

The Ferrari 488: Paying for the Privilege to Lose Money, One Red Mile at a Time

Akbar Pathan



Image A: A picture of the car in question: the Ferrari 488 GTB in Rosso Corsa

Abstract

The late Enzo Ferrari famously said, “If you ask a child to draw a car, they’ll draw a red one.” When it comes to the Ferrari 488, many enthusiasts believe it's among the finest creations of the 21st century. But, as any would-be buyer of a used supercar will ask: How do you pair passion with financial sensibility? Is the thrill worth the depreciation hit? And does the red paint, like in children’s drawings, still reign supreme in value? This project dives into the world of used Ferrari 488s, exploring how mileage, color, and depreciation affect the price tag of these turbocharged marvels.

Using data visualization techniques, we analyzed the performance of the Ferrari 488 in the North American used market, specifically from official Ferrari dealerships. My findings reveal that while mileage is the primary culprit behind value decline, the Ferrari 488 resists depreciation far better than its counterparts with similar performance stats and lower MSRPs. Interestingly, the car’s color—and no, red isn’t king—also plays a role in determining the resale price.

In conclusion, the world of supercar shopping requires a unique approach, one where traditional car-buying wisdom may only partially apply. By grasping the nuances of Ferrari depreciation, mileage, and even color preferences, buyers can confidently navigate the market and maybe, just maybe, drive off with their dream car while feeling a little less guilty about the price they paid.

Introduction

In 2022, the used car market went into overdrive as supply chain issues turned even the most mundane crossovers into high-ticket items. But what about the ultra-luxury supercars like the Ferrari 488? Did they simply follow suit, or did their prices navigate these uncharted roads with more finesse? This project looks at the Ferrari 488's resilience in a market where demand skyrocketed across all price brackets. By analyzing current certified dealership listings in North America, we dive into how the car's mileage and paint color impact its value. The Ferrari 488 might not get as much social media 'hype' as its rivals, Porsche or McLaren, but does that make it immune to market fluctuations? In this study, we uncover the secrets behind the 488's depreciation, dissect current market trends, and provide insights for buyers wondering if they're paying for the prancing horse, the perfect shade of red, or that screaming turbocharged V8.

Summary

The Ferrari 488 holds a special place in my heart, being the first Ferrari I've ever driven and a personal favorite for its embodiment of Ferrari's spirit. As a prospective buyer, I sought to merge passion with practicality, aiming to make an informed decision in the near future. To do so, I developed a Python script to scrape data from the official Ferrari of North America website. This allowed me to collect all current listings for the Ferrari 488 GTB (base model), including variables such as price, exterior color, mileage, year, location, and interior color. Data cleaning was a crucial step to ensure accuracy and consistency. The script filtered out incomplete entries, such as missing values and duplicate listings, to refine the dataset. Afterward, the data was normalized and standardized, ensuring uniformity across variables like mileage and price. This approach not only polished the dataset but allowed for clearer visualizations and analysis, making the final results more insightful for both prospective buyers and data enthusiasts alike.

To visualize the data effectively, I utilized Tableau Desktop for its powerful data visualization capabilities, combined with Python scripting to manage the scraping and data processing. The most effective graph types for this analysis included a bubble chart, a histogram, and a circular packed bubble chart. The bubble chart was particularly useful for comparing mileage, price, and color in one intuitive view, allowing the viewer to see how these variables interact. The histogram offered a clear distribution of prices, revealing the most common price ranges. Finally, the circular packed bubble chart provided an engaging way to compare price vs. mileage without overwhelming the viewer.

These graphs were selected because they provide a balance of clarity, depth, and simplicity. The bubble chart was ideal for displaying three variables simultaneously, making it easy to see how mileage affects price and how color plays a role in determining value. The histogram was effective for showing the spread of prices across a range, while the circular packed bubble chart compactly visualized the relationship between price and mileage. However, each graph comes with limitations. For example, the bubble chart can become cluttered when there are too many data points, and the histogram doesn't provide context on other influencing factors such as mileage or color. The packed bubble chart is difficult to analyze because the size difference of each bubble is not obvious to the reader, which ironically shows how strong the Ferrari 488 holds its value.

