

2021 HISTORIC MILESTONES ACHIEVED

ALEXANDRIA
REAL ESTATE EQUITIES, INC.

2021
ANNUAL
REPORT



ALEXANDRIA®
Building the Future of Life-Changing Innovation®

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ALEXANDRIA®
Building the Future of Life-Changing Innovation®

ALEXANDRIA & MODERNA AT THE LEADING EDGE OF THE mRNA REVOLUTION

Shortly after Moderna was founded in 2010, we recognized the transformative potential of its pioneering mRNA platform. For the past decade, Alexandria has both invested in the company and provided it with mission-critical real estate.

Alexandria's longstanding and deep-rooted relationship with Moderna, whose mRNA-based COVID-19 vaccine received full approval from the FDA in January 2022, underscores our ability to identify and partner with companies developing revolutionary technologies that have immense potential to meet huge unmet medical needs. Moderna's COVID-19 vaccines are specific mRNAs (as featured above and on the cover) that are "translated" into viral spike proteins that trigger an immune response.

Moderna's COVID-19 mRNA vaccine highlights the critical importance of the life science industry and reinforces the essential nature of the complex infrastructure that supports the company's lifesaving work.

DESIGNED TO BE THE MOST SUSTAINABLE
LABORATORY BUILDING IN CAMBRIDGE

325 Binney Street on our Alexandria Center® at One Kendall Square mega campus is a high-performance development targeting LEED Zero Energy certification that will showcase Alexandria's climate-resilient design solutions. Targeting carbon emissions reduction and with features that promote occupant wellness, Moderna's new HQ will enable the company to advance its strategic sustainability initiatives.



ALEXANDRIA & MODERNA

TRUSTED
STRATEGIC
RELATIONSHIP
SINCE 2012

ALEXANDRIA'S SUSTAINED STRATEGIC RELATIONSHIP WITH
MODERNA GENERATES OVER 1 MILLION RSF LEASED IN 2021

LARGEST LIFE SCIENCE LEASE
IN COMPANY HISTORY

462K

MODERNA HQ AND R&D CENTER IN
CAMBRIDGE, MA (PICTURED)

LONG-TERM RENEWALS AT THREE
EXISTING STRATEGIC LOCATIONS

684K

MODERNA TECHNOLOGY
CENTER IN NORWOOD, MA

ALEXANDRIA'S MISSION- CRITICAL INFRASTRUCTURE FOR MODERNA, A PIONEER IN mRNA TECHNOLOGY



“For nearly a decade, Moderna has relied upon Alexandria as a partner in our efforts to grow our company under extraordinary circumstances — especially since the onset of the pandemic. The team at Alexandria has done a great deal to knit together Cambridge and Greater Boston's life science ecosystem and has served as a beacon for the industry. Moderna and Flagship's 40-plus other Cambridge-area companies benefit greatly from their leadership.”

NOUBAR AFEYAN, PhD
CO-FOUNDER & CHAIRMAN OF MODERNA;
FOUNDER & CEO OF FLAGSHIP PIONEERING

**“ALEXANDRIA HAS
ACHIEVED THE
THREE OUTPUTS
THAT DEFINE A
GREAT COMPANY:
SUPERIOR RESULTS,
DISTINCTIVE IMPACT, AND
LASTING ENDURANCE.”**

JIM COLLINS

RENOWNED AUTHOR & BUSINESS STRATEGIST



JOEL S. MARCUS
EXECUTIVE CHAIRMAN
& FOUNDER

ALEXANDRIA'S 2021 HISTORIC MILESTONES ACHIEVED

2021 was an extraordinary year for Alexandria across every facet of our business and by every metric.

People generally want to see good things happen. But few can make them happen. Alexandria has been making it happen for nearly three decades, and this year was no different. Our unique business model, strategic growth initiatives, and sustained high-tempo operational excellence as executed by our world-class team enabled Alexandria to exceed even our own high expectations and resulted this year in our achievement of multiple record-setting milestones. We delivered a historic total stockholder return (TSR) in 2020 and 2021 during the time of COVID-19. Our incredible TSR of 45.1%¹ over that period surpassed by a wide margin the FTSE Nareit Equity Office Index's two-year TSR of -0.5%.

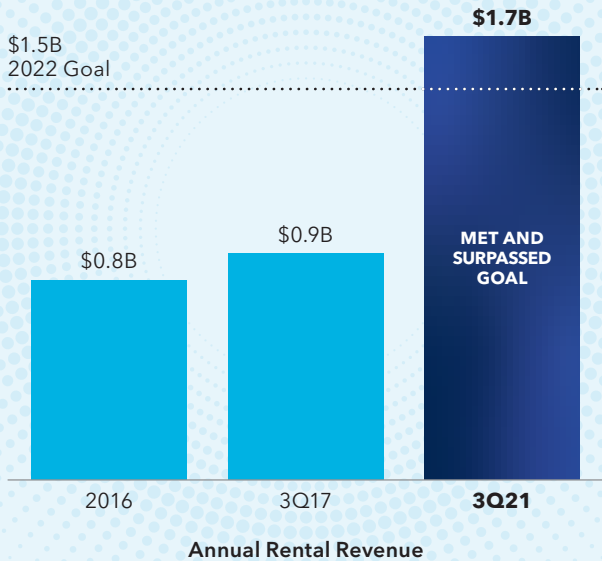
1. Assumes reinvestment of dividends.

I am immensely proud to be leading, together with our unparalleled executive team, the company I founded, and I remain deeply grateful to be working alongside all our colleagues, whose passion for Alexandria's mission to advance human health, and whose deep experience, sophisticated technical expertise, and unwavering commitment to constantly improve and enhance our tenants' experience, has enabled these innovative companies to pursue their mission-critical work. Alexandria is proud to provide our tenants with the highest level of operational excellence. Our reputation for world-class infrastructure and campuses resulted in the company's truly sensational performance in 2021 and has made it possible for us to assemble a deep pipeline of much-in-demand real estate from which we can deliver well into the future. Such achievements this past year, made possible by the hard work of the Alexandria team, will continue to drive superior results for our stakeholders, extend the distinctive impact of our bold and visionary business model, and affirm our position at the vanguard and heart of the life science and agtech ecosystems.

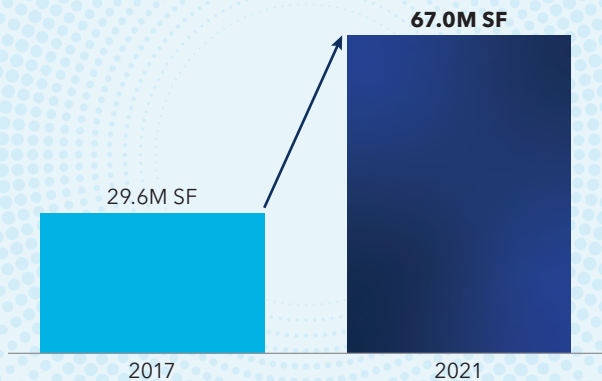
The stellar and well-earned reputation Alexandria has built over the last 28 years has established us as the go-to brand for delivering high-quality complex laboratory infrastructure and operations to transformative life science companies. We have cultivated trusted relationships with our industry-leading and innovative tenant base of over 850 companies to accelerate the translation of cutting-edge scientific discoveries into novel medicines to solve our current healthcare challenges, as well as those we anticipate facing in the future.

