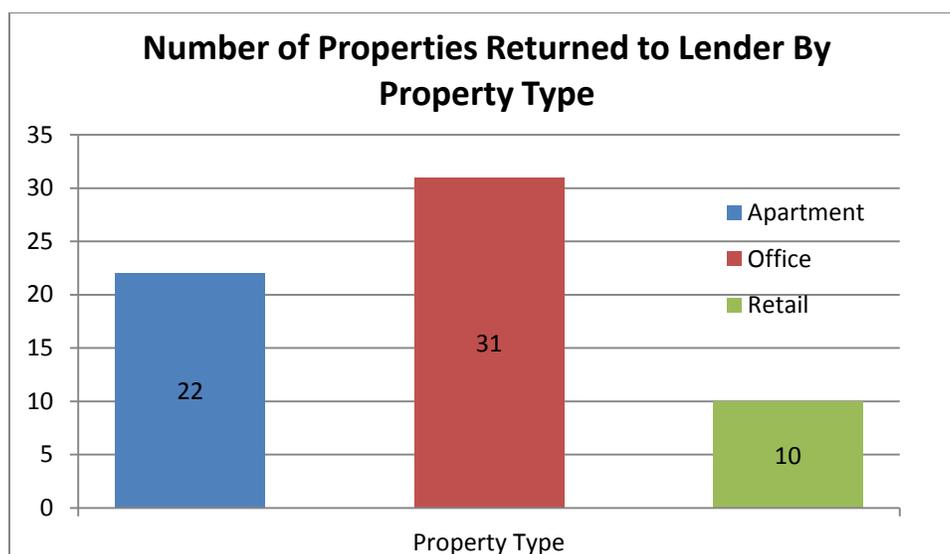


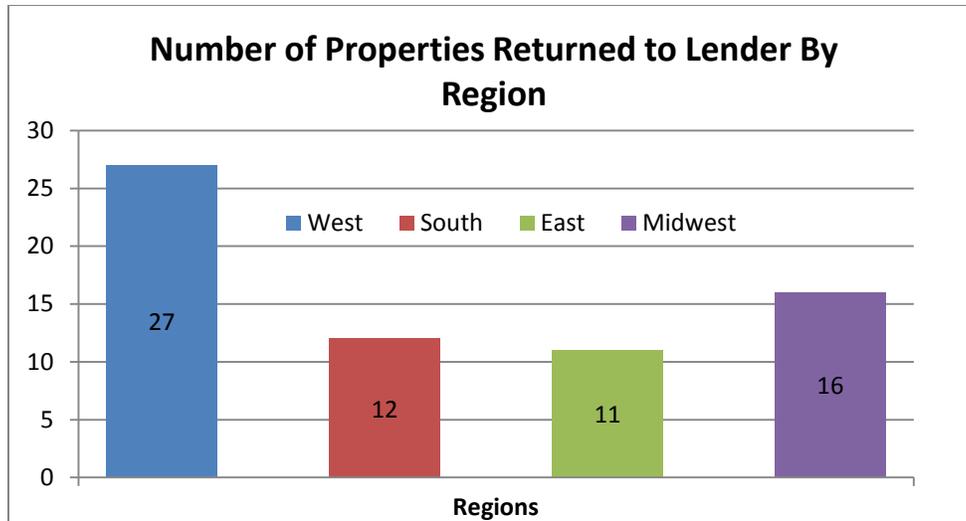
## Properties Returned to the Lender: Does it Matter?

One of the questions members have been asking NCREIF is; how much impact did buildings returned to the lender have on the NPI? Good question. It turns out, not much. Most quarters it would have been just a few basis points at most. There were a total of 73 buildings in the data bases that were returned to the lender from the first quarter 2008 through the first quarter 2011. Of those, 66 properties were in the NPI.

We took a deeper look at those 66 properties in the NPI database. By looking at only NPI properties land, development and non-core properties were excluded from the analysis. Of those 66 properties, there were 22 apartment and 31 office investments given back. In addition there were 10 retail properties that were returned to the lender. The three remaining properties did not meet the masking criteria to disclose their property type.



