NPI-Plus

Most readers of the Research Corner are familiar with the NCREIF Property Index (NPI). That index includes apartment, hotel, industrial, office and retail properties from tax-exempt investors that are valued every quarter. Since the index was first published much has changed in commercial real estate. When the index was first created in 1978, apartments weren't even included in the index. They weren't added until 1984. The initial index included only properties with no leverage. Today, the NPI is calculated on an unleveraged basis, but properties with leverage are included. NCREIF also publishes a leveraged version of the NPI, but that is a topic for a future Research Corner.

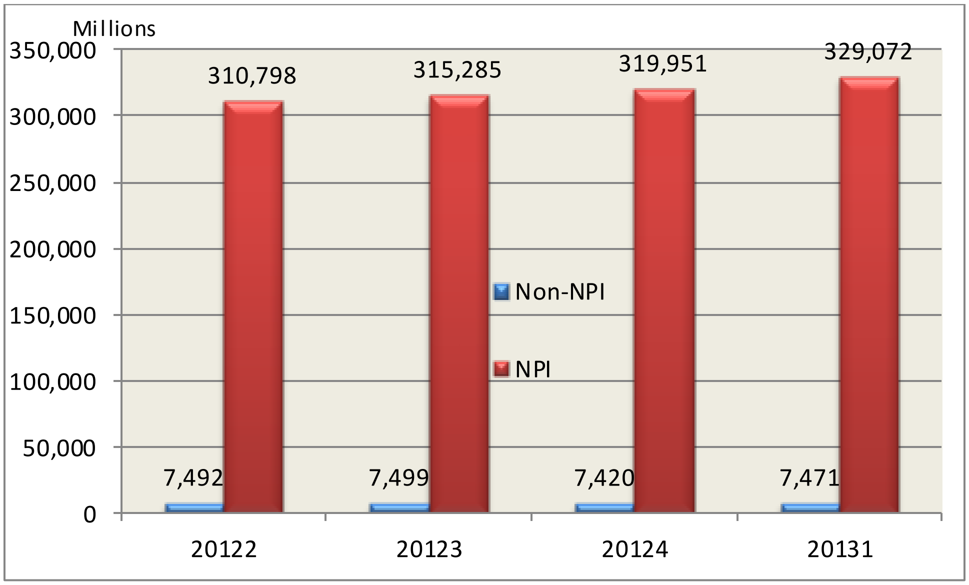
More recently, investors have branched out into non-traditional investment properties including student housing, self-storage and senior living. These product types are no longer considered opportunistic or value-add. They are working their way towards core investment strategies. Before a product type can make the final leap into core it needs an index to be benchmarked against and it must also be included in a broader index. It is for these reasons we created the NPI-Plus.

NCREIF has tracked senior living, self-storage, parking and healthcare as part of the Other category for several years. We have data going back to 2003 for some property types. Table 1 shows the growth of these property types over time and compares them with the five more traditional property types.

There has been significant growth for several of these subtypes, but the number of properties is small relative to the traditional property types in the NPI. In 2003, fifteen managers contributed data to the Other category and only one had more than 30 properties. By the end of 2012, 37 managers were contributing Other properties and four had more than 30 in this category. The market value of these types of properties in the NPI increased from \$1.1 billion in 2003 to \$7.5 billion in first quarter 2013.

	2003Q1	2008Q1	2012Q4
Healthcare		15	33
Senior Living	56	52	81
Parking		11	10
Self-Storage		122	170
Other Total	60	224	331
Apartment	807	1418	1514
Hotel	62	76	243
Industrial	1315	2077	2974
Office	1152	1491	1426
Retail	562	913	1113

Chart 1 shows the market value of the NPI properties compared to the non-NPI properties that comprise the new index. The NPI is almost 50 times greater in market value than the additional properties being added.



Therefore, the inclusion of those additional properties won't change the returns much. The NPI and NPI-Plus return lines are almost identical. However, there is a big difference big difference in performance between the non-NPI properties and the NPI properties.