With over 10,000 diseases known to humankind and less than 10% currently addressable with therapies, a new golden age of biology has emerged. This golden age is driving historic demand for the Labspace® real estate platform we created and fueling the company's truly exceptional growth, including our record-breaking results during 2021.

ALEXANDRIA MET AND SURPASSED OUR GOAL TO DOUBLE ANNUAL RENTAL REVENUE IN 5 YEARS



ALEXANDRIA DOUBLED OUR TOTAL ASSET BASE



ALEXANDRIA'S SCALE ADVANTAGE

TOP 10%
TOTAL EQUITY CAPITALIZATION AMONG
ALL PUBLICLY TRADED U.S. REITS²

2. Represents total equity for publicly traded U.S. REITs, from Bloomberg Professional Services as of December 31, 2021. Alexandria's total equity capitalization is calculated using shares outstanding and the closing stock price as of December 31, 2021.

We are incredibly proud of the many significant and historic milestones we achieved in this truly momentous year in our company's history. Notably, in the third quarter of 2021, Alexandria met and surpassed the goal we introduced at our Annual Investor Day in 2017 to double annual rental revenue in five years (by 2022, compared to 2016), a remarkable accomplishment made more so during a global pandemic.

Through the strength of our brand and disciplined approach, Alexandria also amassed unmatched scale, amplified by strategic and opportunistic acquisitions to expand our highly leased development and redevelopment pipeline. We doubled our total asset base to 67.0 million square feet (SF) in 2021 from 29.6 million SF in 2017 and earned a ranking in the top 10% among all publicly traded U.S. REITs in total equity capitalization as of December 31, 2021. We continued to build and strengthen our fortress balance sheet, and in February 2021, we issued unsecured senior notes aggregating \$1.8 billion at a blended interest rate of 2.51%, which at the time represented the single largest bond offering in Alexandria's history.

Additionally, driven by the historic-high demand for our Labspace, we achieved in 2021 the highest annual leasing volume in our history – or approximately double the annual leasing volume of any of the past several years – through our completion of long-term leases aggregating 9.5 million RSF. We also set new records during the fourth quarter of 2021, with executed leases aggregating 4.1 million RSF that shattered our previous record for total quarterly leasing volume.

DOMINANT BRAND ACHIEVING SUPERIOR RESULTS

In 1994, we founded Alexandria as a garage startup with a unique business plan, \$19 million in Series A capital, and a bold vision to create the first real estate company focused primarily on the essential life science industry and the highly complex infrastructure needed to support its mission-critical work. Today, Alexandria is the leading owner, operator, and developer of collaborative campuses and ecosystems for transformative life science and agtech companies in the nation's top innovation clusters.

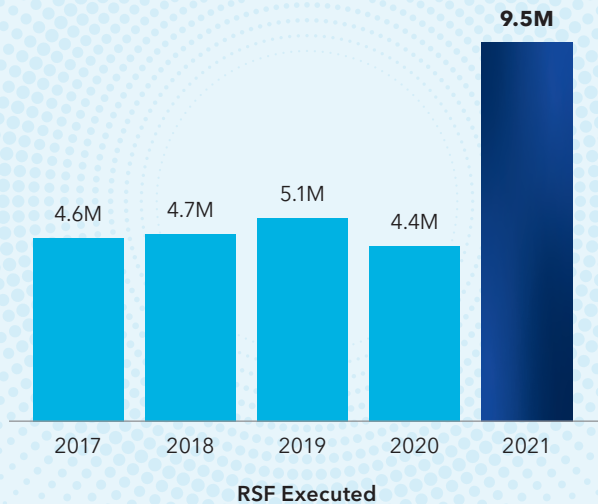
From our modest beginning, we have grown our business into a highly respected investment-grade S&P 500® REIT with a total market capitalization of \$44 billion as of December 31, 2021. Our sensational 2021 performance, distinguished by a TSR of 28.1%¹ that outperformed the FTSE Nareit Equity Office Index TSR of 22% and backed by our compelling dual engine of internal and external growth, positions Alexandria for strong growth in 2022 and beyond.

Since our initial public offering (IPO) in May 1997, we have maintained the highest standards of excellence to maximize long-term value. Alexandria's exceptional TSR, which exceeded 2,500%¹ from IPO through December 31, 2021, significantly outperformed various indices over the same period, including the MSCI U.S. REIT and S&P 500 at 939% and 790%, respectively. Over the four-year period from December 31, 2017 through 2021, we generated strong per-share growth in net asset value of 54%, funds from operations – diluted, as adjusted, of 29%, and common stock dividends of 30%.

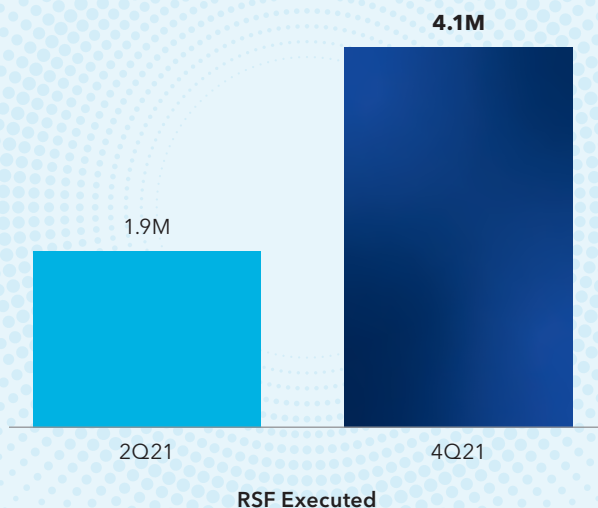
FEBRUARY 2021: ALEXANDRIA COMPLETED OUR THEN-LARGEST BOND OFFERING IN COMPANY HISTORY

\$1.8B | **2.51%**
BLENDED INTEREST RATE

ALEXANDRIA ACHIEVED OUR HIGHEST ANNUAL LEASING VOLUME IN COMPANY HISTORY



4Q21 LEASING RSF SHATTERED PREVIOUS RECORD FOR TOTAL QUARTERLY LEASING VOLUME



Our differentiated and multifaceted business model continued to yield enhanced operational efficiencies and consistently strong growth in high-quality cash flows. Likewise, our impressive roster of high-quality and diverse tenants drove strong results, with 51% of our total annual rental revenue as of December 31, 2021 generated from investment-grade or publicly traded large cap tenants.

The outstanding execution by our team also resulted in a REIT industry-leading Adjusted EBITDA margin of 72% for the year ended December 31, 2021. Additionally, we continued to make improvements to our credit profile – with our efforts ranking our investment-grade credit ratings in the top 10% of all publicly traded U.S. REITs as of year-end 2021. The enduring strength of our balance sheet and significant liquidity of \$3.8 billion as of December 31, 2021 affords us the flexibility to execute our strategic growth initiatives and capitalize on the life science industry's historic-high demand for our state-of-the-art laboratory space. We are also extremely proud to have been awarded another Nareit Investor CARE Gold Award in the Large Cap Equity REIT category for superior shareholder communications and reporting – our fourth consecutive and sixth overall award, the most Nareit has awarded to a single REIT – demonstrating our consistently best-in-class operational transparency and reporting practices.

