



PROFORMANCE

COMPANY UPDATE

APRIL 2017

Information in this presentation is as of December 31, 2016, except as otherwise noted.



NATIONAL STORAGE
— AFFILIATES —

FORWARD-LOOKING STATEMENTS AND NON-GAAP FINANCIAL MEASURES



FORWARD-LOOKING STATEMENTS: We make forward-looking statements in this presentation that are subject to risks and uncertainties. These forward-looking statements include information about possible or assumed future results of our business, financial condition, liquidity, results of operations, plans and objectives. When we use the words “believe,” “expect,” “anticipate,” “estimate,” “plan,” “continue,” “intend,” “should,” “may” or similar expressions, we intend to identify forward-looking statements. The forward-looking statements contained in this presentation reflect our current views about future events and are subject to numerous known and unknown risks, uncertainties, assumptions and changes in circumstances that may cause our actual results to differ significantly from those expressed in any forward-looking statement.

The forward-looking statements are based on our beliefs, assumptions and expectations of our future performance, taking into account all information currently available to us. Forward-looking statements are not predictions of future events. These beliefs, assumptions and expectations can change as a result of many possible events or factors, not all of which are known to us. Some of these factors are described in the annual report on form 10-K filed with the SEC on February 28, 2017 under the headings “business,” “risk factors,” “properties,” and “management’s discussion and analysis of financial condition and results of operations,” as applicable. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. If a change occurs, our business, financial condition, liquidity and results of operations may vary materially from those expressed in our forward-looking statements. Any forward-looking statement speaks only as of the date on which it is made. New risks and uncertainties arise over time, and it is not possible for us to predict those events or how they may affect us. Except as required by law, we are not obligated to, and do not intend to, update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

This presentation and the information contained herein are for informational purposes only and may not be relied upon for any purpose, including in connection with the purchase or sale of any of our securities. Such information does not constitute an offer to sell or a solicitation of an offer to buy any security described herein.

NON-GAAP FINANCIAL MEASURES: This presentation contains certain non-GAAP financial measures, such as funds from operations (“FFO”), Core FFO, net operating income (“NOI”), EBITDA, and Adjusted EBITDA, which are each defined in NSA’s Annual Report on Form 10-K for the period ended December 31, 2016 filed with the SEC. These non-GAAP financial measures are presented because NSA’s management believes these measures help investors understand NSA’s business, performance and ability to earn and distribute cash to its shareholders by providing perspectives not immediately apparent from net income (loss). These measures are also frequently used by securities analysts, investors and other interested parties. The presentation of FFO, Core FFO, NOI, EBITDA, and Adjusted EBITDA herein are not intended to be considered in isolation or as a substitute for, or superior to, the financial information prepared and presented in accordance with GAAP and should not be considered as alternative measures of liquidity. In addition, NSA’s definitions and method of calculating these measures may be different from those used by other companies, and, accordingly, may not be comparable to similar measures as defined and calculated by other companies that do not use the same methodology as NSA. Reconciliations of these measures for the year ended December 31, 2016 and 2015 and the three months ended December 31, 2016 and 2015 to their most directly comparable GAAP measures are included in the Appendix to this presentation. Reconciliations of these non-GAAP financial measures for the three months ended September 30, 2016 and 2015, June 30, 2016 and 2015 and March 31, 2016 and 2015 are available in NSA’s Quarterly Reports on Form 10-Q for the periods ended September 30, 2016, June 30, 2016 and March 31, 2016 filed with the SEC.



INVESTMENT HIGHLIGHTS: “NYSE: NSA”

- 1 NSA’s Institutional Quality Portfolio is Geographically Diversified Beyond the Top 20 MSAs in Higher Growth Markets
- 2 NSA’s Differentiated Structure Provides Strong Internal and External Growth Incentives with Downside Protection
- 3 NSA’s Senior Management Team has Deep Industry Experience
- 4 NSA has Consistently Outperformed its REIT Peers on Various Metrics since its IPO
- 5 NSA’s Flexible Capital Structure Supports Strong Future Growth



NATIONAL STORAGE AFFILIATES OVERVIEW

- National Storage Affiliates Trust (“NSA”) is a publicly traded NYSE self-storage REIT; ticker symbol “NSA”
- NSA is the 6th largest operator of self-storage properties in the US⁽¹⁾
- Institutional quality portfolio is broadly diversified across higher growth markets:
 - Only ~30% of NSA properties are in the top 20 MSAs
 - Biggest focus in MSAs in Western and Southern growth states
- Positioned to deliver strong external and organic growth



⁽¹⁾ Per 2017 Self-Storage Almanac based on number of properties.

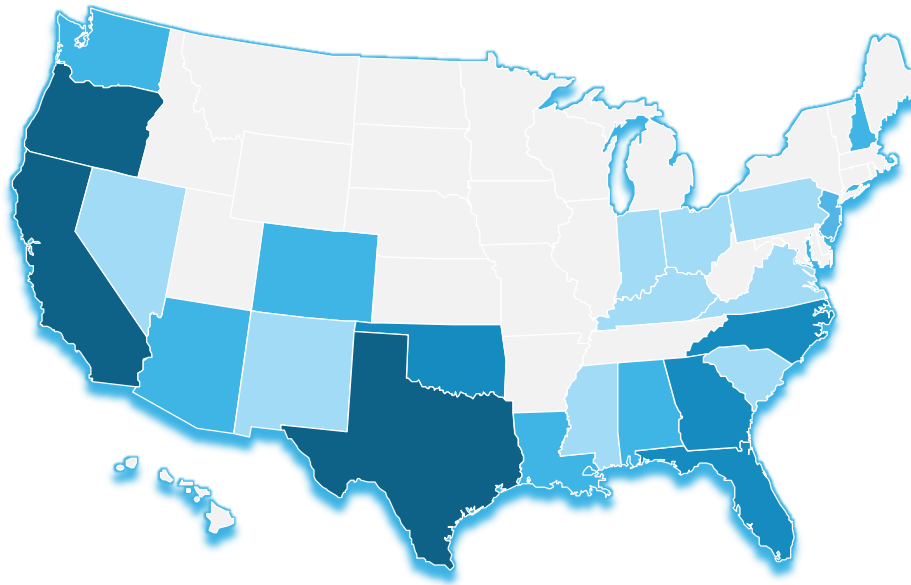
⁽²⁾ As of March 15, 2017, NSA held ownership interests in and operated 452 properties.



