.637 — Lawyer
- Avg. Travtime: 34.364 — Blue Collar
- Clerical
- Avg. Travtime: 30.685 — Manager
- Avg. Travtime: 34.280 — Professional
- Doctor
- Avg. Travtime: 32.322
- Avg. Travtime: 33.555
- Student
- Avg. Travtime: 34.294

Car use - Education

Car Use	Education	Count of Car Use
Commercial	High School	1,187
	Bachelors	929
	<High School	255
	Masters	130
	PhD	60
Private	Bachelors	1,286
	High School	1,196
	Masters	1,185
	<High School	938
	PhD	481

Count of Car Use

Car type-Bluebook-Avg Claim amount

Panel Truck | Van | Minivan
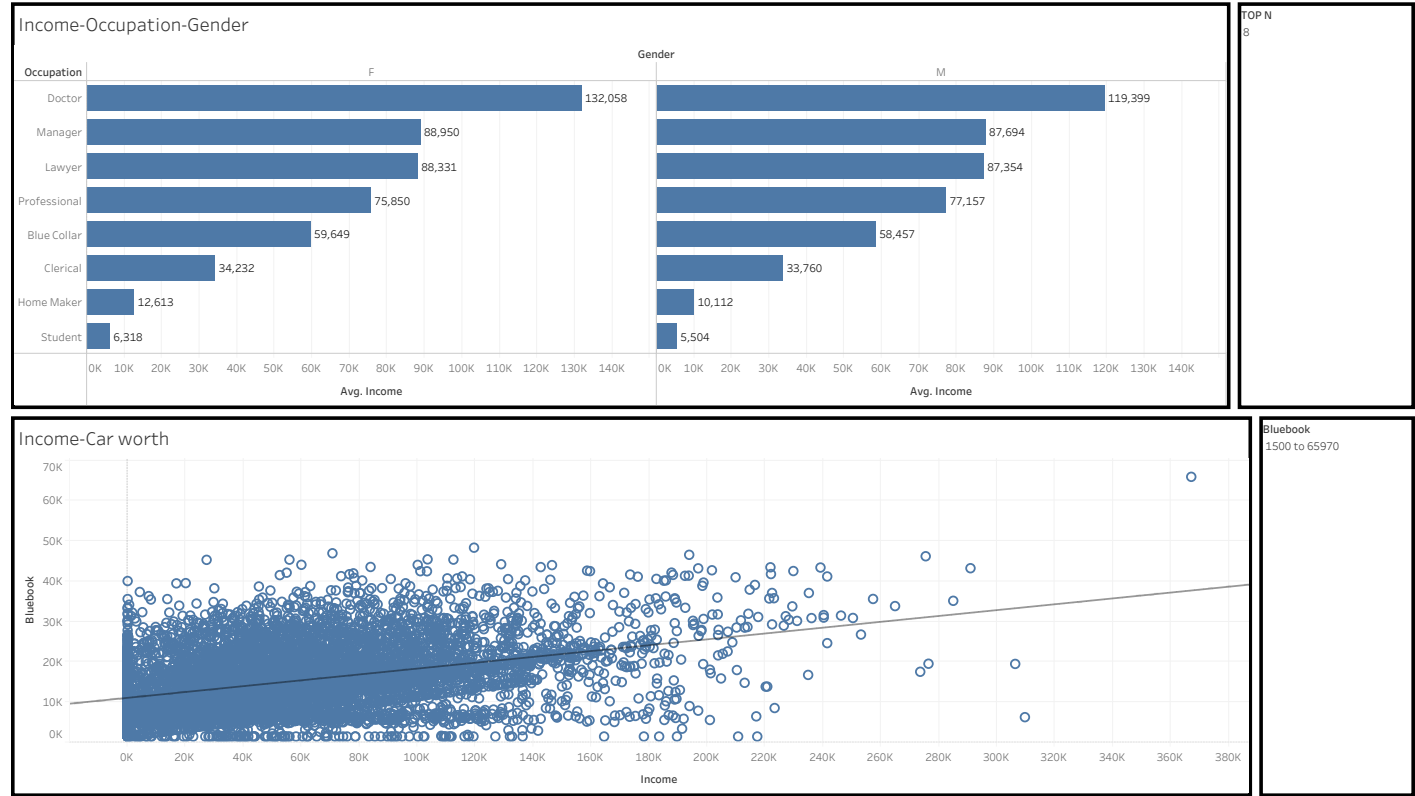Pickup | SUV | Sports Car

Avg. Clm Amt
878 — 2,106

Car Claim Insurance

Maximum claims are made by the customers who born during 1948 - 1964. Customers with Panel truck have highest average claim amount of 2106. Manager hasILeast average travel time of 30.69.