Regionally, the West had the most properties with 26. That was followed by the Midwest with 16 and the South with 12. Within the divisions, the West-Mountain led with 16 properties. That was followed by 15 in the East NorthCentral, which is part of the Midwest. An additional 11 are in the East-Northeast and 10 in West-Pacific divisions. Phoenix with 10 properties and Detroit with 8 were the two markets with the largest number of assets returned to lenders.



To examine the impact on the NPI NCREIF looked at the market value lagged one period and the outstanding loan balance lagged one period. The one quarter lag was necessary since the property was not valued the quarter it returned to the lender.

The mean market value relative to the loan value was 75.5% and the median value was 77.9% with a standard deviation of 21.4%. The minimum market to loan value was 33.7% and the maximum value was 129%. These numbers are in the anticipated range. One would not expect a building to go back to the lender immediately after the value falls below the loan balance. At that point the owner has an option, hope that the building value recovers or return the property to the lender if values decline. Usually, the building owner has time to make that decision. Once the value has fallen 20-25% below the loan, the likelihood of a rebound is small, the cash flow is likely diminishing or below the interest payment and the building reverts to the lender.

There are a few unusual cases where the loan value falls dramatically or the loan value is still below the market value. The maximum value being above the loan value was due to financing conditions. There were properties returned to the lender due to expiring debt that could not be refinanced.

To determine the impact of the properties on the NPI, three different scenarios were run. The properties were added back into the NPI and assumed to fall an additional 10%, 20% and 30%. Keep in mind that almost all the properties fell below the loan value before they were handed back and those declines were previously included in the NPI. The thought process behind the experiment was that the building returned to the lender before all the potential value declines occurred. This topic can be debated as a separate discussion, but assume that premise when examining the impact of the scenarios.

Since a majority of the properties had already fallen below the value of the loan, the question was how much further should the buildings fall until hitting bottom. The value clearly wasn't zero. Regardless of the situation, the building was still going to have some value. So there is some level between when it returned to the lender and zero that is appropriate. We took the three scenarios mentioned above with

the belief that few if any of the buildings would fall an additional 30% given the value levels at the time of return to the lender. Another topic of discussion for a later time is whether the properties should then be added back with a bounce as the market recovered. Some of the buildings were bought at a discount and later stabilized to produce a higher value. An academic can tackle that topic in the future.

The first quarter with more than one property that returned to the lender was third quarter 2009. Nine properties went back that quarter. Even with an additional 10% decline in value the NPI did not change. If a 20% or 30% is assumed then the NPI drops one basis point.

In the fourth quarter of 2009 seven properties were returned and the 10% decline showed no change to the NPI. At 20% the decline was one basis point and the 30% decline showed 2 basis points.

The table below shows the quarterly impact for each scenario. As the reader can see, only one quarter had an impact greater than 3 basis points for any of the scenarios. The fourth quarter of 2010 had 16 properties go back to the lender. The most in a quarter and the greatest market value of the properties that went back! With a 10% decline for those properties, the NPI would have been 11 basis points lower. A 20% decline would have led to the NPI being 20 basis points lower and a 30% decline would have led to 29 basis points off the NPI.

