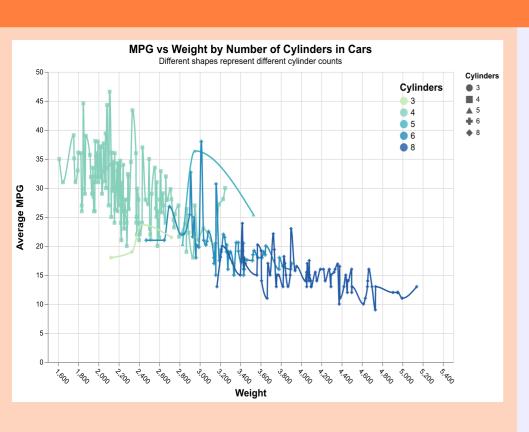


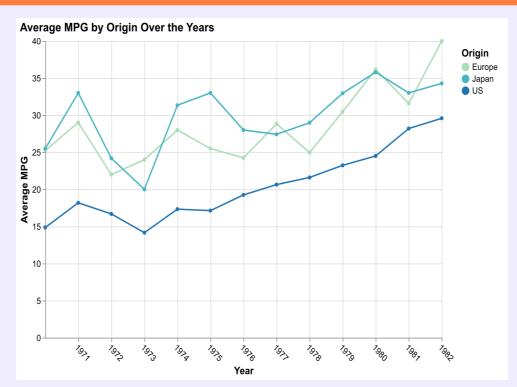
Introduction

This poster explores how engine size, weight, region, and acceleration affect fuel efficiency. We analyze variations in MPG with cylinders and weight, and MPG trends by origin over years. The study also examines the correlation between MPG and acceleration across car models.

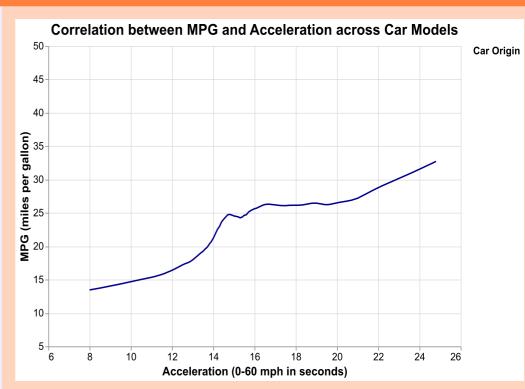
How Do Weight, Cylinders, and Region Shape Car Fuel Efficiency Trends?



MPG decreases as car weight and cylinder count increase; lighter, fewer-cylinder cars have higher MPG.



Japan leads in MPG until 1981; Europe rises steadily, peaking at 40 MPG in 1982; US lags but improves, narrowing the gap.



MPG increases as acceleration time rises; slower accelerating cars generally have better fuel efficiency.

Conclusion

This study shows MPG drops as car weight and cylinder count rise. Japan dominated fuel efficiency until 1981, with Europe improving steadily and the US narrowing the gap. Cars with slower acceleration times tend to have better fuel efficiency. Engine size, weight, region, and acceleration significantly influence MPG trends over time. Lighter, fewer-cylinder cars consistently perform better in fuel economy. Regional advancements reflect technological and regulatory changes. Overall, these factors collectively shape car fuel efficiency patterns across years and regions.