

## Investment Set Codes (ISCs)

The 2011 and future years Investment Set Code (ISC) file is provided in this RPSV4 Web Patch Release. The executable file **VFF\_ISC.exe** will load ninety-nine Investment Set Codes into the RPSV4 Valuation Factor File, within the Commercial Market and Income module. The ISC are used in RPS to value commercial properties using the Income Approach to Value.

In past years, the ISC files were updated each year to reflect current market conditions for fifty of the most typical investment scenarios. The annual updates usually resulted in minor tweaking of the existing codes to reflect changes in the commercial real estate market from year to year.

**Starting in 2011, the Investment Set Code file will no longer require annual updates.** This year, instead of separate upstate and downstate ISCs, one statewide investment set code file will be used. Additionally, the number of investment set codes is increased from fifty to ninety-nine which allows for more investment scenarios and results in a much broader range of overall cap rates to choose from. With these changes, it is anticipated that this ISC file will be used in subsequent years without the need of adjustments. However, the investment set codes will be reviewed annually and adjustments to them will be made if necessary.

### **Research Used to Construct the Investment Set Codes**

Real estate periodicals were researched to study current real estate commercial investment components including: mortgage rates, mortgage terms (amortization period,) loan to value ratios, equity dividend rates and equity yield rates. The periodicals reviewed included: Rynne, Murphy & Associates, Realty Rates, Korpacz, RERC, and Urban Land Institute. Statistical values for each component were adjusted and reconciled into the table below:

	<b>Mortgage Rate (%)</b>	<b>Amortization Period (Yrs)</b>	<b>Loan to Value (%)</b>	<b>Equity Dividend (%)</b>	<b>Equity Yield (%)</b>
<b>Minimum</b>	3.5	15	50.0	4.0	5.5
<b>Average</b>	6.0	20	70.0	9.0	13.5
<b>Maximum</b>	15.0	30	80.0	24.0	28.0

Using these data, eleven groups of investment set codes were built, one for each of the following mortgage rates: 3.5%, 4%, 5%, 6%, 7%, 8%, 9%, 10%, 11%, 13% & 15%. Each group includes nine investment set codes to cover all possible combinations of the minimum, average and maximum amortization period and loan to value occurrences. The equity dividend rates were computed so that the lowest equity dividend rate corresponded to the lowest mortgage rate, the highest equity dividend rate corresponded to the highest mortgage rate and the intermediary values were interpolated. There is a slight adjustment upward in equity dividend rates that accompany shorter amortization periods to account for the larger mortgage constants. The equity yield rates, used for the Mortgage-Equity Analysis (Ellwood,) were constructed to produce similar cap rates as the Simple Mortgage Equity Rates (Band of Investment formula,) assuming no appreciation or depreciation of the subject property over

the holding period. The element of change can best be measured by the reviewer. Change is not a given, each property will vary according to the economic conditions affecting it. Appropriate appreciation or depreciation values should be entered into the investment tables before the Mortgage-Equity Analysis rates, developed with the Ellwood formula, are utilized.

The nine investment set codes in each of the eleven groups' yields a total of ninety-nine investment set codes. While these are adequate for most of the possible commercial property investment scenarios, they do not cover them all. The existing investment set codes can be customized by overriding the data utilized in the VFF. ***Note: RPS will calculate new cap rates when the components in the Investment Tables are changed.***

## **ISC Tables**

Although some of the ninety-nine scenarios produce nearly identical overall cap rates, all are included. The reason for this is twofold. First it keeps the entire analysis intact. Second it allows the user to see the effect that a particular component has on the overall cap rate. Where two (or more) rates are similar, the reviewer should choose the one with the components that match the subject property's investment scenario the closest. Again, if no investment set code adequately covers the investment scenario of the subject property, the appraiser can modify the components of an existing set code to create one that does.