MISSION-DRIVEN BUSINESS MODEL DELIVERING DISTINCTIVE IMPACT

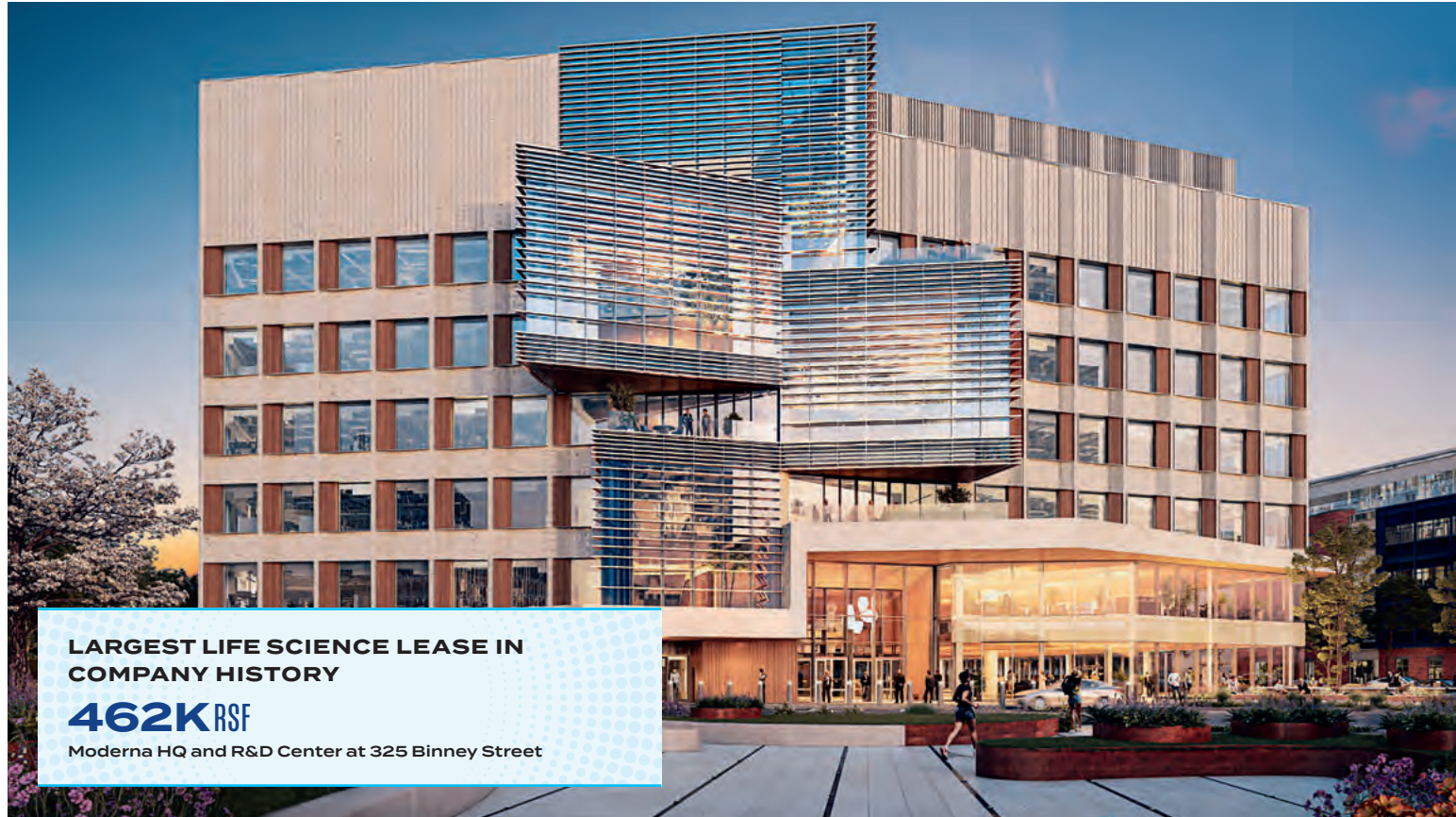
At Alexandria, our visionary mission – *to create and grow life science ecosystems and clusters that ignite and accelerate the world's leading innovators in their noble pursuit to advance human health by curing disease and improving nutrition* – fuels our commitment to building the future of life-changing innovation. Our mission has shaped every aspect of our pioneering, impactful, and enduring business, which is built around our four vertical platforms of real estate, corporate responsibility, venture investments, and thought leadership.

ESSENTIAL REAL ESTATE

Meeting the Life Science Industry's Historic Demand for Immediate Space and Providing a Path for Future Growth

Our extraordinary growth was accelerated by the tremendous execution of our visionary cluster campus strategy, as informed by Harvard Business Professor Michael E. Porter's cluster theory. Utilizing this theory as the basis for our proven cluster model, we identified four critical components for life science companies to thrive – location, innovation, talent, and capital. Through the successful implementation of our cluster model, we have deliberately evolved from our original focus on single assets to amenity-rich collaborative cluster campuses to today's differentiated mega campuses that consist of approximately 1 million RSF or more.

A new era in biotech is driving the life science industry's war for talent and increasing demand for our mega campuses – which have been purposefully designed to support our tenants'



LARGEST LIFE SCIENCE LEASE IN COMPANY HISTORY

462K RSF

Moderna HQ and R&D Center at 325 Binney Street

mission-critical efforts to recruit and retain the best people to advance their lifesaving and life-changing work.

We further deepened our strategic relationships with some of the world's leading companies, such as Moderna, which alone leased over 1 million RSF with Alexandria during 2021, including the largest life science lease in our history aggregating 462,100 RSF at 325 Binney Street in Cambridge and long-term renewals aggregating 683,513 RSF at three existing locations in our Greater Boston market.

In addition to fueling our epic leasing milestones, the historic-high demand for laboratory infrastructure translated into Alexandria's historic-high external growth. In January 2021, we completed our largest acquisition in company history, a \$1.48 billion foundational life science campus aggregating nearly 2 million RSF, in Fenway, where we are pioneering a new submarket. Conceived as the Alexandria Center® for Life Science - Fenway, our spectacular leasing and rental rate growth of our 201 Brookline Avenue development project highlights the power of the Alexandria brand, our visionary mega campus strategy, and our long-running trusted relationships. For this development on our Fenway mega campus, we increased leasing from 17% at acquisition to 96% leased or negotiating as of December 31, 2021 and rental rates by 20%.

Our robust value-creation pipeline of 7.4 million RSF of projects under construction or expected to commence construction in the next six quarters beginning January 2022 is one of

the largest and highest-quality pipelines among all REITs. Significantly de-risked with 83% of this RSF already leased or under negotiation, this highly leased new Class A pipeline is projected to generate more than \$610 million in incremental annual rental revenue primarily from the first quarter of 2022 through the fourth quarter of 2024. As we continue to meet the growing requirements of our tenants for space and provide them a path for future growth, Alexandria is ideally positioned for tremendous growth in 2022 and beyond.

