

PEOPLE. PROCESS. PLATFORM. DRIVING GROWTH

Company Update

June 2023

FORWARD-LOOKING STATEMENTS AND NON-GAAP FINANCIAL

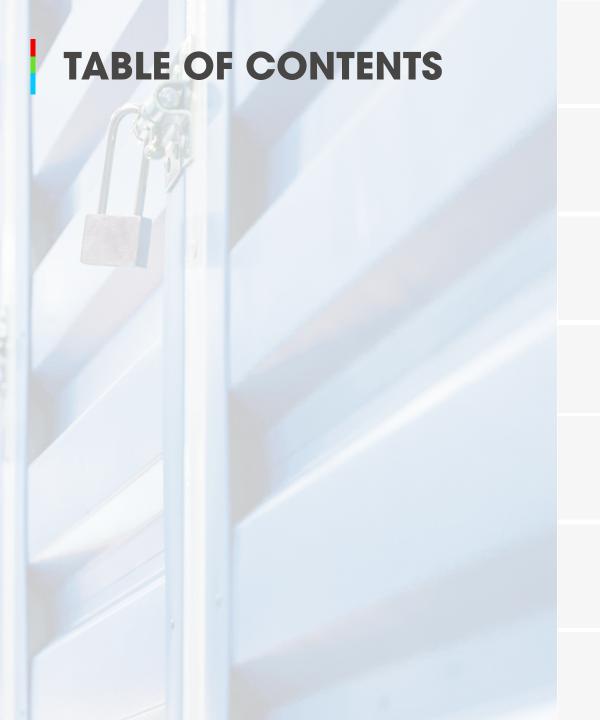
FORWARD-LOOKING STATEMENTS: We make forward-looking statements in this presentation that are subject to risks and uncertainties. These forward-looking statements include information about possible or assumed future results of our business, financial condition, liquidity, results of operations, plans 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 27, 2023 (the "Annual Report") and our quarterly report on Form 10-Q filed with the SEC on May 2, 2023 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, 2023, 2022, 2021, 2020, 2019, and 2018 December 31, 2022, 2021, 2020, 2019 and 2018, September 30, 2022, 2021, 2020, 2019, and 2018, and June 30, 2022, 2021, 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.

Information in this presentation is as of March 31, 2023, except as otherwise noted. See "Definitions and Methodology" in the Appendix for certain definitions and calculation methodologies of certain terms and metrics used herein.



SELF STORAGE Industry Overview

NATIONAL STORAGE AFFILIATES Company Overview

CONSISTENT GROWTH

MULTI-FACETED Growth Strategy

FLEXIBLE CAPITAL STRUCTURE Supports Future Growth

ESG Overview

APPENDIX (including Definitions and Methodology)



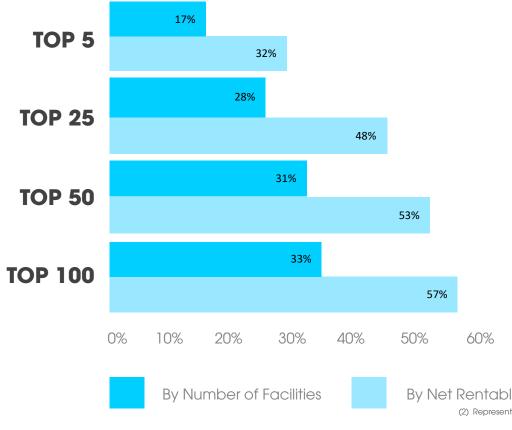
SELF STORAGE

Industry Overview



HIGHLY FRAGMENTED INDUSTRY: CONSOLIDATION OPPORTUNITY

Self Storage Top Operator Market Share⁽¹⁾



Market Share by Number of Facilities(1)

(Approximately 51,000 self storage facilities in the U.S.)



(1) Source: 2023 Self Storage Almanac
 (2) Represents top 100 operators, excluding publicly traded REITs and UHA
 (3) Includes CUBE, EXR, LSI, PSA and UHAL

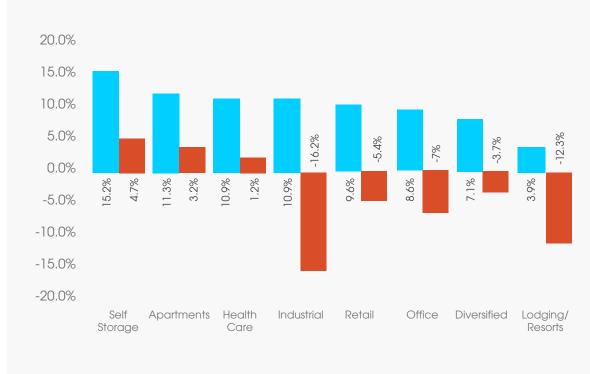
SELF STORAGE: HIGHER RETURNS, LOWER VOLATILITY SELF STORAGE HAS OUTPERFORMED OVER THE PAST 29 YEARS

NAREIT Equity REIT Sectors: 29 Yrs. Avg. Return vs. Volatility(1)



Volatility Ratio: Standard Deviation of Return divided by Avg. Return 1994 - 2022

Even in the worst five-year period, self storage delivered >4.5% total shareholder return per year⁽¹⁾



Average annual return
across each 5-year period

Lowest average annual total
return over a 5-year period



NATIONAL STORAGE AFFILIATES

Company Overview



Q1 2023 UPDATE

\$10.2B

TOTAL ENTERPRISE VALUE(1)

1,117

PROPERTIES

WELL DIVERSIFIED ACROSS

42

STATES + PUERTO RICO

5.7%

Y-O-Y SAME STORE REVENUE GROWTH 4.8%

Y-O-Y SAME STORE NOI GROWTH 89.7%

SAME STORE AVG. OCCUPANCY

-2.9%

Y-O-Y CORE FFO/SHARE

GROWTH

\$161M

WHOLLY OWNED ACQUISITIONS

10%

Y-O-Y GROWTH IN

DIVIDEND RATE

PORTFOLIO METRICS – 2023 SAME STORE POOL

Year-over-year comparisons are challenging, although street rates have continued to increase YTD

