

# INTERIM REPORT

---

## City of San Jose Police and Fire Department Retirement Plan

Private Markets Program  
June 30, 2018

P U B L I C



---

M E K E T A   I N V E S T M E N T   G R O U P

BOSTON  
MASSACHUSETTS

CHICAGO  
ILLINOIS

MIAMI  
FLORIDA

PORTLAND  
OREGON

SAN DIEGO  
CALIFORNIA

LONDON  
UNITED KINGDOM

[www.meketagroup.com](http://www.meketagroup.com)

Private Debt Program .....	4
Private Real Estate Program.....	11
Private Real Assets Program .....	18
Appendices .....	24

## Total Private Markets

As of June 30, 2018

	Committed Capital (\$ mm)	Market Value (\$ mm)	Total Contributions (\$ mm)	Total Distributions (\$ mm)	Total Value Multiple (x)	Net IRR (%)
<b>Total Private Markets<sup>1</sup></b>	<b>1,526.6</b>	<b>641.0</b>	<b>1,096.4</b>	<b>800.7</b>	<b>1.4</b>	<b>9.8</b>
Legacy Private Equity <sup>1,2</sup>	361.2	182.5	291.9	242.7	1.5	9.2
NB Fund of One <sup>1</sup>	200.5	19.1	18.5	0.0	1.1	NM
Private Debt	497.5	206.2	431.8	297.9	1.2	6.3
Real Estate	427.4	214.1	335.0	257.5	1.4	11.5
Real Assets	40.0	19.1	19.2	2.6	1.1	NM

<sup>1</sup> Private Equity and Fund of One underlying data was provided by Neuberger Berman and does not include commitment amounts at this time.

<sup>2</sup> Does not include NB Fund-of-One performance.

## Private Debt Program

As of June 30, 2018, the San Jose Police and Fire Department Retirement Plan had committed \$497.5 million to ten opportunistic debt partnerships and one separately managed co-investment. The reported fair value of the aggregate Private Debt Program was \$206.2 million at June 30, 2018.

Aggregate Private Debt Program <sup>1</sup>	
<b>Number of Partnerships</b>	11
<b>Committed Capital<sup>2</sup></b>	\$497.5 million
<b>Capital Called</b>	\$431.8 million
<b>Distributions</b>	\$297.9 million
<b>Reported Value</b>	\$206.2 million
<b>Total Value Multiple</b>	1.2x
<b>Net IRR</b>	6.3%

<sup>1</sup> Throughout this report, numbers may not sum due to rounding.

<sup>2</sup> Some partnership commitments were made in foreign currency. This total reflects committed capital in U.S. dollars, adjusted for foreign currency exchange rates, as of the report date.

**During the second quarter of 2018, no capital was called from the Retirement Plan.**

**An aggregate \$1.0 million in distributions were received by the Retirement Plan during the second quarter of 2018 from two of its underlying partnerships.**

- Cross Ocean USD ESS Fund II distributed \$0.6 million during the second quarter.
- Shoreline China Value III returned a total of \$0.3 million in the quarter.
- White Oak Direct Lending distributed \$0.1 million during the quarter.

**The Retirement Plan made no new commitments during the second quarter of 2018.**

As of November 30, 2018



- White box: Current investment.
- Grey box: Liquidated investment.

## City of San Jose Police and Fire Department Retirement Plan Private Debt Program

## Aggregate Program Performance Summary

Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date <sup>1,2</sup> (\$ mm)	Unfunded Commitment <sup>3</sup> (\$ mm)	Total Distributions Received to Date <sup>4</sup> (\$ mm)	Reported Fair Value (\$ mm)	Reported Plus Distributions (\$ mm)	Net IRR <sup>5</sup> (%)	Inv. Multiple <sup>6</sup> (x)	Benchmark Net IRR (%) <sup>7</sup>	Benchmark Net Multiple (x) <sup>7</sup>
<b>Total Program<sup>8</sup></b>	<b>497.5</b>	<b>431.8</b>	<b>114.0</b>	<b>297.9</b>	<b>206.2</b>	<b>504.1</b>	<b>6.3</b>	<b>1.2</b>	<b>NA</b>	<b>NA</b>
<b>Vintage Year 2010</b>	<b>150.0</b>	<b>184.4</b>	<b>6.0</b>	<b>151.0</b>	<b>62.2</b>	<b>213.2</b>	<b>4.9</b>	<b>1.2</b>	<b>9.9</b>	<b>1.4</b>
GSO SJ Partners Private Debt	50.0	44.0	6.0	41.9	12.8	54.7	7.7	1.2	9.9	1.4
Medley Opportunity Fund II, L.P. Private Debt	50.0	55.1	0.0	38.0	29.6	67.6	5.0	1.2	9.9	1.4
White Oak Direct Lending Private Debt	50.0	85.2	0.0	71.1	19.7	90.9	2.7	1.1	9.9	1.4
<b>Vintage Year 2011</b>	<b>25.0</b>	<b>25.0</b>	<b>0.0</b>	<b>25.9</b>	<b>4.8</b>	<b>30.8</b>	<b>8.5</b>	<b>1.2</b>	<b>9.5</b>	<b>1.4</b>
Marathon European Credit Opportunity Fund SPC Private Debt	25.0	25.0	0.0	25.9	4.8	30.8	8.5	1.2	9.5	1.4
<b>Vintage Year 2013</b>	<b>140.0</b>	<b>120.3</b>	<b>25.8</b>	<b>78.8</b>	<b>64.1</b>	<b>142.9</b>	<b>7.0</b>	<b>1.2</b>	<b>7.5</b>	<b>1.2</b>
Cross Ocean USD ESS Fund I, L.P. Private Debt	90.0	76.0	14.0	72.0	19.5	91.6	7.6	1.2	7.5	1.2
Park Square Capital Credit Opportunities II Private Debt	50.0	44.4	11.8	6.8	44.6	51.3	5.8	1.2	7.5	1.2
<b>Vintage Year 2014</b>	<b>22.5</b>	<b>22.0</b>	<b>1.4</b>	<b>11.1</b>	<b>14.5</b>	<b>25.6</b>	<b>6.6</b>	<b>1.2</b>	<b>10.1</b>	<b>1.3</b>
Shoreline China Value III, L.P. Private Debt	22.5	22.0	1.4	11.1	14.5	25.6	6.6	1.2	10.1	1.3
<b>Vintage Year 2015</b>	<b>25.0</b>	<b>25.0</b>	<b>0.0</b>	<b>28.5</b>	<b>0.0</b>	<b>28.5</b>	<b>11.3</b>	<b>1.1</b>	<b>11.2</b>	<b>1.2</b>
Octagon CLO Debt Fund II (US) Private Debt	25.0	25.0	0.0	28.5	0.0	28.5	11.3	1.1	11.2	1.2
<b>Vintage Year 2016</b>	<b>75.0</b>	<b>45.0</b>	<b>30.9</b>	<b>2.6</b>	<b>50.3</b>	<b>52.9</b>	<b>NM</b>	<b>1.2</b>	<b>NM</b>	<b>1.1</b>
Cross Ocean USD ESS Fund II, L.P. Private Debt	75.0	45.0	30.9	2.6	50.3	52.9	NM	1.2	NM	1.1
<b>Vintage Year 2017</b>	<b>10.0</b>	<b>10.0</b>	<b>0.0</b>	<b>0.0</b>	<b>10.3</b>	<b>10.3</b>	<b>NM</b>	<b>1.0</b>	<b>NM</b>	<b>1.3</b>
ArrowMark Partners Separate Account Private Debt	10.0	10.0	0.0	0.0	10.3	10.3	NM	1.0	NM	1.3

<sup>1</sup> In certain instances, Total Contributions Paid to Date may exceed Capital Committed as certain partnerships may call fees outside of commitment and most partnerships reserve a limited right to recycle capital and/or recall distributions.

<sup>2</sup> Total Contributions include management fees paid outside of capital commitment.

<sup>3</sup> Unfunded Commitment amounts are an approximation due to the inclusion of recallable distributions.

<sup>4</sup> Distributions may include capital that was recycled back into the Partnership.

<sup>5</sup> The Net IRR calculation was performed by Meketa Investment Group. Total Program, Partnership, and Vintage Year IRRs are net of fees, expenses, and carried interest for each partnership.

<sup>6</sup> The Inv. Multiple calculation was performed by Meketa Investment Group. Total Program, Partnership, and Vintage Year Inv. Multiples are net of partnership fees.

<sup>7</sup> Benchmark drawn from Cambridge Associates | Credit Opportunities, Average.

<sup>8</sup> "NM" indicates that a fund is early in its investment period; therefore, the return is not yet meaningful. A not meaningful return is generated by funds with less than 24 months of activity.





Aggregate Program Performance Summary

Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date <sup>1,2</sup> (\$ mm)	Unfunded Commitment <sup>3</sup> (\$ mm)	Total Distributions Received to Date <sup>4</sup> (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)		Net IRR <sup>5</sup> (%)	Inv. Multiple <sup>6</sup> (x)	Benchmark Net IRR (%) <sup>7</sup>	Benchmark Net Multiple (x) <sup>7</sup>
<b>Vintage Year 2018</b>	<b>50.0</b>	<b>0.0</b>	<b>50.0</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>		<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Octagon CLO Opportunity Fund III, L.P.	50.0	0.0	50.0	NA	NA	NA		NA	NA	NA	NA

The IRR (internal rate of return) and investment multiple are the most meaningful measures of performance for a private equity fund. IRR measures how assets are performing in relation to time. Investment multiple shows the cash on cash return generated on the invested capital by the underlying assets.

The total program net IRR decreased by 40 basis points from 6.7% to 6.3% during the second quarter. The fair market value of the total program decreased by -\$2.6 million, or -1.2%, after adjusting for capital calls and distributions during the second quarter. The net portfolio valuation was driven by decreases in the valuations of White Oak Direct Lending (-\$2.9 million or -12.7%), Shoreline China Value III (-\$1.2 million or -7.8%), and Medley Opportunity Fund II (-\$0.4 million or -1.2%). These were partially offset by increases in the valuations of GSO SJ Partners (\$0.8 million or 6.5%), Cross Ocean USD ESS Fund II (\$0.6 million or 1.3%), and Marathon European Credit Opportunity Fund SPC (\$0.5 million or 10.8%).

## **Private Real Estate Program**

As of June 30, 2018, the Plan had committed \$195.2 million to 12 closed-end real estate funds. The total reported fair value of Total Closed-End Program was \$83.7 million.

Aggregate Real Estate Program <sup>1</sup>	
<b>Number of Partnerships</b>	12
<b>Committed Capital<sup>2</sup></b>	\$195.2 million
<b>Capital Called</b>	\$100.6 million
<b>Distributions</b>	\$52.5 million
<b>Reported Value</b>	\$83.7 million
<b>Total Value Multiple</b>	1.4x
<b>Net IRR</b>	16.3%

<sup>1</sup> Throughout this report, numbers may not sum due to rounding.

<sup>2</sup> Some partnership commitments were made in foreign currency. This total reflects committed capital in U.S. dollars, adjusted for foreign currency exchange rates, as of the report date.

