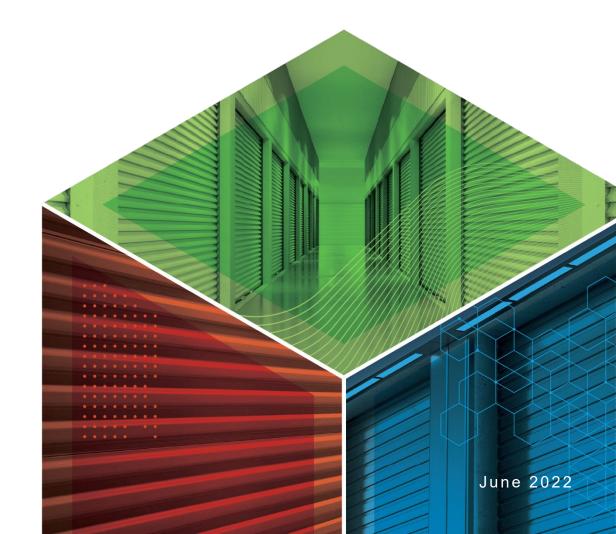
National Storage Affiliates Company Update





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 our annual report on Form 10-K filed with the SEC on February 25, 2022 (the "Annual Report") 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. 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 non-GAAP financial measures to their most directly comparable GAAP measures for the three months ended March 31, 2022 and 2021 are set forth in the Appendix attached hereto. In addition, reconciliations of these non-GAAP financial measures to their most directly comparable GAAP measures for the three months ended December 31, 2021, 2020, 2019, 2018, and 2017, September 30, 2021, 2020, 2019, 2018, and 2017, June 30, 2021, 2020, 2019, 2018, and 2017, and March 31, 2020, 2019, and 2018 are available in NSA's earnings releases for such period ends, which are furnished to the SEC quarterly as Exhibit 99.1 on Current Reports on Form 8-K pursuant to Item 2.02.







National Storage Affiliates Company Overview





544%

Total Shareholder Return Since IPO in April 2015

\$12.6B

Total Enterprise Value

1,061
Property Portfolio

Q1 2022 Performance

\$93M

Completed Acquisitions In Q1 2022

43%Y-O-Y Growth In Q1 2022
Dividend Rate

22.2%

Y-O-Y Same Store NOI Growth In Q1 2022

38.8%

Y-O-Y Core FFO/Share Growth In Q1 2022 94.7%

Same Store Avg. Occupancy In Q1 2022

16.6%

Y-O-Y Same Store Revenue Growth In Q1 2022 Well Diversified; Located in 4.2 States + Puerto Rico

Unique Structure with Participating Regional Operators ("PROs")

Leading owner and operator of self storage facilities in the U.S.



Portfolio Metrics Update – 2022 Same Store Pool

Metric	Q1 2022	May 2022
Period-End Occupancy	94.8%	95.3%
Year-Over-Year Change in Period-End Occupancy	+140 bps	-60 bps
Year-Over-Year Change in Street Rates	+22%	+18%