METRIC	Q1 2023	MAY 2023
Period-End Occupancy	89.8%	90.0%
Year-Over-Year Change in Period-End Occupancy	-380 bps	-450 bps
Year-Over-Year Change in Street Rates	-7%	-9%

NSA FAMILY OF BRANDS



CORPORATE BRANDS (788 properties; 185 of which are in joint ventures)









PRO BRANDS (329 properties)

















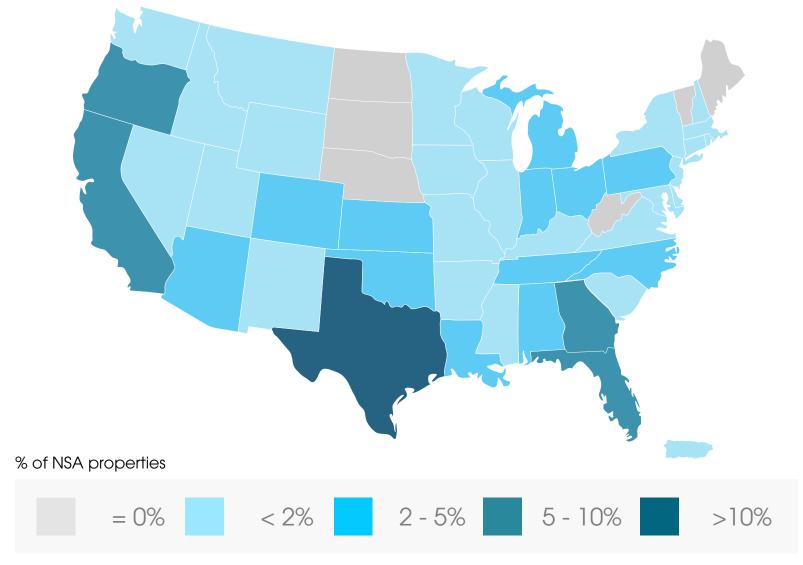
TOTAL PORTFOLIO BY PROPERTY COUNT



CORPORATE BRAND STORES



STRATEGIC FOCUS IN SUN BELT MARKETS



Sun Belt(1)

66%
BY STORE COUNT

Largest MSA

(Riverside-San Bernardino-Ontario, CA)

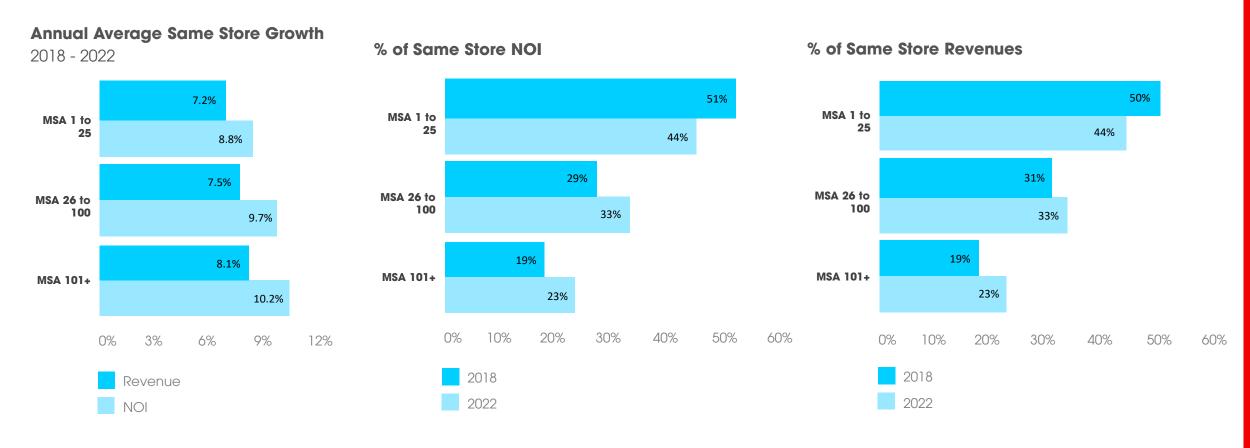
7.5%

OF SAME STORE
REVENUE IN Q1 2023

(1) NSA defines the Sun Belt as the following states: AL, AR, AZ, CA, FL, GA, LA, MS, NC, NM, NV, OK, SC, TN and TX.

SECONDARY MARKET OUTPERFORMANCE

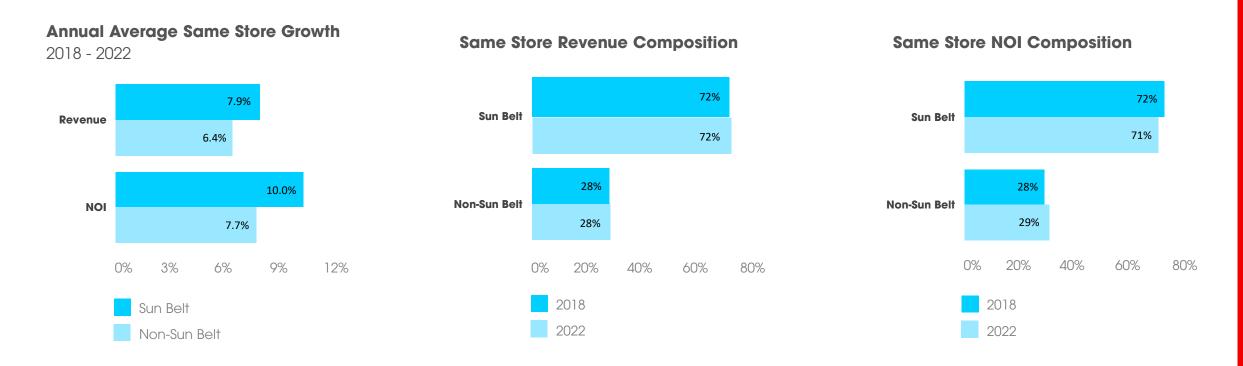
NSA properties outside of the top 25 MSAs have outperformed over the past five years and we have increased our exposure to these markets⁽¹⁾



(1) Historical returns and same store composition have been adjusted to account for asset sales and the removal of certain assets from the same store pools due to casualty events and significant changes in square footage. Figures may not sum to 100% due to rounding.

