



Online Cars Sales Marketplace

Team Passiflora

What is our dataset? What are we trying to answer?

- Online Car Marketplace! I.e. like Craigslist, Facebook Marketplace.
- Columns of car information (year, manufacturer, drive, mileage, value rating)
- Indexed by each individual car listing.



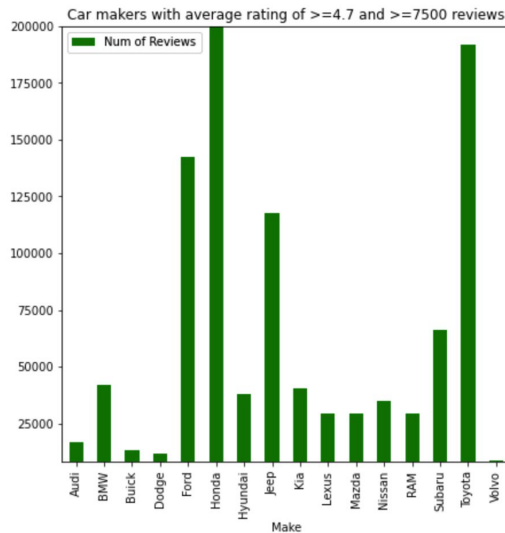


Our Five Questions

- (Most Popular Cars)
- (Difference in car makes for private sellers and dealers)
- (Where are the most used/new cars)
- (Is it better to buy from private seller or dealer)
- (Does Price Vary by Region, what region is best for buying or selling, etc?)
- (Which model is the most economic, combination of : Max MPG, affordability, reliability)

What is the most popular car?

- Review based on number of total reviews for car, and rating.
- Review = Purchase!
- Most popular manufacturers:
 - Ford
 - Honda
 - Toyota



What is the most popular car? Continued

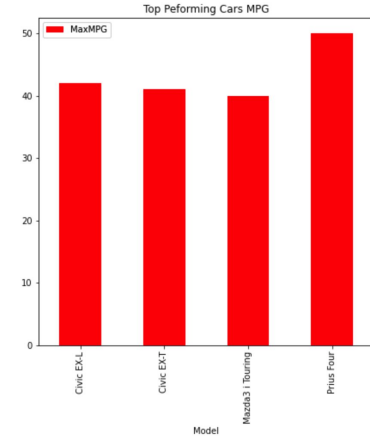
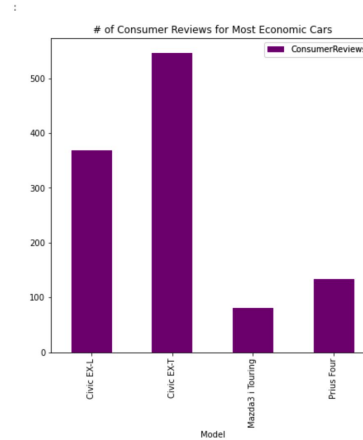
- The three most popular car models based on average review and high number of reviews are the

- 2017 Toyota Camry XLE
- 2018 Ford F150 XL
- 2018 Honda Civic XE



Which cars have the highest consumer-ratings?

- Filtered rows for cars with at least 4.75 in Performance, Value, and Reliability Ratings.
- Minimum 40 MPG
- Minimum 50 reviews
- 2018 Honda Civic EX-T: Highest Consumer Ratings, Average 546 Reviews, 4.8 Performance, 4.8 Economic Rating, 4.8 Reliability Rating, and 41 MPG.





Difference Between Private Sellers and Dealers

In the data set there are 40 listings for private sellers and 9,334 listings for dealers.