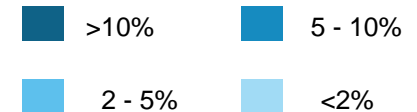
NSA'S GUIDING VISION UNITES TOP OPERATORS

NSA's unique strategy has successfully attracted eight of the most prominent operators with the common goal to drive significant organic and external growth

**6th Largest
U.S. Operator**
452 Properties⁽¹⁾



% of NSA Properties, by State



(1) As of March 15, 2017, NSA held ownership interests in and operated 452 properties.

(2) The iStorage brand is owned by NSA, but iStorage is not a Participating Regional Operator.



GROWTH HISTORY OF NSA

Deeply Rooted Operating History

PRO FORMATION AND INSTITUTIONALIZATION

1970 – 2011

- **1973** – Move It predecessor founded
- **1977** – Northwest and Hide-Away founded
- **1982** – Personal Mini predecessor founded
- **1988** – SecurCare founded
- **1989** – Storage Solutions founded
- **1999** – Guardian founded
- **2007** – Optivest founded
- **2007** – Raised initial institutional capital through SecurCare predecessor

NSA FORMATION AND GROWTH

2012 - 2017

- **2012** – Agreement in principle reached by three founding PROs: SecurCare, Northwest and Optivest
- **2013** – NSA formed
- **2014** – 4th PRO: Guardian
- **2014** – 5th PRO: Move It
- **2015** – 6th PRO: Storage Solutions
- **2015** – Successful IPO
- **2016** – 7th PRO: Hide-Away
- **2016** – JV formation / iStorage acquisition
- **2017** – 8th PRO: Personal Mini Storage



SENIOR MANAGEMENT TEAM HAS DEEP INDUSTRY EXPERIENCE

- Widely respected industry owner / operators
- Average PRO has over 30 years of industry experience
- Proven track record of growth
- Strong network of industry relationships
- Meaningful insider ownership aligns interests with shareholders

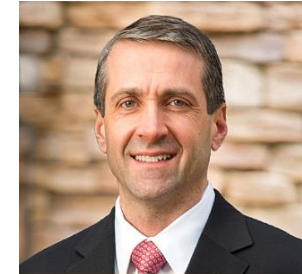
NSA Executive Team



ARLEN NORDHAGEN
Chairman & CEO



TAMARA FISCHER
CFO



STEVEN TREADWELL
*SVP, Operations
President – iStorage JV*

PRO Executive Leadership



KEVIN HOWARD
*Northwest
PRO*



DAVID CRAMER
*SecurCare
PRO*



WARREN ALLAN
*Optivest
PRO*



JOHN MINAR
*Guardian
PRO*



TRACY TAYLOR
*Move It
PRO*



BILL BOHANNAN
*Storage Solutions
PRO*



STEVE WILSON
*Hide-Away
PRO*



MARC SMITH
*Personal Mini
PRO*



STRUCTURE PROMOTES INTERNAL AND EXTERNAL GROWTH

Sophisticated Platform Tools Drive Organic Growth

Operational “Best Practices”