**In aggregate, \$2.6 million was called from the Retirement Plan during the second quarter of 2018 by the underlying partnerships.**

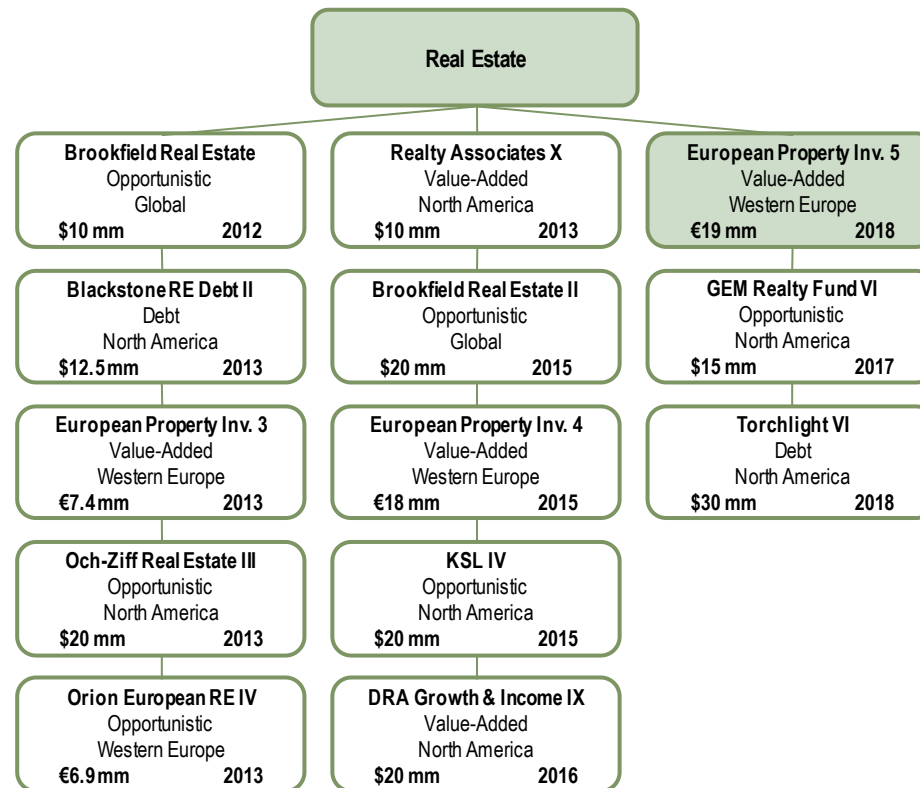
- European Property Investors Special Opportunities 4 called \$1.1 million during the quarter to fund a variety of investments.
- DRA Growth and Income Fund IX called \$0.6 million to fund the acquisitions of four underlying investments.
- Och-Ziff Real Estate Fund III called \$0.5 million in part to fund three underlying investments.

**The Retirement Plan received an aggregate of \$4.0 million in distributions during the second quarter of 2018 from its underlying partnerships.**

- KSL Capital Partners IV distributed \$1.7 million from one underlying investment.
- Blackstone Real Estate Debt Strategies II distributed \$1.1 million, primarily from four underlying investments.
- Och-Ziff Real Estate Fund III distributed \$0.5 million in part from three underlying investments.

**During the second quarter of 2018, the Retirement Plan made one new commitment of \$30.0 million to Torchlight Debt Opportunity Fund VI, a commercial Real Estate debt fund with a diversified strategy.**

As of November 30, 2018



- White box: Current investment.
- Green box: Investment made subsequent to quarter end and, as such, is not included in any other section of this report.

## Aggregate Program Performance Summary

	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date <sup>1</sup> (\$ mm)	Unfunded Commitment <sup>2</sup> (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value		Inv. Multiple <sup>4</sup> (x)	Benchmark	Benchmark	
							Plus Distributions (\$ mm)	Net IRR <sup>3</sup> (%)		Net IRR (%) <sup>5</sup>	Net Multiple (%) <sup>5</sup>	
Total Closed-end		195.2	100.6	99.5	52.5	83.7	136.1	16.3	1.4	NA	NA	
Vintage Year 2012		10.0	11.4	0.3	9.9	10.9	20.9	21.4	1.8	12.8	1.5	
	Brookfield Strategic Real Estate Partners	Real Estate	10.0	11.4	0.3	9.9	10.9	20.9	21.4	1.8	12.8	1.5
Vintage Year 2013		59.6	46.9	15.4	36.1	28.6	64.7	14.6	1.4	NA	NA	
	Blackstone Real Estate Debt Strategies II <sup>6</sup>	Real Estate	12.5	12.8	0.0	13.4	1.3	14.7	9.3	1.2	7.5	1.2
	European Property Investors Special Opportunities 3, L.P. <sup>7</sup>	Real Estate	8.8	8.4	0.4	4.9	6.6	11.5	13.2	1.4	11.9	1.3
	Och-Ziff Real Estate Fund III	Real Estate	20.0	9.9	10.8	5.6	10.6	16.1	32.2	1.6	11.9	1.3
	Orion European Real Estate Fund IV, C.V. <sup>8</sup>	Real Estate	8.3	5.9	4.1	3.8	3.7	7.5	10.1	1.3	11.9	1.3
	Realty Associates Fund X, L.P., The	Real Estate	10.0	10.0	0.0	8.5	6.4	14.9	12.4	1.5	11.9	1.3
Vintage Year 2015		60.6	33.4	27.2	5.0	33.2	38.3	11.3	1.1	10.2	1.2	
	Brookfield Strategic Real Estate Partners II	Real Estate	20.0	13.7	6.3	0.8	15.5	16.3	12.2	1.2	10.2	1.2
	European Property Investors Special Opportunities 4, L.P. <sup>9</sup>	Real Estate	20.6	10.4	10.2	0.8	10.0	10.8	2.9	1.0	10.2	1.2
	KSL Capital Partners IV, L.P.	Real Estate	20.0	9.3	10.7	3.5	7.7	11.2	19.7	1.2	10.2	1.2
Vintage Year 2016		20.0	7.8	12.7	1.4	7.5	9.0	NM	1.1	NM	1.1	
	DRA Growth and Income Fund IX, LLC	Real Estate	20.0	7.8	12.7	1.4	7.5	9.0	NM	1.1	NM	1.1
Vintage Year 2017		15.0	1.1	13.9	0.0	1.2	1.2	NM	1.1	NM	1.0	
	GEM Realty Fund VI, L.P.	Real Estate	15.0	1.1	13.9	0.0	1.2	NM	1.1	NM	1.0	

<sup>1</sup> In certain instances, Total Contributions Paid to Date may exceed Capital Committed as certain partnerships may call fees outside of commitment and most partnerships reserve a limited right to recycle capital and/or recall distributions.

<sup>2</sup> Unfunded Commitment amounts are an approximation due to the inclusion of recallable distributions.

<sup>3</sup> The Net IRR calculation was performed by Meketa Investment Group. Total Program, Partnership, and Vintage Year IRRs are net of fees, expenses, and carried interest for each partnership.

<sup>4</sup> The Inv. Multiple calculation was performed by Meketa Investment Group. Total Program, Partnership, and Vintage Year Inv. Multiples are net of partnership fees.

<sup>5</sup> Real Estate benchmarks (excluding Blackstone Real Estate Debt Strategies II) drawn from Thomson One | Real Estate, Average.

<sup>6</sup> Benchmark drawn from Thomson One | Credit Opportunities, Average.

<sup>7</sup> In 2013, €7.4 million was committed to the Partnership. The \$8.8 million is an estimated amount based on the contributed capital and unfunded commitment as of 6/30/2018.

<sup>8</sup> In 2015, €6.9 million was committed to the Partnership. The \$8.3 million is an estimated amount based on the contributed capital and unfunded commitment as of 6/30/2018.

<sup>9</sup> In 2015, €18.0 million was committed to the Partnership. The \$20.6 million is an estimated amount based on the contributed capital and unfunded commitment as of 6/30/2018.

Aggregate Program Performance Summary

Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date <sup>1</sup>	Unfunded Commitment <sup>2</sup>	Total Distributions Received to Date	Reported Fair Value	Reported Fair Value Plus Distributions	Net IRR <sup>3</sup>	Inv. Multiple <sup>4</sup>	Benchmark Net IRR (%) <sup>5</sup>	Benchmark Net Multiple (%) <sup>5</sup>
		(\$ mm)	(\$ mm)	(\$ mm)	(\$ mm)	(\$ mm)	(%)	(x)	(%) <sup>5</sup>	(%) <sup>5</sup>
<b>Vintage Year 2018</b>	<b>30.0</b>	<b>0.0</b>	<b>30.0</b>	<b>NA</b>	<b>2.1</b>	<b>2.1</b>	<b>NM</b>	<b>NA</b>	<b>NM</b>	<b>NA</b>
Torchlight Debt Opportunity Fund VI, L.P. <sup>10</sup>	Real Estate	30.0	0.0	30.0	NA	2.1	2.1	NM	NA	NM

<sup>10</sup> Torchlight Debt Opportunity Fund VI has funded existing investments through a credit borrowing facility, but has not yet called capital from Limited Partners.



The IRR (internal rate of return) and investment multiple are the most meaningful measures of performance for a private equity fund. IRR measures how assets are performing in relation to time. Investment multiple shows the cash on cash return generated on the invested capital by the underlying assets.

The Total Closed-End Program<sup>1</sup> net IRR remained unchanged at 16.3% during the second quarter.<sup>2</sup> The reported fair value of the Total Closed-End Program increased by \$3.3 million, or 3.9%, after adjusting for capital calls and distributions during the quarter. The improved performance was driven primarily by the valuation increase of Torchlight Debt Opportunity Fund VI (\$2.1 million<sup>3</sup>), Brookfield Strategic Real Estate Partners (\$0.7 million or 7.3%), and KSL Capital Partners IV (\$0.7 million or 8.6%).

---

<sup>1</sup> Total Closed-End Program includes all closed-end funds in the real estate program.

<sup>2</sup> May not sum due to rounding.

<sup>3</sup> Net Change in Value % is not meaningful due to a beginning balance of 0 and no capital calls during the quarter. Increase in value is likely due to investments funded by a credit borrowing facility.



## **Private Real Assets Program**

As of June 30, 2018, the Plan had committed \$40.0 million to two real assets funds. The total reported fair value of real assets investments was \$19.1 million at June 30, 2018.

#### Aggregate Real Assets Program<sup>1</sup>

<b>Number of Partnerships</b>	2
<b>Committed Capital<sup>2</sup></b>	\$40.0 million
<b>Capital Called</b>	\$19.2 million
<b>Distributions</b>	\$2.6 million
<b>Reported Value</b>	\$19.1 million
<b>Total Value Multiple</b>	1.1x
<b>Net IRR</b>	NM

<sup>1</sup> Throughout this report, numbers may not sum due to rounding.

<sup>2</sup> Some partnership commitments were made in foreign currency. This total reflects committed capital in U.S. dollars, adjusted for foreign currency exchange rates, as of the report date.

**In aggregate, \$3.6 million was called from the Retirement Plan during the second quarter of 2018 by the underlying partnerships.**

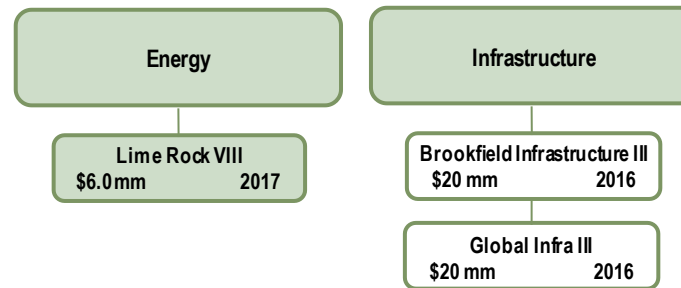
- Global Infrastructure Partners III called \$3.1 million primarily to fund management fees and two underlying investments.
- Brookfield Infrastructure Fund III called \$0.5 million to fund investments in three underlying investments.

**The Retirement Plan received an aggregate of \$0.8 million in distributions during the second quarter of 2018 from its underlying partnerships.**

- Brookfield Infrastructure Fund III distributed \$0.7 million primarily from the Fund's refinancing of two underlying investments.

**The Retirement Plan did not make any new commitments during the second quarter of 2018.**

As of November 30, 2018



- White box: Current investment.
- Green box: Investment made subsequent to quarter end and, as such, is not included in any other section of this report.

## Aggregate Program Performance Summary

	Investment Strategy	Capital Committed (\$ mm)	Total Contributions Paid to Date <sup>1</sup> (\$ mm)	Unfunded Commitment <sup>2</sup> (\$ mm)	Total Distributions Received to Date (\$ mm)	Reported Fair Value (\$ mm)	Reported Fair Value Plus Distributions (\$ mm)	Net IRR <sup>3</sup> (%)	Inv. Multiple <sup>4</sup> (x)	Benchmark Net IRR (%) <sup>5</sup>	Benchmark Net Multiple (%)
Total Program <sup>6</sup>		40.0	19.2	20.8	2.6	19.1	21.7	NM	1.1	NA	NA
Vintage Year 2016		40.0	19.2	20.8	2.6	19.1	21.7	NM	1.1	1.1	1.1
	Brookfield Infrastructure Fund III, L.P.	Infrastructure	20.0	7.7	12.3	1.8	8.0	9.8	NM	1.3	1.1
	Global Infrastructure Partners III, L.P.	Infrastructure	20.0	11.5	8.6	0.7	11.1	11.8	NM	1.0	1.1

<sup>1</sup> In certain instances, Total Contributions Paid to Date may exceed Capital Committed as certain partnerships may call fees outside of commitment and most partnerships reserve a limited right to recycle capital and/or recall distributions.