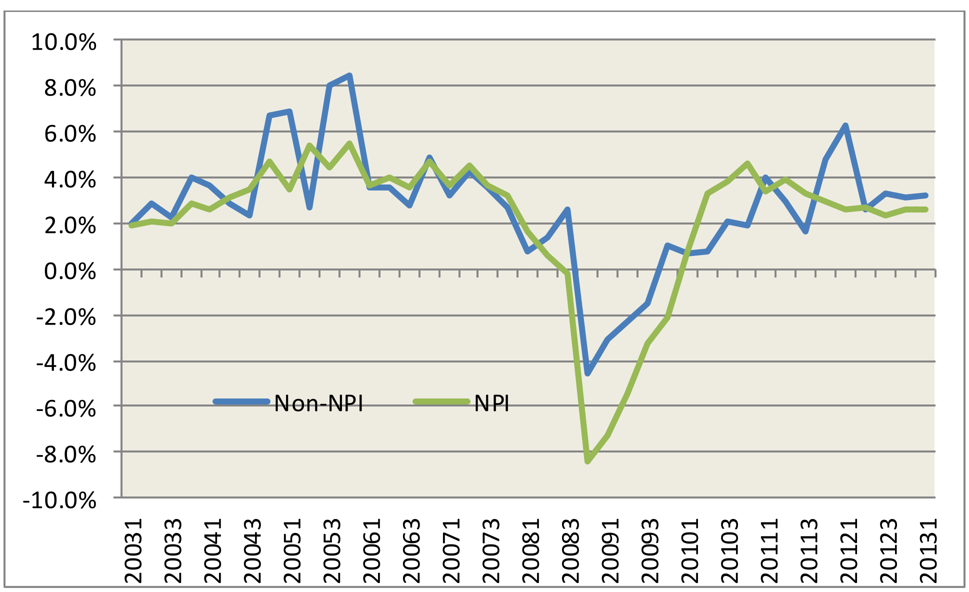
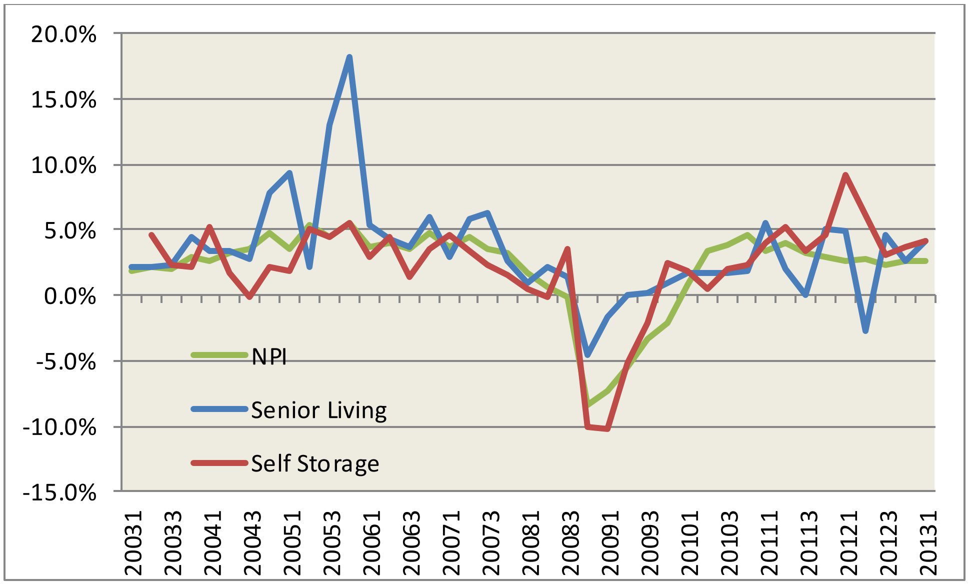


Table 2 shows the quarterly returns for the past five years of the NPI and NPI-Plus with the NPI-Plus difference above or below the NPI in basis points highlighted in red on the far right. The difference is minimal, with 8 basis points being the largest gap over that time period. Some quarters showed no difference in performance. As the market value of the other property types continues to expand, the gap may widen over time.

	NPI	NPI+	Basis Points
20082	0.56%	0.57%	-1
20083	-0.17%	-0.13%	-4
20084	-8.39%	-8.33%	-6
20091	-7.30%	-7.22%	-8
20092	-5.43%	-5.38%	-5
20093	-3.29%	-3.26%	-3
20094	-2.08%	-2.02%	-6
20101	0.77%	0.77%	0
20102	3.32%	3.27%	5
20103	3.83%	3.80%	3
20104	4.63%	4.59%	4
20111	3.36%	3.37%	-1
20112	3.94%	3.91%	3
20113	3.30%	3.26%	4
20114	2.97%	3.01%	-4
20121	2.64%	2.72%	-8
20122	2.70%	2.70%	0
20123	2.34%	2.36%	-2
20124	2.57%	2.58%	-1
20131	2.57%	2.58%	-1

Chart 3 shows the quarterly performance of Senior Living and Self-Storage relative to the NPI. There is a significant difference between them. The correlation between the NPI and Senior Living is .59. Self-storage and the NPI have a correlation of .82. For comparison, apartment, industrial, office and retail all have correlations greater than .88 with the NPI (excluding the property type being compared) and retail is the only property type among those four with a correlation below .95.

As the traditional non-NPI property count and market value continue to grow, the performance of the NPI and NPI-Plus will diverge. In addition, NCREIF is working on expanding its data collection. Later this year, we will begin to separate out student housing and medical office from other property types. Currently, some medical office is in office and some is in healthcare, depending on the type of property. Student housing is also mixed in with apartment and other.



So why create this new index if the performance compared to the BPI is almost identical? The addition of these subtypes will allow for more analysis to be done on property types that may not have been considered core in the past but have now been moved into that realm by investors and mangers. Increased information and transparency about these other property types should lead to lower risk premiums for those property types. They will also enhance the NPI-Plus and encourage the acceptance as core investments beyond apartment, industrial, office and retail.

Since their income streams are dependent on different drivers than the five property types currently in the NPI, the NPI-Plus should have lower risk per unit of return than the NPI. It will also make it easier to invest in a core portfolio since there will be more investment options. The creation of NPI-Plus will benefit core investors and enhance the real estate investment community.