Vehicle Economics

How to Compare New vs Used on Total Cost

A used car's lower price and a new car's lower repair risk both have to be converted into the same total-cost number before "new or used" has a real answer.

"New vs used" isn't one question, it's a tradeoff between two different risks

A new car costs more upfront and depreciates fastest in its first few years, but comes with a warranty and a clean maintenance history. A used car costs less upfront and has already absorbed its steepest depreciation, but carries more uncertainty about repair needs and often a higher financing rate. Neither side is automatically right, the honest comparison depends on how those two specific vehicles' numbers actually play out over your ownership horizon, not on a general rule like "used cars are always the smarter buy."

Depreciation curves are steeper early, which changes the math by vehicle age

A new vehicle typically loses a large share of its value in the first one to three years, then depreciates more slowly after that. A used vehicle that's already past that steep early drop can hold its value more predictably for the remaining years you'd own it. This is why the same make and model can be a much better or worse "used" deal depending on exactly how old the used example is, not just whether it's used at all. New vs Used Car Calculator models each vehicle's own depreciation assumption rather than applying a generic curve to both.

The real risk in a used car is repair variance, not repair certainty

A used car doesn't necessarily cost more to maintain on average, but its range of possible outcomes is wider: it might need nothing beyond routine service, or it might need a major repair the new car's warranty would have covered. That variance is the actual thing being priced when a used car looks cheaper, not a guaranteed extra cost. New vs Used Break-Even solves exactly how much unexpected repair risk the used option could absorb before the new option becomes the better deal, turning that vague risk into a specific number.

Financing terms often differ between new and used, and that's easy to miss

Used-vehicle loans frequently carry a higher APR than new-vehicle loans, sometimes meaningfully so, which eats into a used car's price advantage in ways that aren't obvious from the sticker prices alone. A true comparison has to use each vehicle's actual financing terms, not assume the same rate applies to both. Car A vs Car B Total Cost, the general two-candidate engine behind several comparisons on this site, always asks for each candidate's own APR and term for exactly this reason.

What to actually check before deciding new or used

- Each vehicle's own depreciation assumption over your specific ownership horizon, not a shared generic rate.
- The actual financing terms each vehicle would get, since used-car APRs often run higher than new-car APRs.
- How much unexpected repair cost the used option could absorb before losing its price advantage, not just whether it might need repairs.
- Whether the "used" option is genuinely past its steepest depreciation years, or still early enough to lose value fast too.

Related calculators

New vs Used Car Calculator

Is a new or used version of this vehicle cheaper to own?

New vs Used Break-Even

How much of a used-price discount, or repair risk, would it take to flip the new-vs-used decision?

Car A vs Car B Total Cost

Which of these two cars actually costs less to own over the same horizon?