PURPOSEFUL CORPORATE RESPONSIBILITY

Developing and Implementing Disruptive Solutions to Society's Most Urgent Challenges

At Alexandria, we believe that doing well in our business and doing good for society are inherently linked endeavors. As a mission-driven company, we align every aspect of our business to support our robust corporate responsibility efforts by developing scalable solutions to address society's most pressing challenges. A few of the initiatives we are particularly proud of and that showcase the tangible impact of our efforts are highlighted below:

In our development of real estate, we are pioneering approaches to sustainable laboratory design that will reduce carbon emissions, promote climate readiness, and advance our tenants' sustainability initiatives. Additionally, we make significant



LARGEST ACQUISITION IN COMPANY HISTORY

\$1.48B PURCHASE PRICE

Alexandria Center® for Life Science – Fenway mega campus

HISTORIC-HIGH DEMAND TRANSLATES INTO HISTORIC-HIGH GROWTH

>\$610M
PROJECTED INCREMENTAL ANNUAL
RENTAL REVENUE

Primarily Commencing From 1Q22 Through 4Q24

7.4M RSF³

83% LEASED/NEGOTIATING

As of December 31, 2021

3. Includes 4.8 million RSF under construction and 2.6 million RSF expected to commence construction in the next six quarters.

investments in highly disruptive companies focused on developing groundbreaking technologies to mitigate the effects of climate change, committing over \$100 million in 2021 alone.

We also have long-tenured bedrock social responsibility pillars through which we synergize the passion and commitment of our team members by uniting them with our non-profit partners and leveraging our expertise and resources to address the most persistent societal challenges, which include disease and other threats to human health, hunger and food insecurity, opioid addiction, deficiencies in support services for the military and their families, disparities in educational opportunities, and homelessness. In 2021, we established a new social responsibility pillar to address the growing mental health crisis, with a focus on helping children cope with the loss of a parent or family member to suicide.

In September 2021, I was deeply honored to be recognized for Distinction in Civic Engagement and Renewal by the National September 11 Memorial & Museum during its virtual Annual Benefit Broadcast, and to attend the commemoration at Ground Zero on the 20th anniversary of the 9/11 attacks. On the night of September 11, 2021, we lit up our flagship Alexandria Center® for Life Science - New York City campus in "Memorial Blue" as part of the Memorial & Museum's Tribute in Lights, in a demonstration of our collective remembrance. I was in New York City on 9/11, the day that profoundly changed

the course of our nation, when we lost thousands of people at the hands of terrorists – but as the words of Virgil prominently displayed at the Museum implore us, “No day shall erase you from the memory of time.” Accordingly, we recently launched a new pillar dedicated to supporting museums of compelling importance to the United States as part of our commitment to preserve history and honor heroic citizens, including those who protect the freedoms of this great country.

Overcoming the Opioid Epidemic and Revolutionizing Addiction Treatment

Alexandria is committed to participating in endeavors that aim to advance human health, reduce the economic burden of disease on society, and address critical issues like the opioid epidemic, one of the most pervasive public health challenges in our nation’s history that shows no sign of abating.

Between 1999 and 2019, we lost 500,000 lives in the United States due to opioid overdose. In the face of this crisis, we were compelled to act and in 2017, in partnership with Verily, an Alphabet company, we created OneFifteen, a non-profit learning health system dedicated to the full and sustained recovery of people living with addiction. Alexandria pioneered the design and helped craft the philosophy for the one-of-a-kind campus in Dayton, Ohio that offers a full continuum of care, including a crisis stabilization unit, inpatient residential living, and an outpatient clinic, along with services for peer support, family reunification, workforce development, job placement, and community transition. In September 2021, OneFifteen received an honorable mention in *Fast Company*’s prestigious Innovation by Design Awards in the Impact category, which recognizes designs that have a major cultural or social impact.

OneFifteen is a truly heartfelt undertaking for us, and we sincerely hope this unique and holistic model will be replicated across the country. As the opioid epidemic ravages our nation, we remain unwavering in our efforts to help people recover from addiction, maintain sobriety, and live healthier and fuller lives as we revitalize our communities.

Empowering Underserved Students Through Education

A critical cornerstone of Alexandria’s corporate social responsibility is our dedication to driving educational opportunities and providing the support and resources needed to prepare students for academic success, the 21st-century job market, and beyond.

In Durham, North Carolina, we have formed a deep partnership with the Emily K Center, a non-profit founded by Mike “Coach K” Krzyzewski, that aims to help academically focused K-12 students build the scholastic skills required to succeed in college. Since the non-profit center opened in 2006, nearly 100% of the graduates from its Scholars to College program have been accepted to college, underscoring the non-profit’s truly impactful work in the community.

In November 2021, the non-profit opened its new 7,500 SF building expansion to students, and we were tremendously

proud to have the upper level named in Alexandria’s honor. The building serves as a college access hub with much-needed classroom and advising spaces for the growing number of students accessing its programs.

Developing and Operating Highly Efficient and Healthy Buildings to Reduce Our Environmental Impact

Alexandria’s longstanding and industry-leading sustainability initiatives underscore our steadfast commitment to minimize our environmental impact. Through our sustainable development practices and green building initiatives, Alexandria aims to manage climate risk, reduce carbon emissions, and develop and operate more efficient, healthier, and safer buildings.

Our focus on pioneering high-performance buildings is exemplified in our ground-up development project at 325 Binney Street on the Alexandria Center® at One Kendall Square mega campus. Designed to be the most sustainable laboratory building in Cambridge, the development is expected to eliminate most of the fossil fuel consumption for building heating and enable the building to operate as a net-zero energy commercial laboratory facility. It will serve as Moderna’s new HQ and R&D center and will enable the company to provide its employees with an environmentally friendly workplace with design features that promote their health and wellness.

STRATEGIC VENTURE INVESTMENTS

Supporting Groundbreaking Companies at the Forefront of Innovation

We founded Alexandria Venture Investments®, our strategic venture capital platform, in 1996 to provide long-term investment capital to trailblazing life science companies that will positively impact human health. Since then, we have actively invested in disruptive life science companies as well as promising agrifoodtech, climate innovation, and technology companies developing transformative therapies and technologies to cure disease, improve nutrition, and advance the future of human health. Our robust venture activity provides us with deep insights emerging from the leading edge of science and technology, strengthens our relationships with leading entrepreneurs and investors across the life science industry, and enables us to curate the highest-quality tenant base.

As a testament to our position at the vanguard and heart of the life science and agrifoodtech ecosystems, Alexandria Venture Investments was recognized for a fifth consecutive year as the most active corporate investor in biopharma by new deal volume by Silicon Valley Bank and as one of the top five most active U.S.-based investors in agrifoodtech by AgFunder for the second consecutive year.

During 2021, Alexandria’s key life science investment areas included oncology, infectious diseases, and neuroscience, with a focus on breakthrough platforms with immense potential to address a wide range of diseases. With a continued focus on

climate change technology companies, Alexandria Venture Investments committed more than \$100 million in 2021 to help fund the most promising companies transforming the way we manage our climate-driven environment and secure a sustainable food supply chain. We also doubled our investments in the agrifoodtech sector. As of December 31, 2021, our Alexandria Venture Investments' portfolio had a carrying value of nearly \$1.9 billion, including unrealized gains aggregating \$797.7 million. We continue to invest in highly disruptive leading-edge companies that are pioneering novel therapies and technologies to improve human health and nutrition and drive down the cost and burden of disease.