Size and Diversification Reduce Risk

68.4M
Rentable Square Feet

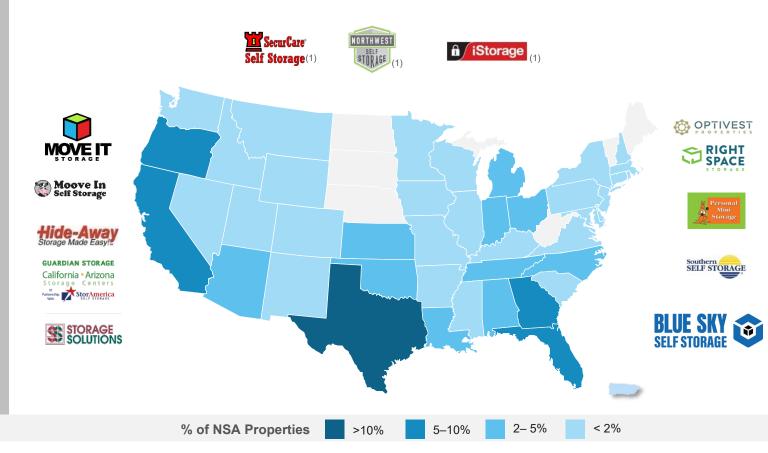
1,061
Properties

884 Wholly-Owned

510 Corporate Portfolio 374 PRO Managed Portfolios

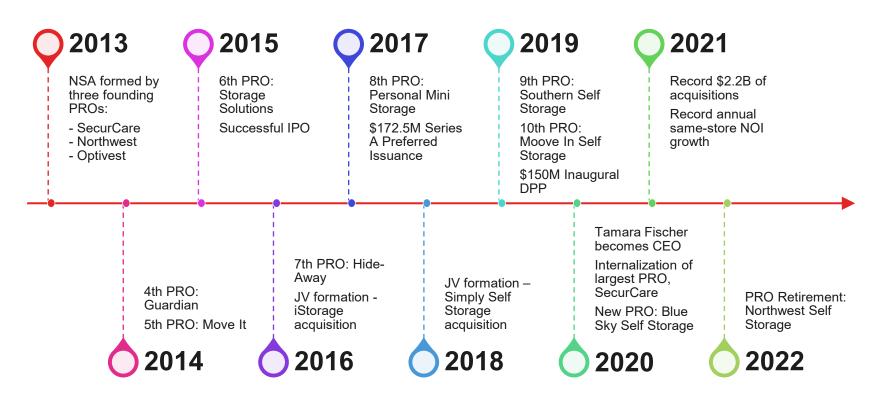
177 Joint Venture

Managed by NSA Corporate Property Management Platform (NSA has a 25% ownership interest in its two joint ventures)





NSA Timeline of Key Milestones







Environmental - Social - Governance

Ε

We constantly seek out ways to conserve energy and water, reduce waste and greenhouse gas emissions, and operate across the board in an environmentally sustainable manner.

S

We prioritize the wellbeing of our customers and team members as well as the communities that we serve. Our partnership with Feeding America exemplifies our community efforts. Promoting diversity is also a key part of how we operate our business.

G

NSA is committed to conducting its business with integrity, and in compliance with all applicable laws, rules, regulations and policies. Our commitment to these ethical principals extends to those we do business with as well. We are also committed to improving disclosure and transparency on ESG initiatives.





The self storage **NSA** has Geographic sector has outperformed diversification proven recession O the self storage across Sunbelt. resilient and has peers in key Secondary and been the best performance Suburban performing REIT **NSA** currently **Attractive** metrics since its markets Differentiated sub-sector over dividend growth IPO in April trades at a **PRO** structure the long term⁽¹⁾ - NSA's Q2 2022 2015(2) discounted drives external dividend valuation relative growth and provides represents a 45% to the peer group, downside protection increase YoY and despite better a 189% increase projected since IPO earnings growth⁽³⁾



⁽¹⁾ See slide 33.

⁽²⁾ Based on quarterly average same store revenue growth and same store NOI growth from Q2 2015 - Q1 2022, and total shareholder return since NSA's IPO through March 31, 2022.

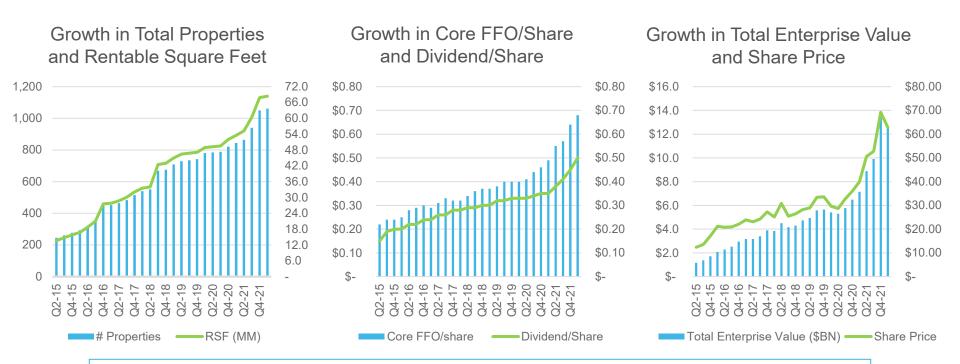
⁽³⁾ Based on P/Core FFO multiples as of May 31, 2022, utilizing consensus 2022 Core FFO per share estimates. NSA P/CFFO of 18.5x vs the peer group average of 20.1x; NSA consensus 2022 CFFO per share growth of 25% vs the peer average of 19%.

