



PROFORMANCE

COMPANY UPDATE

MARCH 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

Institutional Quality, Geographically Diverse Portfolio Focused in High Growth Markets in the Top 100 MSAs

2

Differentiated Structure Provides Strong Internal and External Growth Incentives with Downside Protection

3

Senior Management Team has Deep Industry Experience

4

NSA has Consistently Outperformed its REIT Peers on Various Metrics since its IPO

5

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, geographically diversified portfolio focused in high growth markets in the top 100 MSAs
- Positioned to deliver strong external and organic growth



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

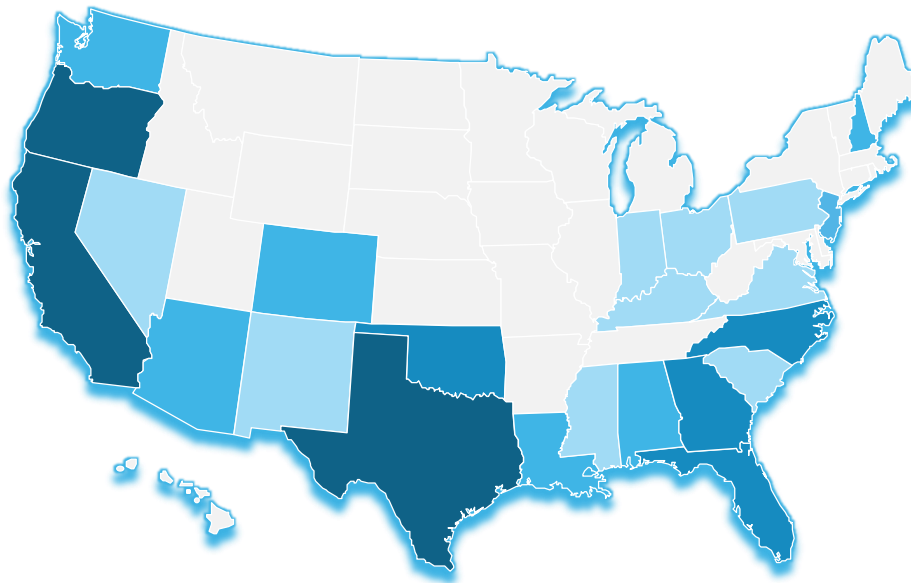
⁽²⁾ As of February 28, 2017, NSA held ownership interests in and operated 453 properties.



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**
453 Properties⁽¹⁾



(1) As of February 28, 2017, NSA held ownership interests in and operated 453 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

Structure Creates External Growth Opportunities

Acquisition of Captive Pipeline Properties

Relationship Driven Third Party Acquisitions

Recruitment of New PROs

Strategic Joint Ventures



NSA'S PLATFORM LEVELS THE PLAYING FIELD

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

STRATEGY DRIVES SIGNIFICANT EXTERNAL GROWTH OPPORTUNITIES



1 Acquire Internal Pipeline Properties (Participating Regional Operator (“PRO”) managed assets)

- NSA’s captive pipeline has 120+ additional assets located in 10 states totaling over \$900 million in estimated asset value⁽¹⁾
- PROs are obligated to offer to contribute stabilized assets which they control upon debt maturity
- PROs are committed to facilitate the contribution of assets they manage, but do not control

2 Source Relationship Driven Local Acquisitions

- PRO acquisition teams with significant investment in NSA source single assets and portfolios from third parties via long-standing local relationships
- Proven ability to close deals: over \$500 million of third party acquisitions closed in 2016
- Focus on institutional quality assets that are synergistic to existing operations and geographies

Recruit New PROs

- ### 3
- Evaluating several “PRO prospect” operators with the goal of adding one to three per year over the next three to five years
 - Focus on operators with established platforms in Top 100 MSAs, typically with \$100+ million portfolios and 20+ properties, reputation for operational excellence and demonstrated capabilities to grow their portfolios