IMPACTFUL THOUGHT LEADERSHIP

Driving Transformational Healthcare Solutions

Through Alexandria's thought leadership vertical, we coalesce our world-class global life science and healthcare networks for unique programming to foster impactful collaborations and drive innovation across our mission-critical ecosystems. The Alexandria Summit® was founded in 2011 with the goal of building a highly collaborative neutral platform that would convene our preeminent network of visionary stakeholders to catalyze transformative discussions and stimulate new approaches to address some of the most important issues facing human health. The collaborations and policy work that have been cultivated by this platform over the last 10 years have had a profound influence on the fields of oncology, neuroscience, immunology, infectious diseases, healthcare economics, agricultural innovation, medical research philanthropy, and digital health.

In May 2021, amid the ongoing COVID-19 pandemic, we brought together key stakeholders for the Alexandria Summit - Infectious Diseases 2021. We examined several key themes that emerged from our collective experiences from COVID-19, including lessons learned about the need to prioritize and fund our public health infrastructure and pandemic preparedness as a matter of national security; the need for policy that fosters, incentivizes, and protects innovation; and the importance of reestablishing domestic manufacturing and supply chains.

The agricultural sector represents a critical under-tapped source of opportunity for improving nutrition, ending global hunger, combating climate change, and advancing human health at its most fundamental level. In July 2021, we convened the Alexandria Summit - Innovate Ag 2021 to explore opportunities for accelerating and scaling groundbreaking technologies and broader transformations in the food and agricultural sectors that are key to ensuring a healthy, accessible, and sustainable global food supply.

The year also marked the 10th anniversary of the Alexandria Summit, which we proudly celebrated in October 2021 as we convened our fifth oncology-focused summit. A decade ago, when we gathered for our inaugural Alexandria Summit - Oncology 2011, cancer stood out as one of the leading global public health challenges facing society, accounting for about

1 in 6 deaths worldwide – more than HIV/AIDS, tuberculosis, and malaria combined. Today, cancer remains a leading cause of death and a cost burden on healthcare globally. But with dramatic progress in the last decade, driven by continued innovation in life science, the industry is positioned to redefine cancer as a manageable chronic disorder while moving potentially closer toward the reality of a cure.

As we look to the future, the Alexandria Summit will continue to focus on harnessing the extraordinary momentum of the last decade, further emboldening our undertaking to accelerate life-changing treatments and to vigorously meet the challenges ahead. It is our fervent hope that we can leverage the intellectual capital gathered at each summit to further advance and potentially revolutionize our life science and agrifoodtech ecosystems.

VISIONARY STRATEGY AND DISCIPLINED EXECUTION DRIVING LASTING ENDURANCE

In 2022, the year we celebrate Alexandria's 25th anniversary as a New York Stock Exchange (NYSE) listed company, we are very well positioned to continue delivering strong operating and financial results in the years to come. The historic-high demand for our brand, our relationships with over 850 tenants, our mega campus strategy, and ongoing operational excellence solidify Alexandria's unique role at the vanguard and heart of the life science and agtech ecosystems and continue to set us apart.

This new golden age in biology, catalyzed by innovative technologies, massive unmet medical needs, and strong life science fundamentals, has reaffirmed the fundamental truth Alexandria recognized over 28 years ago and on which we have built our visionary business model – that laboratory infrastructure is essential and mission critical for advancing innovation that improves human health. We are as committed as ever to supporting the vitally important life science industry and its lifesaving work.

A profound thank-you to our tenants for their scientific discoveries and technological advancements that have and will continue to benefit humankind; to our stockholders for your support of our mission-driven business model; and to every member of our extraordinary Alexandria family for an epic and historic execution at a remarkable operational pace, considering this global pandemic. As we look to our future, we have more reason than ever to be passionate about making a positive and meaningful impact on the world as we build the future of life-changing innovation.

With sincere gratitude,



Joel S. Marcus
Executive Chairman & Founder

ALEXANDRIA'S EXCEPTIONAL TOTAL SHAREHOLDER RETURN

May 27, 1997¹ - December 31, 2021



Since our IPO in 1997, we have maintained the highest standards of excellence and continue to drive long-term total value for our stockholders, significantly outperforming major indices and companies.

Source: Bloomberg and S&P Global Market Intelligence. Assumes reinvestment of dividends.
1. Alexandria's IPO priced at \$20.00 per share on May 27, 1997.

“PRESERVE THE CORE AND STIMULATE PROGRESS”

“Enduring great organizations exhibit a **dynamic duality**. On the one hand, they have a **set of timeless core values and purpose that remain constant over time**. On the other hand, they have a **relentless drive for progress — change, improvement, innovation, and renewal.**”

JIM COLLINS
RENOWNED AUTHOR & BUSINESS STRATEGIST

PRESERVING THE CORE

PASSIONATE PURSUIT OF ALEXANDRIA'S MISSION TO ADVANCE HUMAN HEALTH DRIVES STELLAR 2021 LEASING RESULTS

The passionate and dedicated team at Alexandria has always been clear on the core purpose of our business:

providing mission-critical infrastructure to the nation's life science industry — a true national treasure that shines as a beacon of progress and hope as it leads the world in advancing our understanding of biology and enhancing human health. We are driven each and every day by our mission and by the core values that guide us: respect, integrity, teamwork, loyalty, and selfless service. For nearly three decades, we have proven prescient in the deployment of our cluster model, according to which we synergize elements critical for developing life science ecosystems that thrive: best-in-class locations, novel innovation, top talent, and investment capital. This model has positioned us where we stand today, at the vanguard and heart of the life science industry, able to lead the pivot from siloed workplaces in suburban settings to multi-building campuses in urban centers to the Alexandria mega campus, and it remains a guiding principle for us as the industry enters a new golden age.

As the recognized leader of life science real estate, now a mainstream asset class, we have consistently offered exceptional value to our investors and tenants. This value has never been more apparent than it was during this past year. In these still-early days of the biology revolution, and with the

ever-urgent need for the life science industry coming to the fore during the global COVID-19 pandemic, we have seen historic demand for life science space expressed as specific demand for Alexandria's undeniably superior Labspace® real estate platform, supported by our unrivaled team and the expertise we have forged over the course of our more than 28 years in business. Alexandria's proven track record of delivering high-quality projects on time and on budget and our reputation for the operational excellence of our complex laboratory infrastructure make us the partner of choice to the most innovative life science entities in the world. Our superb reputation has enabled us to amass the highest-quality tenants in our core clusters, where we meet their needs for immediate space and provide a path with significant optionality for their future growth.

9.5 MILLION RSF LEASED IN 2021

Highest Annual Leasing Volume in Company History

The historic-high demand for Alexandria's Labspace real estate fueled our historic leasing results in 2021. We completed a monumental 9.5 million RSF of leasing activity, representing the highest annual leasing volume in company history and providing in excess of \$6 billion of contractual triple-net base rents. During 4Q21 alone, we executed over 4 million RSF of leasing activity, a company record-breaking figure that more than doubled the previous highest quarterly leasing volume. Such accomplishments stand as testaments to our team's unwavering work ethic and resolute ability to execute. Notably, 3.9 million RSF of our 2021 leasing activity occurred in our value-creation pipeline, which will deliver strong financial results and mission-critical space in the years to come.