SUN BELT OUTPERFORMANCE

NSA's properties in Sun Belt Markets have outperformed over the past five years and given domestic migration, employment and housing trends - we expect this outperformance to continue⁽¹⁾

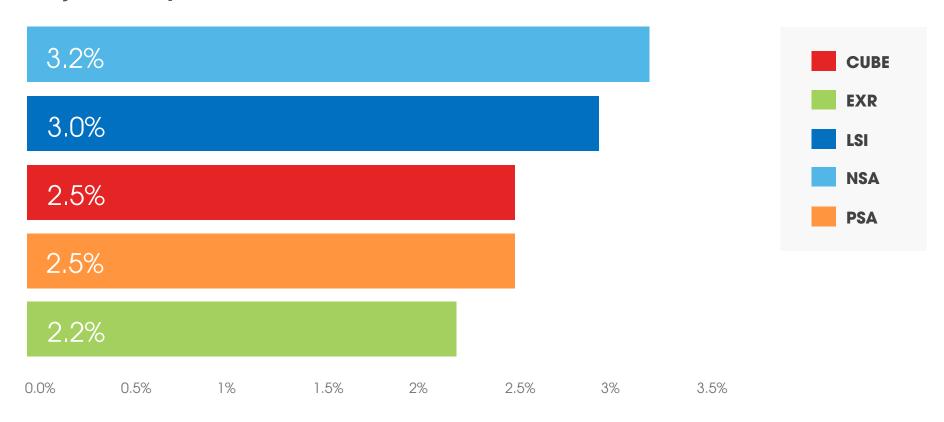


(1) Historical returns and same store composition have been adjusted to account for asset sales and the removal of certain assets from the same store pools due to casualty events and significant changes in square footage.

NSA'S MARKETS ARE WELL POSITIONED VS PEERS

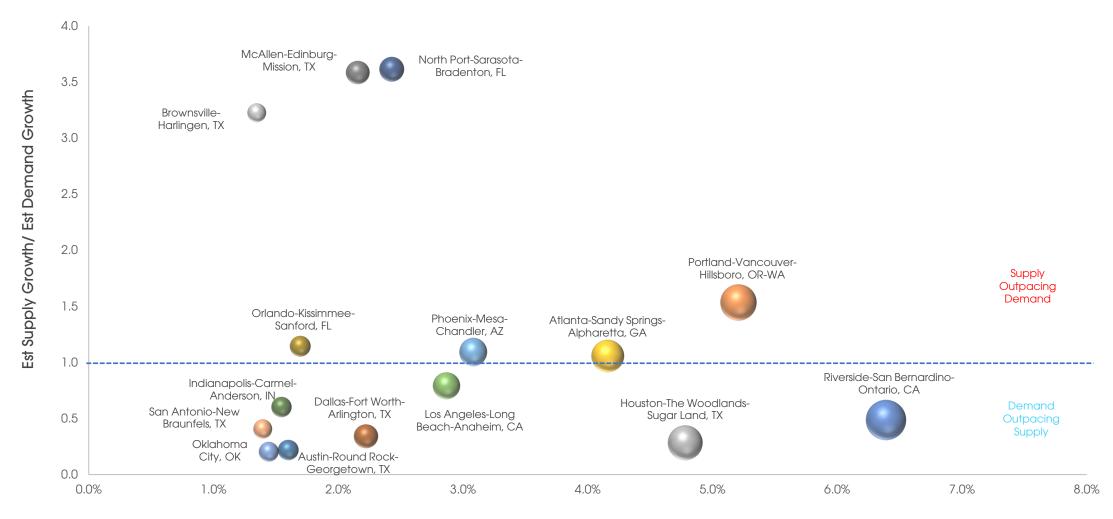
Population growth in NSA's markets is expected to outpace the peers(1)

Projected Population Growth 2023 - 2028



(1) Source: Evercore ISI 1Q 2023 Storage Demographic Update (May 16, 2023)

NSA'S TOP 15 MARKETS - SUPPLY OUTLOOK FAVORABLE

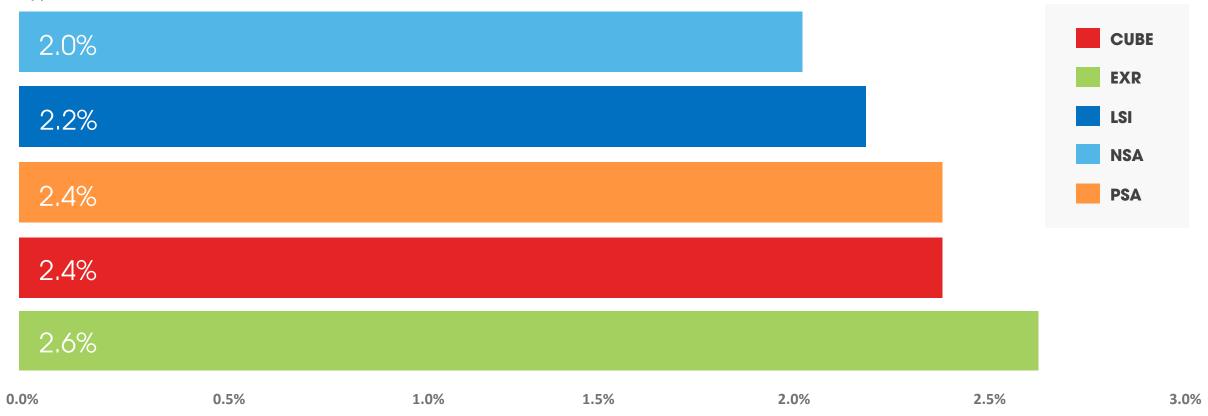


% of 2023 Budget - All NSA Stores (with JV Stores at NSA's 25% share)

