

### 3.7 Vehicle Use

Not all vehicles available to households are used in evacuations. Vehicle use is predicted well by hypothetical response data.

#### 3.7.1 Miller Model

The source of the vehicle usage rates used in the Miller Model is not included in their report. It is assumed that 69 to 71% of available vehicles will be used.

#### 3.7.2 Baker Study

Dr. Baker states that the normal range for vehicle usage is 65% to 75%. Based on behavior during Hurricane Georges, the Baker 2000 report recommended that for planning purposes, it be assumed that 70% of the vehicles available to evacuating households will be used, and 10% of those households will pull a camper, trailer, or boat or take a motor home.

#### 3.7.3 South Florida Behavioral Survey

The 2008 survey asked how many vehicles would be available to a household that could be used to evacuate, and how many vehicles would a household take if they evacuated? As can be seen from Table 17, the percent of available vehicles that would be used in an evacuation varies from a low of 72% in the Lower Keys to a high of 91% in Key West.

Table 30. Vehicle Availability and Use During an Evacuation

	n	Available vehicles	Vehicles used in evacuation	% of available vehicles used in evacuation	% of households with no vehicle
Monroe	400	1.9	1.4	81%	5%
Key West	100	1.5	1.5	91%	10%
Lower Keys	100	2.6	1.3	72%	2%
Middle Keys	100	1.8	1.3	79%	2%
Upper Keys	100	1.8	1.4	80%	3%

#### 3.7.4 Updated Miller Model

The South Florida survey data are the most recent, and we believe the most accurate data available. We therefore assumed the following vehicle usage rates for residents: 91% vehicle usage for Key West (Zone 1); 72% vehicle usage for the rest of the Lower Keys