The NICB Vehicle Theft Study Methodology

The NICB Vehicle Theft Study (Hot Spots) contains vehicle theft rates and rankings for Metropolitan Statistical Areas (MSAs) in the United States for 2011.

What data sources were used for the report?

a) The NICB's mirror image of NCIC's Vehicle Theft file as of 04/05/2012.
b) The extracted population database from http://www.census.gov.
c) Current ZIP code list which matches ZIP codes and cities to Core Based Statistical Areas (CBSA) This data was provided by http://www.zip-codes.com.
d) Current listing of Originating Agency Identification (ORI) Numbers provided by the National Law Enforcement Telecommunication System (NLETS).

What editing was made on the data sources to create the report?

a) **NCIC File** – 2011 vehicle data was extracted using the standard representation of vehicles in the file. The dataset also included located, cleared and cancelled vehicles. Records containing the term "test" in the Vehicle Identification Number (VIN), miscellaneous, or Originating Case Agency (OCA) number were omitted.
b) **Population Database** - No specific editing was performed on the data. The 2011 report creation process used the 2011 population figures provided by the U.S. Census Bureau.
c) **ZIP Code File** - No editing was performed on the file. The file is used to match ZIP codes and cities to the CBSA's. For each ZIP code which is part of a metropolitan area this file identifies the CBSA code in which the ZIP code occurs.
d) **ORI File** - The nine character ZIP code field for each ORI is reduced to five characters. The ORI ZIP code is then matched to the ZIP code file to identify the CBSA code and county of the ORI. In instances where an exact match could not be found on the ORI file to the ORI itself, the last two characters of the ORI (terminal location) were dropped to match the ORIs on file. When a ZIP code is not provided as part of the ORI address, we match up towns/cities by address where possible to a ZIP code.

What are CBSAs - MSAs?

The United States Office of Management and Budget (OMB) defines metropolitan and micropolitan statistical areas according to published standards that are applied to Census Bureau data. The term "core based statistical area" became effective in 2000 and refers collectively to metropolitan and micropolitan statistical areas (MSAs). The 2000 standards provide that each CBSA must contain at least one urban area of 10,000 or more population. Each MSA must have at least one urbanized area of 50,000 or more inhabitants.

The MSAs are here: http://www.census.gov/population/www/metroareas/lists/2009/List4.txt.

Why are population estimates used?

The U.S. Census Bureau annually produces estimates of total resident population for each state and county. County population estimates are produced with a component of population change method, while the state population estimates are solely the sum of the county populations. The Population Estimates Program publishes total resident population estimates and demographic components of change (births, deaths, and migration) each year. These estimates are used in federal funding allocations, as denominators for vital rates and per capita time series, as survey controls and in monitoring recent demographic changes. The most current population figures can be found here http://www.census.gov/popest/data/metro/totals/2011/index.html and selecting this

file: “Annual Estimates of the Population of Metropolitan and Micropolitan Statistical Areas: April 1, 2010 to July 1, 2011 (CBSA-EST2011-01) [CSV].”

What process is used to calculate the theft rate and the overall report?

a) The ZIP code data is matched to the corresponding CBSA code.
b) This data is then used to create a table of theft records from the time period using the data from the above step to identify thefts within CBSA.
c) The resulting table contains CBSA/MSA names, number of thefts and population.
d) The calculation performed is: ((number of thefts/prior year's estimated population) *100,000) rounded out to 2 decimal places.
e) The data is then ranked from highest to lowest.

Revised 6/12