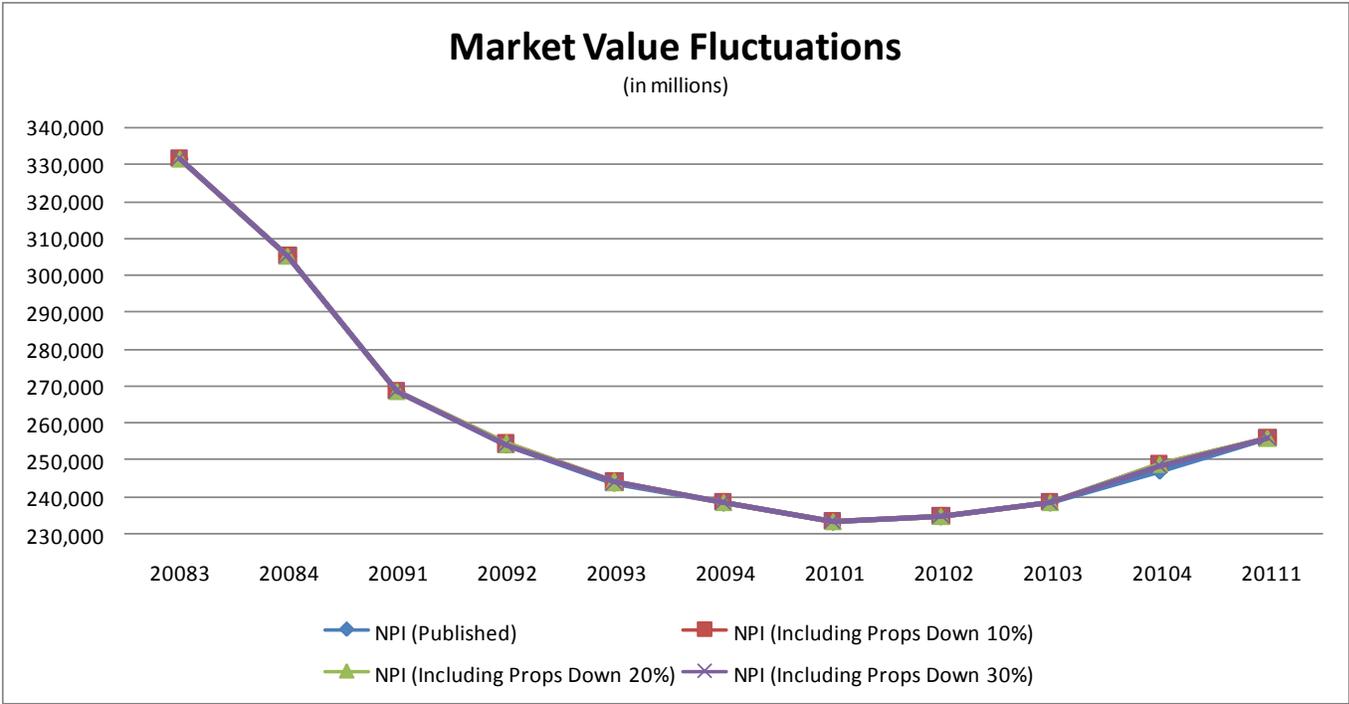
Other than that one quarter the impact on the NPI was minimal from the properties that were returned to the lender. Even with that single quarter, several large properties drove the decline and without those properties the impact was similar to other quarters.

<b>MV Adjusted Down 10%</b>		
<b>YYYYQ</b>	<b>Change in Total Return</b>	<b>Number of Properties to Lender</b>
20093	0.00%	9
20094	0.00%	7
20101	-0.01%	8
20102	-0.01%	10
20103	-0.01%	5
20104	-0.11%	16
20111	-0.01%	8

<b>MV Adjusted Down 20%</b>		
<b>YYYYQ</b>	<b>Change in Total Return</b>	<b>Number of Properties to Lender</b>
20093	-0.01%	9
20094	-0.01%	7
20101	-0.02%	8
20102	-0.03%	10
20103	-0.01%	5
20104	-0.20%	16
20111	-0.01%	8

<b>MV Adjusted Down 30%</b>		
<b>YYYYQ</b>	<b>Change in Total Return</b>	<b>Number of Properties to Lender</b>
20093	-0.01%	9
20094	-0.02%	7
20101	-0.03%	8
20102	-0.04%	10
20103	-0.02%	5
20104	-0.29%	16
20111	-0.02%	8

To further portray the diminutive impact that properties given back to the lender had on the NPI, an analysis was performed that looked at the fluctuation in market values at each hypothetical level. If you refer to the graph below, one will see that there is no clear separation in value until fourth quarter 2010 and even that quarter shows a very slight difference. The fourth quarter 2010 published NPI reported a market value of \$247,074 million. Those 16 additional properties at a 10% decline in market value had a market value of \$1,882 million or .76% of the reported NPI value. The size, value, and number of properties that make up the index help explain why these properties that dropped out left such little impact on the whole.



## **Conclusion**

The NPI had between 6,000-6,300 properties in the index each of those quarters studied. Investors think of the NPI as an index with core and core plus properties. The data seems to bear this out with so few properties returning to the lender and those properties that were returned to the lender having a minimal impact on return performance. It is safe to say that the properties in the index that were then dropped didn't materially impact it.