An alternative graph type I considered was a 3D scatter plot, which could have added more dimension to the analysis by visualizing all three variables in a 3D space. However, it might have compromised readability on a 2D surface, so I opted for the bubble chart instead. Another option was a box plot to show price distribution and highlight outliers more effectively, though it would have needed the intuitive visual appeal of the histogram. I discovered that the Ferrari 488 GTB, the base model of this iconic supercar, defies the typical depreciation trends of most high-performance vehicles. Contrary to popular belief, the Ferrari 488 holds its value remarkably well even as it ages. While mileage naturally impacts its price, the depreciation rate is significantly slower than other sports cars in its class, like the Mercedes-AMG GT, Chevrolet C8 Corvette, or Acura NSX. And then there's the question of color. While many Ferrari enthusiasts gravitate towards the iconic Rosso Corsa (Ferrari Red), its ubiquity ironically diminishes its rarity. Enter Bianco Avus (Ferrari White), a more coveted option among collectors and buyers due to its relative scarcity. In the end, it's clear that, for the Ferrari 488, value is dictated not just by miles on the odometer but by the perfect blend of performance, uniqueness, and aesthetic allure.

The data used for this analysis was scraped from the official Ferrari pre-owned website for North America (<https://preowned.ferrari.com/en-US/r/north-america/used-ferrari/usa/488-gtb/rfcm?z=price-desc>) using a Python script, ensuring that the dataset reflected current listings from certified dealerships, making the analysis not only relevant but accurate for today's market conditions.

```

1  import pandas as pd
2  from bs4 import BeautifulSoup
3
4  # Load the HTML file
5  with open('used488s.htm', 'r', encoding='utf-8') as file:
6      soup = BeautifulSoup(file, 'html.parser')
7
8  # Create lists to hold extracted data
9  years = []
10 prices = []
11 mileages = []
12 exterior_colors = []
13 interior_colors = []
14 locations = []
15
16 # Parse the listings
17 listings = soup.find_all('div', class_='VehicleCard__content__aWk634tv')
18
19 for listing in listings:
20     # Extract year and mileage
21     year_element = listing.find('div', class_='VehicleCard__year__31akchrt')
22     year = year_element.get_text(strip=True) if year_element else 'N/A'
23
24     mileage_element = listing.find('div', class_='VehicleCard__odometer__2Aa-D18j')
25     mileage = mileage_element.get_text(strip=True) if mileage_element else 'N/A'
26