Strategic Joint Ventures

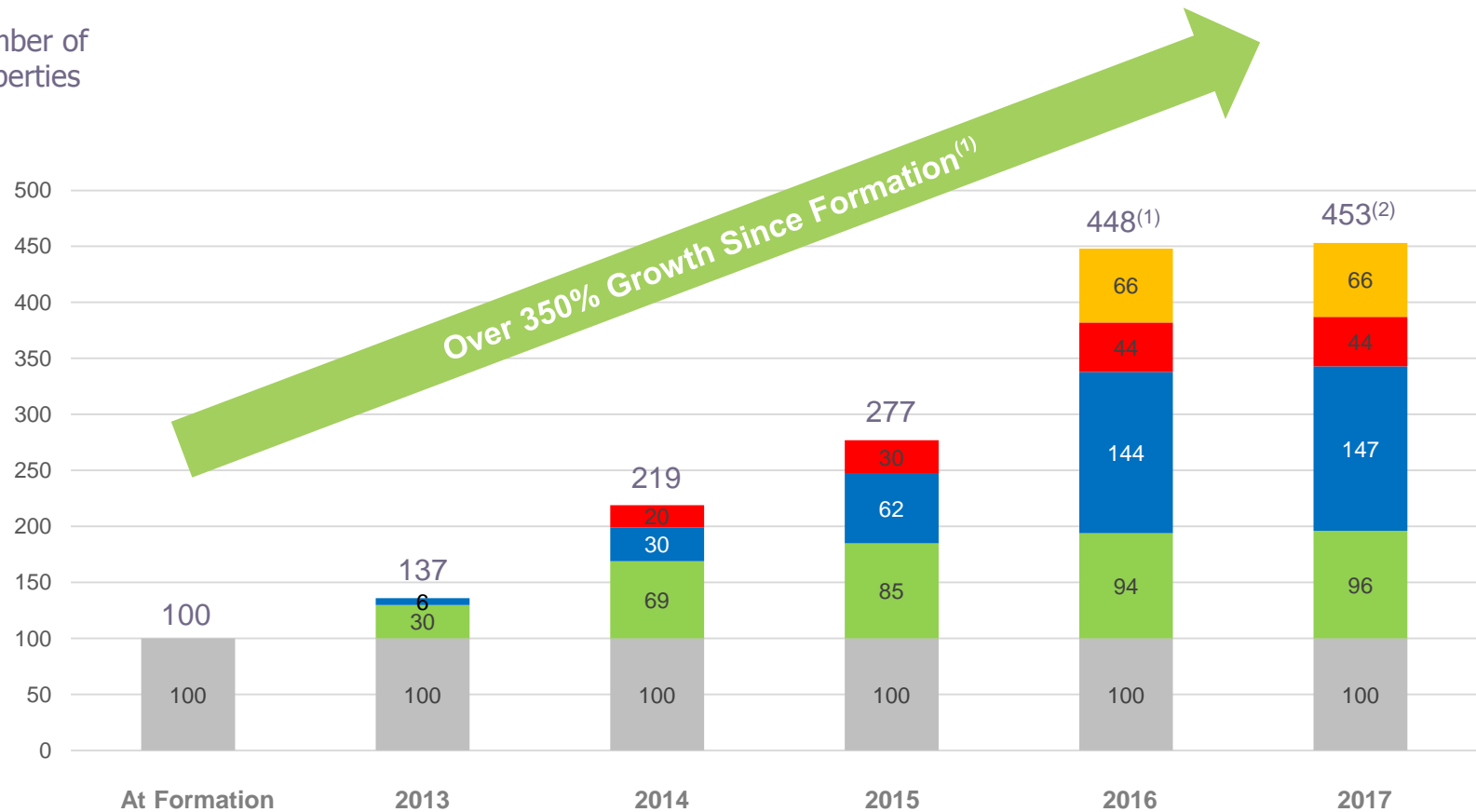
- ### 4
- Opportunistically partner with institutional funds to acquire attractive portfolios through a promoted return structure
 - NSA will provide property and asset management services for joint ventures through its internal operating platform, generating additional third party fee income

⁽¹⁾ There can be no assurance as to whether NSA will acquire any properties or the actual timing of any acquisitions. NSA has varying degrees of control and influence on these acquisitions. This estimated acquisition pipeline may not be completely realized given the PROs do not own controlling interests in many of the properties and contributions are driven by debt, stabilization and other outside factors.



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.

(2) As of February 28, 2017, NSA held interests in and operated 453 properties.