Top car makes for Dealers

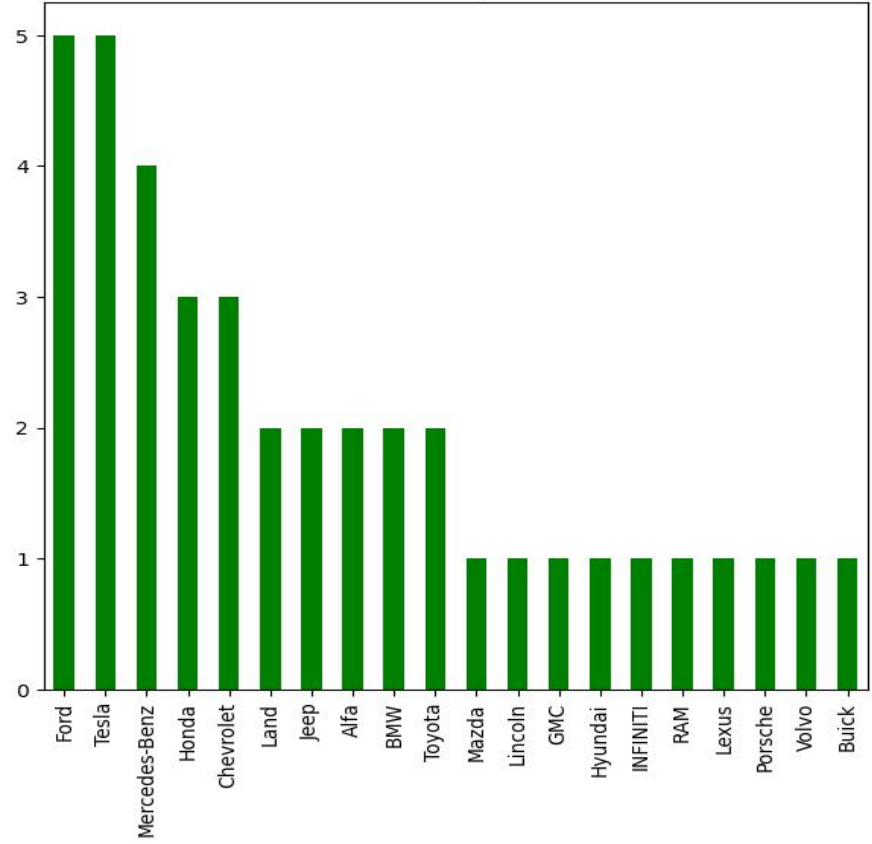
- BMW **941**
- Mercedes-Benz **806**
- Toyota **795**

Top car makes for Private Sellers

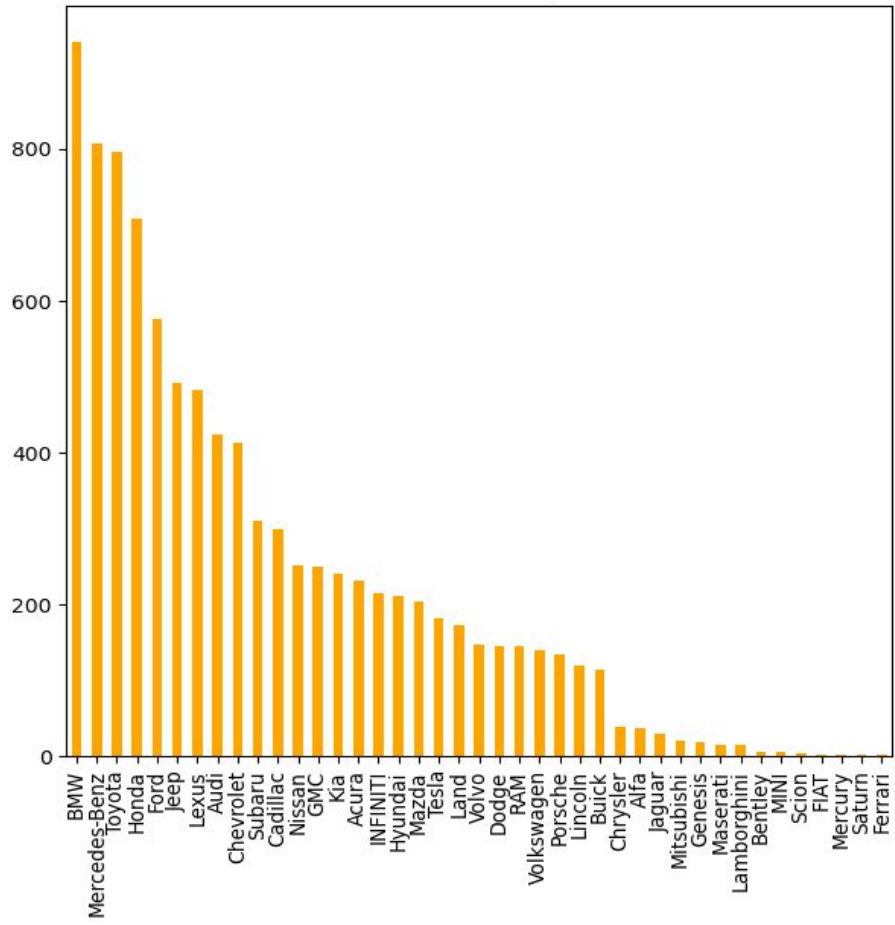
- Ford **5**
- Tesla **5**
- Mercedes-Benz **4**