```

Image B: Screenshot of code used to pull data from Ferrari's official website

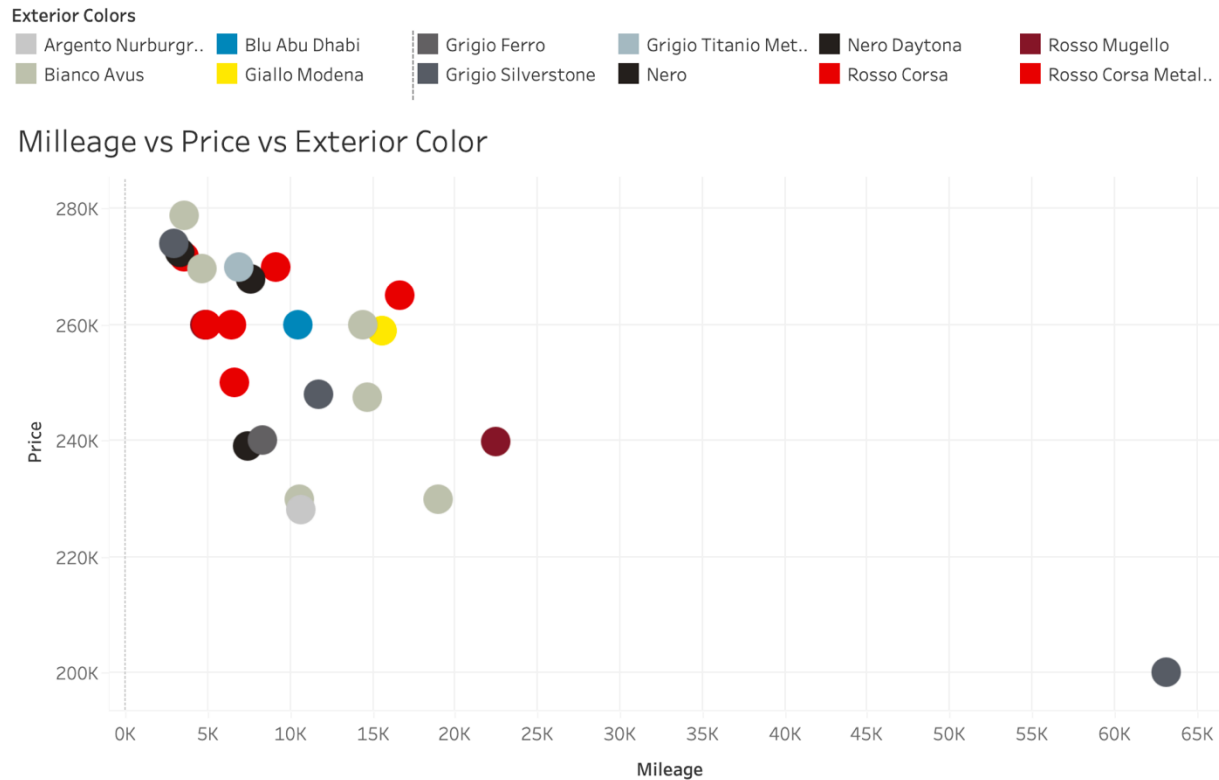
```

1  Year,Price,Mileage,Exterior Color,Interior Color,Location
2  2019,278900,3530,Bianco Avus,Cuoio,Ferrari of Fort Lauderdale
3  2016,274000,2900,Grigio Silverstone,Bordeaux,Ferrari of Atlanta
4  2018,272488,3326,Nero,Rosso Ferrari,Foreign Cars Italia
5  2018,271573,3548,Rosso Corsa,Nero,Ferrari of Central New Jersey
6  2017,269990,9103,Rosso Corsa Metallizzato,Nero,Ferrari of Houston
7  2019,269900,6861,Grigio Titanio Metall,Nero,Ferrari Lake Forest
8  2019,269500,4643,Bianco Avus,Nero,Ferrari of San Francisco
9  2017,267895,7621,Nero,Nero,Ferrari Central Florida
10 2018,265000,16679,Rosso Corsa,Nero,Ferrari of San Francisco
11 2017,259999,10451,Blu Abu Dhabi,Nero,Continental Autosports
12 2016,259990,6452,Rosso Corsa,Cuoio,Ferrari of Houston
13 2017,259990,4846,Rosso Mugello,Beige Tradizione,Ferrari of Denver
14 2018,259900,4908,Rosso Corsa,Beige Tradizione,Ferrari Lake Forest
15 2017,259900,14443,Bianco Avus,Rosso Ferrari,Boardwalk Ferrari
16 2019,259000,15565,Giallo Modena,Nero,Ferrari of San Francisco
17 2016,249995,6573,Rosso Corsa Metallizzato,Nero,Prancing Horse of Nashville
18 2017,247995,11730,Grigio Silverstone,Nero,Ron Tonkin Gran Turismo
19 2018,247500,14674,Bianco Avus,Rosso Ferrari,Ferrari of Central New Jersey
20 2016,240000,8288,Grigio Ferro,Charcoal,Ferrari of Austin
21 2016,239900,22453,Rosso Mugello,Nero,Cauley Ferrari of Detroit
22 2016,238995,7428,Nero Daytona,Rosso Ferrari,Ferrari of Palm Beach
23 2016,229995,10506,Bianco Avus,Nero,Ferrari Philadelphia
24 2017,229895,19000,Bianco Avus,Rosso Ferrari,Ferrari Central Florida
25 2018,228000,10644,Argento Nurburgring,Nero,Ferrari Silicon Valley
26 2018,199995,63186,Grigio Silverstone,Charcoal,Ron Tonkin Gran Turismo
27

```

Image C: Screenshot of CSV file used to store Pre-Owned Ferrari 488s currently listed

Figure 1: Mileage vs. Price vs. Exterior Color (Bubble Chart)



This bubble chart visualizes three key variables—mileage, price, and exterior color—for Ferrari 488 GTB models. The X-axis represents mileage (in miles), while the Y-axis shows the price (in USD). The size and color of the bubbles correspond to the exterior color of each Ferrari 488 GTB, as shown in the legend.