Doctors have highest average income among both males and females. Customer with income 3,67,030 has the car with highest value of 65,970. Parameter is set with top N = 8, based on the highest average income.

PhD has the highest average income, followed by Masters and Bachelors. Action filter is set on education based average income, wherein it shows gender based average income based on the education.

Income-Occupation-Gender

Gender

Occupation	F	M
Doctor	132,058	119,399
Manager	88,950	87,694
Lawyer	88,331	87,354
Professional	75,850	77,157
Blue Collar	59,649	58,457
Clerical	34,232	33,760
Home Maker	12,613	10,112
Student	6,318	5,504

Avg. Income

TOP N
8

Income-Car worth

Bluebook
1500 to 65970

Car Claim Insurance

Income-Education

Education

Education	Avg. Income
<High School	25,869
Bachelors	65,590
High School	39,100
Masters	82,923
PhD	118,010

Income-Education-Gender

Education / Gender

Education	Gender	Avg. Income
<High School	F	23,729
<High School	M	28,474
Bachelors	F	61,382
Bachelors	M	70,538
High School	F	36,479
High School	M	42,472
Masters	F	79,510
Masters	M	87,454
PhD	F	114,779
PhD	M	123,062

Car Claim Insurance

PhD has the highest average income, followed by Masters and Bachelors. Action filter is set on education based average income, wherein it shows gender based average income based on the education.
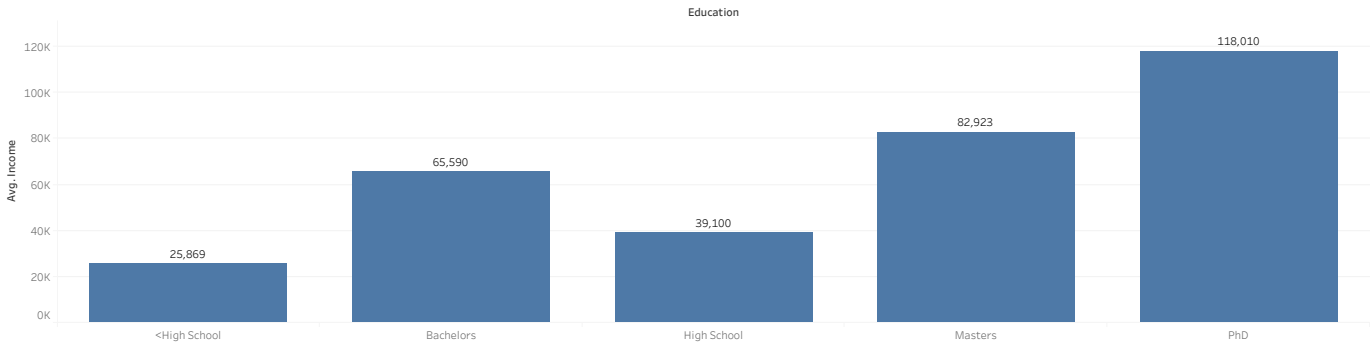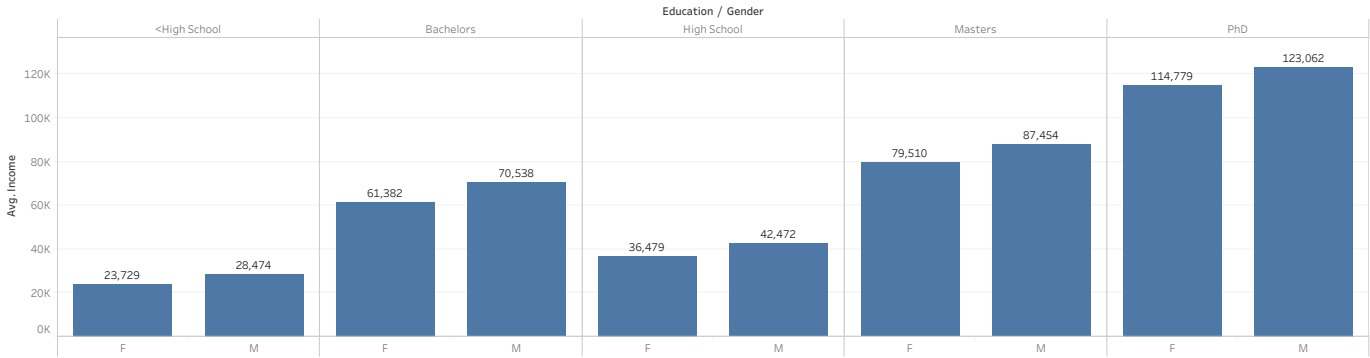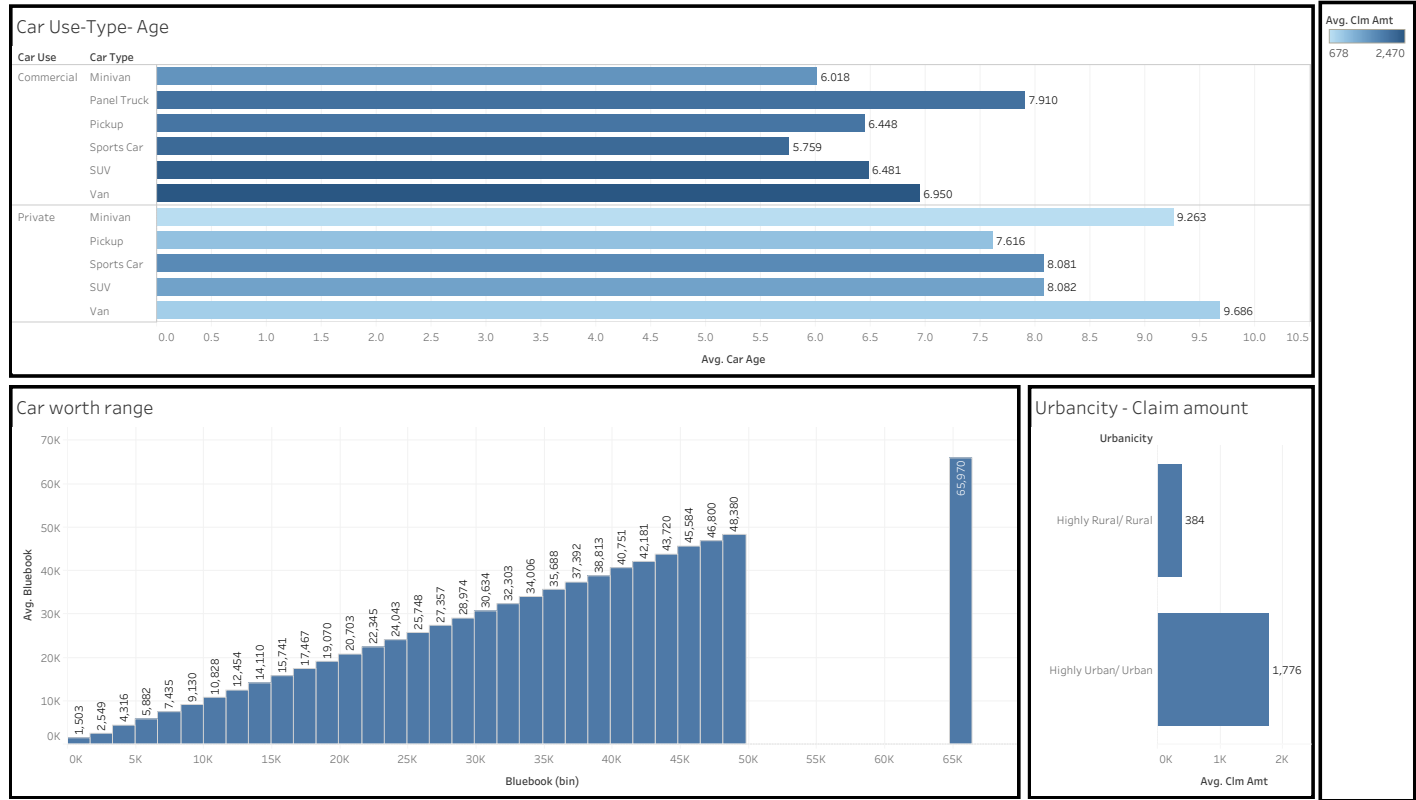
Car worth ranges from 1,500 to 65,970. Majority customers drive their cars primarily in urban areas.