Popular Makes by sellers

Make of cars sold by Private Sellers

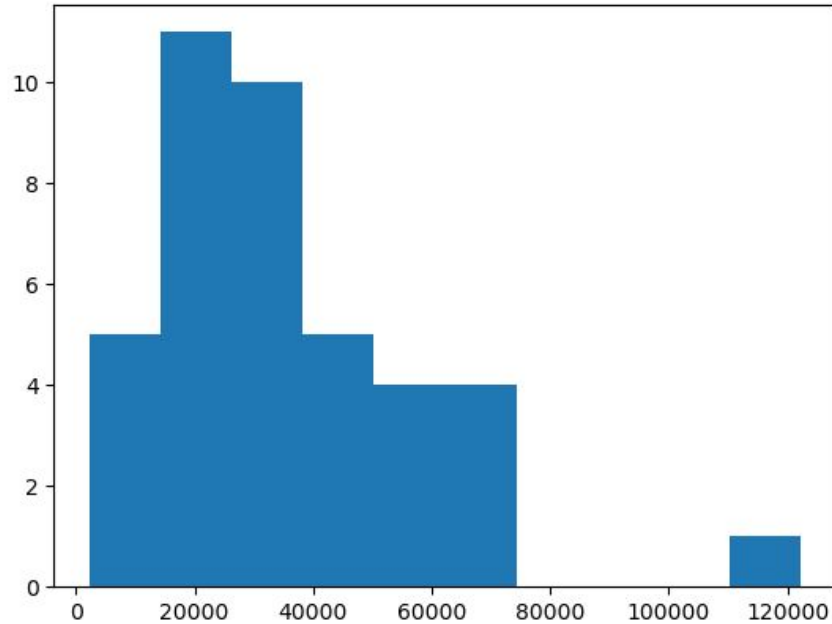


Make of cars sold by Dealers





Price distribution



Most Expensive car by seller



Private Sellers Most expensive car is TESLA 2020 Model X

\$122,222

	Price
count	40.000000
mean	36515.075000
std	23225.065302
min	2300.000000
25%	21998.750000
50%	30150.000000
75%	47375.000000
max	122222.000000

Dealers Most expensive car is
Mercedes-Benz 2020 AMG G 63
Base
\$449,996

	Price
count	9334.000000
mean	39848.573816
std	20783.697476
min	3995.000000
25%	28995.000000
50%	35999.500000
75%	45996.000000
max	449996.000000