Mileage Impact on Price:

- i) The trend here illustrates the expected negative correlation between mileage and price. As the mileage increases, the price tends to decrease, which aligns with typical depreciation behavior in the used car market.
- ii) Notably, cars with mileage below 10,000 miles tend to cluster at higher price points, predominantly around the \$260K—\$280K range. This suggests that Ferrari 488 GTBs with relatively low mileage retain higher resale values, supporting the insight that mileage is a primary factor in determining depreciation.

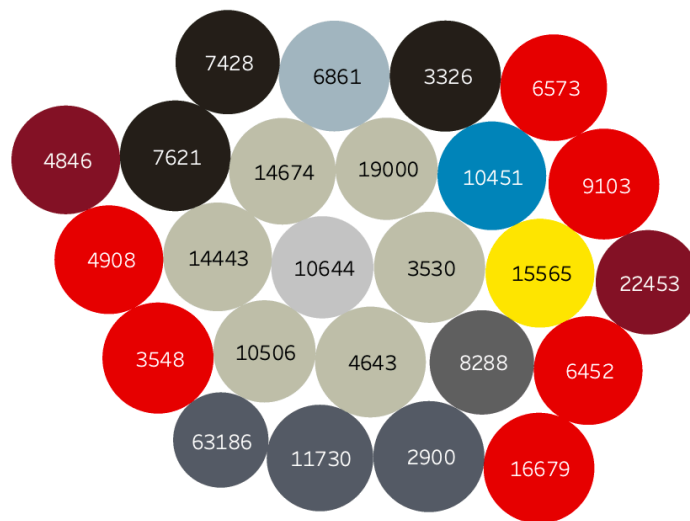
Color Impact on Price:

- i) Rosso Corsa (Ferrari Red), the iconic color, is well-represented across the price spectrum but is often clustered at higher prices, despite varying mileage. This suggests that, while common, the classic Ferrari red still commands a premium due to its historical and symbolic value.

- ii) Bianco Avus (Ferrari White), a rarer color, appears in the mid-price range, showing a potential for higher desirability due to its relative scarcity, despite having similar mileage to red cars.
- iii) The presence of Blu Abu Dhabi and Giallo Modena (Ferrari Yellow) in lower frequencies highlights that more unique colors (especially non-traditional ones) maintain competitive pricing, especially at lower mileages, perhaps due to their rarity.

Figure 2: Price vs. Mileage (Circular Packed Bubble Chart)