Revenue Management / Analytics

Economies of Scale and Lower Cost of Capital

Internet Marketing

PROs Drive External Growth Opportunities

Acquisition of Captive Pipeline Properties

Relationship Driven Third Party Acquisitions

Recruitment of New PROs

Strategic Joint Ventures

NSA'S TOOLS & DECENTRALIZED STRUCTURE DELIVER TOP RESULTS



**Delivered 2016 Same Store Total Revenue Growth
of 7.7% and Same Store NOI Growth of 10.2%**

NSA CORPORATE HEADQUARTERS PROVIDES PLATFORM TOOLS

EXECUTIVE LEADERSHIP

- Recruitment of PROs
- Acquisition review and approval

LEGAL & FINANCE SUPPORT

- Asset contributions and structuring
- Equity and debt capital markets

CORPORATE ACCOUNTING

- Internal controls, policies and procedures
- Budgeting and forecasting

CORPORATE MARKETING

- Revenue management infrastructure
- Internet platform
- Call center

TECHNOLOGY & INNOVATION

- Management information systems
- Streamlined operational processes

REGIONAL & LOCAL OPERATIONS IMPLEMENT BEST PRACTICES

Acquisition Underwriting
& Sourcing

Property Management

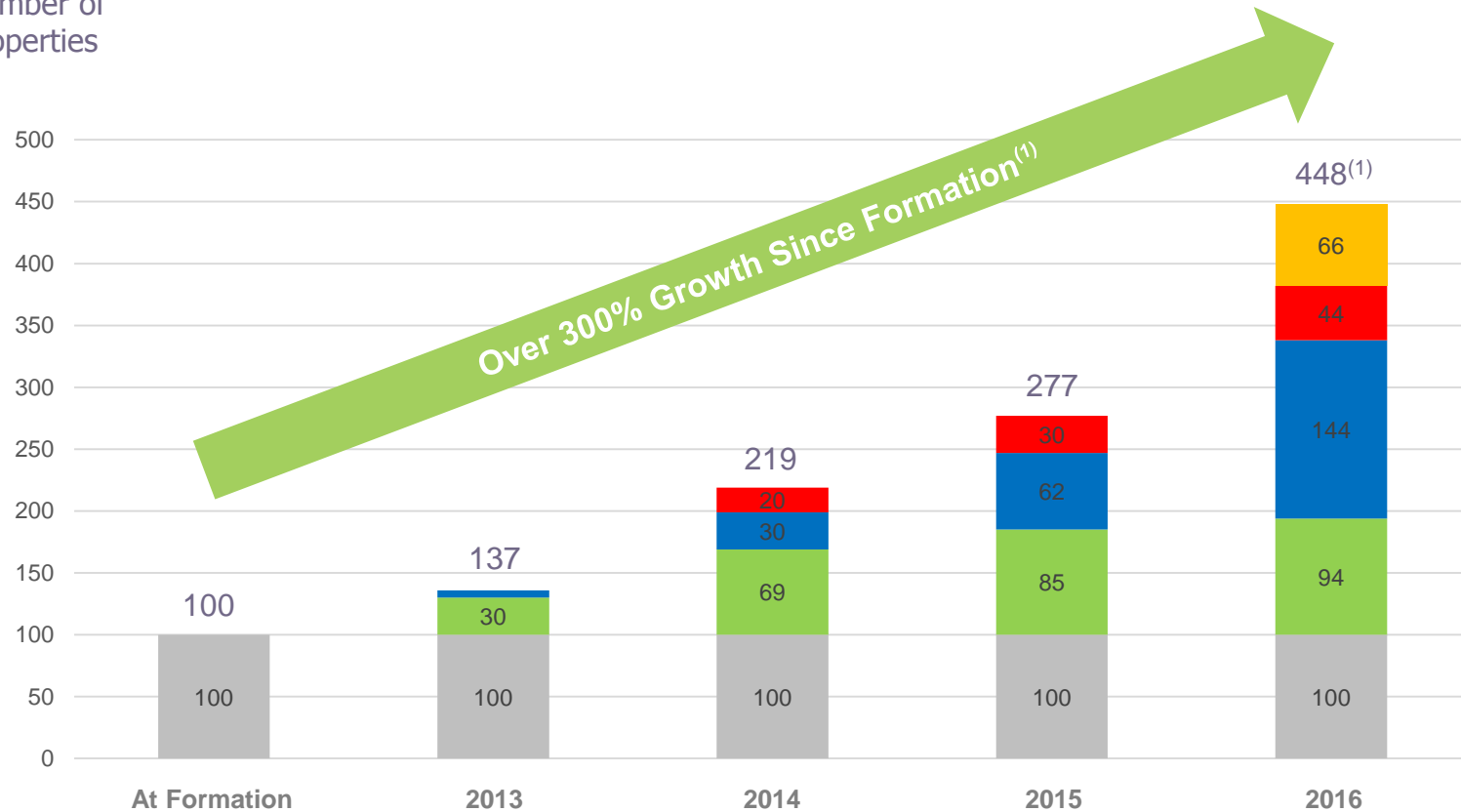
Property Level
Accounting

Local Branding &
Marketing



NSA'S TRACK RECORD OF EXTERNAL GROWTH

Number of
Properties



- 1 Captive Pipeline 2 3rd Party Acquisitions 3 New PROs 4 Strategic Joint Ventures

⁽¹⁾ In 2016, NSA closed over \$1.3 billion of consolidated and unconsolidated acquisition transactions.

STRUCTURE ATTRACTS DISCIPLINED, GROWTH-ORIENTED OPERATORS



Successful regional operators join NSA as PROs rather than JV or Sale options, giving NSA access to top properties not otherwise available

Criteria	NSA	JV	Sale / Exit
Liquidity / Monetization	✓	●	●
Ability to Maintain Property Management	✓	●	
Participate in Upside	✓	●	
Enhance NOI Through Best Practices	✓		
Opportunity and Incentives to Grow Portfolio	✓		

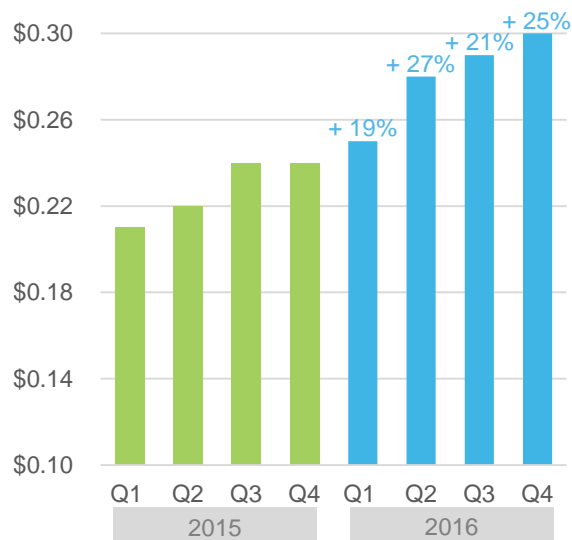
2016 FINANCIAL UPDATE



Strong Operational Growth Continues

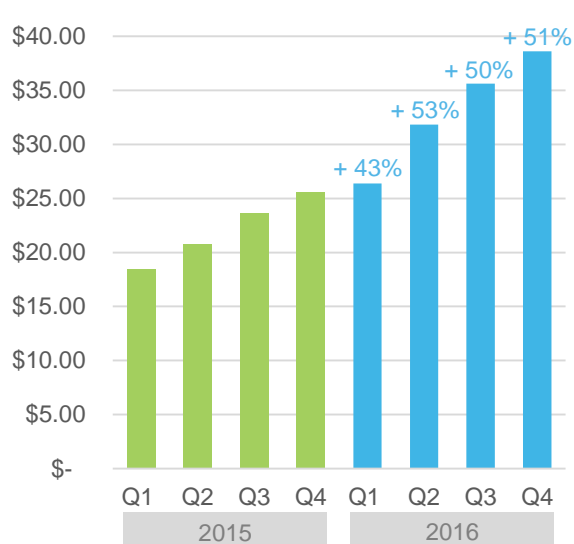
Core FFO (\$ per share)

Year-over year growth:



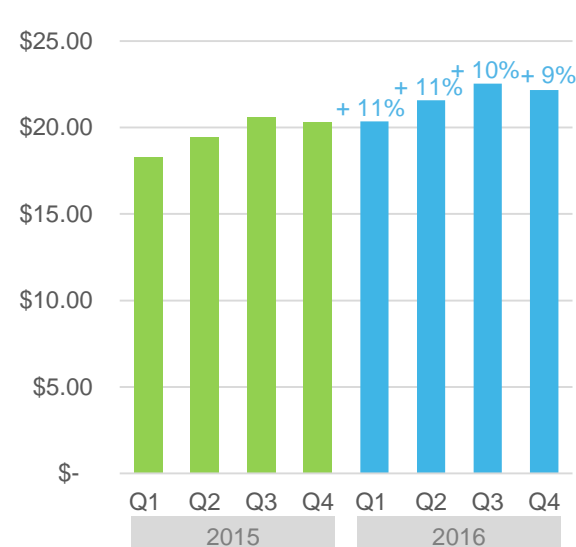
NOI (\$ millions)

Year-over year growth:



Same Store NOI (\$ millions)

Year-over year growth:



FLEXIBLE CAPITAL STRUCTURE AS OF DECEMBER 31, 2016



TOTAL PRINCIPAL DEBT OUTSTANDING

- \$873.2 MM

CONSERVATIVE BALANCE SHEET

- 30.0% Debt/Total Capitalization⁽¹⁾
- 6.2x Net Debt/Adjusted EBITDA⁽²⁾
- 5.0x Interest Coverage Ratio⁽³⁾