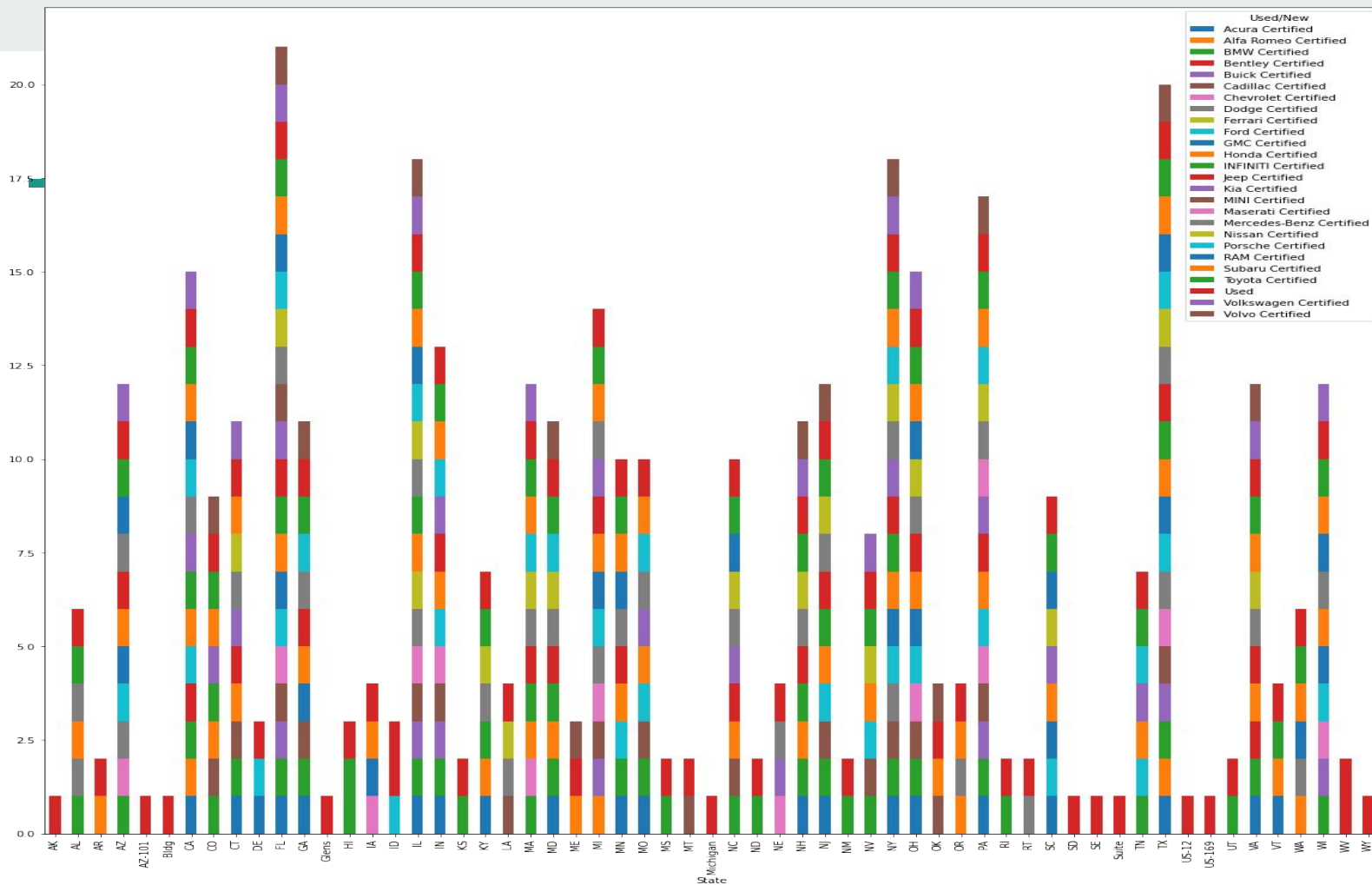


Where are the most used/new cars?