<sup>2</sup> Unfunded Commitment amounts are an approximation due to the inclusion of recallable distributions.

<sup>3</sup> The Net IRR calculation was performed by Meketa Investment Group. Total Program, Partnership, and Vintage Year IRRs are net of fees, expenses, and carried interest for each partnership.

<sup>4</sup> The Inv. Multiple calculation was performed by Meketa Investment Group. Total Program, Partnership, and Vintage Year Inv. Multiples are net of partnership fees.

<sup>5</sup> Benchmark drawn from Cambridge Associates | Infrastructure, Average.

<sup>6</sup> "NM" indicates that a fund is early in its investment period; therefore, the return is not yet meaningful. A not meaningful return is generated by funds with less than 24 months of activity.

The IRR (internal rate of return) and investment multiple are the most meaningful measures of performance for a private real assets fund. IRR measures how assets are performing in relation to time. Investment multiple shows the cash on cash return generated on the invested capital by the underlying assets.

The Real Assets Program is at an early stage in its development and as such, the net IRR of the Program has been listed as “Not Meaningful” across this report. The reported fair value of the Real Asset Program increased by \$0.9 million, or 5.3%, after adjusting for capital calls and distributions during the second quarter of 2018. The improved performance was driven by the valuation increases of Global Infrastructure Partners III (\$0.8 million or 8.9%) and Brookfield Infrastructure Fund III (\$0.1 million or 1.4%).

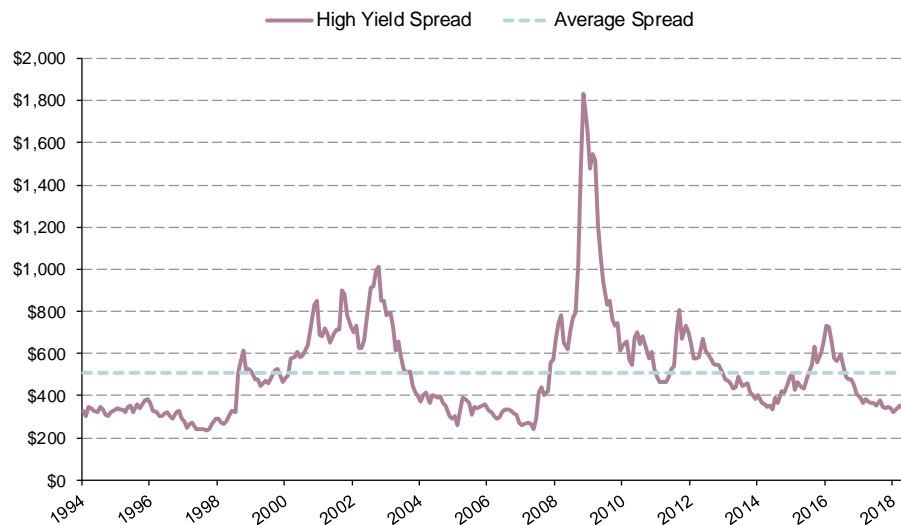
## Appendices



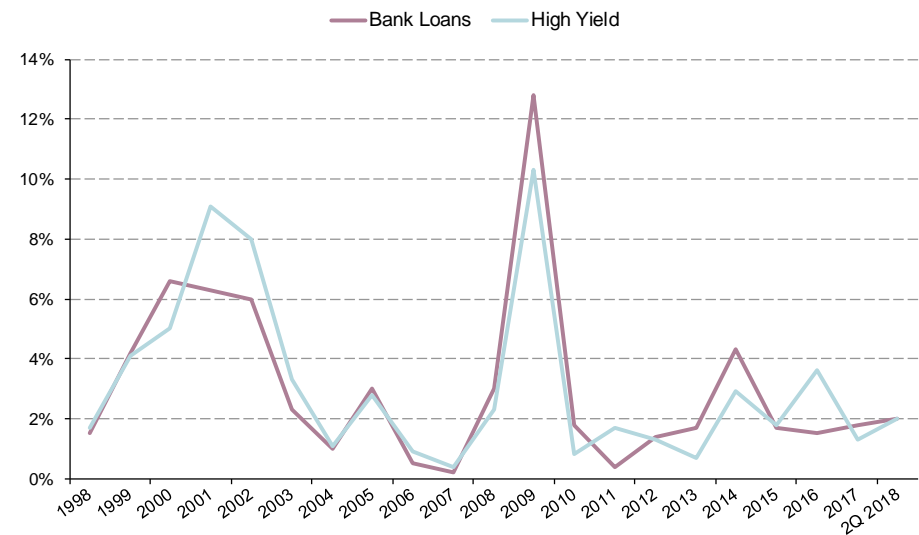
## Private Debt

Credit markets continued their positive performance in the second quarter led by the most credit-sensitive, lowest rated debt. Over the quarter, shorter-term interest rates continued to increase and the yield curve continued to flatten. High yield spreads finished June at 363 basis points, significantly below the historical average and approaching their post-financial crisis lows. Default rates in high yield bond and loans ticked up slightly and both finished the quarter at 2.0%. Shorter-term expectations for defaults continue to be muted.

### U.S. Corporate High Yield Spread<sup>1</sup>



### U.S. Corporate Default Rate<sup>2</sup>



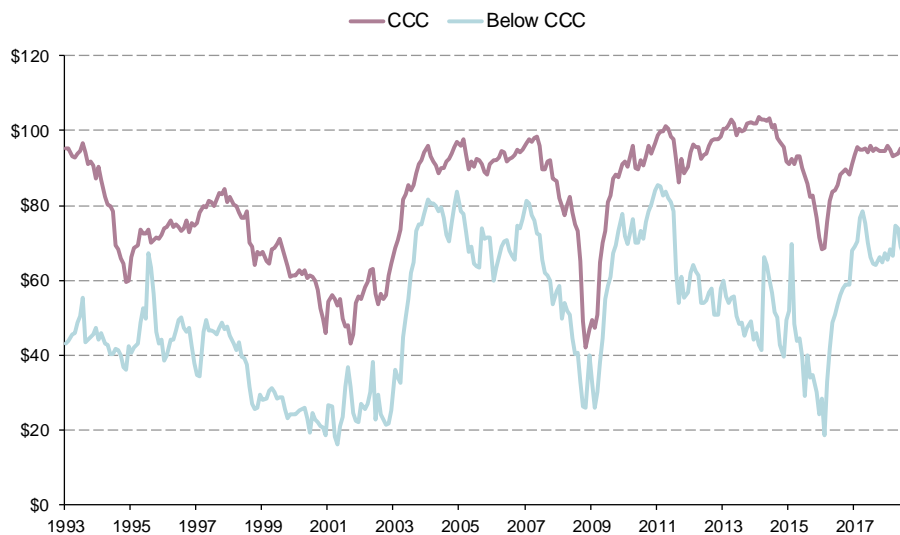
<sup>1</sup> Source: Barclays Capital

<sup>2</sup> Source: JP Morgan

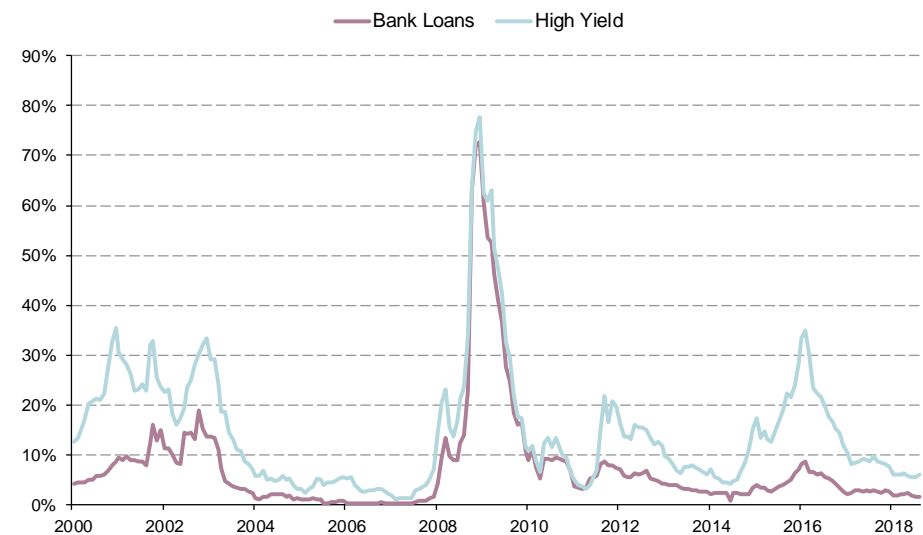
### Distressed & Opportunistic Debt

The lowest rated bonds and loans in the market continued to trade higher and CCC-rated bonds finished the second quarter at an average price of \$95. The industries with the highest default rates over the past twelve months have been broadcasting (led by iHeart), energy and retail. Distressed debt investment opportunities remain muted as only \$23.4 billion of the high yield index trades below \$70 and \$22.6 billion of the bank loan index trades below \$80. The distressed ratios in both bonds and loans continued to fall.

#### Lower Rated Debt Pricing<sup>1</sup>



#### Distressed Ratio<sup>2</sup>



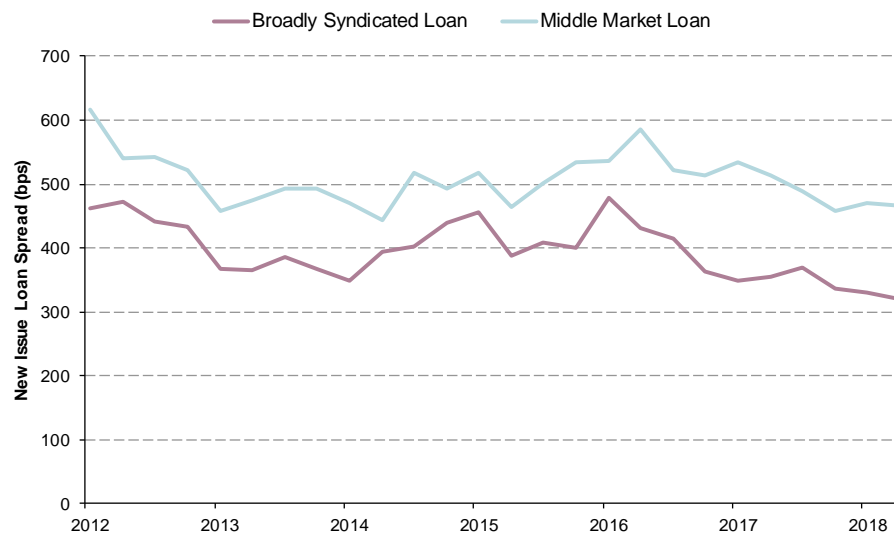
<sup>1</sup> Source: Barclays Capital

<sup>2</sup> Source: Bank Loans trading below \$80, Credit Suisse; High Yield trading at spread of more than 1,000bps, Deutsche Bank.