AFFORDABILITY ANALYSIS - NSA WELL POSITIONED

Storage Rent in NSA's Markets is More Affordable on Average Relative to Peers

Typical 10x10 Unit Annual Rent as a % of Median HH Income⁽¹⁾

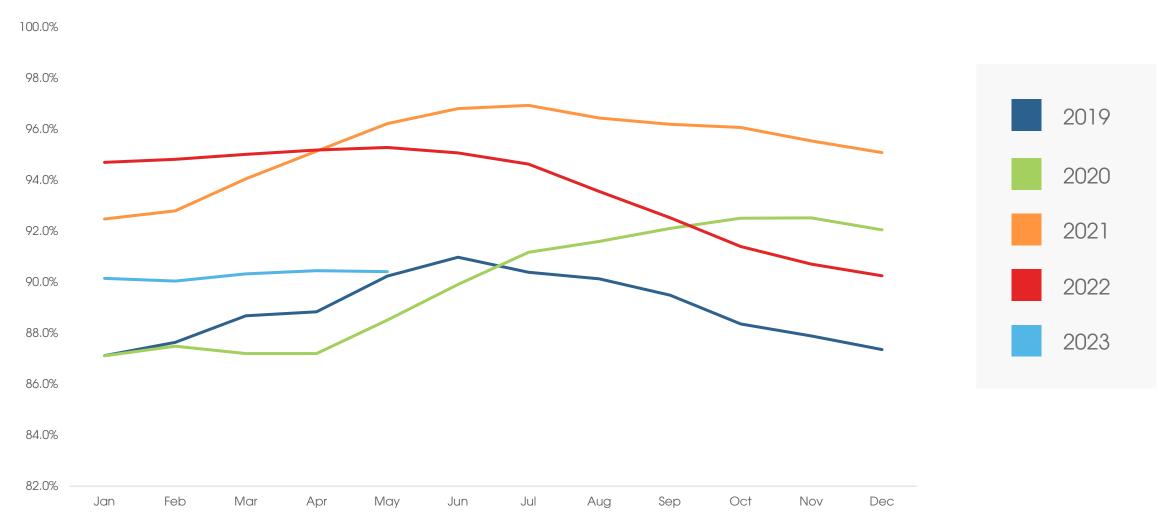


(1) Based on utilizing 3-mile radius Median HH Income from Evercore ISI's report: 1Q 2023 Storage Demographic Update, combined with 1Q 2023 same store annualized rental revenue per occupied square foot from public filings as of March 31, 2023 as follows: NSA \$15.13; LSI \$19.31; CUBE \$22.39; EXR \$22.53; and PSA \$22.65.

The annualized rental revenue per occupied square foot is then multiplied by 100 to represent a 10x10 unit.

OCCUPANCY TRENDS

Core Pool of 430 Stores Owned Since Jan 1, 2018



TIMELINE OF KEY MILESTONES



2019 9th PRO: Southern Self Storage 10th PRO: Moove In Self Storage 2018 **JV Formation:** 2017 8th PRO: Personal Mini Storage \$172.5M Series A Preferred 500 store milestone

2020 Internalization of largest PRO, SecurCare New PRO: Blue Sky Self Storage 2021 **Record \$2.2B** of acquisitions **Record** same-store NOI growth 1,000 store milestone 2022 **PRO Retirement:** Northwest Self Storage 2023 PRO Retirement: Move It (over 70% of properties are now corporate managed)

WHY INVEST IN NSA?

The self storage sector has proven recession resilient and has been the best performing REIT sub-sector over the long term¹



Attractive dividend growth - NSA's dividend rate has grown 93% over the past five years (Q2 2023 vs Q2 2018), and has a current yield of 5.9%⁽²⁾



Differentiated PRO structure Drives robust external growth



NSA has outperformed the self storage peers in average quarterly same store NOI
growth and Core FFO/SH growth since its IPO in
2015



Geographic Diversification - across Sun Belt, Secondary and Suburban markets



NSA's focus on People, Process and Platform supports future growth initiatives

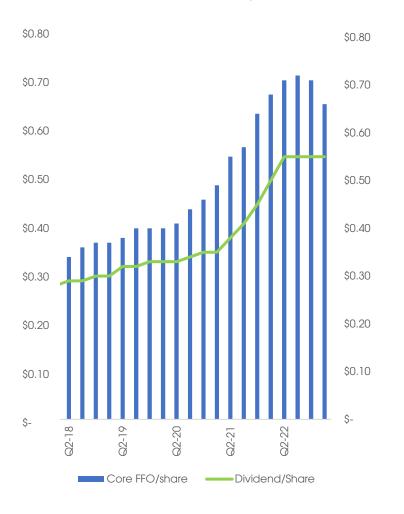


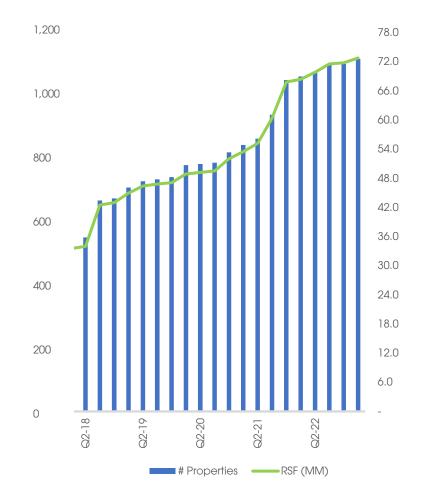
(1) See slide 6. (2) As of June 2, 2023



CONSISTENT GROWTH

TRAILING FIVE YEARS OF PERFORMANCE (Q2 2018 – Q1 2023)