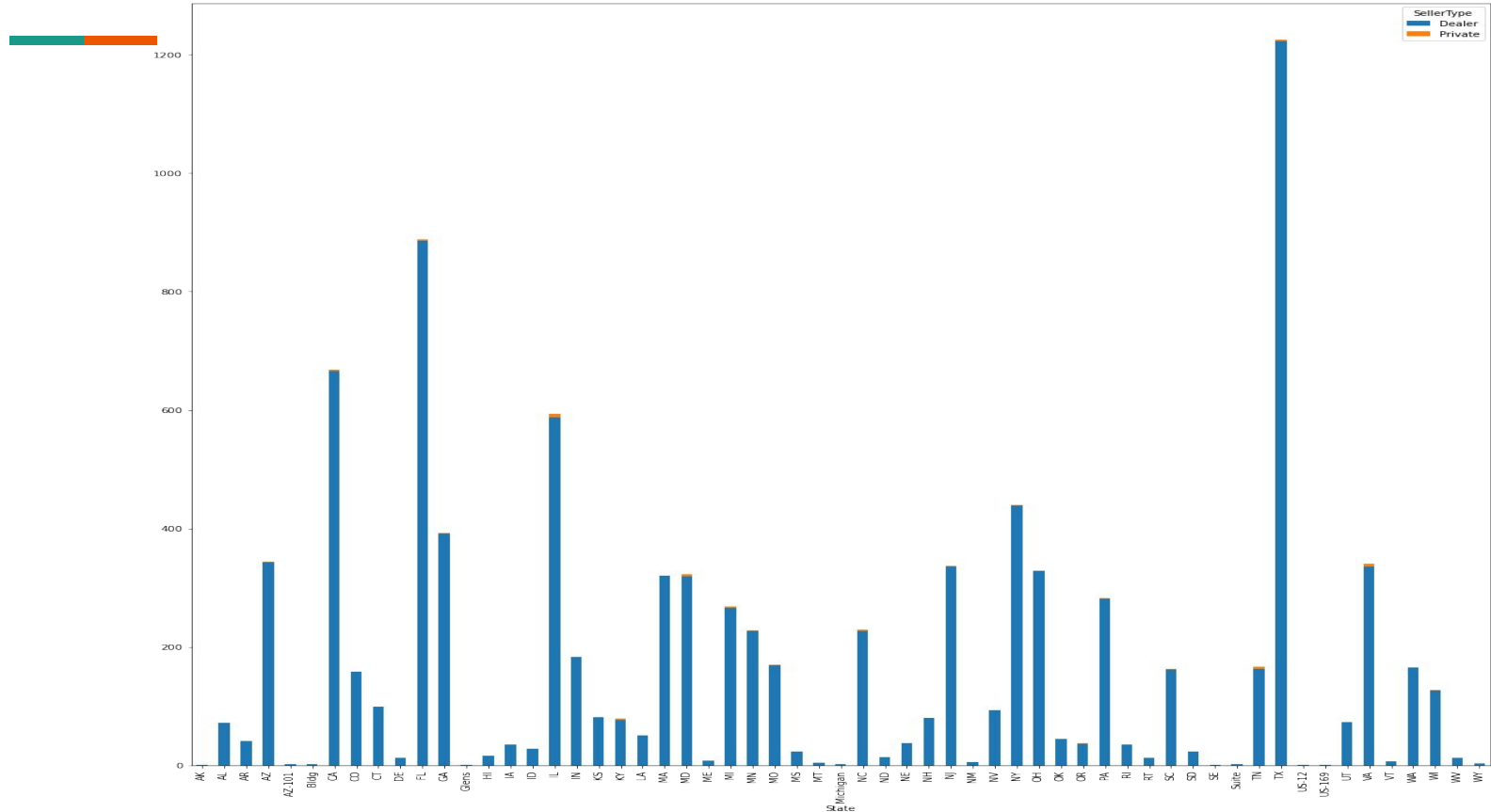
The results show that there are more used cars(7900) compared to the new ones(1479)