Highest amount claimed is 85,524 by the customer with ID 281417916. Among customers who have claimed larger amount, Panel truck has average car age of 10 years. Calculation field is set based on the amount claimed i.e., < 25000 as "Small amount"; >25000 AND <50000 as "Medium amount"; >50000 as "Large amount".

Car Use-Type- Age

Car Use	Car Type	Avg. Car Age
Commercial	Minivan	6.018
	Panel Truck	7.910
	Pickup	6.448
	Sports Car	5.759
	SUV	6.481
	Van	6.950
Private	Minivan	9.263
	Pickup	7.616
	Sports Car	8.081
	SUV	8.082
	Van	9.686

Avg. Clm Amt: 678 — 2,470

Car worth range

Bluebook (bin) / Avg. Bluebook:
1,503 · 2,549 · 4,316 · 5,882 · 7,435 · 9,130 · 10,828 · 12,454 · 14,110 · 15,741 · 17,467 · 19,070 · 20,703 · 22,345 · 24,043 · 25,748 · 27,357 · 28,974 · 30,634 · 32,303 · 34,006 · 35,688 · 37,392 · 38,813 · 40,751 · 42,181 · 43,720 · 45,584 · 46,800 · 48,380 · 65,970

Urbancity - Claim amount

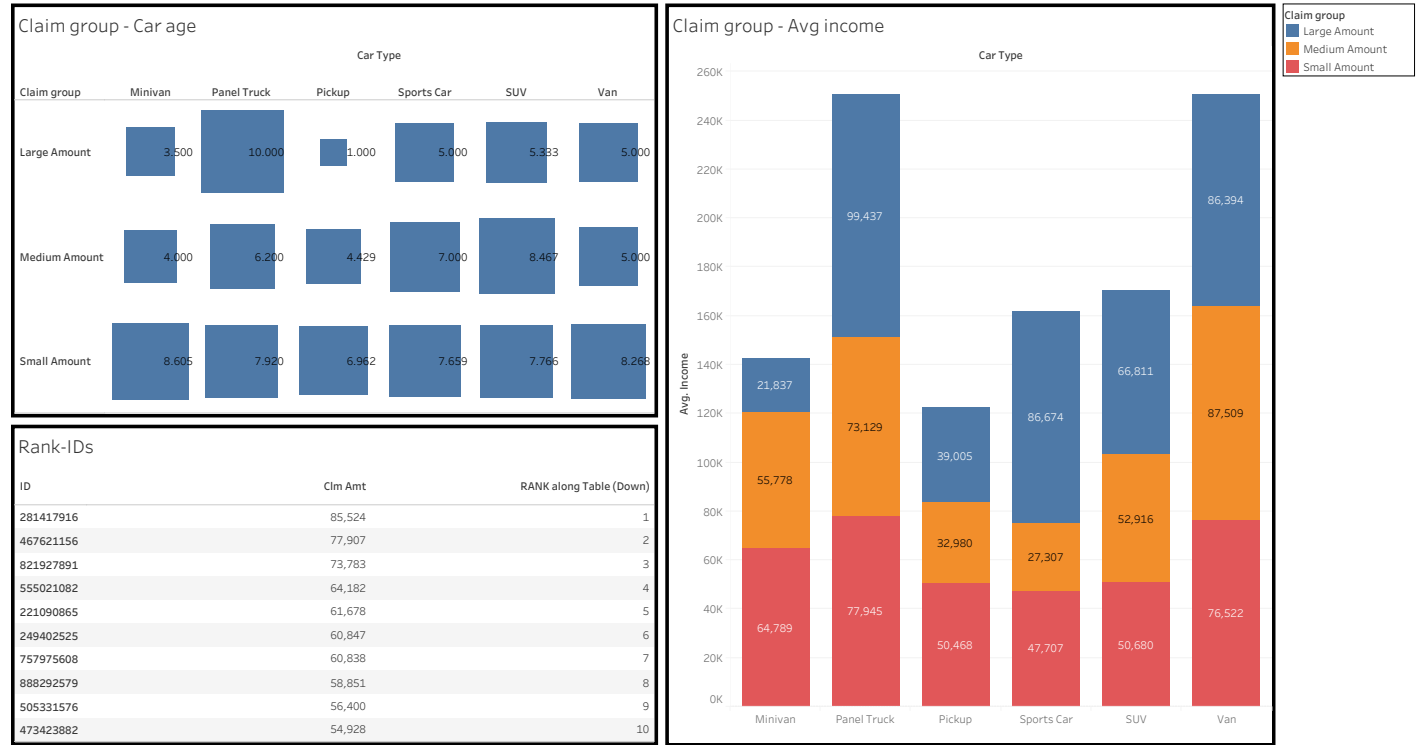| Urbanicity	Avg. Clm Amt
Highly Rural/ Rural	384
Highly Urban/ Urban	1,776

Car Claim Insurance

Car worth ranges from 1,500 to 65,970. Majority customers drive their cars primarily in urban areas.