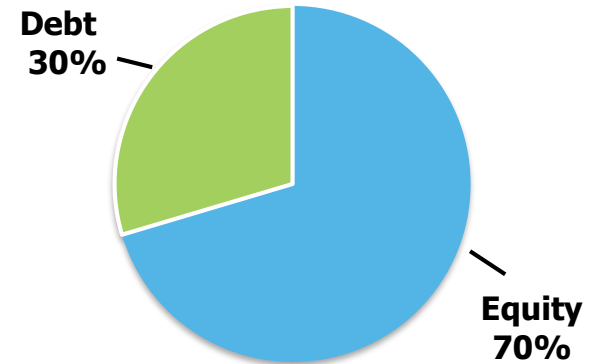
CAPITAL FOR GROWTH

- \$400MM Unsecured Revolving Line of Credit
- OP Units & SP Units

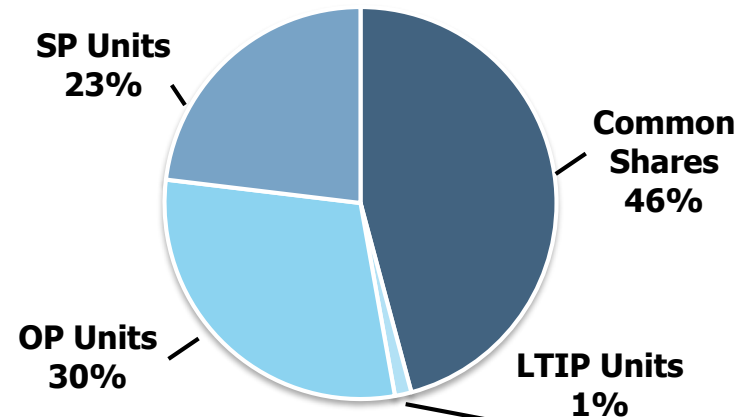
ATTRACTIVE DIVIDEND

- 4.35% Yield⁽⁴⁾

Total Capitalization: \$2.9 BN⁽¹⁾



Significant Investment by
Management & PROs⁽¹⁾



(1) Total Capitalization means our Debt plus the product of our \$22.07 closing share price on December 31, 2016 and our fully diluted outstanding equity as of December 31, 2016 (with SP Units deemed converted on a hypothetical basis into an estimated 1.41 OP units based on historical financial information for the trailing twelve months ended December 31, 2016).

(2) Net debt means our outstanding debt financing less cash and cash equivalents as of December 31, 2016. Adjusted EBITDA is based on annualized current quarter for Q4 2016.

(3) Interest coverage is computed by dividing Q4 2016 adjusted EBITDA by Q4 2016 interest expense. Does not include loss on early extinguishment of debt.

(4) Yield is calculated based on current quarterly annualized dividend of \$0.96 divided by market closing price of common shares on December 31, 2016 of \$22.07.



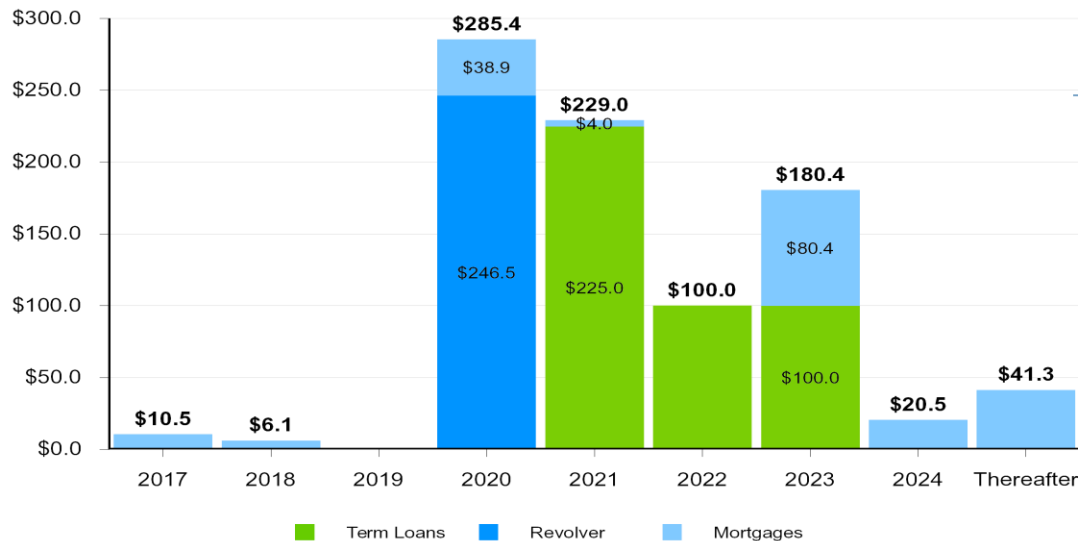
DEBT PROFILE AS OF DECEMBER 31, 2016

Total Principal Debt Outstanding: \$873.2 MM

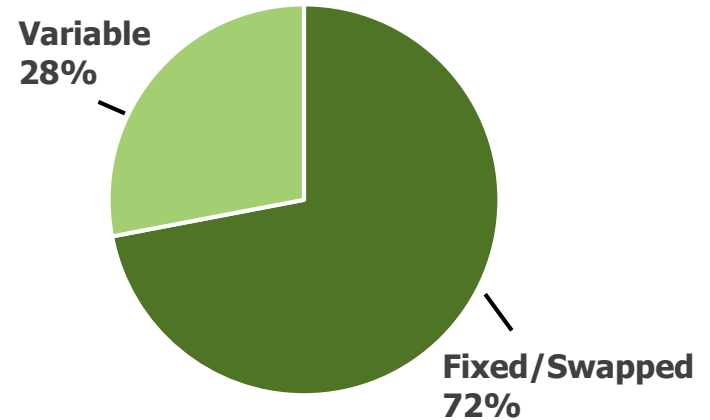
Weighted Average Maturity: 5.2 Years

Effective Interest Rate⁽¹⁾: 3.0%

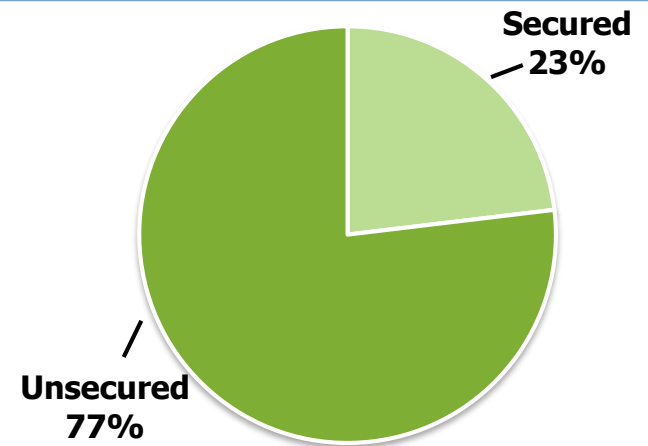
**Debt Maturity Schedule
(\$ in Millions)**



Minimal Interest Rate Risk: Principal



Balanced Debt Security Profile



(1) Effective interest rate incorporates the stated rate plus the impact of interest rate cash flow hedges and discount and premium amortization, if applicable. For the revolving line of credit, the effective interest rate excludes fees which range from 0.15% to 0.25% for unused borrowings.