Consistent Sector-Leading Results



NSA's Transformational Growth Since IPO

NSA's PRO Model Drives All Aspects of Growth



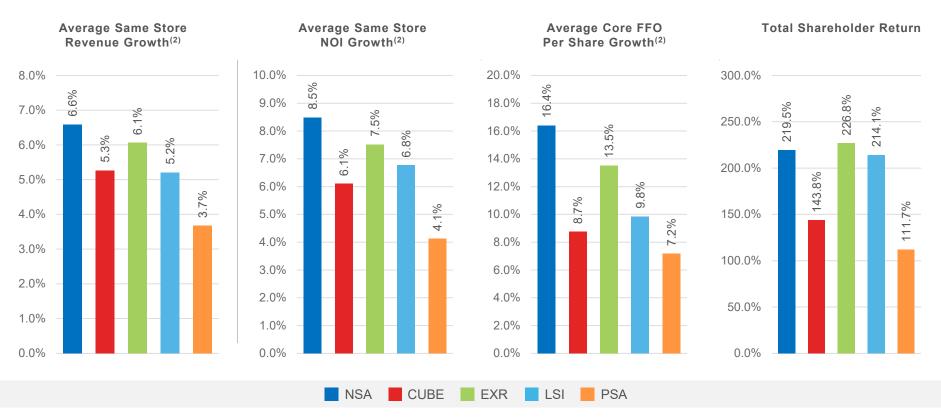
189% Growth in Quarterly Dividend per Share Since IPO⁽¹⁾



¹⁾ Based on Q2 2022 quarterly dividend per share of \$0.55, and Q2 2015 quarterly dividend rate of \$0.19

NSA Delivers Sector Leading Results

Trailing Five Years of Performance(1)



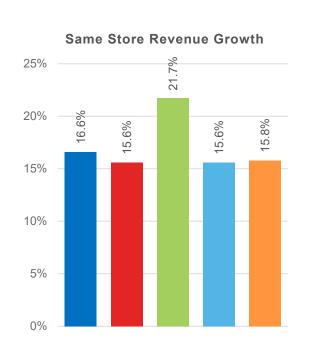
⁽¹⁾ Source: Public reporting and S&P Global Market Intelligence.

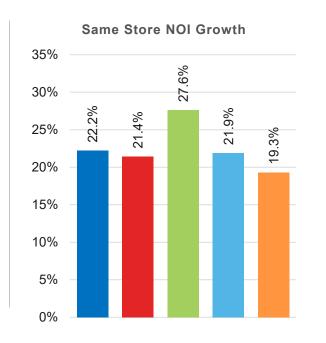


⁽²⁾ Quarterly averages are computed using a simple average of year-over-year quarterly growth rates from second quarter 2017 through first quarter 2022.

NSA Delivers a Strong Start to 2022

First Quarter 2022 Key Metrics









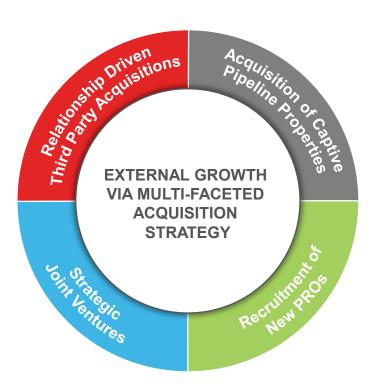


Differentiated PRO Structure Drives Growth



NSA Structure Promotes Internal and External Growth







NSA's Tools and Decentralized Structure Deliver Results

Since IPO in April 2015, NSA has Delivered Average Year-over-Year Same Store Revenue Growth of 6.9% and Same Store NOI Growth of 9.1%







Structure Attracts Disciplined Growth-Oriented Operators

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

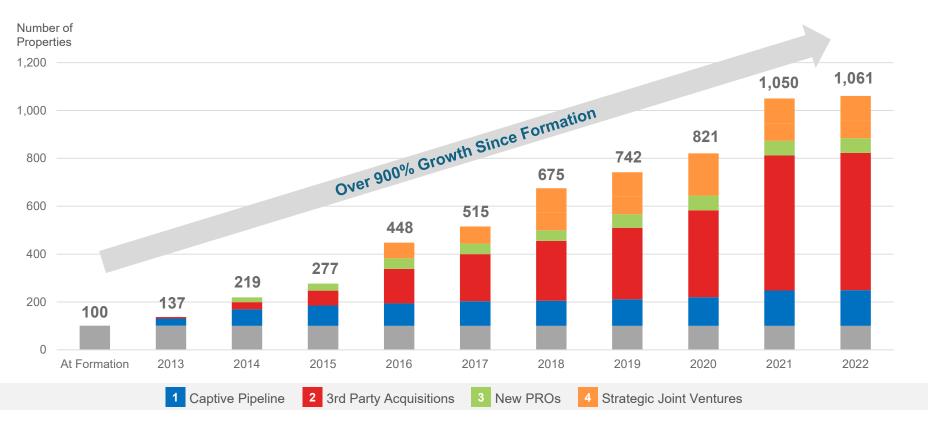
CRITERIA	NSA	JV	SALE / EXIT
Liquidity / Monetization	~	•	•
Ability to Maintain Property Management	~	•	
Participate in Upside	~	•	
Enhance NOI Through Best Practices	✓		
Opportunity and Incentives to Grow Portfolio	✓		