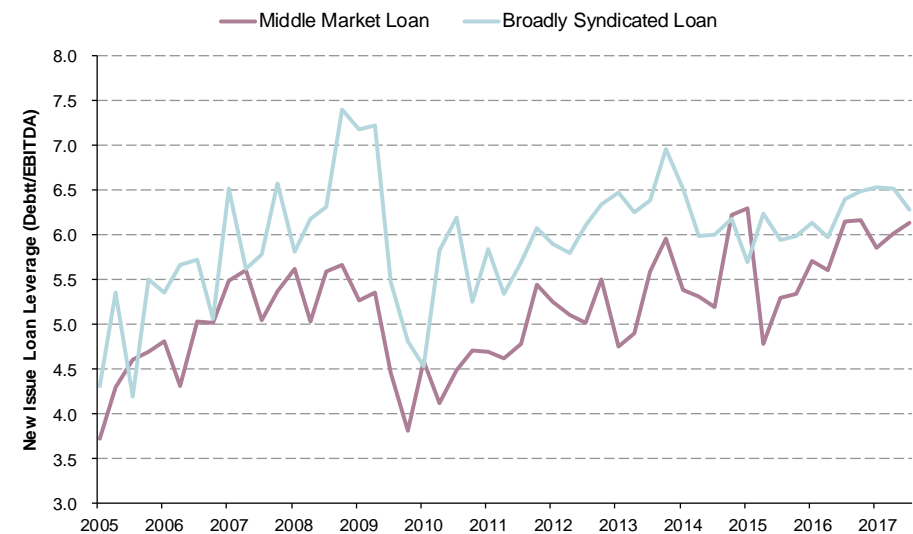
### Private Senior & Subordinated Debt

Pricing for middle market senior debt remained consistent while larger cap loan pricing slightly compressed. Mezzanine and subordinated debt volumes continued to remain muted as the financing for most LBOs today relies on a unitranche debt structure led by one or a small group of lenders. Private equity sponsors prefer this model as it usually allows them to close transactions quicker and have a consistent group of lenders. Even second lien new issuance slowed during the second quarter as a result of this dynamic.

#### Senior Loan Pricing<sup>1</sup>



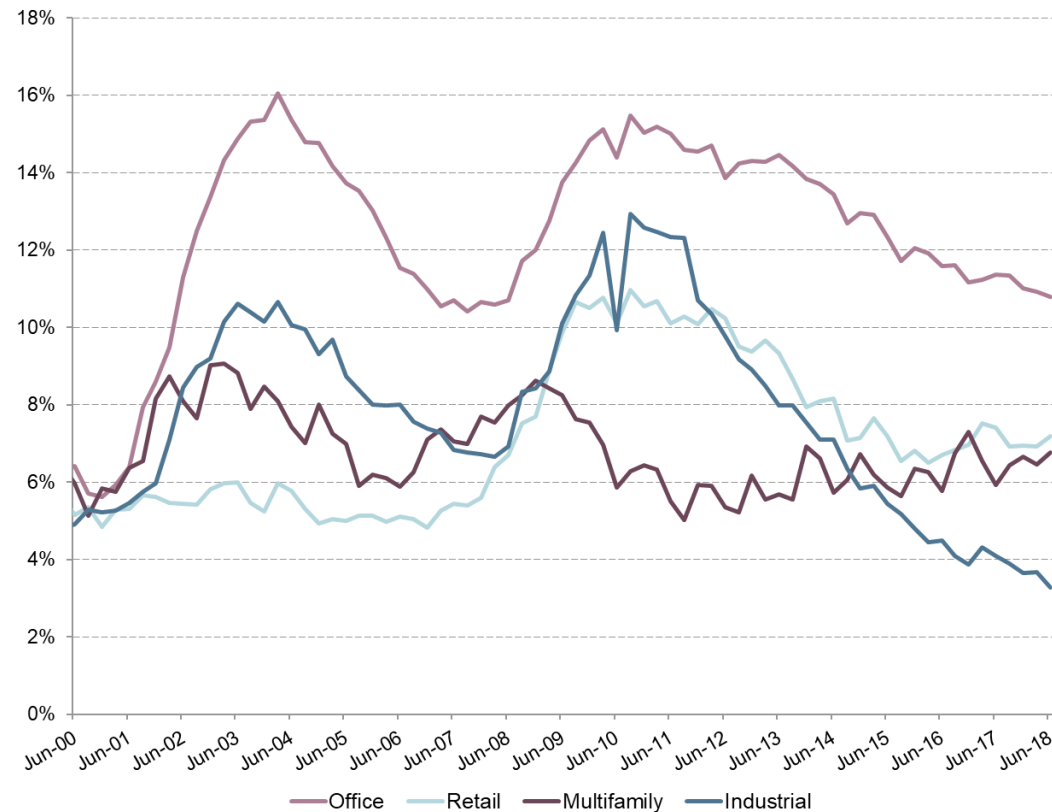
#### New Deal Leverage Multiples



<sup>1</sup> Source: Thomson Reuters LPC

## Real Estate Fundamentals

### Vacancy by Property Type<sup>1</sup>



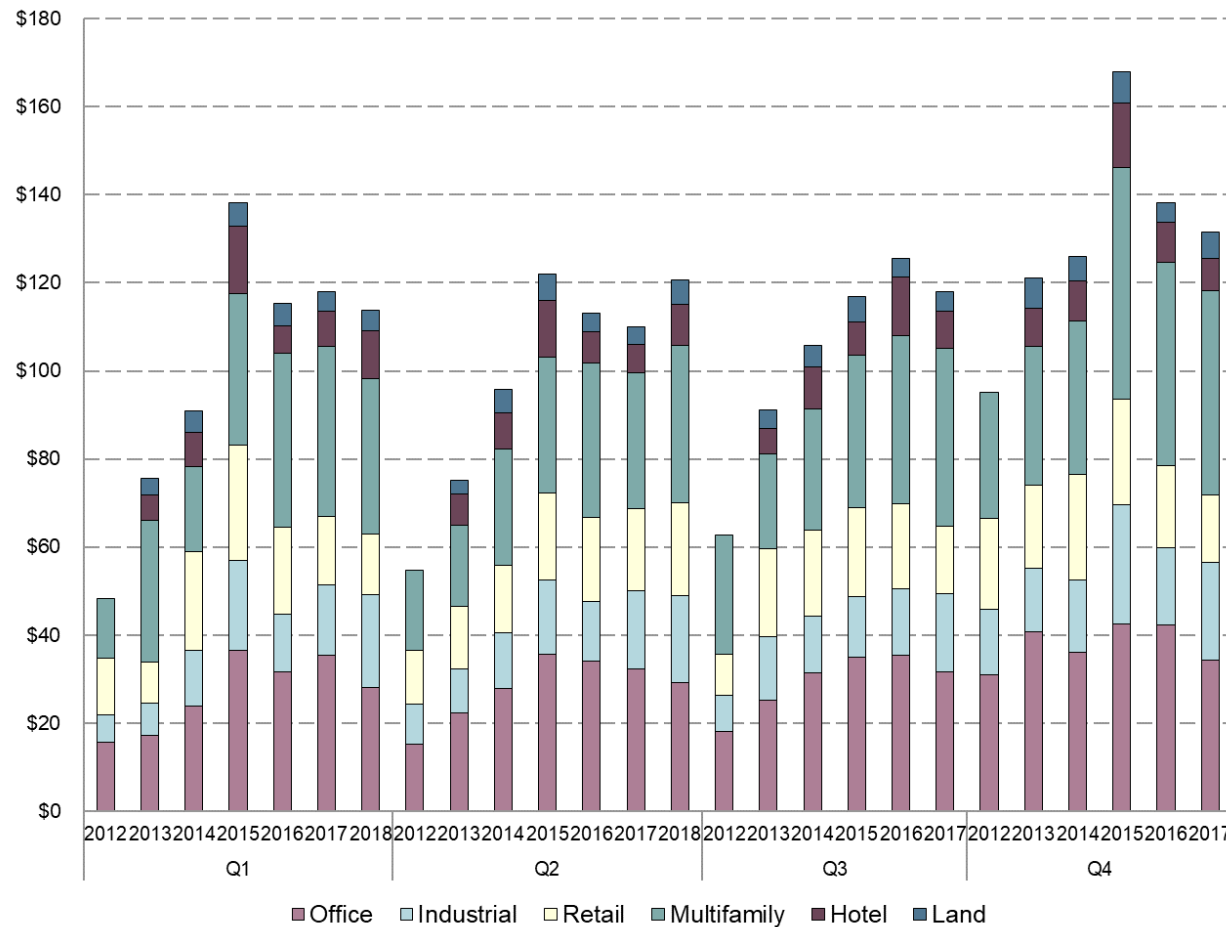
In the second quarter of 2018, vacancy rates across office and industrial properties continued to decrease, while vacancy rates in multifamily and retail increased slightly. Compared to the same period one year ago, vacancy rates in multifamily properties increased by 85 basis points, office decreased by 57 basis points, industrial decreased by 85 basis points, and retail decreased by 22 basis points. Overall, total vacancy rates across all property types decreased 53 basis points from Q2 2017. Industrial properties continue to exhibit the lowest vacancy rate at nearly 4%, while office properties have the highest vacancy rate of the major property types at almost 11%.

<sup>1</sup> Source: NCREIF



The trailing twelve month rate of NOI growth partially rebounded from a slight recent drop, trending back up towards 5% in the second quarter of 2018. This is largely due to the continued growth of the U.S. economy coupled with only moderate new construction, allowing property owners to increase rents and lease vacant space. The strongest NOI growth during the quarter was for industrial properties, which grew at 8.3% year-over-year ending Q2 2018. Previously, office properties were experiencing the highest NOI growth as of the end of 2017. Retail property NOI growth recovered slightly to 1.4% after a sharp drop-off in Q1 2018.

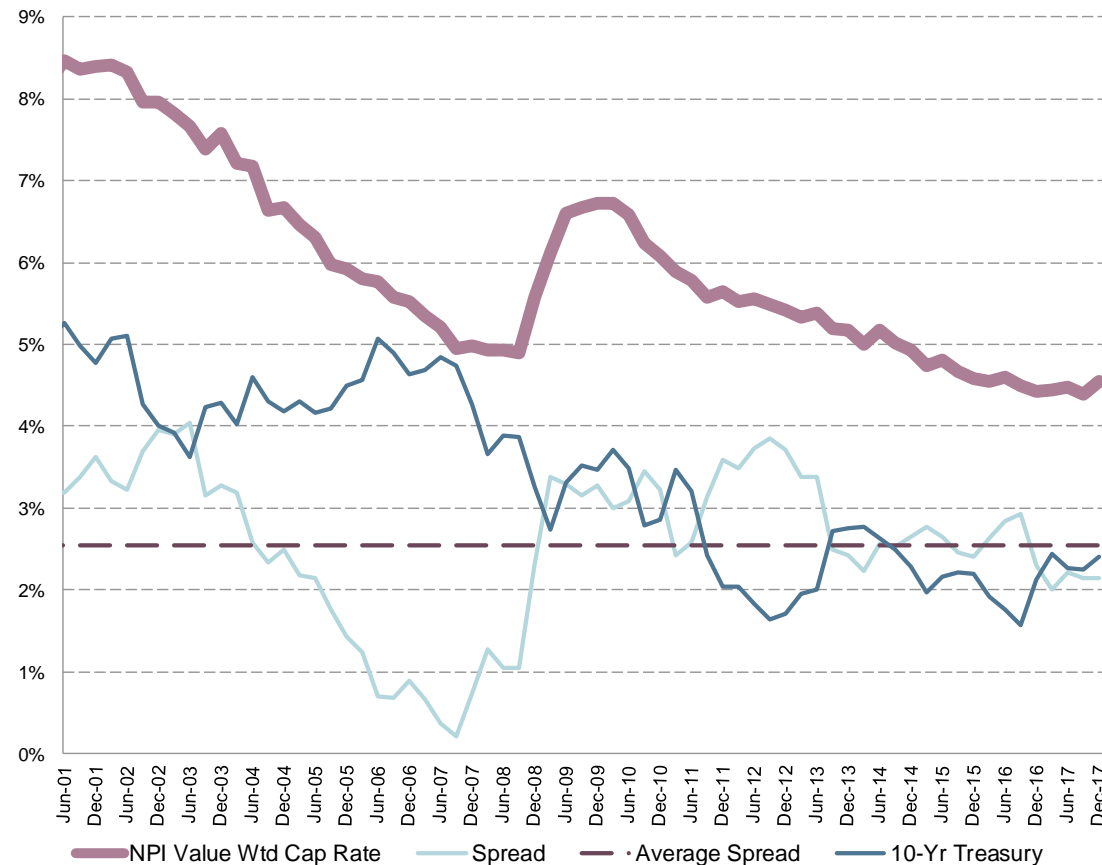
<sup>1</sup> Source: NCREIF

Transaction Volume (\$bn)<sup>1</sup>

Private real estate transaction volume for properties valued over \$2.5 million increased 9.5% in Q2 2018 when compared to Q2 2017. Retail volumes were up 50% compared to last quarter, while hotel and industrial volumes were down 11% and 8%, respectively. Office and multifamily volumes were relatively flat. Multifamily and office properties made up the largest percentages of total transaction volume, at 30% and 24%, respectively.