POST-ACCORDION EXERCISE DEBT PROFILE AS OF FEBRUARY 8, 2017

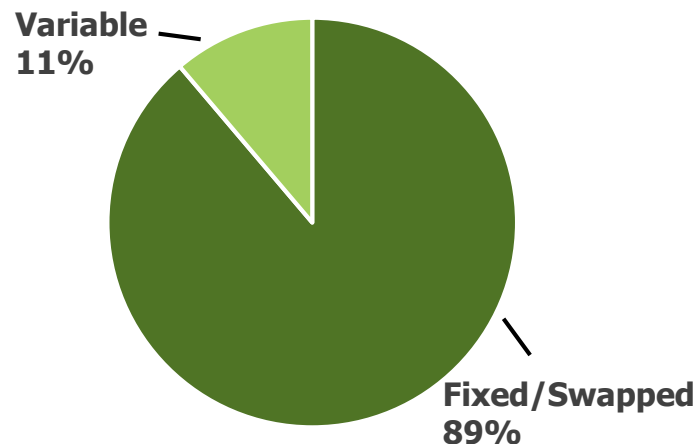


Total Principal Debt Outstanding: \$887.1 MM

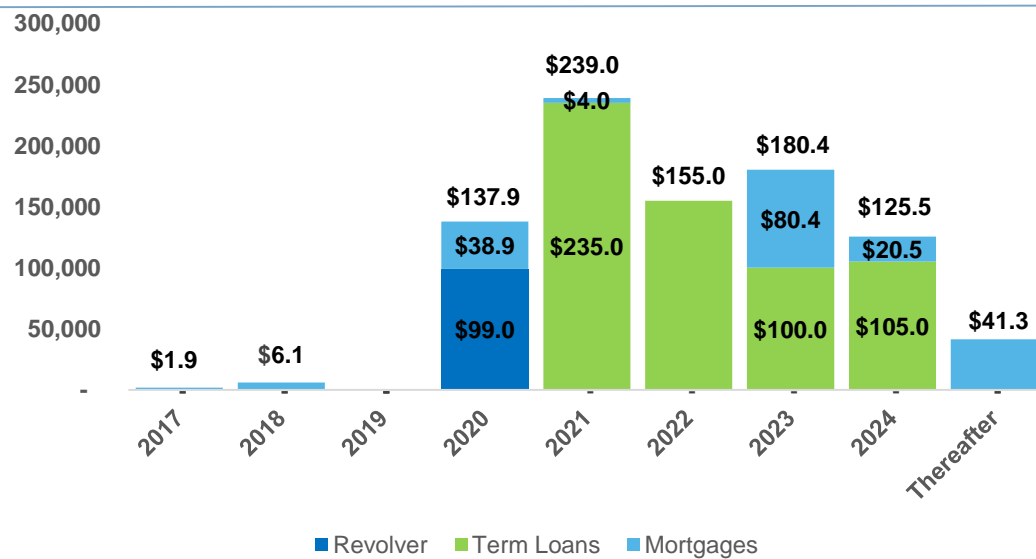
Weighted Average Maturity: 5.7 Years

Effective Interest Rate⁽¹⁾: 3.2%

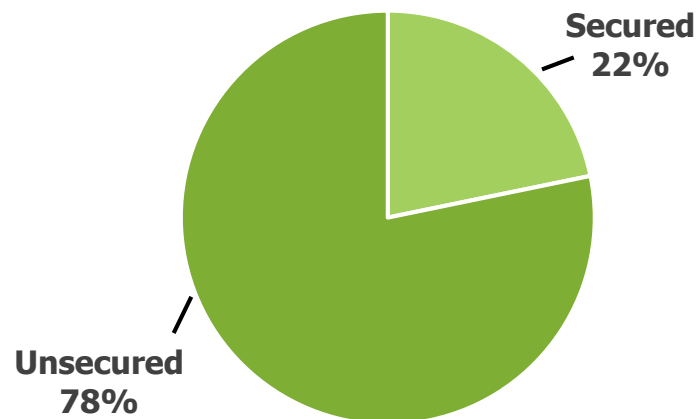
Minimal Interest Rate Risk: Principal



**Debt Maturity Schedule
(\$ in Millions)**



Balanced Debt Security Profile



(1) Effective interest rate incorporates the stated rate plus the impact of interest rate cash flow hedges and discount and premium amortization, if applicable. For the revolving line of credit, the effective interest rate excludes fees which range from 0.15% to 0.25% for unused borrowings.



PEER COMPARISON DATA: 2015 AND 2016 COMBINED



Source: 2015 and 2016 year-end public reporting.

* Only reflects stock price appreciation from NSA's IPO to 12/31/16 (1 year, 8.2 months) versus 2 full years for all others.



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CONTACT US



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NATIONAL STORAGE
— AFFILIATES —

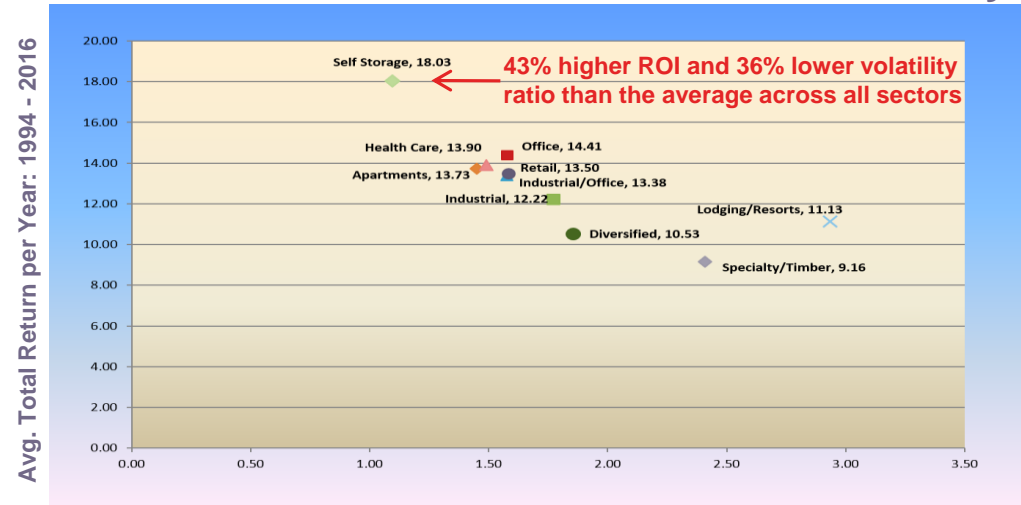
Appendix

SELF STORAGE HAS CONSISTENTLY OUTPERFORMED



Self Storage Has Outperformed over Last 23 Years on Total Return with Less Volatility

