New Definitions.   ZDoorZ[c.] 19.1

As you peruse this latest ZDoorZ update you will discover several new data points and numerous format changes and upgrades. In the near future we will issue an updated user guide that will examine the evolving ZDoorZ program and how-to best extract and use the wealth of data. For now, there are two new data points that require definitions: "**Total Housing Units In Current Use**" and "**Premium Value**" housing units.

Housing Units In Current Use

Historically, ZDoorZ simply reiterated the US Census Bureau's (USCB) base measure of housing called Total Housing Units (THU). The problem with that measure is that the "vacant" portion of THU includes a significant number of un-occupied units that are not habitable or otherwise in dis-repair.

Additionally, the USCB treats as "vacant", any housing unit that is not occupied on a full-time basis, and this includes many thousands of second and third homes, as well as vacation houses that families regularly utilize, but not as their primary residence. Such housing units include garage doors and must not be excluded from the enumeration of "garage doors in-place" which is the core for determining residential retrofit demand.

Thus, the new base measure of housing units for ZCI purposes is **Housing Units In Current Use**, **defined as all occupied dwellings (all tenures and all configurations of units per structure), plus all units that are "in-use", but not on a full time basis**. The later includes units that have been sold or rented but are awaiting occupancy. For shorthand, we refer to the measure as **HU-ICU**.

Owner-occupied single-unit houses constitute the largest portion of HU-ICU (approximately 53.3%), with renter-occupied single units being just less than 12.0%. The various configurations of multi-unit structures, both owner and renter occupied, each represent fractional portions, as do manufactured (mobile) houses. Seasonal and second (or more) houses noted above are about 4.2% of the total. Obviously, not all housing units have garage doors, and single-unit structures contain proportionately far more than multi-unit structures. Identifying the array and the varying rates of replacement and addition that is the essence of the ZDoorZ demand analysis.

Premium Value Housing Units

Knowing the geographic distribution of HU-ICU is but one of many steps in generating garage door demand. Housing age and value, both of which are closely tied to location, are the dominant influences in determining door replacement activity. Fortunately, USCB provides a cursory analysis of value, which we further evaluate to provide a picture of the quantity of Premium Value housing units in each geography presented in the ZDoorZ model.

What constitutes "Premium" varies dramatically by geographic location. For ZDoorZ purposes we consider housing units that are at least 12 to 14% above the

immediate regional median-value to be of Premium Value. Obviously, the absolute dollar value number varies significantly. There are places in the U.S. where the value of 90% or more of all houses exceed the regional median-value (e.g., Santa Clara County, CA), and others where less than one-fifth exceed the lower limit of 12-14% of median.

ZDoorZ 19.1 includes a Premium Value percentage for each geography.
That percentage, combined with the age distribution of housing units, provides an accurate identification of the quantity of garage doors that are subject to replacement and/or upgrading. The calculation reflects ZDoorZ research indicating that nearly 70% of residential replacement activity occurs in Premium Value housing units that are between 15 an 30 years of age.