External Growth Has Momentum



Multi-Faceted Acquisition Strategy Drives Growth







TOTAL ACQUISITION PIPELINE:

300+

PROPERTIES

\$2.9 BILLION

Captive Acquisition Pipeline

- 130+ properties
- Estimated value \$1.4 billion

Potential Buyout of JV Partner Interest

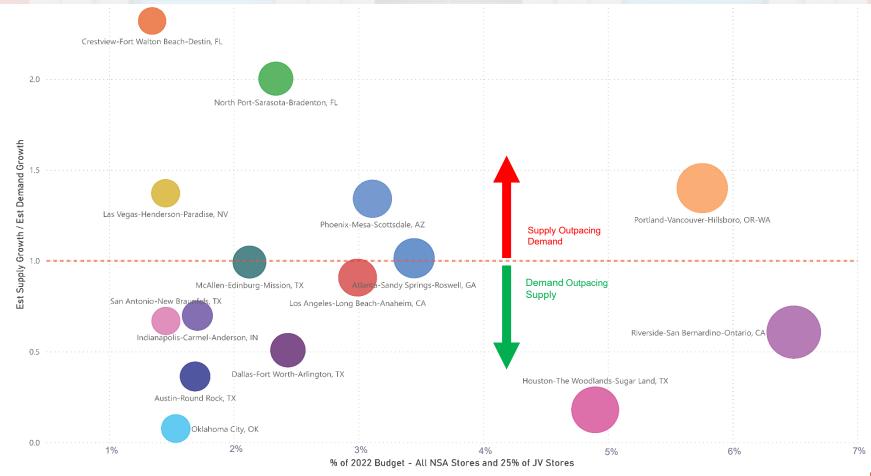
- 177 properties
- JV Partner ownership interest 75%
- Current estimated value of JV partner interest \$1.5 billion⁽¹⁾



Supply Update



NSA's Top 15 Markets – Supply Outlook is Balanced







Flexible Capital Structure Supports Future Growth





NSA's Flexible Capital Structure Positioned for Growth

BBB+ Rated

by Kroll Bond Rating Agency **Key Credit Metrics**

24% Principal Debt /Total Enterprise Value

5.7x
Net Debt/
Adjusted EBITDA

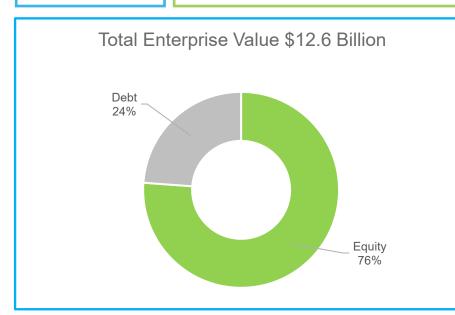
5.7x
Interest
Coverage Ratio

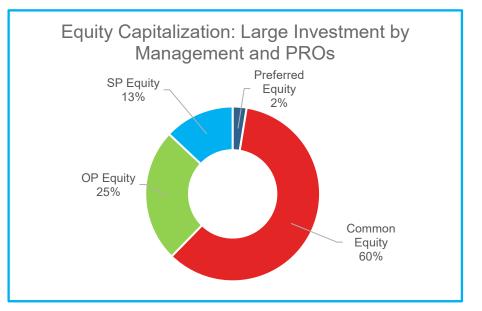
Capital for Growth

\$650MM OP & SP
Unsecured Revolving Line of Credit Equity

Dividend Yield

3.2%









Investment Grade Balance Sheet Provides Strength and Flexibility to Finance Growth