- Since 1994, total returns for self storage have outperformed all other equity REIT sectors while experiencing the least volatility
- The industry is expected to continue to generate substantial NOI growth
- Savings expected through improved scale, new technology and centralized infrastructure



Five Forces Driving Self Storage

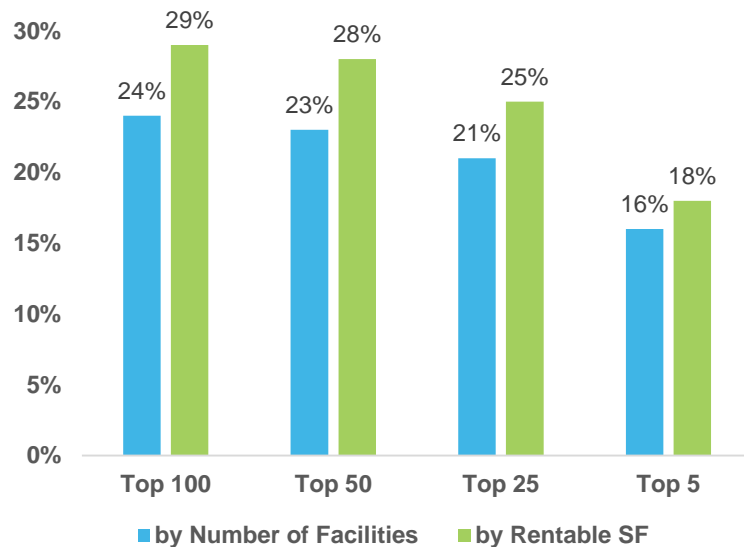
	Impact
Competitive Rivalry	Low – geographically limited
Customer Bargaining Power	Limited – not price driven
Threat of Substitute Products	Very few cost effective options
Supplier Bargaining Power	Limited - but increasing
Threat of New Entrants	Limited – increasing entry barriers

Note: Data sourced from NAREIT 2016 published data. Volatility ratio defined as the standard deviation of return divided by return.



MEANINGFUL OPPORTUNITY TO CONSOLIDATE

- Highly fragmented sector
 - ~42,000⁽¹⁾ self-storage properties with over 30,000 operators
 - ~\$30 billion in annual revenue with over \$250 billion in private market value
- NSA primarily targets top private operators with 20 or more institutional quality properties in the top 100 MSAs
 - Target operators own and/or manage over 2,500 self-storage properties⁽²⁾



Source: 2017 Self-Storage Almanac and Self-Storage Association 2017.

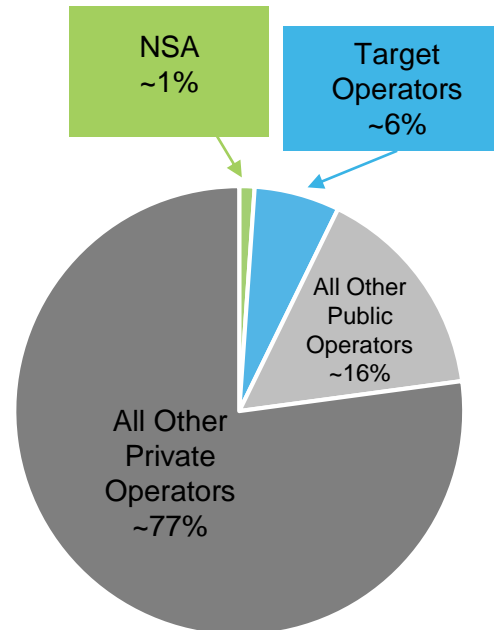
Note: Rankings are based on net rentable square footage under management.

(1) 2017 Self-Storage Almanac survey excludes small, rural facilities included in previous year's Almanacs.

(2) Represents the number of facilities owned and/or managed by top operators, excluding NSA and other publicly traded entities.

(3) Includes facilities owned internationally.

(4) New NSA PRO, effective 3/1/17.



Top 40 Operators

- Public Storage⁽³⁾
- Extra Space Storage
- CubeSmart
- U-Haul International
- Life Storage, Inc. (formerly Sovran/Uncle Bob's)
- National Storage Affiliates Trust
- StorageMart**
- W. P. Carey, Inc.
- Metro Storage, LLC
- The William Warren Group dba StorQuest Self Storage
- Westport Properties, Inc.
- Devon Self Storage Holdings, (US) LLC
- World Class Capital Group, LC
- Absolute Storage Management, Inc.
- All Storage
- TnT Self Storage Management
- Compass Self Storage
- Morningstar Properties
- Brundage Management Co., Inc.
- Safeguard Self Storage
- The Jenkins Organization, Inc.
- Storage Asset Management
- Platinum Storage Group
- A-1 Self Storage
- Universal Storage Group
- Argus Professional Storage Management
- Security Public Storage
- Metro Mini Storage
- Strat Property Management, Inc.
- StoragePRO Management Co.
- Brookwood Properties, LLC
- SHS Development/Lock Up Self Storage
- West Coast Self-Storage
- RHW Capital Management Group, LLC
- Pogoda Companies
- Dahn Corporation
- Rosewood Property Company
- Self-Storage Consulting Group
- Shader Brothers Corp dba Personal Mini Storage⁽⁴⁾
- Elite Stor Capital Partners
- Sentry Self Storage