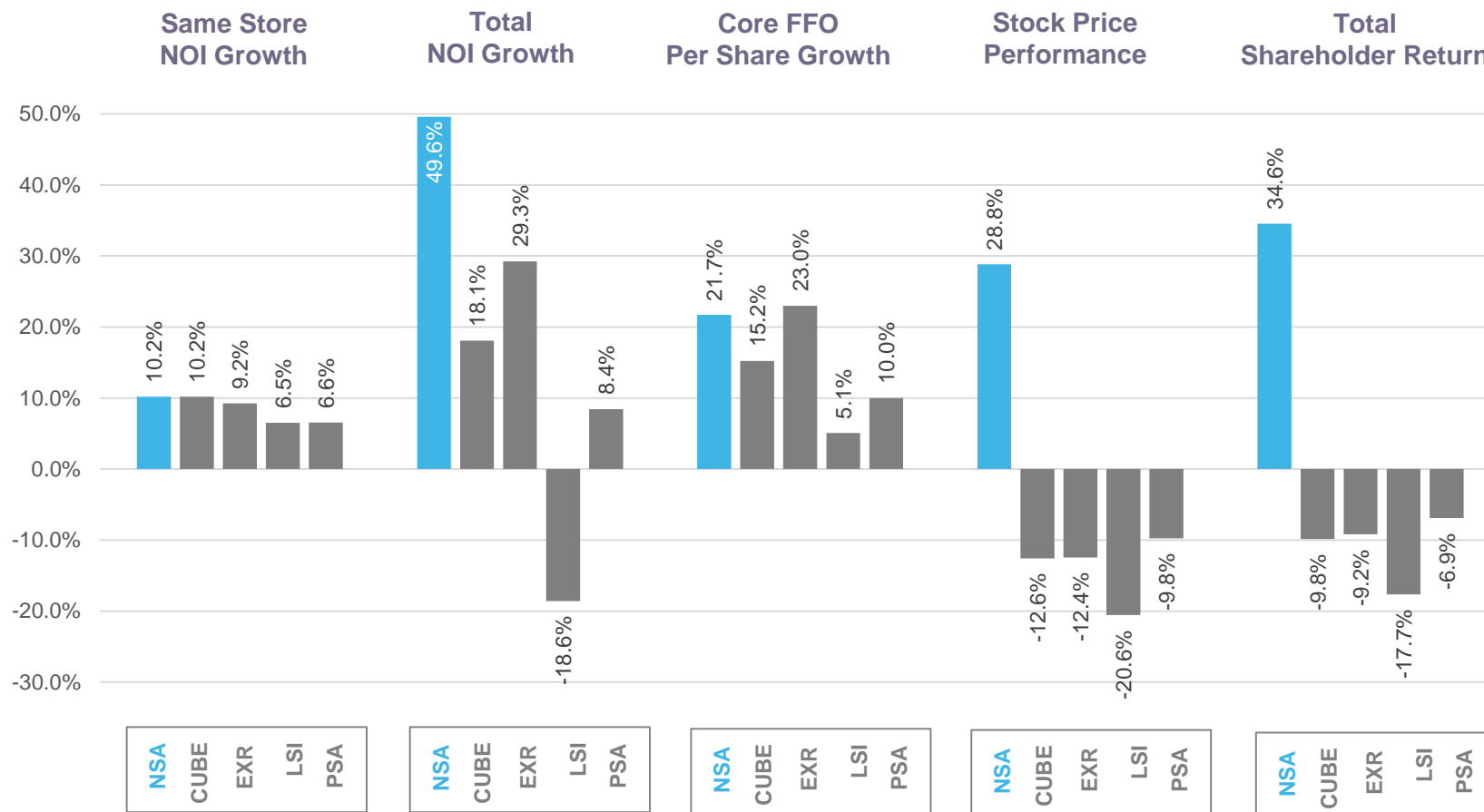
STRUCTURE ATTRACTS DISCIPLINED, GROWTH-ORIENTED OPERATORS



Why successful regional operators are motivated to join NSA instead of opting for an institutional joint venture or a portfolio sale

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	✓		

PEER COMPARISON DATA: YEAR ENDED DECEMBER 31, 2016



Source: 2016 Q4 and year-end public reporting.

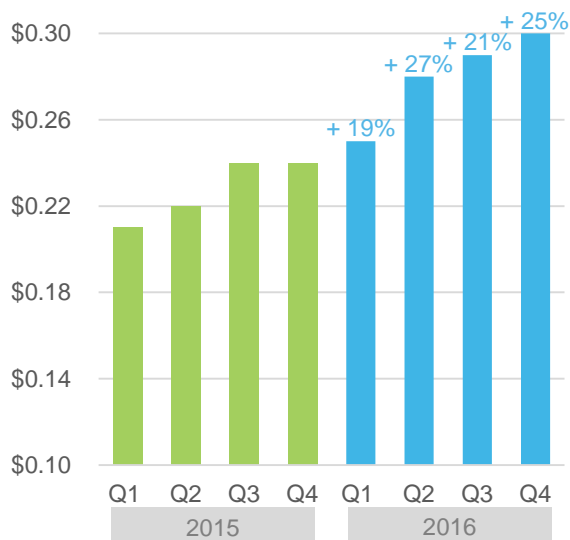
2016 FINANCIAL UPDATE



Strong Operational Growth Continues

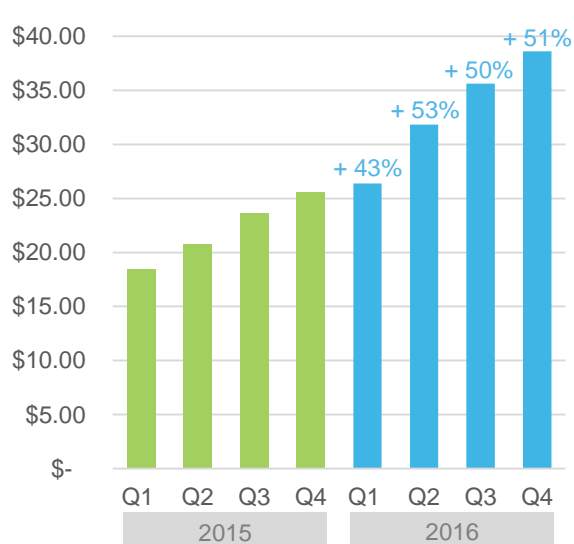
Core FFO (\$ per share)

Year-over year growth:



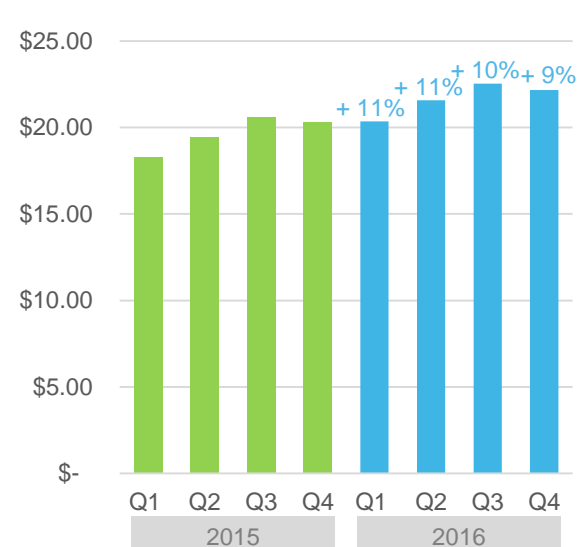
NOI (\$ millions)

Year-over year growth:



Same Store NOI (\$ millions)

Year-over year growth:



FLEXIBLE CAPITAL STRUCTURE AS OF DECEMBER 31, 2016



CONSERVATIVE BALANCE SHEET

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

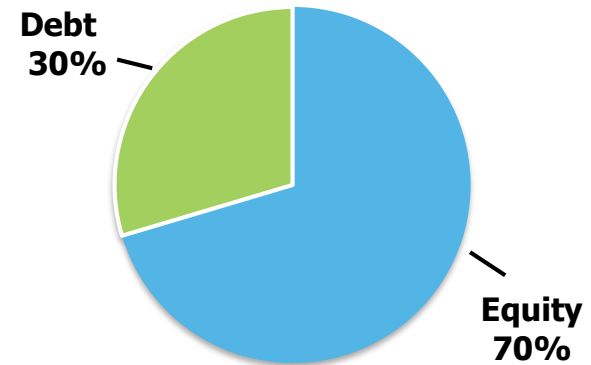
CAPITAL FOR GROWTH

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

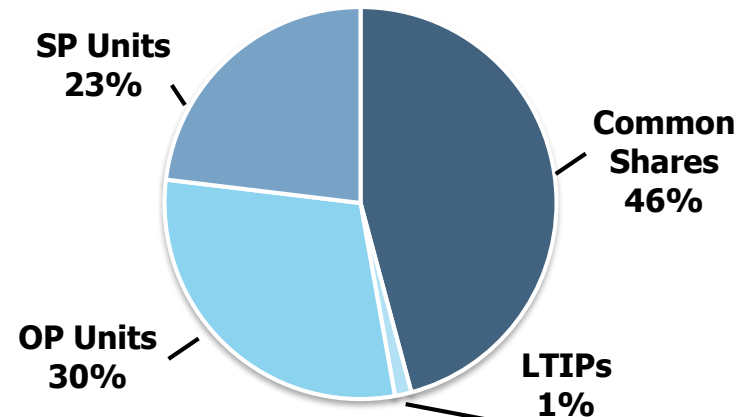
ATTRACTIVE DIVIDEND

- 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

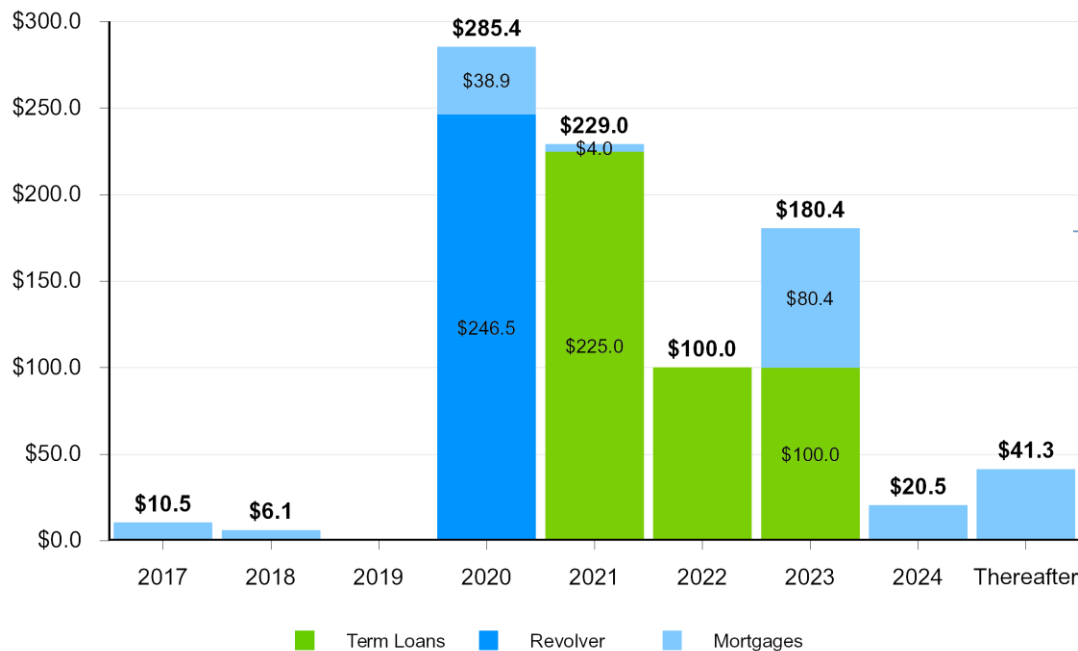
Weighted Average Maturity (in years)

