**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.