<sup>1</sup> Source: PREA

### Real Estate Capital Markets Cap Rates vs. 10-Year Treasury<sup>1</sup>



The NPI Value Weighted Cap Rate has flattened over the last two years following a declining trend post-GFC. 10-year Treasury yields continued to trend up in 2018 after a slight pullback in 2017. The spread between cap rates and the 10-year Treasury remained flat between Q1 2018 and Q2 2018, ending the quarter at 1.6%, 90 basis points below the long term average.

<sup>1</sup> Source: NCREIF and U.S. Department of the Treasury

**Trailing Period Returns<sup>1</sup>**

<i>As of June 30, 2018</i>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>NFI-ODCE (EW, net)</b>	<b>7.7%</b>	<b>8.7%</b>	<b>10.2%</b>	<b>4.2%</b>
<b>NCREIF Property Index</b>	<b>7.2</b>	<b>8.3</b>	<b>9.8</b>	<b>6.2</b>
<b>NFI-CEVA (EW, net)</b>	<b>9.6</b>	<b>10.5</b>	<b>12.3</b>	<b>4.6</b>
<b>NAREIT Index</b>	<b>4.9</b>	<b>9.1</b>	<b>8.9</b>	<b>8.3</b>

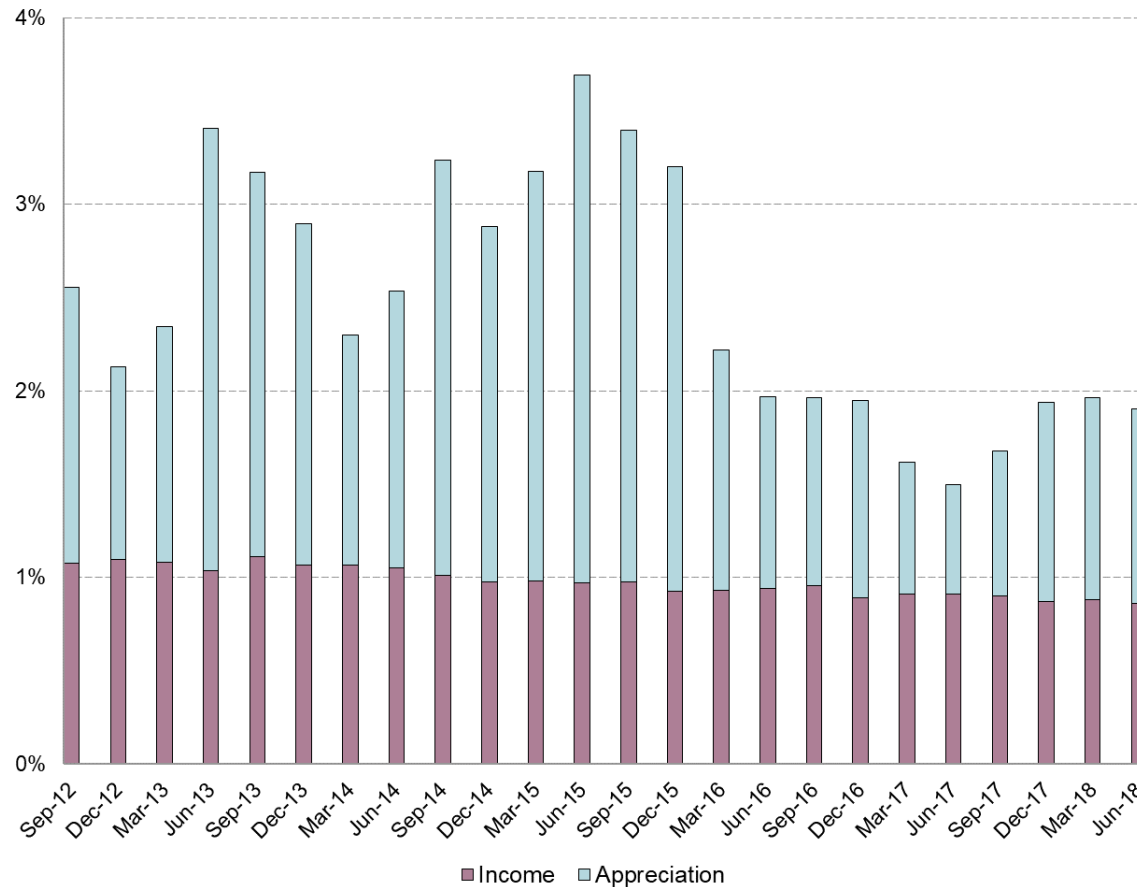
Public and private real estate indices have continued to post positive returns, driven by strong property-level fundamentals and a low interest rate environment. The NFI-CEVA (Closed-End Value Add) Index has outperformed over recent time periods, although the funds included in the index utilize higher leverage and have vacancy risk than the comparable indices, which generally include stabilized properties.

<sup>1</sup> Source: NCREIF





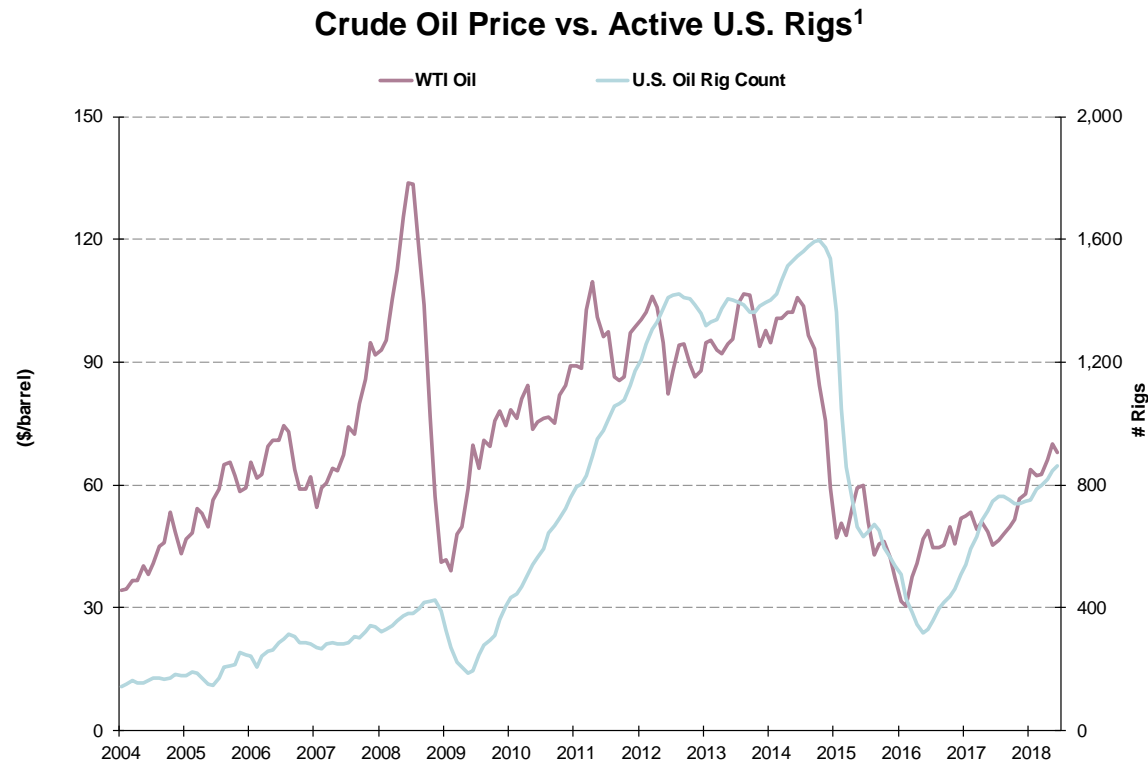
### ODCE Return Components<sup>1</sup> (Equal Weight, Net)



The NFI-ODCE Equal Weight return for Q2 2018 was 1.9%, consistent with the previous two quarters. The appreciation component of the return has reached 2016 levels at just over 1.0%. Appreciation return is expected to be moderate in the near term due to the stabilization of cap rates. Income return has been on a slow downward trend, dipping below 0.9% for the quarter.

<sup>1</sup> Source: NCREIF

## Extracted Resources

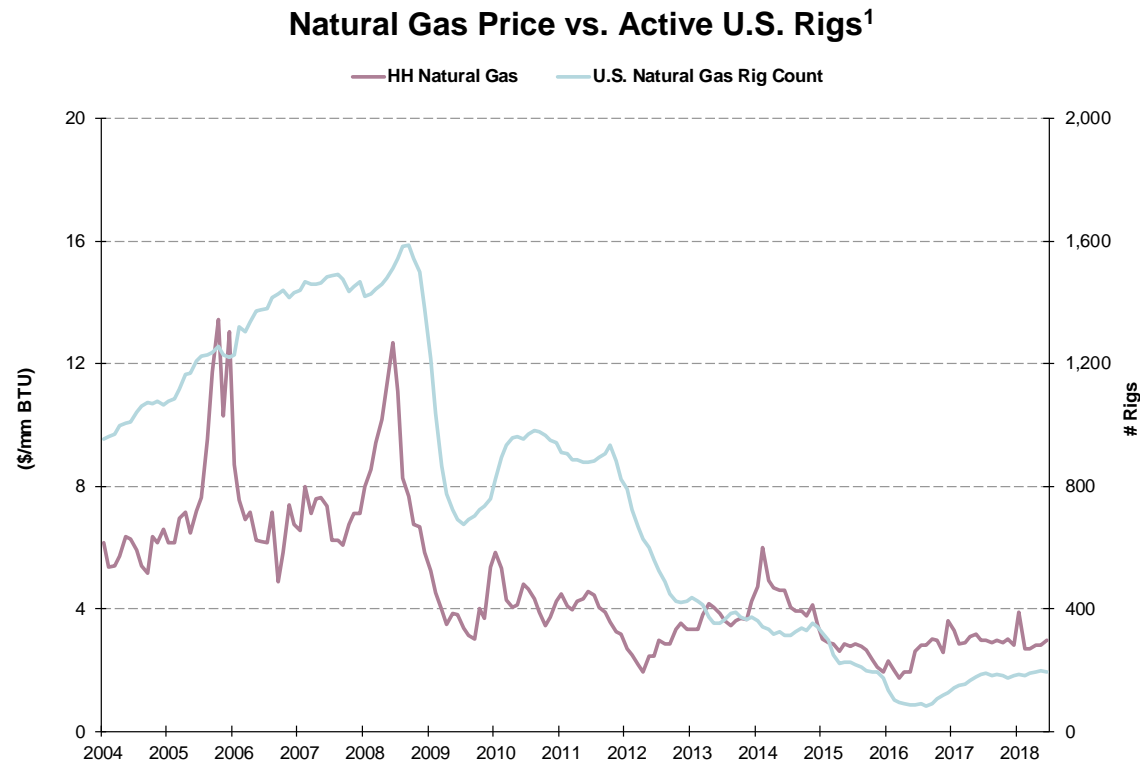


The U.S., UK, and France coordinated military strikes in Syria after a suspected chemical attack in the country. The attack raised concerns of potential oil supply disruptions in neighboring Iran. Additionally, President Trump announced the U.S. will impose sanctions on Iranian oil production with an effective date of November 2018. While Saudi Arabia pledged additional capacity, OPEC has limited spare capacity to increase production meaningfully.

Prices for West Texas Intermediate ("WTI") oil increased to \$68 per barrel representing an 8% quarterly increase and a 50% increase from one year prior. During the quarter, an additional 62 oil rigs were added which brought the total count to 861. U.S. gasoline prices for regular blend increased to \$3.08 per gallon during the second quarter, representing a 10% increase from the previous quarter and a 21% increase from one year prior. The U.S. produced an average of 10.5 million barrels of oil equivalent per day in the second quarter of 2018. The availability of water and midstream energy infrastructure, as well as disposal and treatment of produced water, continue to present challenges to the industry. As a result, regional pricing between local terminals and WTI has been widening to more than \$15 in certain areas.

<sup>1</sup> Source: EIA and Baker Hughes.