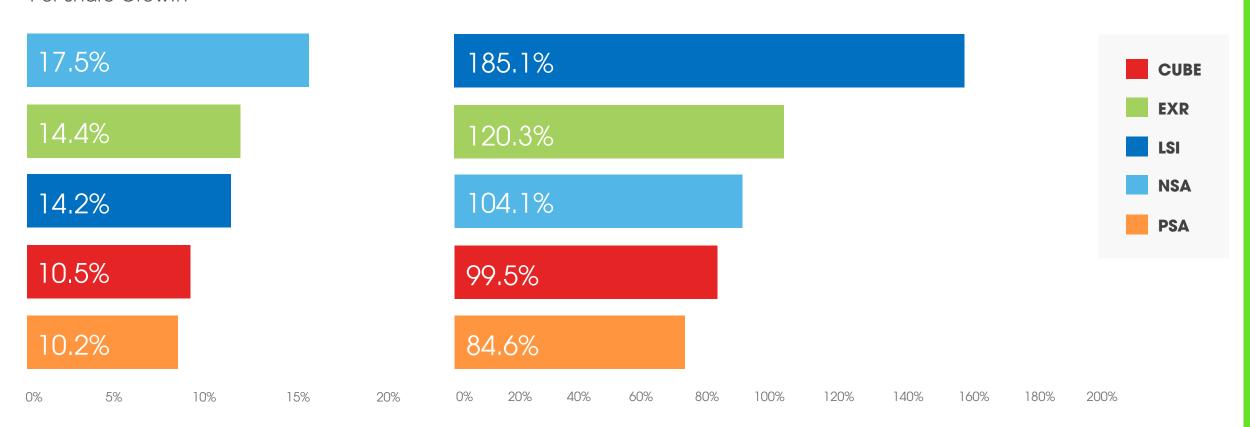




Total Shareholder Return

TRAILING FIVE YEARS OF PERFORMANCE (Q2 2018 – Q1 2023)

Average Quarterly Core FFO Per Share Growth



TRAILING FIVE YEARS OF PERFORMANCE (Q2 2018 – Q1 2023)

0.0% 1.0%

2.0%

3.0%

4.0%

5.0%

6.0%

8.0%

7.0%

Average Quarterly Same Store Average Quarterly Same Store Revenue Growth NOI Growth 7.9% 10.2% **CUBE EXR** 7.7% 9.6% LSI **NSA** 9.4% 7.5% **PSA** 6.5% 8.0% 5.8% 6.7%