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We can observe few customers who have made more than 2 claims in past 5 years. There are also few who made 5 claims in past 5 years. Company needs to take care with these kind of customers as it affects the performance.

Claim amount distributions

Claim group - Car age

Car Type

Claim group	Minivan	Panel Truck	Pickup	Sports Car	SUV	Van
Large Amount	3.500	10.000	1.000	5.000	5.333	5.000
Medium Amount	4.000	6.200	4.429	7.000	8.467	5.000
Small Amount	8.605	7.920	6.962	7.659	7.766	8.268

Claim group - Avg income

Car Type

Claim group
- Large Amount (blue)
- Medium Amount (orange)
- Small Amount (red)

Rank-IDs

ID	Clm Amt	RANK along Table (Down)
281417916	85,524	1
467621156	77,907	2
821927891	73,783	3
555021082	64,182	4
221090865	61,678	5
249402525	60,847	6
757975608	60,838	7
888292579	58,851	8
505331576	56,400	9
473423882	54,928	10

Car Claim Insurance

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Summary and Recommendations

Birth date -Claim freq

Year of Birth	Clm Freq (bin)			
	2.0	3.0	4.0	5.0
1930		1		
1931	1			
1932	2		1	
1933	2	2	1	
1934	4	2	1	
1935	6	2		
1936	10	5		
1937	8	11	3	
1938	11	9	2	
1939	15	4	2	
1940	10	10		
1941	18	8	5	
1942	23	12	4	
1943	26	15	2	
1944	28	18	3	
1945	17	16	4	
1946	25	19	10	
1947	22	21	5	
1948	30	24	9	
1949	39	33	8	
1950	35	19	5	
1951	48	42	5	
1952	56	16	7	
1953	41	38	6	
1954	44	31	6	
1955	42	23	7	
1956	33	28	9	
1957	47	27	5	
1958	46	28	6	
1959	52	27	9	
1960	42	26	6	
1961	37	28	4	
1962	29	26	6	
1963	40	30	4	
1964	37	17	5	
1965	21	20	3	
1966	29	19	5	
1967	16	10	1	
1968	15	8		

Clm Freq (bin)
- ☐ 0.0
- ☐ 1.0
- ☑ 2.0
- ☑ 3.0
- ☑ 4.0
- ☑ 5.0

Car Claim Insurance

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We can observe few customers who have made more than 2 claims in past 5 years. There are also few who made 5 claims in past 5 years. Company needs to take care with these kind of customers as it affects the performance.

Summary and Recommendations

Summary and Recommendations

SUMMARY:

1. Majority of the customers are Female.
2. Claim frequency is more among the married females.
3. Average travel time of Home maker is highest among the other groups.
4. Among 7647 customers, the highest claimed amount is 85,524.
5. Average income of doctor is the highest, followed by Managers and Lawyers among both males and females.
6. Ph.D graduates earn an average income of 118,010 which is highest, followed by the customers with Masters degree with 82,923.
7. About 6034 customers drive their cars primarily in urban areas.

RECOMMENDATIONS:

1. Company can increase premium or reduce coverage on the car types based on the claim frequency.
2. Premiums can also be set based on age of the driver, usage of car and the average travel time.
3. Company can introduce better plans (with higher premiums) for the high-income customers, as these customers prefer better service and car safety.
4. To decrease the premiums on rural areas in order to attract new customers.
5. Company can increase the premiums by 35% to 50% on bumper-to-bumper covers for cars with more than 2 claims. This helps in making customers to choose other covers such as collision or comprehensive covers.
6. Company can also introduce group policies or offer discounts for the married couples.

CONCLUSION:

Business should focus on introducing Car insurance online in order to stay competitive in the market, as there are many companies who provide online services, with no paperwork etc.