## Extracted Resources

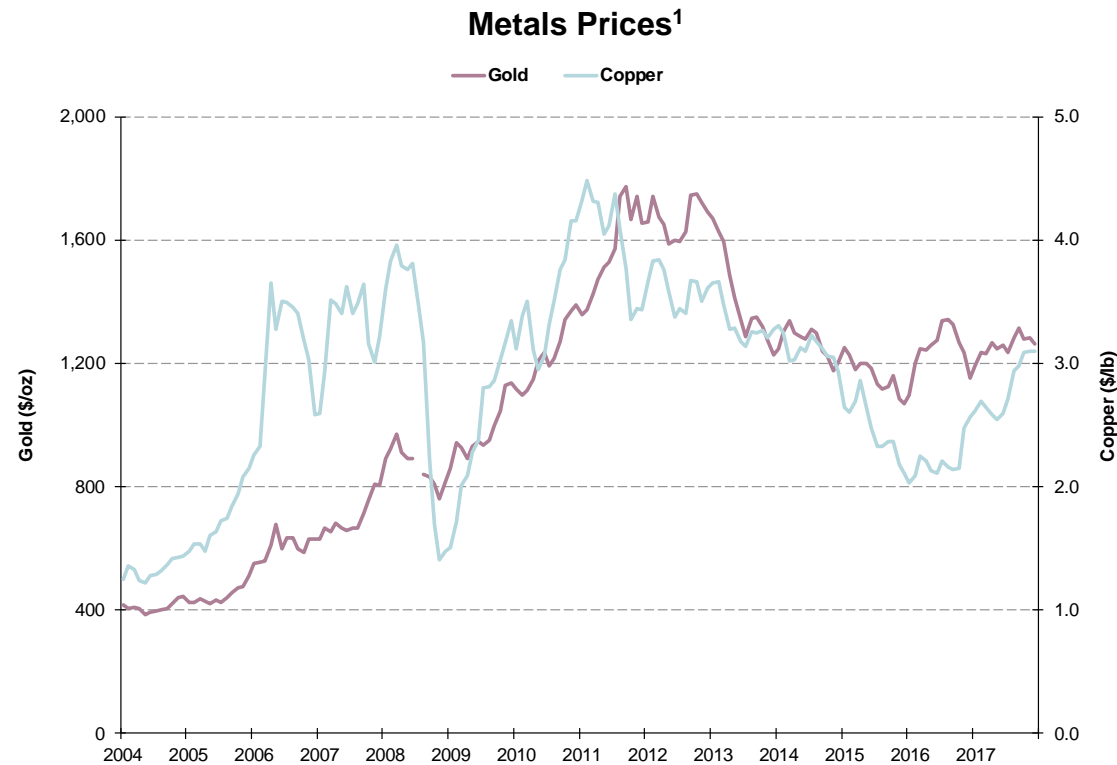


Henry Hub natural gas spot price was \$2.97/MM BTU, as of June 30, 2018, representing a 10% increase from the prior quarter. Relative to one year prior, natural gas prices are flat. Natural gas production from the Marcellus and Utica and significant amounts of associated gas production from oil production in the Permian and Eagle Ford are contributing to record levels of U.S. production. During the second quarter of 2018, the U.S. produced an average of 87.5 billion cubic feet of natural gas per day.

There is a significant buildout of refineries, petrochemical, and liquefied natural gas (“LNG”) facilities along the Gulf Coast that is seeking to take advantage the abundant supplies of natural gas and natural gas liquids (“NGL”) being produced in the U.S. Once these facilities become operational, they should help absorb excess supply and transform the U.S. into a major energy exporter.

<sup>1</sup> Source: EIA and Baker Hughes.

## Extracted Resources

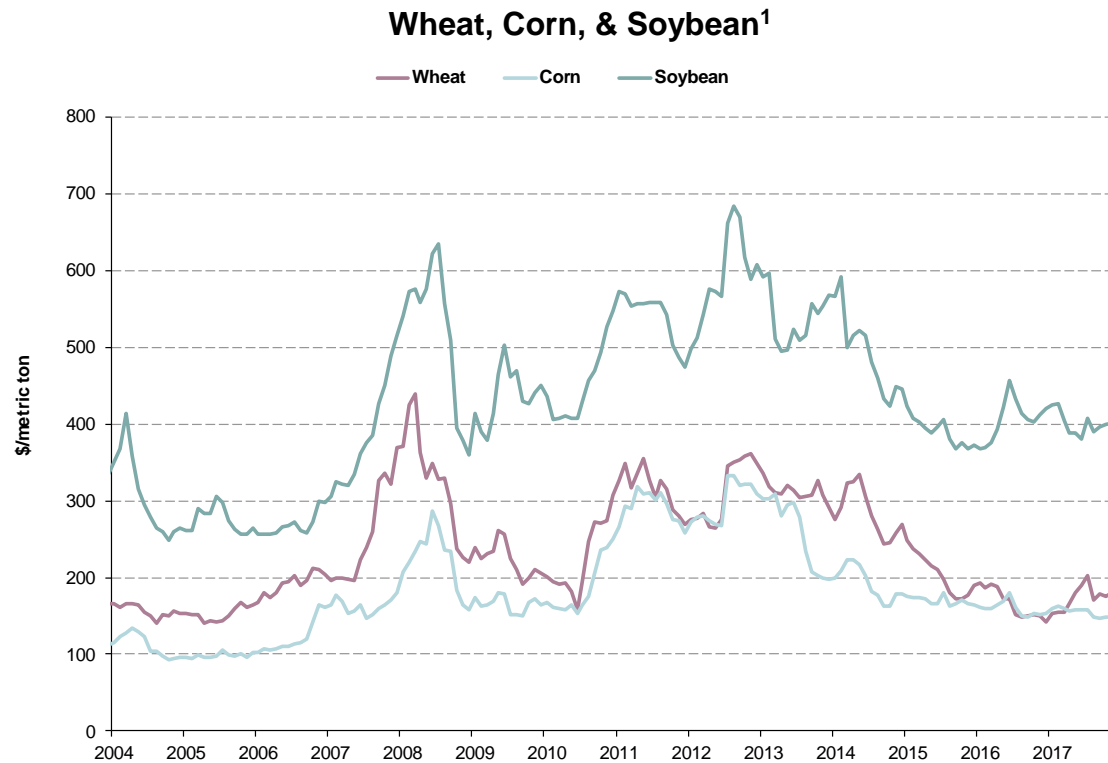


During the quarter, gold traded between \$1,250 and \$1,350 and finished the quarter at \$1,282 per ounce representing a 3% decrease from the prior quarter. Relative to one year prior, gold prices were slightly up by 2%. Further rate increases in the U.S. are expected to contribute to a stronger U.S. dollar which will likely limit positive momentum in gold prices.

Copper prices increased slightly during the quarter to just over \$3 per pound, representing a 2% increase from the previous quarter. Relative to one year prior, copper prices were up by approximately 22%. Copper tends to perform well on global growth and optimism and underperform in weakening economic periods.

<sup>1</sup> Source: World Bank

## Harvested Resources



Concerns of tariffs and the impact of trade wars between the U.S. and the rest of the world increased during the second quarter, notably with China. China imposed a round of retaliatory tariffs targeted at the U.S. agricultural sector with an emphasis on soybeans since it imports approximately 60% of U.S. production. China will end up importing more of its soybeans from Brazil; however, Brazil may not be able to supply China while also meeting its domestic demand. As a result, Brazil may import soybeans from the U.S., and new trade routes for U.S. agricultural products will be established over time.

During the quarter, wheat prices were up 4% while corn and soybeans were down by 4% and 7%, respectively. Relative to one year prior, wheat, corn, and soybeans were up by 12%, 5%, and 9%, respectively.

<sup>1</sup> Source: World Bank

**Harvested Resources****Trailing Period Returns<sup>1</sup>**

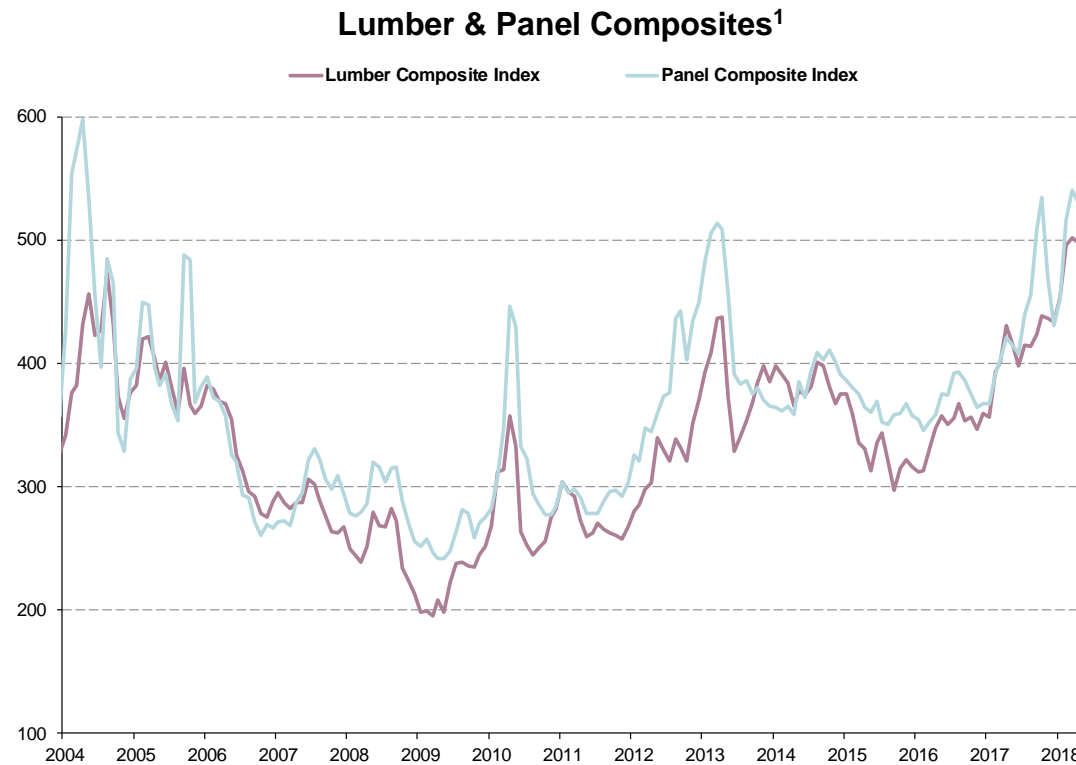
<i>As of June 30, 2018</i>	<b>Q2 18</b>	<b>1 Year</b>	<b>5 Years</b>	<b>10 Years</b>
<b>NCREIF Farmland</b>	<b>1.1%</b>	<b>6.5%</b>	<b>11.7%</b>	<b>14.6%</b>
<b>NCREIF Timberland</b>	<b>0.5%</b>	<b>3.6%</b>	<b>6.0%</b>	<b>4.0%</b>
<b>S&amp;P 500</b>	<b>3.4%</b>	<b>14.4%</b>	<b>13.4%</b>	<b>10.1%</b>
<b>Barclays Aggregate</b>	<b>-0.2%</b>	<b>-0.4%</b>	<b>2.3%</b>	<b>3.7%</b>

The NCREIF Farmland index experienced a 1.1% increase during the quarter within income accounting for 0.6% and appreciation generating 0.5%. Permanent crops returned 0.4% and row crops generated 1.7%. For the year, the NCREIF Farmland index increased by 6.5% driven by 4.7% from income and modest appreciation gains of 1.8%.

The NCREIF Timberland index increased 0.5% during the quarter as a result of income returns of 0.8% and a decrease of land values of 0.3%. For its one year returns, the index generated 3.6% largely from income returns of 3.1%. The Pacific Northwest region generated the strongest regional returns of 2.4%.