2.0%

4.0%

6.0%

8.0%

10.0%

12.0%

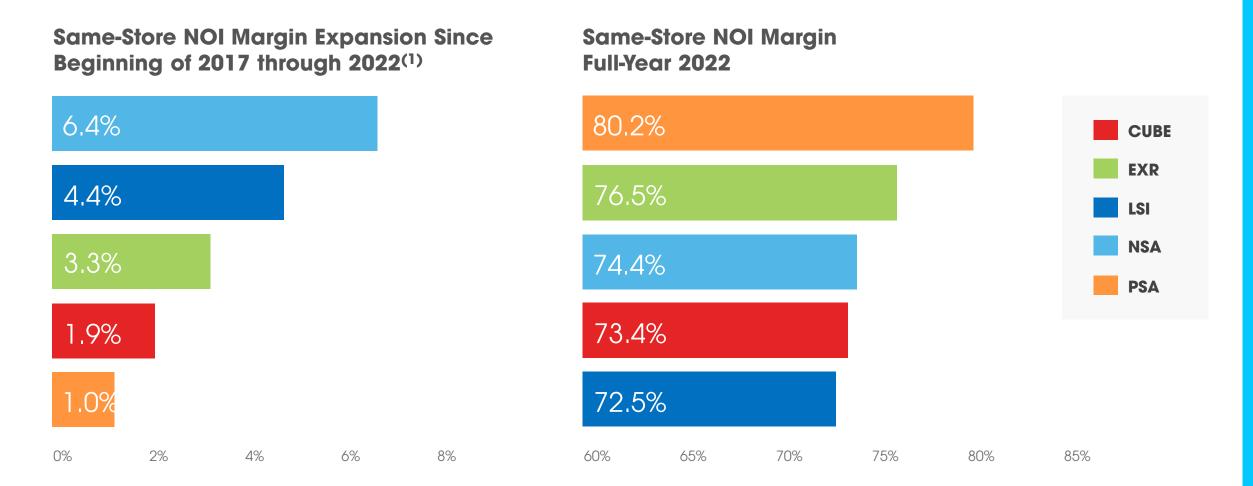


MULTI-FACETED Growth Strategy

PEOPLE, PROCESS & PLATFORM: DRIVING INTERNAL GROWTH



SECTOR-LEADING MARGIN IMPROVEMENT

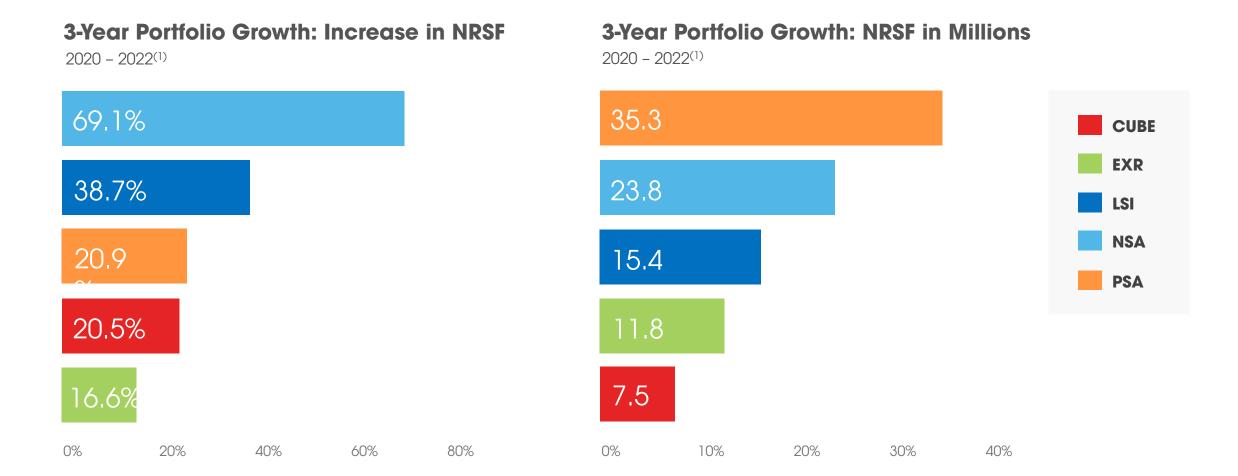


(1) Based on reported full-year same-store NOI margins in 2016 and 2022.

MULTI-FACETED ACQUISITION STRATEGY



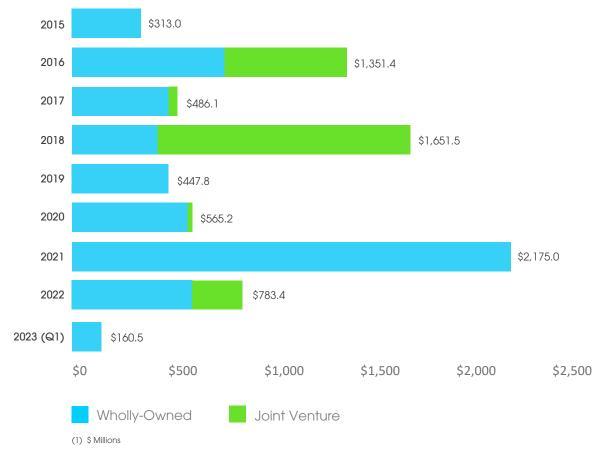
EXTRAORDINARY PORTFOLIO GROWTH



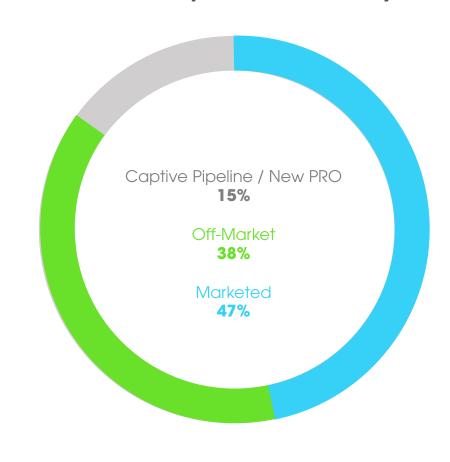
⁽¹⁾ Based on reported consolidated square footage as of December 31, 2019 and December 31, 2022

RELATIONSHIP-DRIVEN TRANSACTIONS FUEL GROWTH

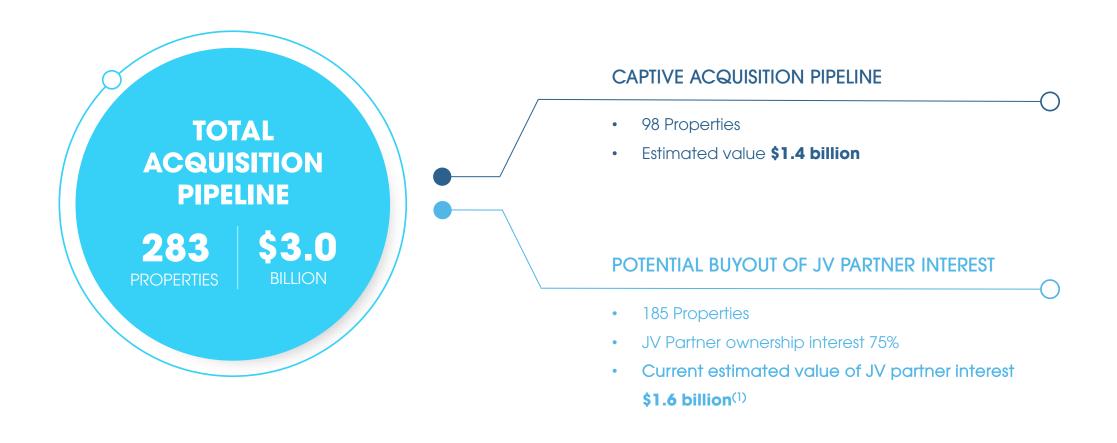
Annual Acquisition Volume Since IPO(1)



2020 - 2022 Acquisition Volume by Source



ROBUST LONG-TERM ACQUISITION PIPELINE



(1) The 75% third-party share of gross real estate assets is estimated to be approximately \$1.6 billion based on the historical book value of the joint ventures



FLEXIBLE CAPITAL STRUCTURE Supports Future Growth

FLEXIBLE CAPITAL STRUCTURE



By Kroll Bond Rating Agency \$950M

Unsecured Revolving
Line of Credit

CAPITAL FOR GROWTH

MULTIPLE SOURCES OF EQUITY

UNSECURED & SECURED DEBT

JOINT VENTURE KEY CREDIT METRICS(1)