Total Principal Debt Outstanding

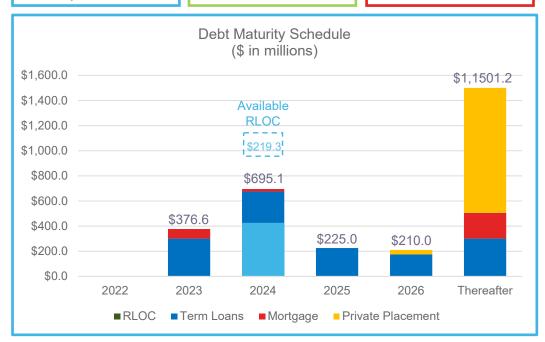
\$3.0B

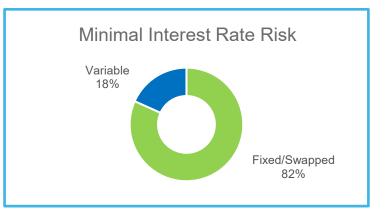
Weighted Average Maturity

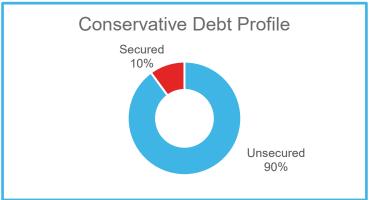
5.4 Years

Effective Interest Rate

3.0%









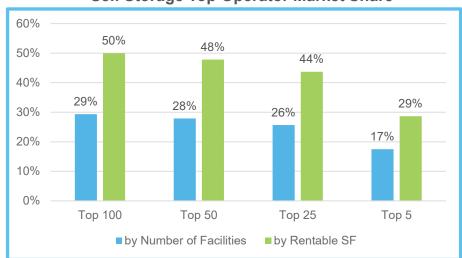
Appendix



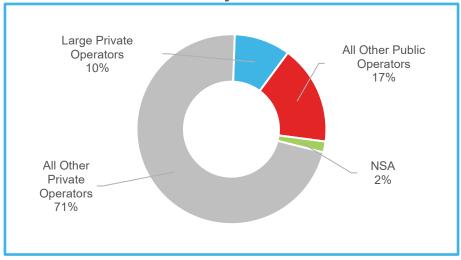
Highly Fragmented Industry: Consolidation Opportunity

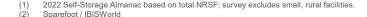
- Highly fragmented sector
 - ~51,000⁽¹⁾ self storage properties with over 30,000 operators⁽²⁾
- NSA PRO growth primarily targets top private operators with 20 or more institutional quality properties in the top 100 MSAs
 - Top 100 operators, excluding public REITs and U-Haul, own and/or manage over 4,900 self storage properties

Self Storage Top Operator Market Share



Market Share by # of Facilities





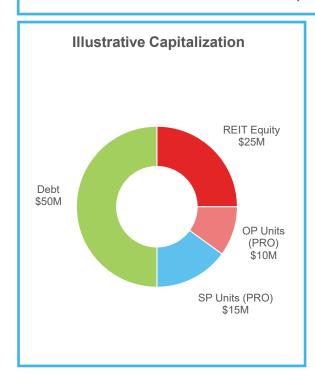


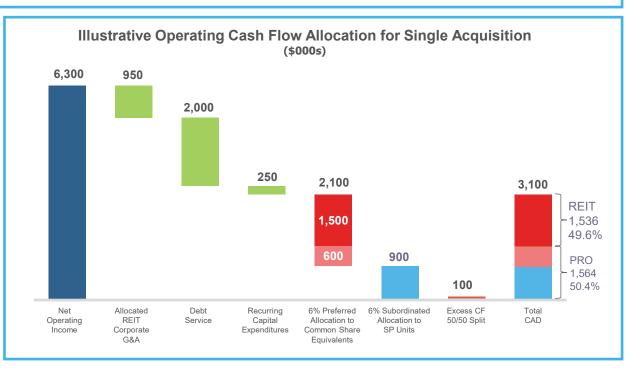
Structure Incentivizes PROs To Perform

Key Assumptions

- \$100MM Purchase Price
- 6.3% Cap Rate

- 50% Funded with Debt
- 50% of Equity from PRO

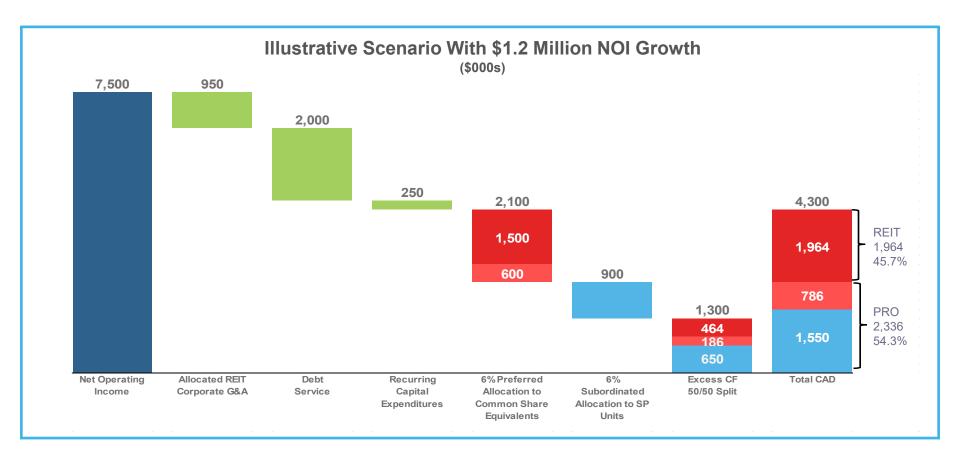




Note: Proportion of SP units and OP units in each acquisition will vary. In general, the number of OP units issued will be capped at a level intended to provide a minimal level of operating cash flow ("CF") allocation on unreturned capital attributable to the OP units. Debt Service is reflective of interest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



