Data sources and methodology

mcp.vin | Evidence, coverage and appropriate use

Primary source	Implemented use	Interpretation
NHTSA vPIC [1]	VIN decoding and submitted vehicle attributes	US-oriented manufacturer records; completeness varies by vehicle.
EPA / FuelEconomy.gov [2]	Configurations, emissions, energy assumptions and owner MPG	Test configuration data. Owner reports are voluntary; sample size and method are shown.
Transport Canada via vPIC [1]	Dimensions and curb mass	Canadian model variants. Select the appropriate configuration; not an exact-VIN match.
NHTSA ODI archives [3]	Manufacturer communications and defect investigations	Dated local indexes. Report variants and provenance retained; not a vehicle-level defect finding.
Federal Reserve G.19 [4]	New-car loan rate context	Manual snapshot: Aug 2026 observations, released 7 Oct 2026. Not a lender offer.

Verified implementation

102 Node tests and two index integrity tests passed. Live checks exercised REST, the JavaScript client and MCP. The interface was reviewed on desktop and at 390-pixel width. This is implementation verification, not an independent accuracy certification. Investigation index: **5,351 distinct actions** across 154,439 association rows. The manufacturer-communications index contains 5,834,958 vehicle/component associations across seven archives; that is not a count of unique bulletins.

Illustrative source check

2003 Honda Accord V6 automatic, EPA ID 18657: **22 combined EPA MPG**; **23.5 owner-reported harmonic mean MPG** from 29 submitted records, range 15-34 MPG. These measures use different methods and samples. The Honda Accord 2003 investigation query returned five distinct actions. Values reflect the 24 Oct 2026 UTC verification.

Professional use

Confirm the configuration. Model-year records do not establish exact factory equipment.
Read manufacturer coverage. Ford, GM and Tesla report VIN status; Honda reports active recalls (15 years). Nissan and Mopar supply positive open records. Toyota, Hyundai and Kia need interactive verification. GM closure is not always repair; only explicit repair dates are shown.
Review assumptions and dates. Cost results use entered assumptions; snapshots can become outdated.

Sources and verification basis

[1] vpic.nhtsa.dot.gov/api/
[2] fueleconomy.gov/feg/ws/
[3] nhtsa.gov/nhtsa-datasets-and-apis
[4] federalreserve.gov/releases/g19/20261007/
Source reference: docs/data-sources.md; verified release 1.6.0. No paid data provider is required for these research features. Hosting, maintenance and source availability remain operational considerations.