— 5.16

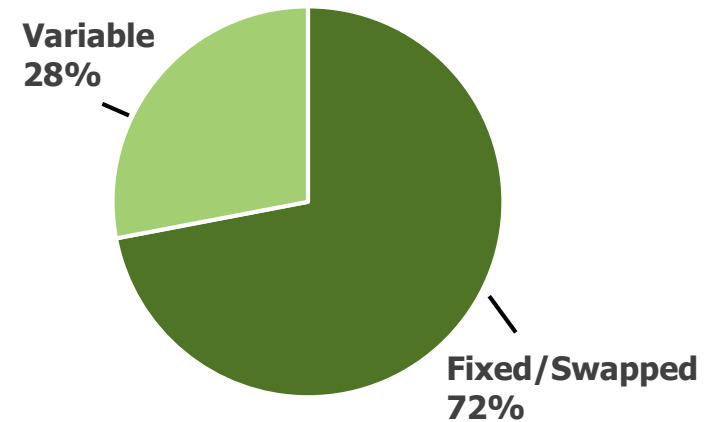
Effective Interest Rate⁽¹⁾

— 2.95%

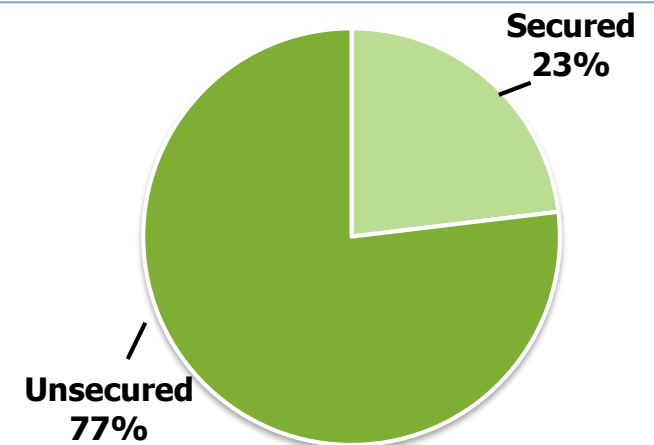
Debt Maturity Schedule (\$ in Millions)



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



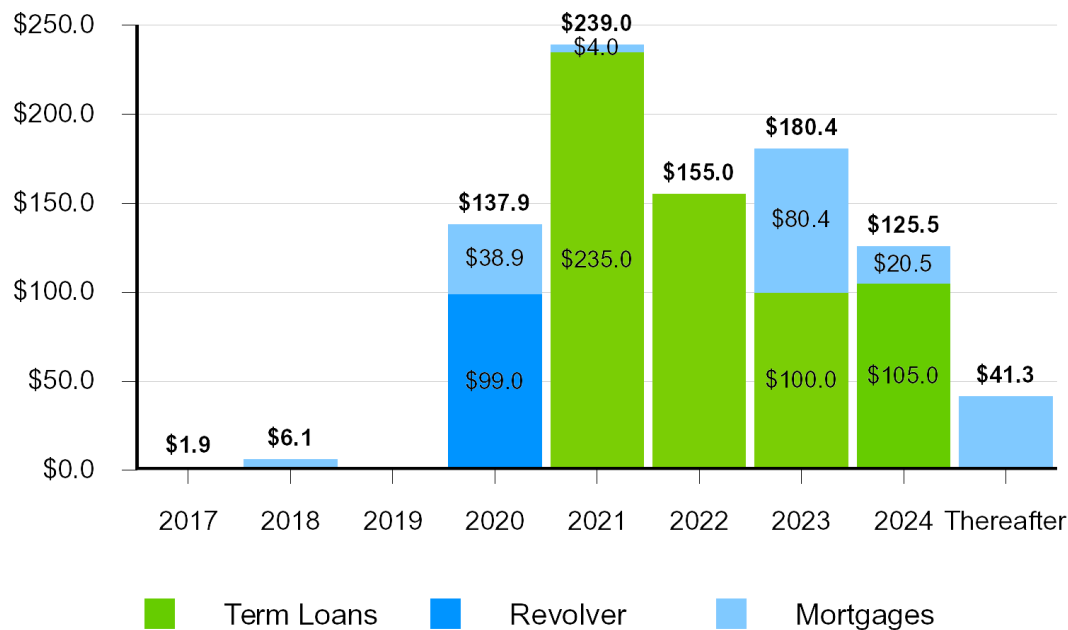
Weighted Average Maturity (in years)

— 5.70

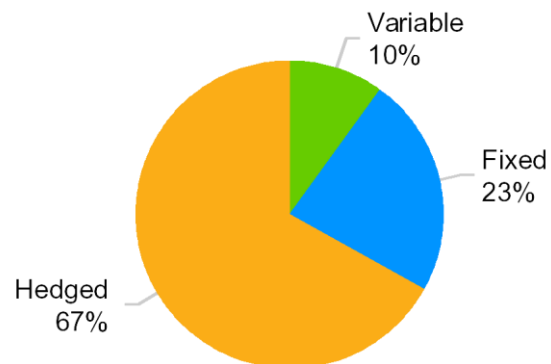
Effective Interest Rate

— 3.24%

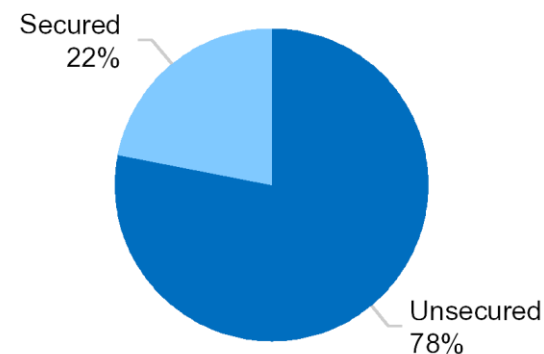
**Debt Maturity Schedule
(\$ in millions)**