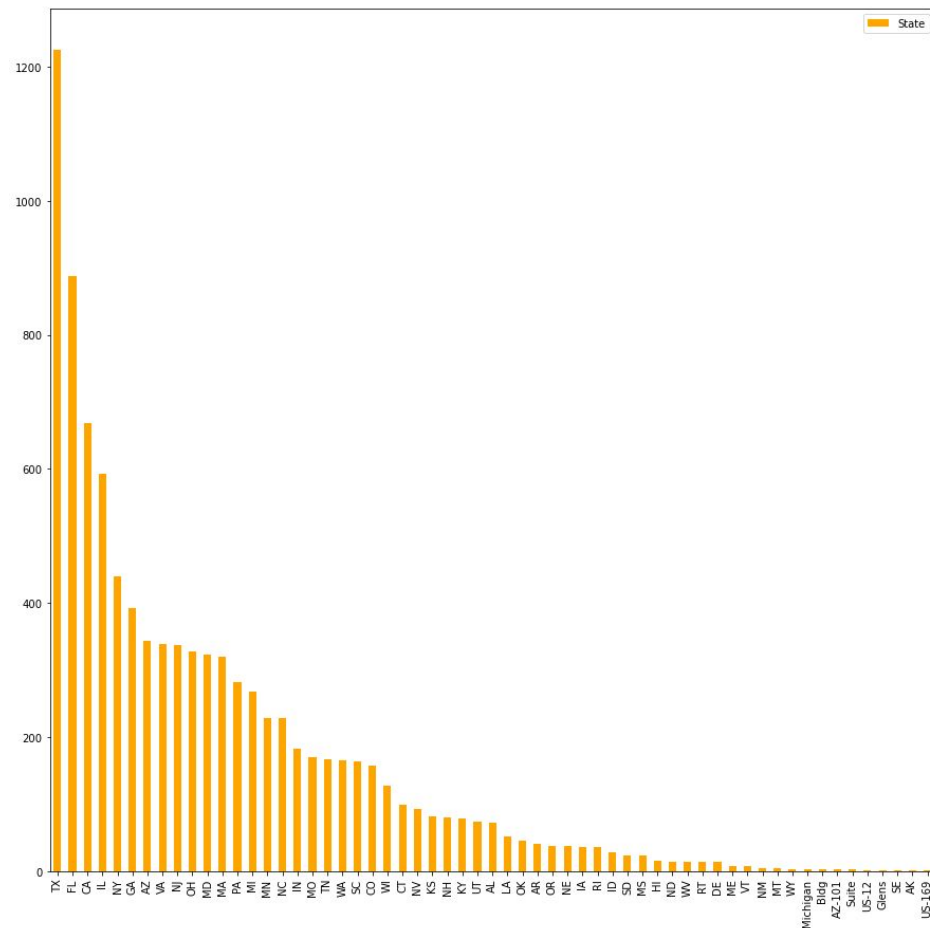
- The state with the highest count of used cars is **TX** with a count of **1069** used cars
- The state with the most new cars is **FL** with a count of **157** cars

Used	7900
BMW Certified	247
Mercedes-Benz Certified	223
Honda Certified	208
Toyota Certified	153
Cadillac Certified	105
Ford Certified	71
Subaru Certified	58
Jeep Certified	55
Nissan Certified	50
Acura Certified	47
Chevrolet Certified	40
INFINITI Certified	34
Kia Certified	34
Volvo Certified	33
Porsche Certified	25
RAM Certified	24
Buick Certified	20
Volkswagen Certified	17
GMC Certified	13
Dodge Certified	10
Alfa Romeo Certified	7
Bentley Certified	2
MINI Certified	1
Ferrari Certified	1
Maserati Certified	1



Is it better to buy from private seller or dealer? Where are dealer and private seller?





Texas with 1225, Florida with 888, California with 668, Illinois with 593 and New York with 439.

These five states with the most listing.

Zip Code 76051, 75093 and 75034 are located in the state of Texas.

Zipcode	
76051	69
75093	65
30096	63
29607	48
75034	46
...	...
14224	1
23452	1
07940	1
96021	1
06092	1