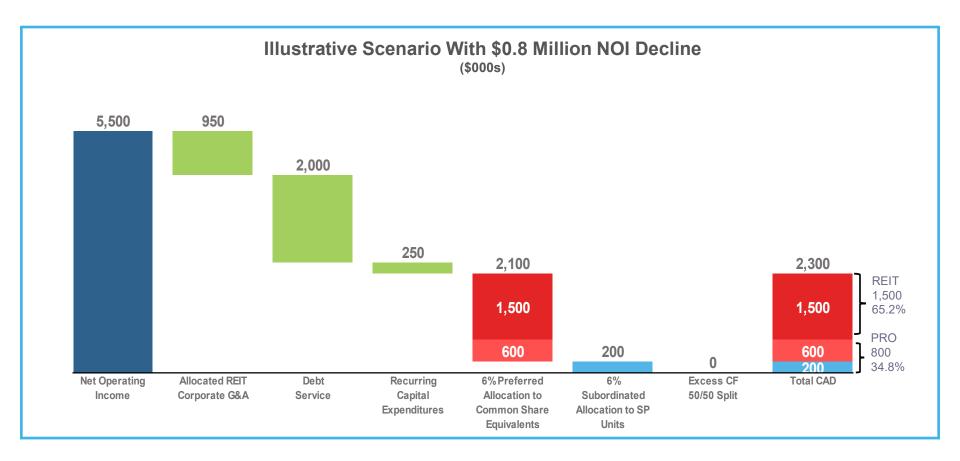
Structure Incentivizes PROs To Perform - Upside Scenario



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 focts 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 \$464K 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 of paid as dividends on NSA's common shares at the discretion of our board of trustees).



Structure Protects NSA Shareholders - Downside Scenario

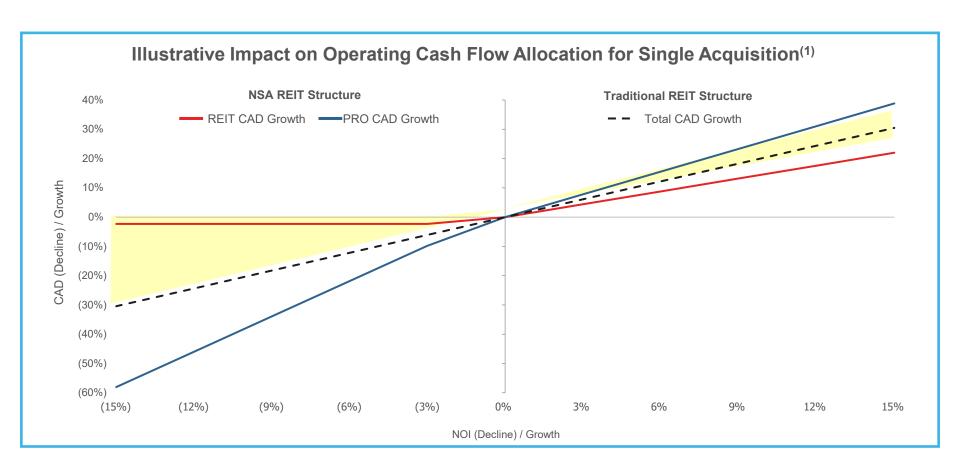


Note: Proportion of SP units and OP units in each acquisition will vary. In general, the number of OP units issued will be capped at a level intended to provide a minimal level of operating cash flow ("CF") allocation on unreturned capital attributable to the OP units. Debt Service is reflective of interest 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 \$0K 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 NSA's 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).



