

TIMBERLAND INDEX

RECORD LOG PRICES IN THE WEST DRIVE RETURNS HIGHER IN 2017

The NCREIF Timberland Property Index (TPI) generated a total return of 1.52% for the 4Q-17, which was comprised of an appreciation return of 0.78% and EBITDDA return of 0.74%. The total return increased 92 basis points from last quarter and 34 basis points from the fourth quarter 2016 return. For the year, the total Timberland Property Index was 3.63%, with the appreciation return contributing 0.84% and the EBITDDA return contributing 2.77%.

The Northwest led the regional returns for both the fourth quarter and full year 2017. The total quarterly return for the Northwest was 3.85%, supported by appreciation returns of 2.86% and an EBITDDA return of 0.99%. For the year, the annual return for the Northwest was 7.0%, which was split evenly between EBITDDA and capital appreciation components. The South, Northeast, and Lake States had a less compelling year, posting fourth quarter returns of 0.76%, 2.74% and -3.04%, and annual returns of 2.74%, 1.78% and -1.50%, respectively.

For the Northwest, log market strength was the driver of the strong outperformance over the other three regions. 4Q-17 nominal log prices in the Pacific Northwest reached highs not seen for more than twenty years. These robust prices generated strong EBITDDA in comparison to other regions. Additionally, the Northwest's annual 2017 capital appreciation return of 3.47% is likely a product of higher log prices being reflected in annual valuation and sale assumptions. The exposure to the export market continues to provide favorable tension in the Northwest log markets. As a result of reduced exports from Canada and an improving U.S. housing market, 2017 ended with the expectation of increasing domestic lumber demand, which should prove beneficial to all regions. With the West nearing a sustainable harvest level, according to FEA, prices are expected to remain elevated into 2018. In the South, recent investment in mills combined with increased domestic lumber demand should benefit returns in this region over time as well.

At year-end 2017, the NCREIF TPI consisted of 464 timberland properties with a market value of \$25.5 billion, or \$1,808 per acre. This includes 317 properties in the South, 95 in the Northwest, 35 in the Northeast, and 16 in the Lake States. This is an increase of 18 properties and 922,913 acres from 4Q-16. By region, the respective timberland per-acre market value at fourth quarter 2017 was \$2,806 in the Northwest, \$1,775 in the South, \$972 in the Northeast, and \$686 in the Lake States. The market value in the South and Northwest remained relatively stable from 4Q-16, while the Northeast and Lake States decreased by 17% and 4%, respectively. Each timberland property is unique in terms of location, age class distribution, species mix, site class, quality of timber, operational factors, and log markets so the per-acre market value can be a potentially misleading oversimplification if taken without reference to other factors that influence value. However, the relative per-acre market value between regions can provide a relative value premium per region with Northwest properties demanding the highest value, followed by the South, Northeast and Lake States.

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TIMBERLAND TOTAL RETURNS

	NPI	Total Timberland	Property Count	South	Northwest	Northeast	Lake States
4th Qtr 2017	1.80	1.52	464	0.76	3.85	2.74	-3.04
3rd Qtr 2017	1.70	0.60	476	0.63	0.90	-1.45	1.02
One Year	6.96	3.63		2.74	7.00	1.78	-1.50
Three Years	9.38	3.73		3.32	5.87	-0.14	2.33
Five Years	10.19	6.22		5.53	9.28	1.43	6.15
Ten Years	6.08	4.43		3.56	7.14	0.80	

TIMBERLAND EBITDDA RETURNS

	NPI	Total Timberland	South	Northwest	Northeast	Lake States
4th Qtr 2017	1.16	0.74	0.67	0.99	0.50	0.52
3rd Qtr 2017	1.14	0.74	0.65	0.97	0.70	0.86
One Year	4.68	2.77	2.59	3.45	2.17	2.11
Three Years	4.82	2.67	2.62	2.92	2.36	2.47
Five Years	5.08	2.74	2.52	3.45	2.22	2.01
Ten Years	5.54	2.51	2.30	3.26	1.75	

TIMBERLAND APPRECIATION RETURNS

	NPI	Total Timberland	South	Northwest	Northeast	Lake States
4th Qtr 2017	0.63	0.78	0.09	2.86	2.24	-3.56
3rd Qtr 2017	0.56	-0.15	-0.02	-0.07	-2.15	0.16
One Year	2.20	0.84	0.15	3.47	-0.38	-3.55
Three Years	4.41	1.03	0.69	2.89	-2.45	-0.14
Five Years	4.92	3.42	2.95	5.69	-0.77	4.06
Ten Years	0.52	1.88	1.23	3.80	-0.94	