Minimal Interest Rate Risk - Principal



Balanced Debt Security Portfolio





INVESTMENT HIGHLIGHTS: “NYSE: NSA”

1

Institutional Quality, Geographically Diverse Portfolio Focused in High Growth Markets in the Top 100 MSAs

2

Differentiated Structure Provides Strong Internal and External Growth Incentives with Downside Protection

3

Senior Management Team has Deep Industry Experience

4

NSA has Consistently Outperformed its REIT Peers on Various Metrics since its IPO

5

Flexible Capital Structure Supports Strong Future Growth

CONTACT US



INVESTOR RELATIONS

Marti Dowling

Director - Investor Relations

720-630-2624

mdowling@nsareit.net

CORPORATE HEADQUARTERS

National Storage Affiliates Trust

5200 DTC Parkway

Suite 200

Greenwood Village, CO 80111

WEBSITE

www.nationalstorageaffiliates.com



NATIONAL STORAGE
— AFFILIATES —

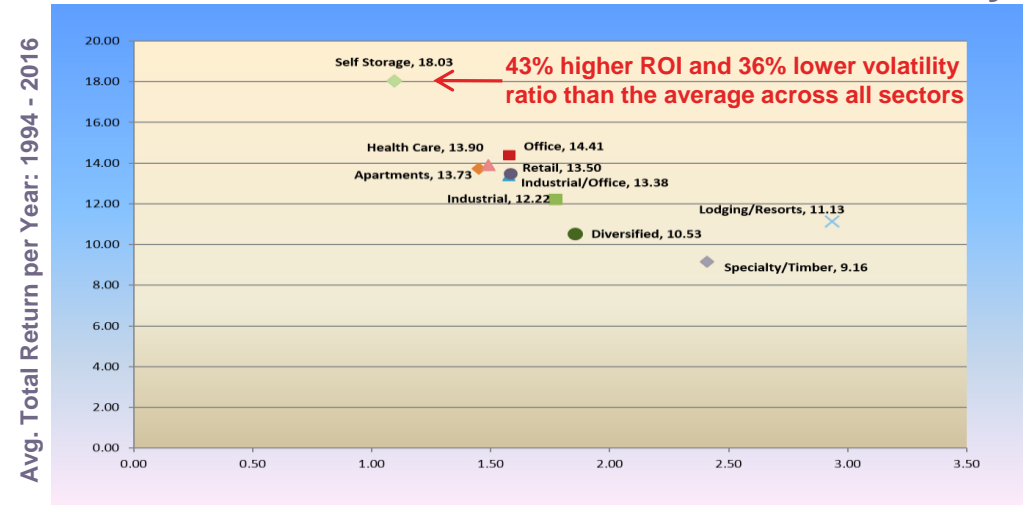
Appendix

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

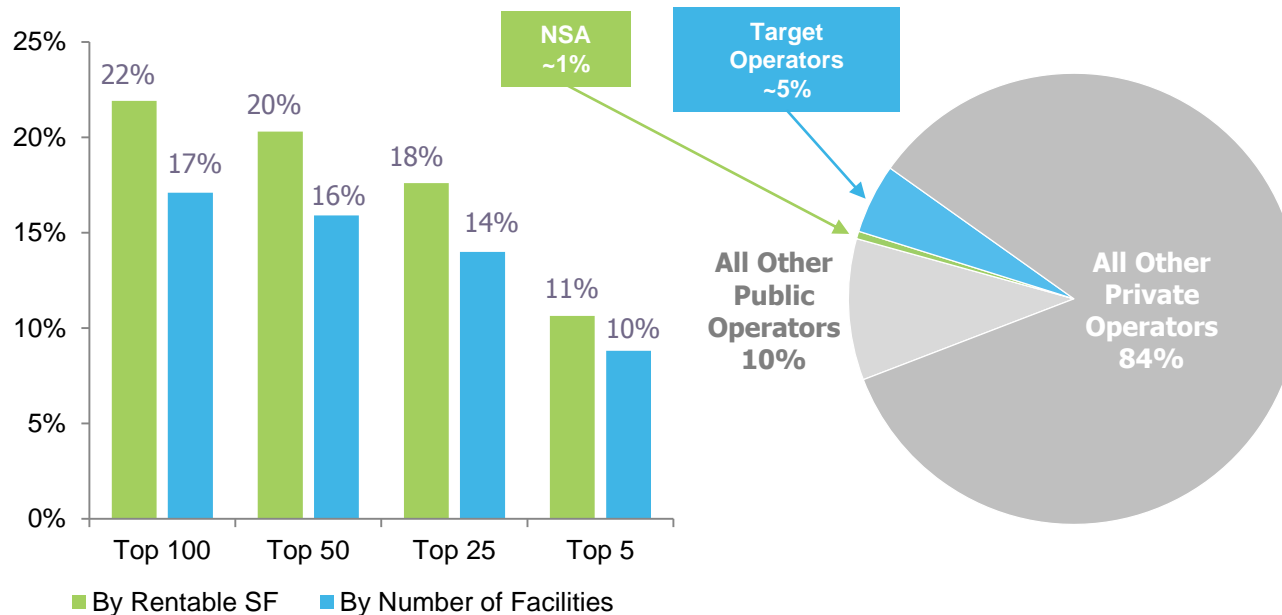
	Impact
Competitive Rivalry	Low – geographically limited
Customer Bargaining Power	Limited – not price driven
Threat of Substitute Products	Very few cost effective options
Supplier Bargaining Power	Limited - but increasing
Threat of New Entrants	Limited – increasing entry barriers