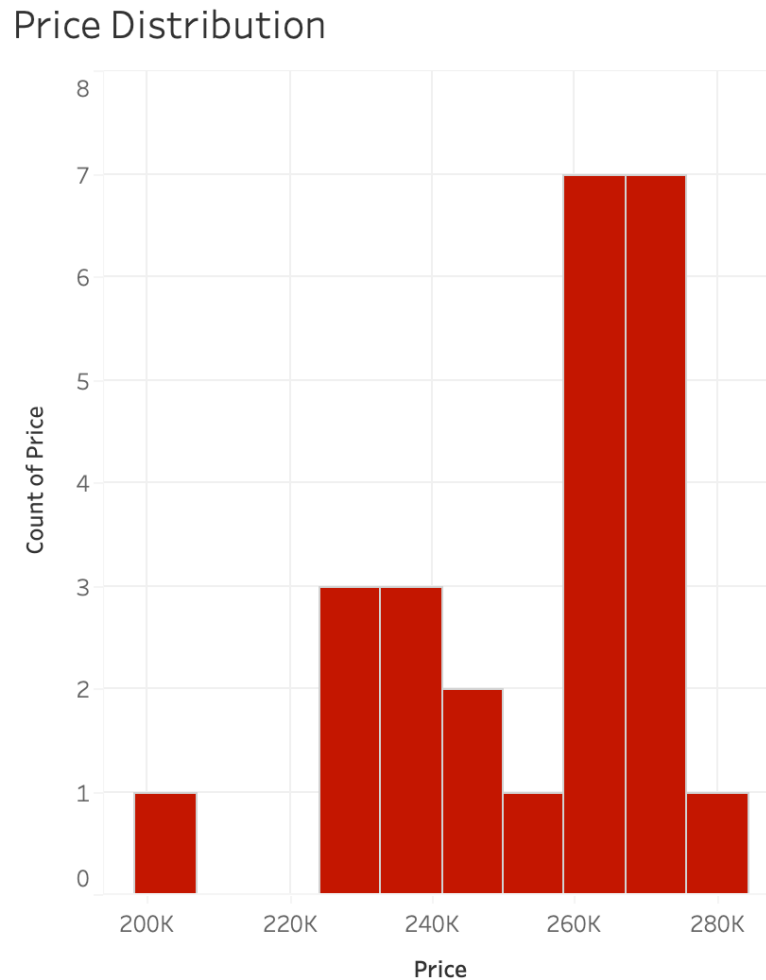
Price vs. Mileage



This circular packed bubble chart visually represents the relationship between mileage and price for Ferrari 488 models, with each bubble's size corresponding to its mileage. The goal is to see how these cars cluster regarding mileage and how that might relate to price trends, providing insight into depreciation patterns.

Mileage and Price Clusters:

- i) The smaller bubbles represent lower-mileage cars, while larger bubbles correspond to higher-mileage vehicles. Most Ferrari 488s have a mileage between 3,000 and 20,000 miles, with a few outliers exceeding 60,000 miles. This chart illustrates that most buyers or sellers are dealing with relatively low-mileage vehicles, reinforcing that lower mileage is highly desirable in this supercar market.

Figure 3: Price Distribution (Histogram)

This histogram visualizes the distribution of prices for Ferrari 488 GTB models, illustrating how many cars fall within specific price brackets. The X-axis represents price ranges (from \$200K to \$280K), while the Y-axis shows the count of cars within each price bracket.

Price Clustering:

- i) Most Ferrari 488s in the dataset cluster between \$240K and \$260K, with the highest concentration—7 cars—at the \$260K mark. This suggests that the majority of listings in the market hover around this price point, reaffirming the car's ability to retain substantial value. In contrast, only one car is priced at \$200K, likely reflecting a high-mileage outlier or perhaps a less desirable exterior color.

High-End Listings:

- i) At the upper end of the spectrum, a few Ferraris are priced at \$280K, indicating that some sellers are still commanding premium prices despite mileage or age. These high-price listings could correspond to cars with low mileage or rare

exterior colors, reinforcing the idea that unique features (like color or customization) can help retain higher resale values.

Depreciation Insights:

- i) What's notable here is the lack of dramatic price drop-offs. Even in a market known for rapid depreciation, the Ferrari 488 shows a consistent retention of value, with most models priced comfortably above \$240K. This supports the broader narrative in the project—that the 488 depreciates less aggressively compared to other high-performance sports cars, a nice bit of reassurance for prospective buyers.

Sources

- 1) Evans, Scott. "Ferrari 488 GTB Is the 2017 Motor Trend Best Driver's Car." MotorTrend, MotorTrend, 24 Sept. 2019, www.motortrend.com/news/ferrari-488-gtb-2017-best-drivers-car/.
- 2) Mills, James. "Comparing the Depreciation of Modern Supercars Shows Ferrari Sets the Pace." Hagerty UK, 19 May 2021, www.hagerty.co.uk/articles/market-analysis/comparing-the-depreciation-of-modern-supercars-shows-ferrari-sets-the-pace/.
- 3) "Used 488 GTB for Sale in USA." 488 GTB for Sale near You in USA | Ferrari Approved, preowned.ferrari.com/en-US/r/north-america/used-ferrari/usa/488-gtb/rfcm?z=price-desc. Accessed 14 Sept. 2024.