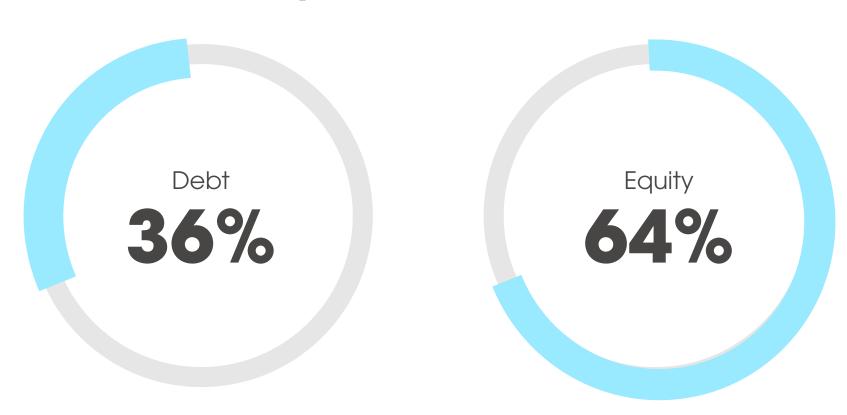
6.3x 3.8x

Net Debt/ Adjusted EBITDA Interest Coverage Ratio

(1) See appendix for calculation methodology

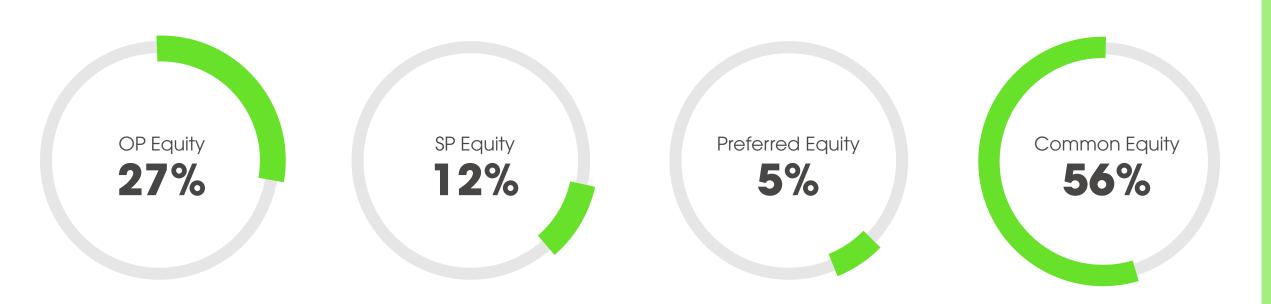
FLEXIBLE CAPITAL STRUCTURE

Total Enterprise Value - \$10.2 Billion

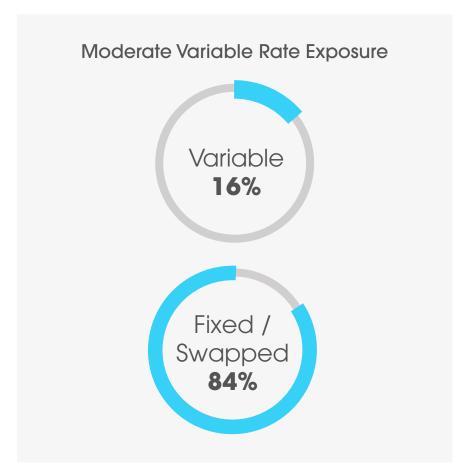


FLEXIBLE CAPITAL STRUCTURE

Equity Capitalization - Large Investment By Management and PROs



INVESTMENT GRADE BALANCE SHEET PROVIDES STRENGTH AND FLEXIBILITY TO FINANCE GROWTH





(1) After giving pro forma effect to the \$120 million of senior unsecured notes due July 5, 2028, with an effective interest rate of 5.75% that were issued on April 27, 2023.

(2) Weighted average maturity would increase to 5.6 years if maturity extension options were exercised on Term Loan B with a balance of \$275M, which would extend the maturity to 2025 from 2024, and on the revolving line of credit with a proforma balance of \$540.5M, which would extend the maturity to 2028 from 2027.

See description of terms in Appendix: Definitions and Methodology.

Total Principal
Debt Outstanding

\$3.7B

Weighted Average Maturity⁽¹⁾⁽²⁾

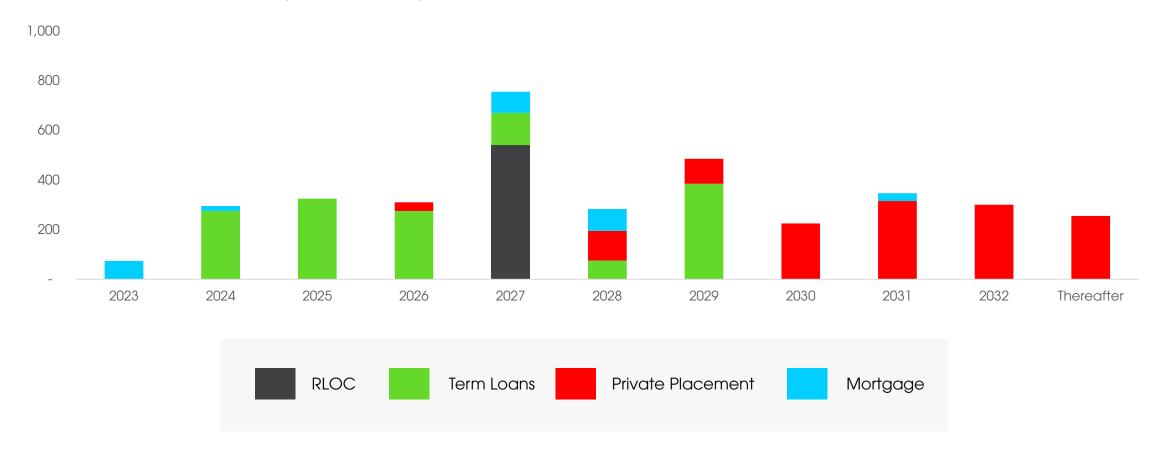
5.4 years

Effective Interest Rate⁽¹⁾

4.1%

WELL-LADDERED DEBT MATURITY SCHEDULE

Debt Maturity Schedule (\$ in millions)(1)

