

The four charts were built in Microsoft Excel using CSV exports of each SQL query's result set. The CSVs were opened in Excel 365, where: (1) the CarComplaints total-complaints CSV was plotted as a sorted horizontal bar chart and converted to a Pareto by adding a cumulative-percentage line; (2) the CarComplaints model-share CSV was visualized with a pie chart; (3) the NHTSA recall-counts CSV became a bar chart showing the top vehicles; and (4) the NHTSA component-share CSV, containing Model, Component, and component_count, was plotted as a Treemap, letting Excel automatically nest components within each model block. Each chart was titled, data-labeled for readability, and placed on its own worksheet. The workbook was saved as Visualizations.xlsx, then exported via File → Export → Create PDF/XPS to produce Visualizations.pdf. Both the Excel file, the helper Python export script (export_csv.py), and the PDF were committed to the repository under reports/.

Visualizations Below:

CarComplaints