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
 - More than 50,000 self-storage properties with over 30,000 operators
 - Over \$24 billion in annual revenue with over \$200 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⁽¹⁾



Top 40 Operators

- 1 Public Storage
- 2 Extra Space Storage
- 3 U-Haul International
- 4 CubeSmart
- 5 Sovran Self Storage
- 6 National Storage Affiliates
- 7 Simply Self Storage
- 8 W.P. Carey
- 9 StorageMart
- 10 The William Warren Group
- 11 Metro Storage
- 12 iStorage | NSA - JV acquired on 10-4-16
- 13 US Storage Centers
- 14 TnT Self Storage Management
- 15 Absolute Storage Management
- 16 The Jenkins Organization
- 17 All Storage
- 18 Move It Management
- 19 Compass Self Storage
- 20 Safeguard Self Storage
- 21 A-AAAKey Mini Storage
- 22 Devon Self Storage
- 23 Platinum Storage Group
- 24 Security Public Storage
- 25 Central Self Storage
- 26 A-1 Self Storage
- 27 Metro Mini Storage
- 28 Storage Pros Management
- 29 Self Storage Management
- 30 Storage Asset Management
- 31 Universal Storage Group
- 32 Strat Property Management
- 33 Brookwood Properties
- 34 Personal Mini Storage
- 35 Morningstar Properties
- 36 Advantage Storage
- 37 Storage Etc.
- 38 Argus Professional Storage Management
- 39 Professional Self Storage Management
- 40 West Coast Self-Storage

Source: Public company filings as of December 31, 2014, Self Storage Association and 2016 Self-Storage Almanac.

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

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



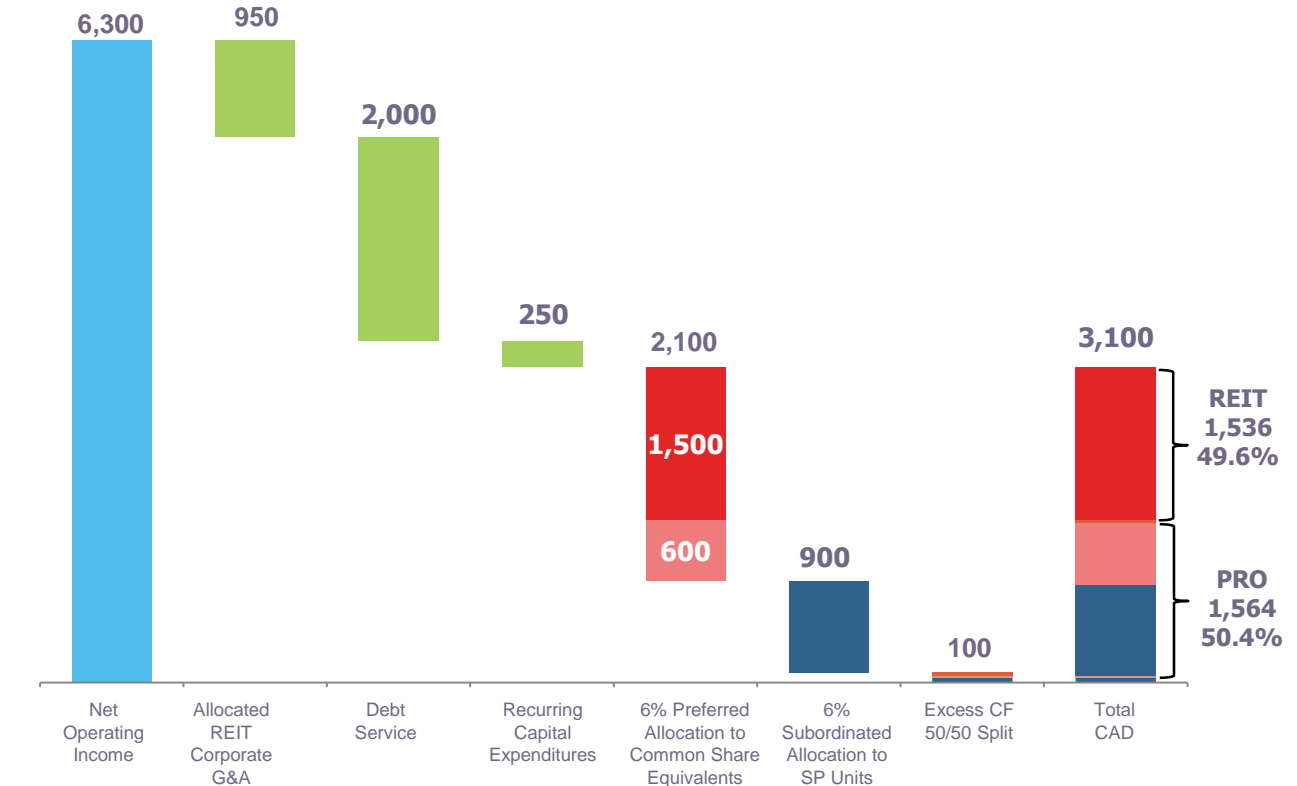
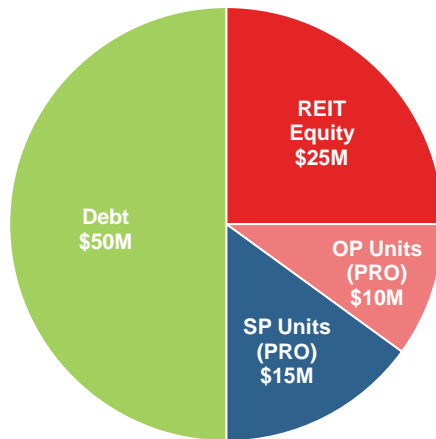
STRUCTURE INCENTIVIZES PROS TO PERFORM