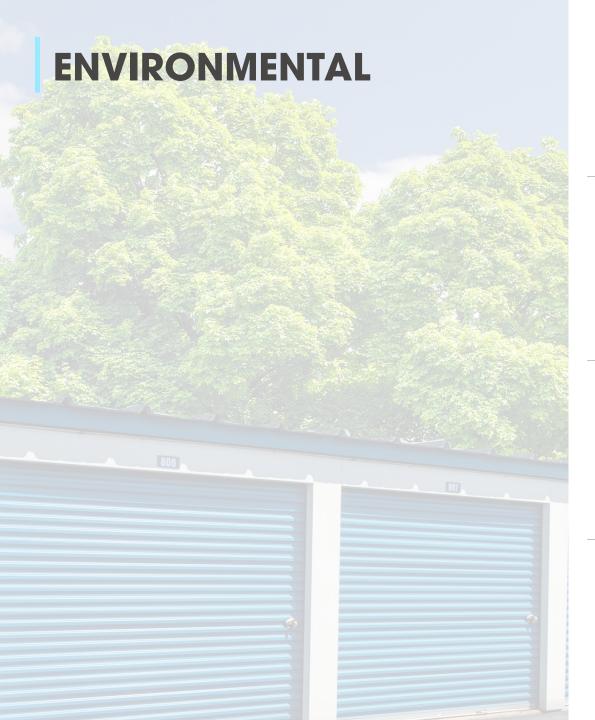


⁽¹⁾ After giving pro forma effect to the \$120 million of senior unsecured notes due July 5, 2028, with an effective interest rate of 5.75% that were issued on April 27, 2023. Does not assume the exercise of maturity extension options on Term Loan B with a balance of \$275 million, which would extend the maturity to 2025 from 2024, and on the revolving line of credit with a pro forma balance of \$540.5 million, which would extend the maturity to 2028 from 2027.



ESG Overview





- Over 900 of our properties have LED lighting
- Vast majority of properties have motionsensor-controlled lighting
- All HVAC replacements completed with energy efficient models
- Approximately 20 of our properties have solar arrays installed
- Expect to add solar on up to an additional 16 sites by 2024

- Right sizing waste containers
- Reducing the frequency of pick ups

- Water-saving plumbing devices
- Landscaping features that minimize water consumption











 National Storage Affiliates has partnered with Feeding America to provide 1.5 million meals annually to individuals facing food insecurity.



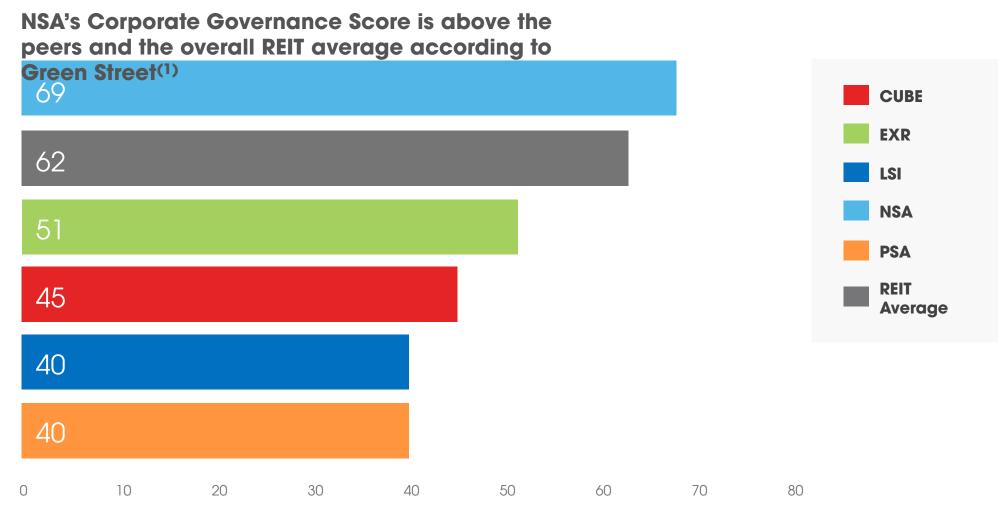
Our SecurCare brand was recognized by Newsweek Media as one of America's Best Customer Service Brands for 2022



- 62% of our employees are women⁽¹⁾
- 33% racially or ethnically diverse⁽¹⁾
- 42% of senior management are women⁽¹⁾
- Diversity, Equity, Inclusion and Belonging Council formed in 2022
- Member of NAREIT DDEI CEO Council
- Veteran hiring program implemented in 2022



GOVERNANCE



(1) Source: Green Street, Executive Compensation & Corporate Governance Report, July 14, 2022.

GOVERNANCE

Corporate Governance Highlights

GRESB – participated in the 2022 assessment and committed to participate in the 2023 assessment

Opted out of MUTA

Vendor code of conduct

No "poison pill" plan

7 of 10 trustees are independent

Annual election of all trustees

Separate chairman and CEO roles

Risk Management Committee formed a Cybersecurity subcommittee in 2021



APPENDIX

DEFINITIONS AND METHODOLOGY

Total Enterprise Value: The sum of the Company's debt principal outstanding plus the perpetual preferred series A and common equity (on a fully diluted basis) valued at the closing price per share, as of March 31, 2023, of \$23.01 and \$41.78, respectively, and the Company's perpetual preferred series B preferred equity valued at a par value of \$25.00 per share. SP equity is assumed converted using the hypothetical conversion ratio of 1.63x for the trailing twelve months ended March 31, 2023.

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 quarter.

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 second quarter 2023 quarterly annualized dividend of \$2.24 divided by market closing price of NSA's common shares on June 2, 2023 of \$37.85.

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 6 -Sector Average Annual Total Shareholder Returns for Each 5-Year Period (All US Public Equity REITs) Over the past 29 years ended 2022. Annual total shareholder returns calculated as five-year IRRs on NAREIT's individual property sector total return index levels, for 25 separate 5-year periods from 1994-1998 through 2018 - 2022. Lowest average annual return periods for each sector are the five years ended: Self Storage 2020; Apartments 2009; Health Care 1999; Industrial 2011; Retail 2020; Office 2022; Diversified 2011; Lodging / Resorts 2002.

Page 15 - 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 May 31, 2023. 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 2023 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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