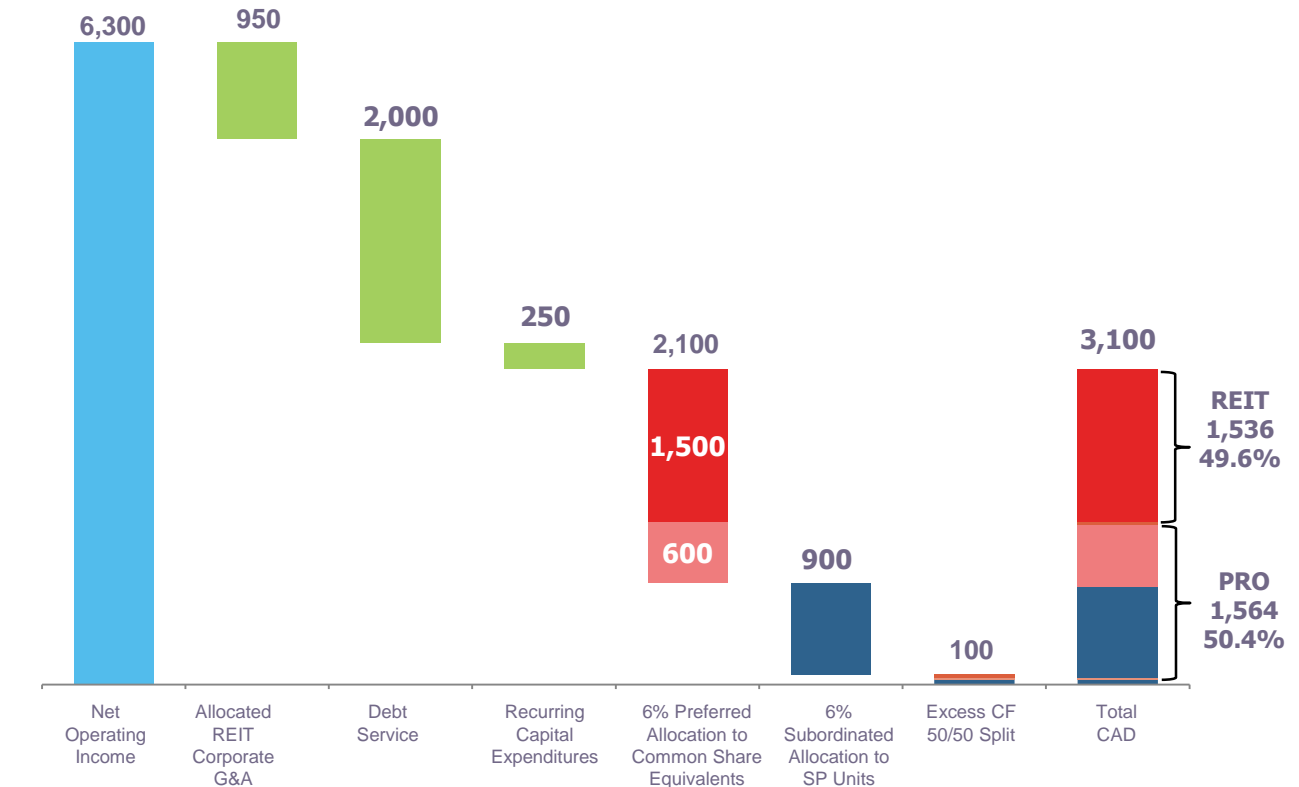
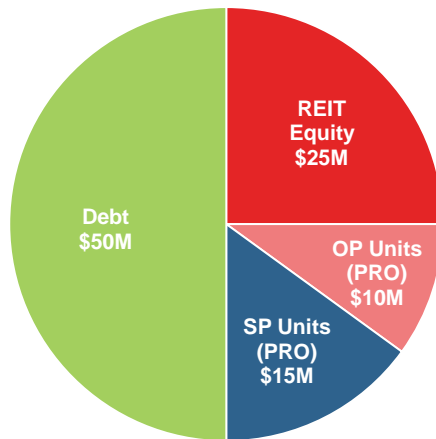
STRUCTURE INCENTIVIZES PROS TO PERFORM

KEY ASSUMPTIONS

- \$100MM Purchase Price
- 6.3% Cap Rate
- 50% Funded with Debt
- 50% of Equity from PRO

Illustrative Operating Cash Flow Allocation for Single Acquisition (\$'000s)

Illustrative Capitalization



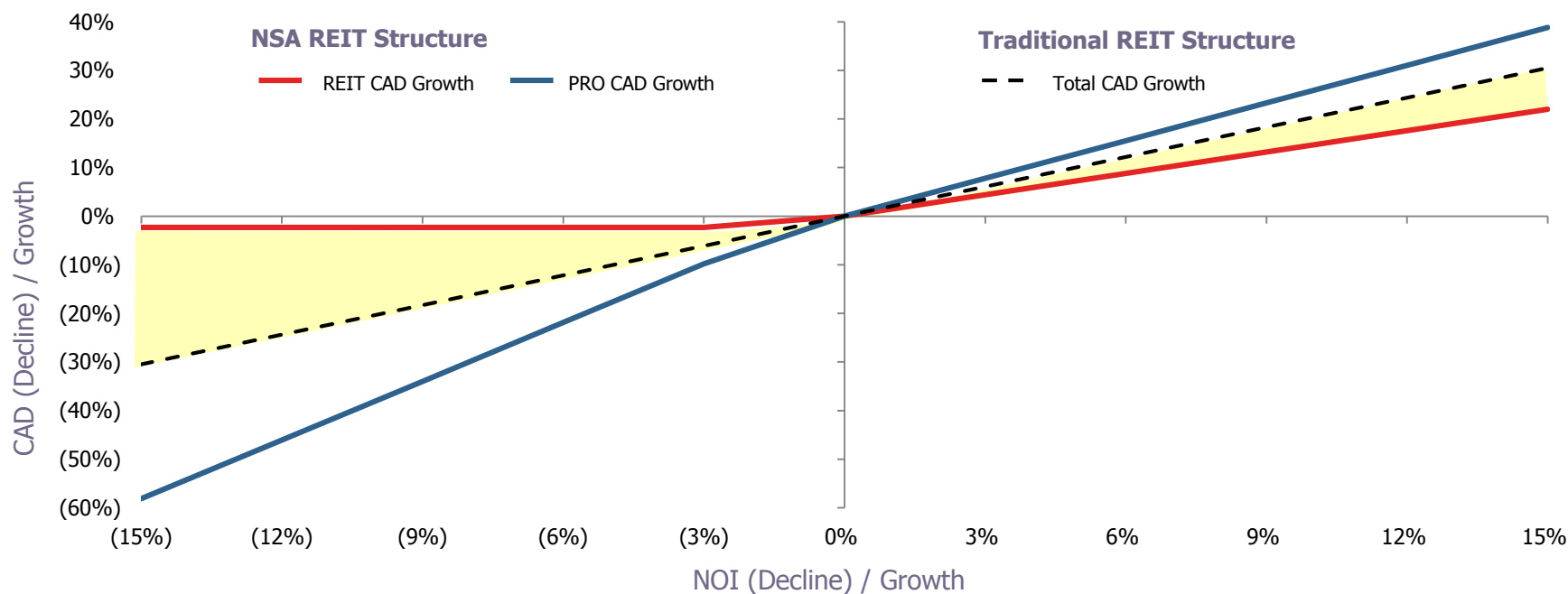
Note: Proportion of SP units and OP units in each acquisition will vary. In general, the number of OP units issued will be capped at a level intended to provide a minimal level of operating cash flow ("CF") allocation on unreturned capital attributable to the OP units. Debt Service is reflective of interest expense and scheduled principal amortization. Post-contribution capital structure is reflective of cost and does not reflect market value. This hypothetical capital structure and cash flow allocation is for illustrative purposes only and reflects the terms of the partnership agreement: SP unit holders receive a 6% allocation of operating CF on their unreturned capital contributions after a 6% allocation on unreturned capital attributable to OP unit holders, and then share in the allocation of any excess cash flow 50/50 with OP unit holders. The REIT is allocated \$36K of the operating CF allocated to OP units related to the 50/50 split of excess operating CF. The allocation of operating CF between the SP units and OP units is for purposes of determining distributions on SP units and does not represent the operating CF that will be distributed on OP units (or paid as dividends on our common shares). Any distribution of operating CF allocated to OP units will be made at the discretion of NSA (and paid as dividends on our common shares at the discretion of our board of trustees).

