

Summary Methodology for Manheim Used Vehicle Value Index

Sample: all Manheim U.S. sales that fall into one of the 20 market classes. (i.e., excludes heavy trucks, motorcycles, etc.)

Eliminate outliers: calculate average miles and average price for each model year / make / body. For each transaction calculate price and mileage deviation. Outliers are defined as those where both price *and* mileage are outside of 2.6 standard deviations.

Calculate mean sale price and mileage by market class.

Adjust prices for mileage. The per mile adjustment is based on a simple linear regression for price and miles for each market class based on data for the current month. The mileage differential used is: current month's average mileage by market class minus average mileage for that market class over the past 24 months.

Market classes weighted to total. In original version of Manheim Index, market class averages were sales-weighted to a total based on fixed weights that represented unit volumes sold in calendar year 1998. Currently the Index is weighted based on a 24-month rolling average of past sales by market class.

Seasonal adjustment. The mix- and mileage-adjusted total is seasonally adjusted using current iteration of Census X methodology.