PRO Structure — Shareholder Cash Flow Stability and Downside Protection

Shareholders benefit from less volatile cash flow and downside protection

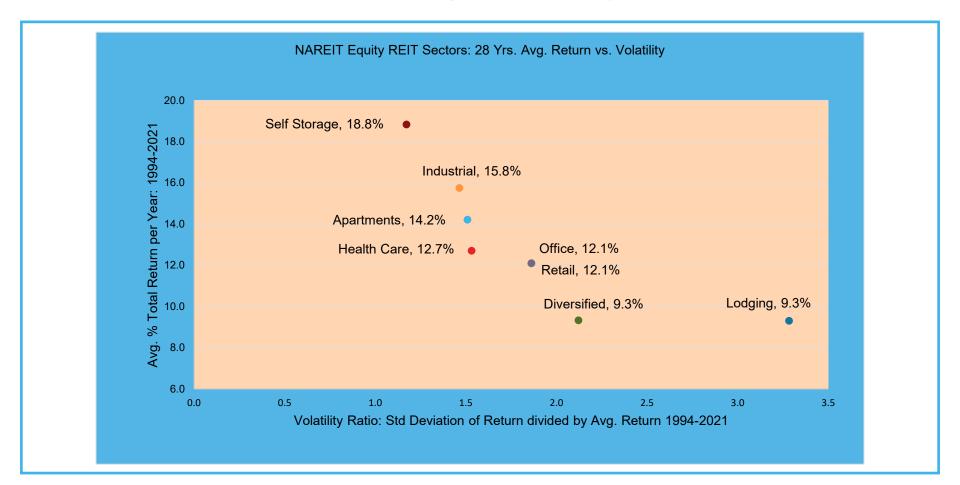


Note: PRO CAD Growth is comprised of cash available to PROs through their ownership interests in both OP and SP units. REIT CAD Growth is comprised of cash available to all other equity stakeholders. (1) This illustrative sensitivity graph reflects the capital structure of a single acquisition and standard NSA operating CF allocation assumptions. 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 NSA's common shares). Any distribution of operating CF allocated to OP units will be made at the discretion of NSA (and paid as dividends on NSA's common shares at the discretion of our board of trustees).



Self Storage: Higher Returns, Lower Volatility

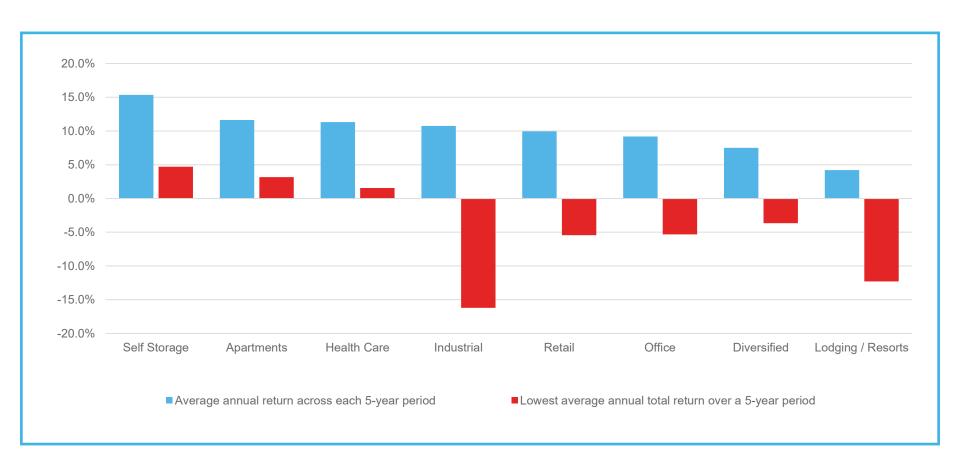
Self Storage total returns have outperformed all other equity REIT sectors for 28 years while experiencing the least volatility





Self Storage Has Outperformed Over the Past 28 Years

Even in the worst five-year period, self storage delivered >4.5% total shareholder return per year









Earnings Per Share – Diluted to Funds From Operations ("FFO") and **Core FFO Per Share and Unit Reconciliation**

	Three Months Ended March 31,			
	2022		2021	
Earnings (loss) per share – diluted	\$	0.24	\$	0.19
Impact of the difference in weighted average number of shares ⁽¹⁾		(0.07)		0.04
Impact of GAAP accounting for noncontrolling interests, two- class method and treasury stock method ⁽²⁾		0.15		-
Add real estate depreciation and amortization		0.45		0.31
Add Company's share of unconsolidated real estate venture real estate depreciation and amortization		0.03		0.04
Subtract gain on sale of self storage properties		(0.02)		-
FFO attributable to subordinated performance unitholders		(0.11)		(0.09)
FFO per share and unit	\$	0.67	\$	0.49
Add acquisition costs		0.01		-
Core FFO per share and unit	\$	0.68	\$	0.49

Source: Q1 2022 Company financials.

Represents the effect of adjusting the numerator to consolidated net income (loss) prior to GAAP allocations for noncontrolling interests, after deducting preferred share and unit distributions, and before the application of the twoclass method and treasury stock method, as described in footnote(1).