STRUCTURE OFFERS CASH FLOW STABILITY AND DOWNSIDE PROTECTION



Shareholders benefit from less volatile cash flow and downside protection

Illustrative Impact on Operating Cash Flow Allocation for Single Acquisition⁽¹⁾



Note: PRO CAD Growth is comprised of cash available to PROs through their ownership interests in both OP and SP units. REIT CAD Growth is comprised of cash available to all other equity stakeholders.

⁽¹⁾ This illustrative sensitivity graph reflects the capital structure of a single acquisition and operating CF allocation assumptions reflected on page 25. This hypothetical capital structure and cash flow allocation is for illustrative purposes only and reflects the terms of the partnership agreement: SP unit holders receive a 6% allocation of operating CF on their unreturned capital contributions after a 6% allocation on unreturned capital attributable to OP unit holders, and then share in the allocation of any excess cash flow 50/50 with OP unit holders. This allocation of operating CF between the SP units and OP units is for purposes of determining distributions on SP units and does not represent the operating CF that will be distributed on OP units (or paid as dividends on our common shares). Any distribution of operating CF allocated to OP units will be made at the discretion of NSA (and paid as dividends on our common shares at the discretion of our board of trustees).

EARNINGS (LOSS) PER SHARE – DILUTED TO FUNDS FROM OPERATIONS (“FFO”) AND CORE FFO PER SHARE AND UNIT RECONCILIATION



(dollars in thousands)	Three Months Ended December 31,		Year Ended December 31,	
	2016	2015	2016	2015
Earnings (loss) per share - diluted	\$ 0.07	\$ 0.08	\$ 0.31	\$ 0.17
Impact of the difference in weighted average number of shares ⁽¹⁾	0.03	0.03	0.11	0.02
Impact of GAAP accounting for noncontrolling interests, two-class method and treasury stock method ⁽²⁾	-	-	-	(0.07)
Add real estate depreciation and amortization	0.24	0.21	0.93	1.03
Add Company's share of unconsolidated venture real estate depreciation and amortization	0.02	-	0.03	-
FFO attributable to subordinated performance unitholders	(0.10)	(0.09)	(0.39)	(0.38)
FFO per share and unit	0.26	0.23	0.99	0.77
Add acquisition costs, Company's share of unconsolidated real estate venture acquisition costs, organizational and offering expenses, and loss on early extinguishment of debt	0.04	0.01	0.13	0.15
Core FFO per share and unit	\$0.30	\$0.24	\$1.12	\$0.92

Source: Q4 and full year 2016 Company financials.

(1) Adjustment accounts for the difference between the weighted average number of shares used to calculate diluted earnings per share and the weighted average number of shares used to calculate FFO and Core FFO per share and unit. Diluted earnings per share is calculated using the two-class method for the company's restricted common shares, the treasury stock method for certain unvested LTIP units, and includes the assumption of a hypothetical conversion of subordinated performance units, DownREIT subordinated performance units and LTIP units into OP units, even though such units may only be convertible into OP units (i) after a lock-out period and (ii) upon certain events or conditions. For additional information about the conversion of subordinated performance units and DownREIT subordinated performance units into OP units, see Note 10 to the consolidated financial statements in Item 8 of the Company's most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission. The computation of weighted average shares and units for FFO and Core FFO per share and unit includes all restricted common shares and LTIP units that participate in distributions and excludes all subordinated performance units and DownREIT subordinated performance units because their effect has been accounted for through the allocation of FFO to the related unitholders based on distributions declared.

(2) Represents the effect of adjusting the numerator to consolidated net income (loss) prior to GAAP allocations for noncontrolling interests and the application of the two-class method and treasury stock method, as described above in footnote (1).



NET INCOME (LOSS) TO NET OPERATING INCOME RECONCILIATION

	Three Months Ended December 31,		Year Ended December 31,	
(dollars in thousands)	2016	2015	2016	2015
Net income	\$6,075	\$5,365	\$24,866	\$4,796
(Subtract) add:				
Management fees and other revenue	(1,809)	-	(1,809)	-
General and administrative expenses	7,097	4,409	21,528	16,265
Depreciation and amortization	16,765	10,459	55,064	40,651
Interest expense	7,059	4,727	24,109	20,779
Equity in losses of unconsolidated real estate venture	1,484	-	1,484	-
Loss on early extinguishment of debt	-	-	136	914
Acquisition costs	1,813	573	6,546	4,765
Organizational and offering expenses	-	-	-	58
Non-operating expense	137	23	515	279
Net Operating Income	\$38,621	\$25,556	\$132,439	\$88,507



NET INCOME (LOSS) TO EBITDA & ADJUSTED EBITDA RECONCILIATION

(dollars in thousands)	Three Months Ended December 31,		Year Ended December 31,	
	2016	2015	2016	2015
Net income	\$6,075	\$5,365	\$24,866	\$4,796
Add:				
Depreciation and amortization	16,765	10,459	55,064	40,651
Company's share of unconsolidated real estate venture depreciation and amortization	1,559	-	1,559	-
Interest expense	7,059	4,727	24,109	20,779
Loss on early extinguishment of debt	-	-	136	914
EBITDA	\$31,458	\$20,551	\$105,734	\$67,140
Add:				
Acquisition costs	1,813	573	6,546	4,765
Company's share of unconsolidated real estate venture depreciation and amortization	1,006	-	1,006	-
Organizational and offering expenses	-	-	-	58
Equity-based compensation expense ⁽¹⁾	684	652	2,597	3,027
Adjusted EBITDA	\$34,961	\$21,776	\$115,883	\$74,990

(1) Equity-based compensation expense is a non-cash item that is included in general and administrative expenses in the Company's consolidated statements of operations.



NATIONAL STORAGE
— AFFILIATES —

NYSE: NSA