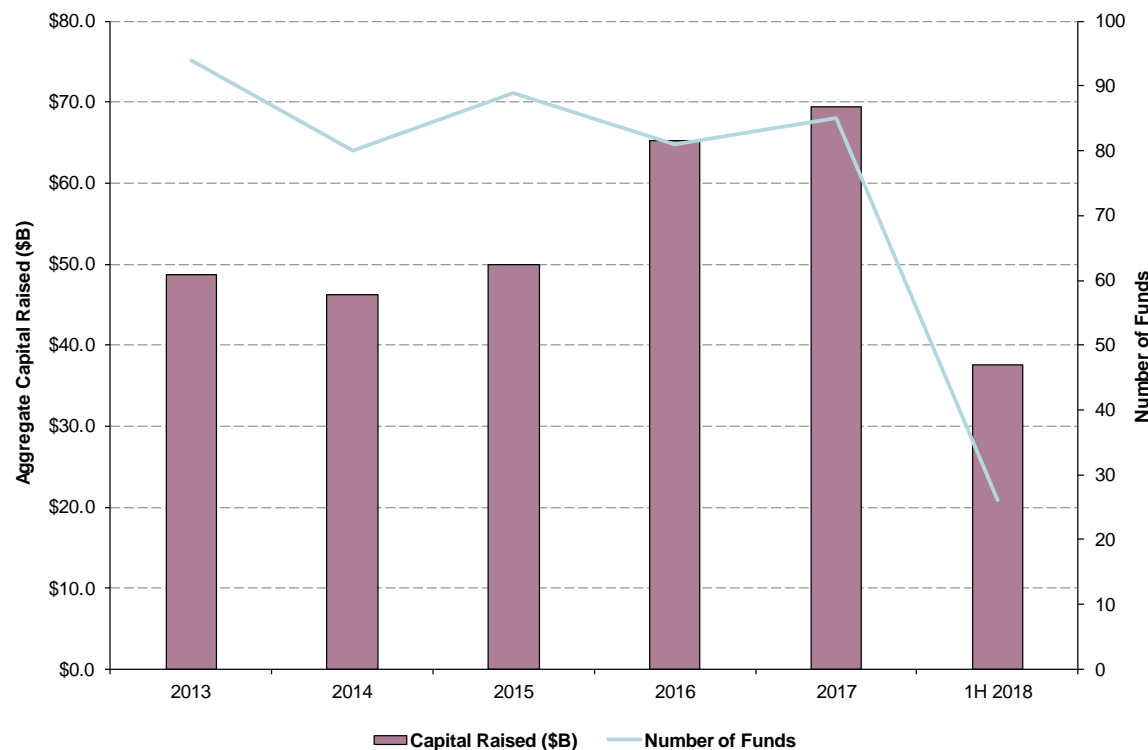
<sup>1</sup> Source: National Council of Real Estate Investment Fiduciaries (NCREIF).

## Harvested Resources



The housing sector continues to be the driving factor for the U.S. timberland and wood products sectors. New residential housing starts in the U.S. remained stable at approximately 1.35 million. Prices for timber products such as lumber and panel increased during the quarter from strong demand, limited inventories, and weather issues, in general. During the quarter, lumber and panel prices increased by 12% and 5%, respectively. Relative to one year prior, prices were up 42% and 39%, respectively.

<sup>1</sup> Source: Random Lengths

Global Quarterly Unlisted Infrastructure Fundraising<sup>1</sup>

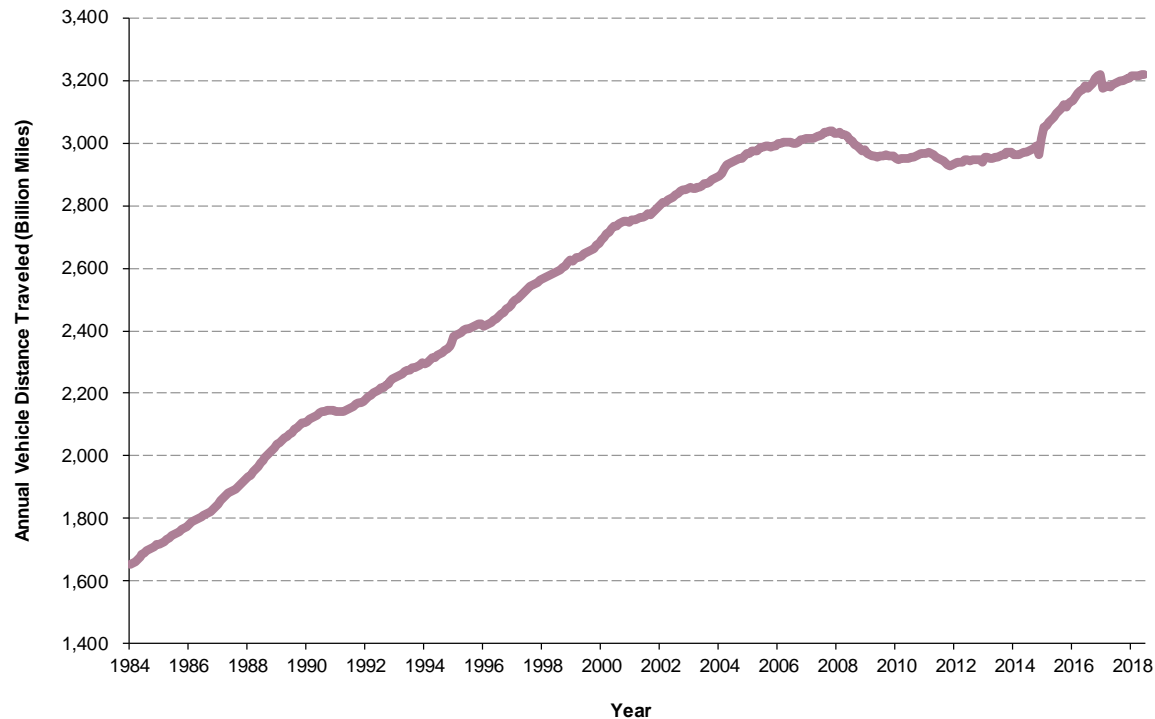
Capital raised in the first half of 2018 is on pace with the previous two years in terms of dollars raised, but the market continues to trend toward fewer funds at higher target sizes. In both the first and second quarter, the average fund size raised has exceeded \$1 billion. As of June 30, 2018, a total of 180 unlisted infrastructure funds were in market, according to Preqin, with a combined fundraising target of approximately \$127 billion.

The majority of infrastructure capital continues to focus on the developed markets of North America and Europe, accounting for nearly 85% of the capital raised in Q2 and 15 of the 17 funds closed this quarter. Only two funds collectively raising \$3.6 billion of capital were secured by Asia-focused funds in Q2, while there were no funds closed that focused on the rest of the world.

Notable final closes held in Q2 2018 included ISQ Global Infrastructure Fund II's fundraise of \$6.5 billion, Macquarie Asia Infrastructure Fund II's fundraise of \$3.3 billion, Infracapital Partners III's fundraise of £1.85 billion, and DIF Infrastructure V's fundraise of €1.9 billion.

<sup>1</sup> Source: Preqin Quarterly Update: Infrastructure, Q2 2018.



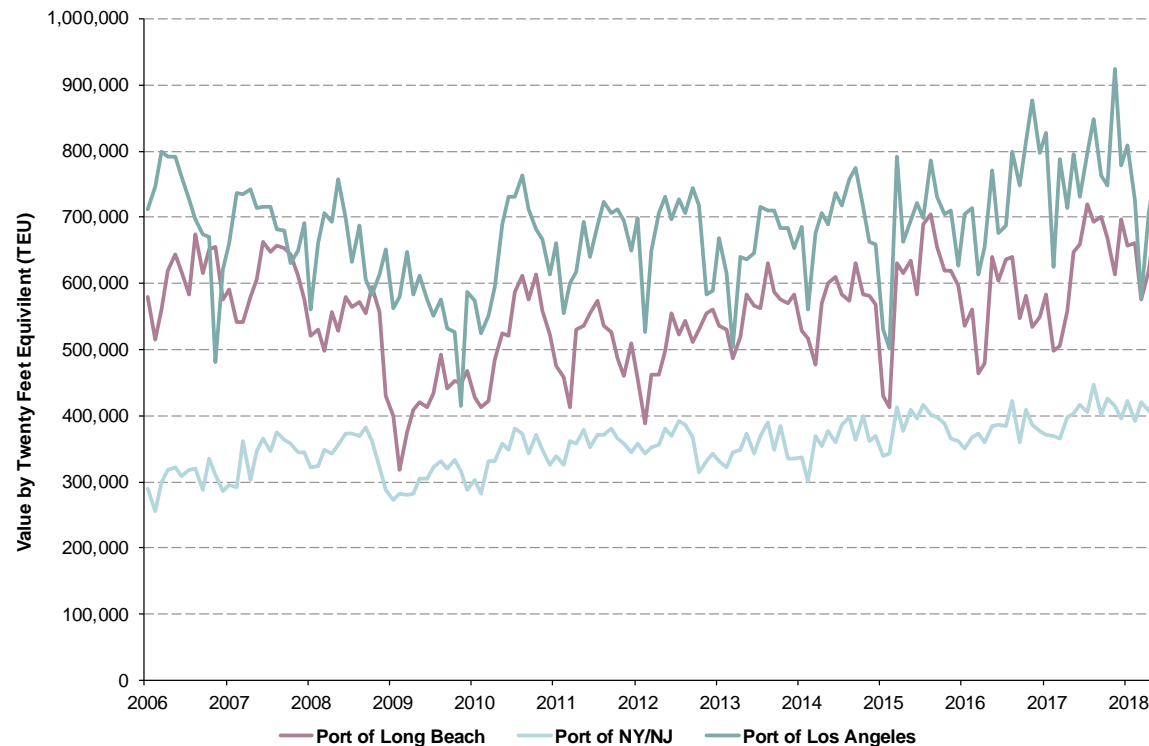
**Moving 12-month Total on All U.S. Roads<sup>1</sup>**

During the second quarter of 2018, travel on U.S. roads totaled approximately 840 billion miles. This represented an increase of 0.7% over the same period in 2017. For the 12 months ending June 30, 2018, Federal Highway Administration data showed vehicle miles traveled increased by 459 billion miles, up 0.03% over the prior 12 month period.

In Q2 2018, the average U.S. price of a gallon of gas came down to a monthly average of \$2.94 per gallon, with a peak of \$2.99. This compares to \$2.50 and \$2.53 seen in 2017. According to INRIX, Los Angeles, New York City, and San Francisco rank as the top three cities in the U.S. in which drivers spend the most hours in traffic.

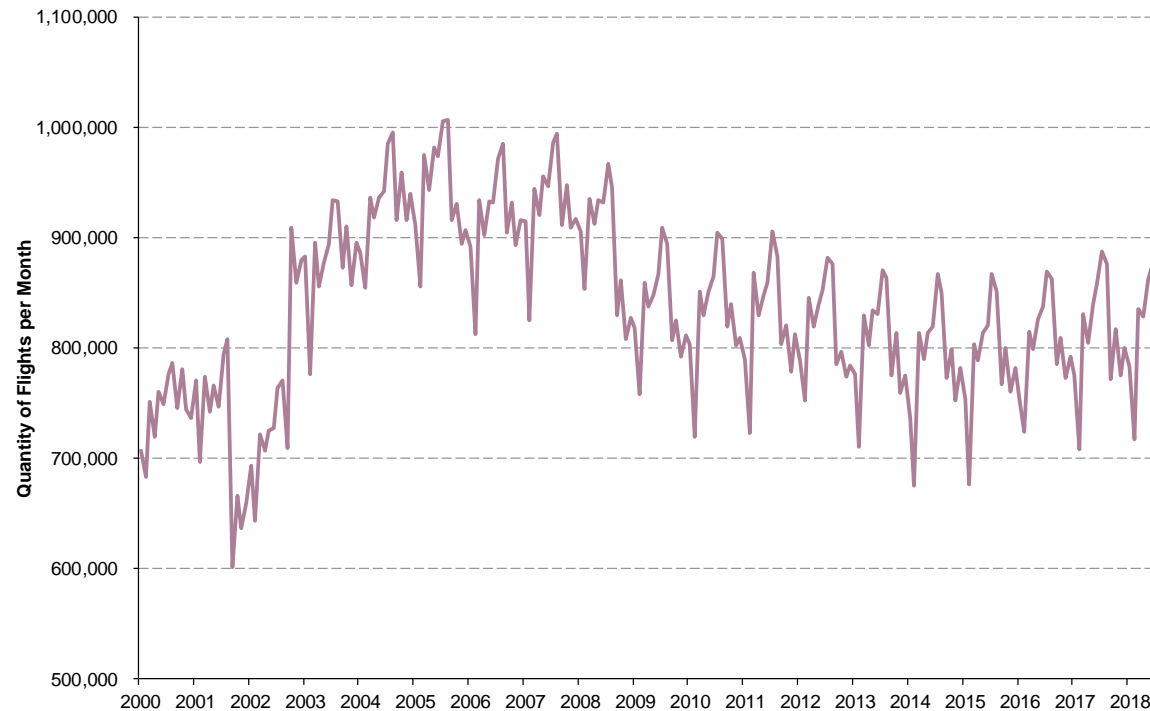
<sup>1</sup> Source: U.S. Department of Transportation, Federal Highway Administration: Office of Highway Policy Information.