⁽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 and the treasury stock method for certain unvested LTIP units, and assumes the conversion of vested LTIP units into OP units on a one-for-one basis and the hypothetical conversion of subordinated performance units, and DownREIT subordinated performance 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 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.

Net Income to Net Operating Income Reconciliation

		Three Months Ended March 31,			
	20)22	20	21	
Net income	\$	44,786	\$	27,635	
(Subtract) add:					
Management fees and other revenue		(6,549)		(5,728)	
General and administrative expenses		13,966		11,238	
Other		470		397	
Depreciation and amortization		58,072		32,424	
Interest expense		22,647		16,792	
Equity in earnings of unconsolidated real estate ventures		(1,494)		(759)	
Acquisition costs		553		292	
Income tax expense		848		196	
Gain on sale of self storage properties		(2,134)		-	
Non-operating expense		112		173	
Net Operating Income	\$	131,277	\$	82,660	



Net Income to EBITDA & Adjusted EBITDA Reconciliation

	Three Months Ended March 31,			
	20)22	202	21
Net income	\$	44,786	\$	27,635
Add:				
Depreciation and amortization		58,072		32,424
Company's share of unconsolidated real estate venture depreciation and amortization		3,846		3,881
Interest expense		22,647		16,792
Income tax expense		848		196
EBITDA	\$	130,199	\$	80,928
Add (subtract):				
Acquisition costs		553		292
Gain on sale of self storage properties		(2,134)		-
Equity-based compensation expense		1,544		1,286
Adjusted EBITDA	\$	130,162	\$	82,506



Definitions and Methodology

Total Enterprise Value: The sum of the Company's debt principal outstanding plus the perpetual preferred and common equity (on a fully diluted basis) valued at the closing price per share, as of March 31, 2022, of \$25.46 and \$62.76, respectively. SP equity is assumed converted using the hypothetical conversion ratio for the trailing twelve months ended at each respective quarter end, which we publicly disclose each quarter. See Supplemental Schedule 4 to each of our earnings releases which are furnished with the U.S. Securities and Exchange Commission.

Net Debt / Adjusted EBITDA: Total debt less cash and cash equivalents, divided by annualized Adjusted EBITDA for most recently reported quarter.

Interest Coverage Ratio: Computed by dividing Adjusted EBITDA by interest expense for most recently reported guarter.

EBITDA: Net income (loss), as determined under GAAP, plus interest expense, loss on early extinguishment of debt, income taxes, depreciation and amortization expense and the Company's share of unconsolidated real estate venture depreciation and amortization.

Adjusted EBITDA: EBITDA plus acquisition costs, organizational and offering expenses, equity-based compensation expense, losses on sale of properties and impairment of long-lived assets, minus gains on sale of properties and debt forgiveness, and after adjustments for unconsolidated partnerships and joint ventures.

Dividend Yield: Calculated based on first quarter 2022 quarterly annualized dividend of \$2.00 divided by market closing price of NSA's common shares on March 31, 2022 of \$62.76.

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 0.20% for unused borrowings.

Page 23 - Supply Graph Methodology

- 1. We estimate supply growth for each market as follows: first, we add together the expected total net rentable square footage attributable to (i) all Fill-Up and Under Construction Properties and (ii) 25% of all Planned and Prospective Properties. Properties refers to all self storage properties (including NSA's) in the MSAs set forth above, tracked and reported by Yardi Matrix. Fill-Up are stores that have opened in the 24-month period prior to March 31, 2022. Under Construction are those currently under construction. Planned and Prospective are those with a permit in place or an approval pending to build. We divide this number by the total net rentable square footage of all properties in each market.
- 2. We estimate demand growth in each market by adding together (i) Experian's 5-year projections for the percentage increase in household growth in each market plus (ii) 5%, which represents our assumptions with respect to increased demand in each market irrespective of population growth.
- 3. The ratio of supply growth to demand growth is calculated based upon NSA's estimates and assumptions as set forth in footnotes 1 and 2 above. There can be no assurance that supply growth and demand growth in any market will correspond to such estimates. Some or all of our competitor's properties in these markets may not fill up, reach completion or be built at all or on the schedule currently contemplated and increases in population and non-population related demand may differ from our estimates and assumptions.
- 4. Circle sizes correspond to each MSA's % share of NSA's projected 2022 revenue, with JV properties accounted for at NSA's 25% share.
- 5. Excludes the San Juan-Carolina-Caguas MSA due to lack of available supply data.



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Website

www.nationalstorageaffiliates.com





National Storage Affiliates

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