We currently have an unparalleled base of over 850 tenants, and our longstanding relationships with leaders in the life science industry continue to generate sustainable and ongoing demand for our space while also providing us unique insights into the current and future needs of our innovative tenants and the industry at large. Of our 2021 lease renewal activity, 82% came from renewals — a clear indication of the unmatched appeal of our powerful brand, proven team, and differentiated spaces. Alexandria's deep relationships drive robust growth in each of our core markets, with two-thirds of our 2021 leases signed with existing tenants, who recognize the strong value of partnering with us.

Our 2021 leasing results are extraordinary and record-setting statistics, but the more compelling honor we at Alexandria hold is in our ability to partner with these leading-edge companies, an ability that stems from our shared vision of better health and patient outcomes around the world and our deep respect and enthusiasm for their work. Global healthcare leader Eli Lilly, whose relationship with Alexandria stretches back over 20 years, anchors 201 Haskins Way (pictured above), a collaborative multi-tenant facility that is part of the Alexandria Center® for Life Science - South San Francisco, along with Lyell Immunopharma, a fully integrated cell therapy company



aiming to cure patients with solid tumors. Lilly and its subsidiary Loxo Oncology, which focuses on discovering and developing medicines with the potential to make a meaningful difference for cancer patients, will use the space to accelerate crucial research and development. The building's tenants, of which 75% are from existing relationships, are advancing novel platforms across key areas of unmet need, including cancer, sickle cell disease, and other chronic diseases. With sweeping bay views, this Class A development also features an array of amenities to help our tenants recruit and retain top talent.

Alexandria is deeply committed to catalyzing and leading the way for positive change to benefit human health and society. We are profoundly proud to be the leader in the top life science clusters across the United States and a trusted partner to our tenants as they endeavor to improve quality of life, address unmet medical needs, and realize the transformative power of their innovative discoveries. In a time of historic growth and renewal, as we continue the shift from the COVID-19 pandemic toward a more manageable endemic, we never lose sight of our mission, and we are humbled to continue seeing the consistency of our principles delivering consistently strong results.

Sincerely,

Stephen A. Richardson
Co-Chief Executive Officer



“PRESERVE THE CORE AND STIMULATE PROGRESS”

JIM COLLINS
RENOWNED AUTHOR & BUSINESS STRATEGIST

STIMULATING PROGRESS

RELENTLESS DRIVE TO INNOVATE TRANSLATES INTO ALEXANDRIA'S HISTORIC-HIGH GROWTH AND TREMENDOUS MOMENTUM

Since establishing the life science real estate niche in 1994, Alexandria has constantly innovated to transform the Labspace® niche we pioneered into the mainstream asset class it is today.

Mission driven from the start, we are not content only to offer our collaborative real estate platform; rather, we think holistically to create, deepen, and expand thriving life science ecosystems, buoyed by our longstanding engagement in venture investments, corporate responsibility, and thought leadership.

We at Alexandria aspire to continually improve and enhance every facet of our business to meet and anticipate the evolving needs of this essential industry. Our proven dedication to building deep relationships with our tenants and investing in the communities where we live and work has distinctly enhanced our growing clusters. The burgeoning golden age of biology, which has been catalyzed by novel technologies, massive unmet medical needs, and strong life science fundamentals will continue to accelerate historic demand across our innovation clusters, and Alexandria is uniquely positioned to meet it. We are honored to support the unique needs of leading life science companies as they scale their businesses in pursuit of the next generation of solutions that will radically transform the future of human health.

Our 7.4 million RSF value-creation pipeline (consisting of projects under construction or expected to commence construction in the six quarters following 4Q21) is one of the largest and highest-quality pipelines among all REITs. Its exceptional robustness and scale underpin our future ecosystem-building efforts and will fuel earnings growth for years to come. The projected incremental annual rental revenue from these key projects surpasses an impressive \$610 million.

HISTORIC-HIGH DEMAND TRANSLATES INTO HISTORIC-HIGH GROWTH

Alexandria's incremental annual rental revenue from highly leased new Class A properties through development and redevelopment

>\$610M
PROJECTED INCREMENTAL ANNUAL RENTAL REVENUE

Primarily Commencing From 1Q22 Through 4Q24

7.4M RSF¹

83% LEASED/NEGOTIATING

As of December 31, 2021

With a historic level of leasing on active and near-term developments, Alexandria's value-creation pipeline is significantly de-risked. As of December 31, 2021, a remarkable 83% of the 7.4 million RSF currently under construction or expected to commence construction within the next six quarters is leased or negotiating. Of this leasing activity, 94% comes from existing relationships, highlighting incredible loyalty to our stellar brand, and these relationships will continue to fuel growth opportunities for us. The deep, longstanding life science industry relationships reflected in these numbers drive strong demand for our high-quality laboratory space.

Life science companies are fighting a war for talent and recognize that space in an Alexandria building or on an Alexandria campus is a compelling asset in that contest. Our mega campuses are unique Class A campuses that combine distinctive architecture and sophisticated building systems with deep operational expertise. Thoughtful placemaking and community activation augment our complex infrastructure to create inspiring, energetic settings that are extremely attractive to an in-demand workforce. These mega campuses compose 80% of the 11.6 million RSF currently under construction and in our near-term pipeline and 63% of our operating property RSF as of December 31, 2021, attesting to our ability to offer scalable and exciting environments befitting their work. We remain engaged in reinventing dynamic workplace models at a time when attracting and retaining life science talent is more vital to the health of the world than it has ever been before.

Leveraging our unique market and industry insights, as well as the proven expertise of our best-in-class team, our value-creation pipeline is tactically broadening our core clusters to meet the needs of leading companies. An incredible example of this expansion and of our highly successful leasing momentum and rental rate growth is 201 Brookline Avenue, our 510,116 RSF development project at the Alexandria Center® for Life Science – Fenway mega campus. It will

provide essential laboratory space in a historic and vibrant district where we are curating a new life science submarket. Alexandria has been at the vanguard and heart of developing and growing life science ecosystems for almost three decades, and we continue to pioneer new vibrant locations and double down in our core locations.

Alexandria's tremendous execution on our value-creation pipeline represents a key component of our compelling growth engine as we constantly progress in support of our mission. We are always growing strategically and opportunistically, and we make bold commitments to significant development and redevelopment opportunities, enabled by our clarity of purpose, highly experienced team, and fortress balance sheet. 2021 was a remarkable year of historic demand that drove significant pipeline expansion for Alexandria to meet the accelerating needs of our tenants, and we foresee this strong momentum continuing. With proud resolve, we recognize the opportunity and responsibility of our position at the vanguard of life-changing innovation to provide the critical infrastructure for our collective health and success needed to advance human health and improve nutrition for decades to come.

Many thanks,



Peter M. Moglia
Co-Chief Executive Officer &
Co-Chief Investment Officer

1. Includes 4.8 million RSF under construction and 2.6 million RSF expected to commence construction in the next six quarters.



JIM COLLINS DEFINES SUPERIOR RESULTS

In business, performance is defined by financial results ... and achievement of corporate purpose. In the social sectors, performance is defined by results and efficiency in delivering on the social mission. But whether business or social, you must achieve top-flight results.