### U.S. Port Activity – Container Trade in TEUs



The chart represents the top three U.S. ports by container volume, as measured by twenty-foot equivalent units (TEU). Activity at the three ports provides a high-level representation of the volume of imports received into the U.S. more broadly.

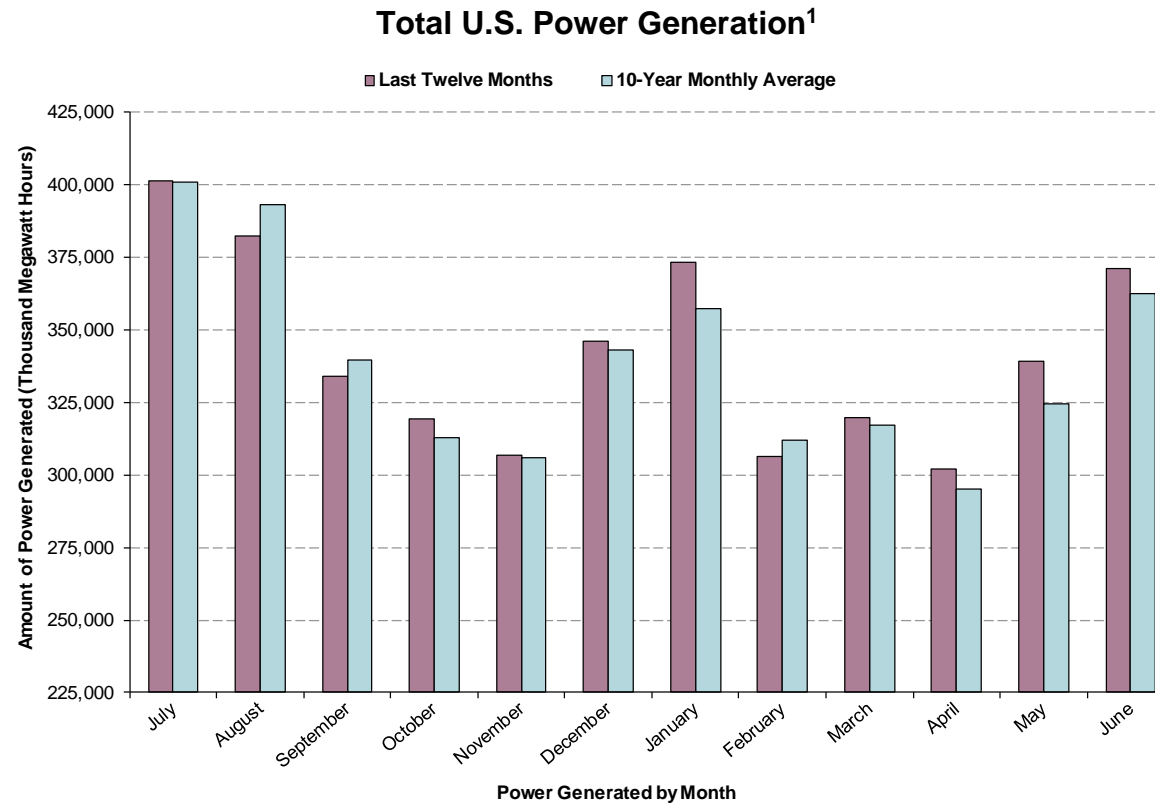
During the second quarter of 2018, volumes at the three ports increased by approximately 210,000 TEU, or 4.0% over same period in 2017. On a year-over-year basis, the combined port volumes increased by 1,409,000 TEU, or 6.8%, over the prior 12 month period. The Port of Long Beach and the Port of NY/NJ both saw an increase in year-over-year activity, while the Port of Los Angeles saw a slight decrease. The Port of Long Beach and NY/NJ recorded increases of 15.9% (1,105,000 TEU) and 7.3% (340,000 TEU), respectively, from the prior 12 months. The Port of Los Angeles recorded a decrease of 0.4% (36,000 TEU).

**Total U.S. Domestic and International Flights<sup>1</sup>**

The chart above represents all U.S. domestic and international flights, excluding foreign point-to-point flights by month. Air traffic is cyclical with peaks in the summer months and declines in the winter months.

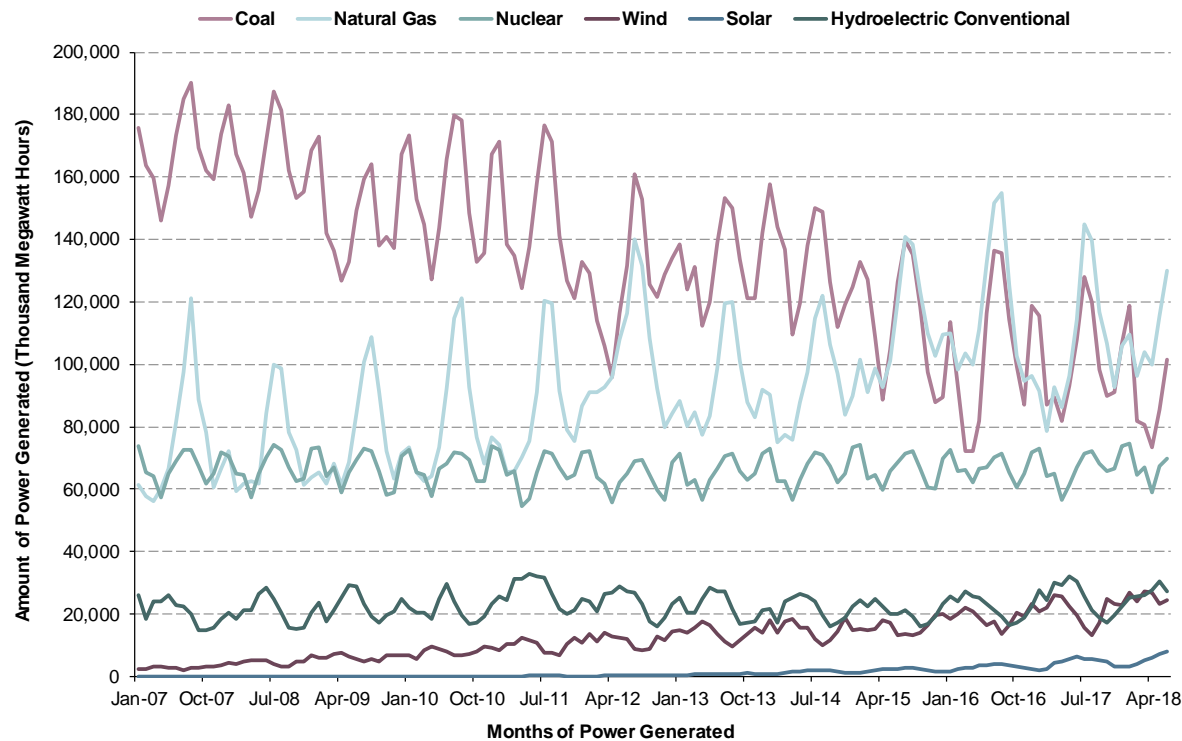
There were over 61,700 more flights during the second quarter of 2018, representing a 4.0% increase, compared to the same period in 2017. Air traffic activity also increased by 1.2% for the 12 months ending June 30, 2018 over the previous period. In addition to the number of flights during the second quarter increasing year-over-year, the total number of passengers travelling on U.S. and international airlines increased by 4.3% from 2017 to 2018, which indicates higher capacity factors among airlines compared to the prior period.

<sup>1</sup> Source: Bureau of Transportation Statistics: Flights, All U.S., and Foreign Carriers.



The graph above represents the total net generation for the past 12 months compared to the 10 year average for each month. Over the past year, power generation exceeded the 10-year average in nine out of the 12 months. Net energy generation in the U.S. increased by 4.3% during the second quarter, compared to the same period in 2017. For the 12 months ended June 30, 2018, net energy generation increased by 1.3% over the previous 12 months.

<sup>1</sup> Source: U.S. Energy Information Administration: Electric Power Monthly, September 2018.

**U.S. Power Generation by Source<sup>1</sup>**

When comparing individual generation sources in the U.S., natural gas, nuclear, wind, and solar increased 16.5%, 6.0%, 9.5%, and 25.2%, respectively in the second quarter of 2018 as compared to the same period in the previous year, while generation from coal and hydroelectric conventional dropped by 8.0% and 7.3%, respectively, during the same period. Wind and utility scale solar continue to make up a small portion of total net energy generation in the U.S., accounting for only 7.4% and 2.1% of energy generation in the second quarter, while coal and natural gas accounted for 25.7% and 34.1%, respectively. However, the growth of wind and solar as sources of energy generation continues to increase at a faster rate than coal and natural gas, especially over the last couple of years.

<sup>1</sup> Source: U.S. Energy Information Administration: Electric Power Monthly, September 2018.

The material contained in this report is confidential and may not be reproduced, disclosed, or distributed, in whole or in part, to any person or entity other than the intended recipient. The data are provided for informational purposes only, may not be complete, and cannot be relied upon for any purpose other than for discussion.

Meketa Investment Group has prepared this report on the basis of sources believed to be reliable. The data are based on matters as they are known as of the date of preparation of the report, and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available.

If we manage your assets on a discretionary basis, please contact us if there are any changes in your financial situation or investment objectives, or if you want to impose any reasonable restrictions on our management of your account or reasonably modify existing restrictions.

In general, the valuation numbers presented in this report are prepared by the custodian bank for listed securities, and by the fund manager or appropriate General Partner in the case of unlisted securities. The data used in the market comparison sections of this report are sourced from various databases. These data are continuously updated and are subject to change.

This report does not contain all the information necessary to fully evaluate the potential risks of any of the investments described herein. Because of inherent uncertainties involved in the valuations of investments that are not publicly traded, any estimated fair values shown in this report may differ significantly from the values that would have been used had a ready market for the underlying securities existed, and the differences could be material. Note that for unlisted securities the valuations may be lagged by one or more calendar quarters, or may reflect original cost.

This document may contain certain forward-looking statements, forecasts, estimates, projections, and opinions ("Forward Statements"). No representation is made or will be made that any Forward Statements will be achieved or will prove to be correct. A number of factors, in addition to any risk factors stated in this material, could cause actual future results to vary materially from the Forward Statements. No representation is given that the assumptions disclosed in this document upon which Forward Statements may be based are reasonable. There can be no assurance that the investment strategy or objective of any fund or investment will be achieved, or that the client will receive a return of the amount invested.

In some cases Meketa Investment Group assists the client in handling capital calls or asset transfers among investment managers. In these cases we do not make any representations as to the managers' use of the funds, but do confirm that the capital called or transferred is within the amounts authorized by the client.

The values of companies and partnerships in this review are based on unaudited reports for June 30, 2018, provided by the General Partners, unless otherwise noted.

Because there is no readily accessible market for private markets assets (companies and partnerships), the values placed on private markets assets are calculated by General Partners using conservative and industry standard pricing procedures. Annually, an independent auditor reviews the pricing procedures employed by the General Partner of each partnership.

While all private markets partnerships are audited by an independent entity, there is some discretion as to the method employed to price private companies and, therefore, private markets partnerships. At all times, Meketa Investment Group expects General Partners to utilize conservative and industry standard pricing procedures, and requires the General Partners to disclose those procedures in their reports. However, because of the inherent uncertainty of valuation, these estimated values may differ from the values that would be used if a ready market for the investments existed, and the differences could be significant.