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



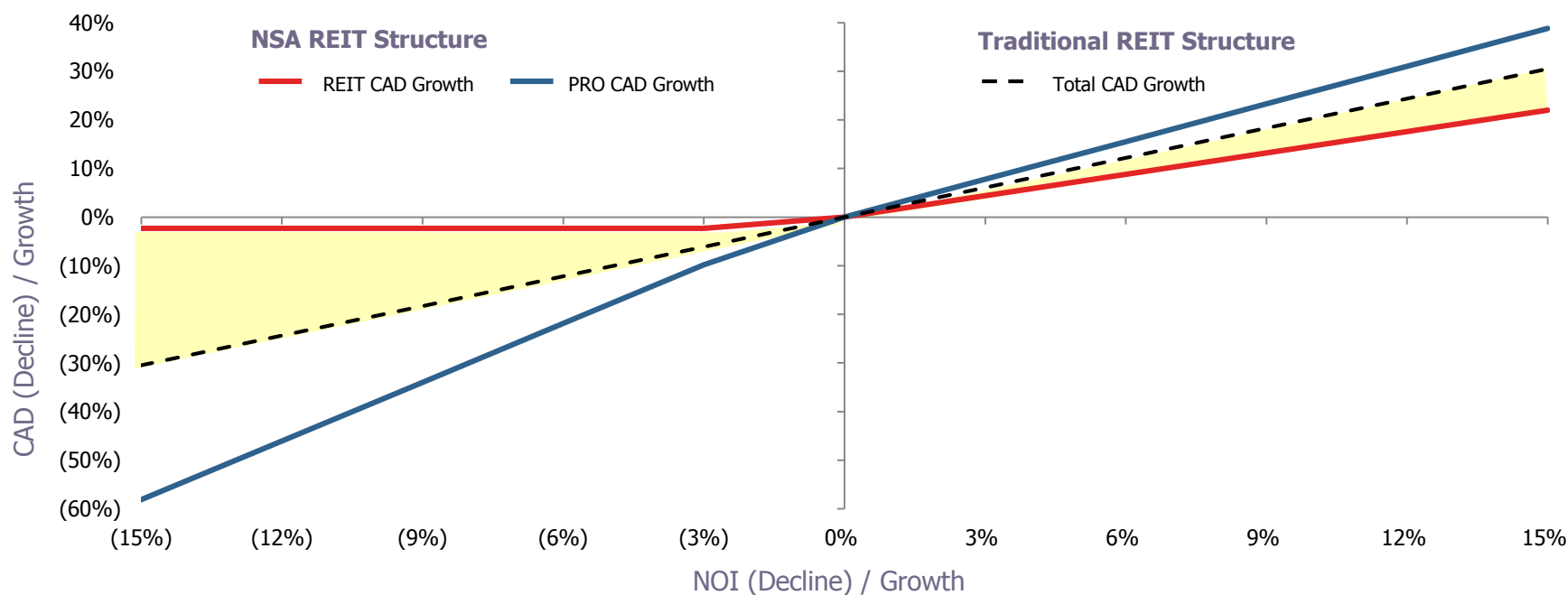
Note: Proportion of SP units and OP units in each acquisition will vary. In general, the number of OP units issued will be capped at a level intended to provide a minimal level of operating cash flow ("CF") allocation on unreturned capital attributable to the OP units. Debt Service is reflective of interest 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