SUPERIOR

Ideally located on the One Alexandria Square mega campus, 3215 Merryfield Row is a 170,523 RSF Class A office/ laboratory facility in our Torrey Pines submarket. Shaped like human lungs, Vertex Pharmaceuticals' San Diego R&D site supports the discovery and development of cystic fibrosis medicines.

RESULTS

RESULTS

RESULTS

RESULTS

RESULTS

RESULTS

RESULTS

2021 PERFORMANCE

2021 was a record year for Alexandria’s financial and operating performance. As the go-to brand for the life science industry, our team delivered at a very high level of operational excellence and remains well positioned to continue driving exceptional performance for our stockholders.

DEAN A. SHIGENAGA
PRESIDENT &
CHIEF FINANCIAL
OFFICER



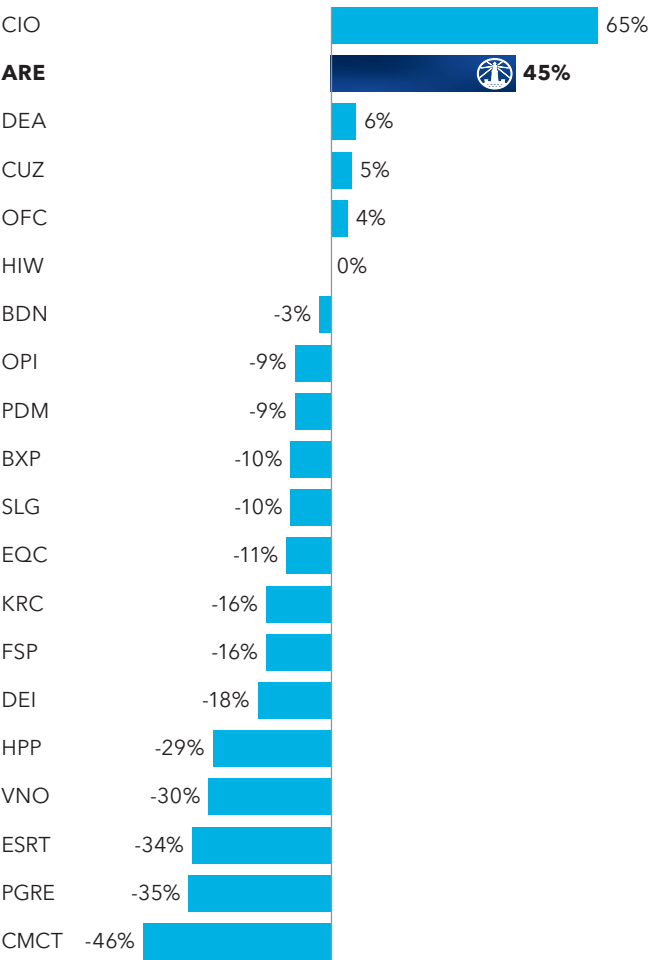
Best-in-Class Transparency,
Quality, and Efficiency of
Disclosures and Reporting

FOURTH CONSECUTIVE AND
SIXTH OVERALL GOLD AWARD
The Most Nareit Investor
CARE Gold Awards Earned
by Any Equity REIT



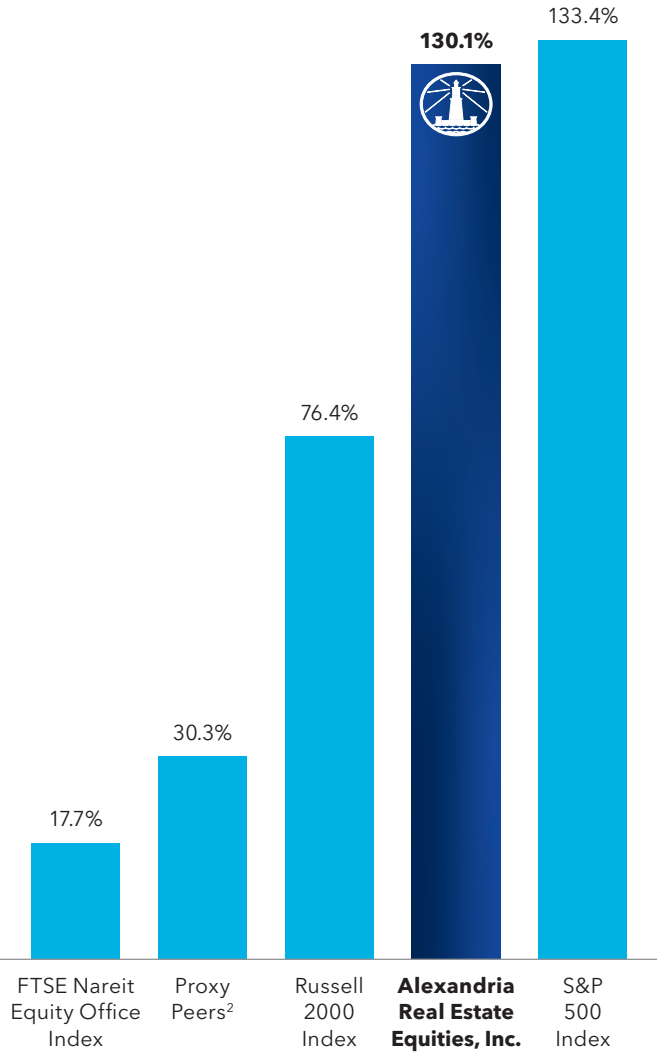
ALEXANDRIA’S OUTSTANDING TOTAL SHAREHOLDER RETURN¹

TWO YEARS ENDED DECEMBER 31, 2021



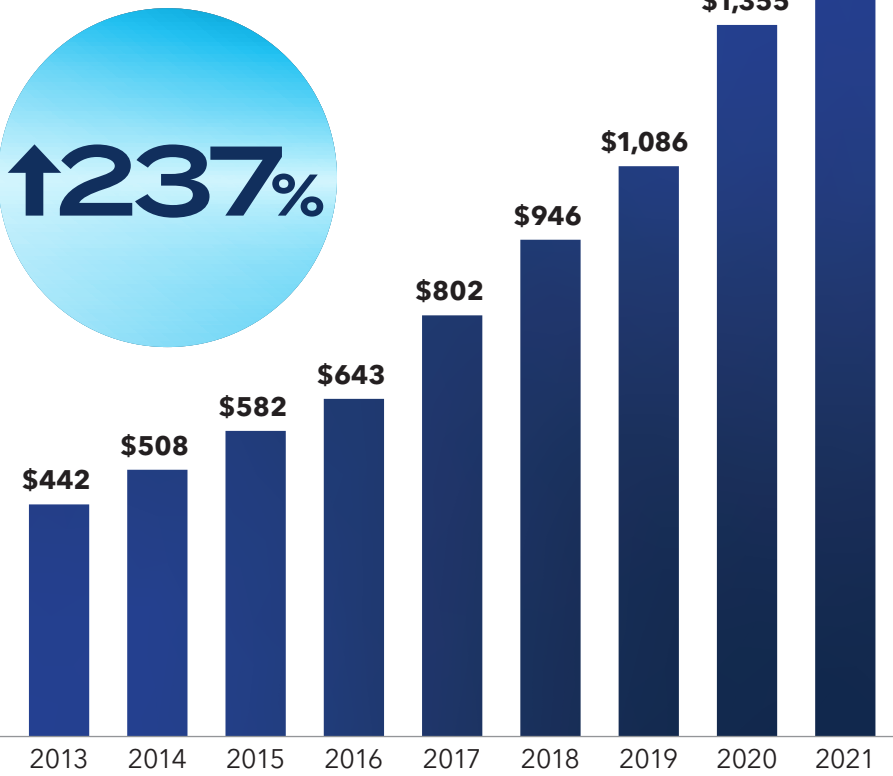
Alexandria FTSE Nareit Equity Office Index REITs

FIVE YEARS ENDED DECEMBER 31, 2021



SUSTAINED STRONG REAL ESTATE PERFORMANCE

NET OPERATING INCOME³ GROWTH
(\$ in Millions)



1. Assumes reinvestment of dividends.
2. For a list of proxy peers, including our criteria used to determine their selection, refer to the description of “2021 Peer Group” in Alexandria’s Notice of 2022 Annual Meeting of the Stockholders and Proxy Statement.

3. For information on Alexandria’s net operating income, including a definition and a reconciliation from the most directly comparable GAAP measure, see “Non-GAAP Measures and Definitions” under Item 7 of Alexandria’s Annual Report on Form 10-K for the fiscal years ended December 31, 2013 through 2021.

4. Based on average net asset value estimates as of the end of each year presented from Bank of America Merrill Lynch, Citigroup Global Markets Inc., Evercore ISI, Green Street, and J.P. Morgan Securities LLC.
5. Represents funds from operations per share - diluted, as adjusted.

PER-SHARE GROWTH
2021 VS. 2017

Net Asset Value⁴
↑54%

Funds From Operations⁵
↑29%

Common Stock Dividends
↑30%

For information on Alexandria’s funds from operations, including a definition and a reconciliation from the most directly comparable GAAP measure, see “Non-GAAP Measures and Definitions” under Item 7 of Alexandria’s Annual Report on Form 10-K for the fiscal years ended December 31, 2017 and 2021.

2021 PERFORMANCE

HIGH-QUALITY REVENUES AND CASH FLOWS

Delivering Operational Excellence and Deepening Strategic Relationships With High-Quality Entities

WORLD-CLASS MEGA CAMPUSES

63%

of Our Operating Property RSF Are Part of a Mega Campus¹

A REIT INDUSTRY-LEADING HIGH-QUALITY ROSTER OF 850+ TENANTS

51%

of Our Total Annual Rental Revenue Is From Investment-Grade or Publicly Traded Large Cap Tenants²

88%

of Our Top 20 Tenants' Annual Rental Revenue Is From Investment-Grade or Publicly Traded Large Cap Tenants²

A REIT INDUSTRY-LEADING ADJUSTED EBITDA MARGIN^{3,4}

72%

LONG-TERM CONSISTENCY AND STABILITY OF EARNINGS

Generating Long-Term Value Through the Execution of Our Unique Business Strategy

STRONG SAME PROPERTY NOI GROWTH (CASH BASIS)^{4,5}

7.1%

5-Year Average

TRUSTED PARTNERSHIPS DRIVE SOLID OCCUPANCY⁶

96%

5-Year Average



1. As of December 31, 2021. For more information on Alexandria's mega campuses, including a definition and a reconciliation, see "Non-GAAP Measures and Definitions" under Item 7 of Alexandria's Annual Report on Form 10-K for the fiscal year

ended December 31, 2021. As of December 31, 2021. Represents the Adjusted EBITDA margin for the year ended December 31, 2021. For information on Alexandria's Adjusted EBITDA and Adjusted EBITDA margin, net operating income, net

operating income (cash basis), and operating margin; and same properties, including definitions and reconciliations from the most directly comparable GAAP measure, see "Non-GAAP Measures and Definitions" under Item 7 of Alexandria's Annual Report on Form

10-K for the fiscal year ended December 31, 2021. Represents the five-year average for the period of 2017 through 2021. Represents average occupancy of operating properties in North America as of each December 31 for

STRONG AND FLEXIBLE BALANCE SHEET

Prudently Managing Our Balance Sheet to Drive Strategic Growth

SIGNIFICANT LIQUIDITY²

\$3.8B

INDUSTRY-LEADING CREDIT PROFILE

TOP 10%

Credit Rating Ranking Among All Publicly Traded U.S. REITs⁷

Baa1

Stable⁸

BBB+

Positive⁹

STRONG NET DEBT AND PREFERRED STOCK TO ADJUSTED EBITDA¹⁰

5.2x

LONG-DURATION WEIGHTED-AVERAGE REMAINING DEBT TERM²

12.1 YEARS

TREMENDOUS SCALE ADVANTAGE

Building Momentum Through the Strength of Our Brand

67.0M SF

Asset Base in North America¹¹

TOTAL EQUITY CAPITALIZATION²

\$35.2B

TOP 10%

Among All Publicly Traded U.S. REITs¹²

the last five years. Represents credit rating levels from Moody's Investors Service and S&P Global Ratings for publicly traded U.S. REITs, from Bloomberg Professional Services, as of December 31, 2021. Moody's Investors Service corporate

credit rating and outlook as of December 31, 2021. S&P Global Ratings corporate credit rating and outlook as of December 31, 2021. 4Q21 annualized. The asset base in North America includes

38.8 million RSF of operating properties and 4.8 million RSF of Class A properties under construction, 8.7 million RSF of near-term and intermediate-term development and redevelopment projects, and 14.7 million SF of future development projects.

12. Represents total equity capitalization for publicly traded U.S. REITs, from Bloomberg Professional Services, as of December 31, 2021. Alexandria's total equity capitalization is calculated using shares outstanding and the closing stock price as of December 31, 2021.

2021 PERFORMANCE & IMPACT

EPIC AND LONG-TENURED TENANT RELATIONSHIPS

Enabling Our Tenants' Transformative Work to Address Massive Unmet Medical Needs

850+

Tenant Relationships

~90%

of Alexandria's Leasing Activity Was Generated From Existing Relationships

100%

of FDA-Approved Engineered Gene and Cell Therapies Were Developed or Owned by Alexandria Tenants

STRATEGIC VENTURE INVESTMENTS

Diligently Investing in the Future of Human Health

MOST ACTIVE CORPORATE INVESTORS IN BIOPHARMA¹

#1

Fifth Consecutive Year

MOST ACTIVE U.S. INVESTORS IN AGTECH²

TOP 5

ON-BALANCE SHEET UNREALIZED GAINS³

\$798M

INVESTMENT COMMITMENTS TO CLIMATE CHANGE TECHNOLOGY

\$100M+

1. Source: Silicon Valley Bank, "Healthcare Investments and Exits: 2022 Annual Report." Most Active New Investors calculated as new (first-time) investments into U.S. and Europe companies from 2020 to 2021.

2. Source: AgFunder, "2022 AgriFoodTech Investment Report." Most Active Venture Capital Fund Managers calculated by number of companies invested in, including follow-ons.

3. Represents Alexandria's unrealized gains on non-real estate investments as of December 31, 2021.

4. Source: Barron's, "10 Real Estate Companies That Are Both Greener and More Profitable," February 19, 2022.

MISSION-DRIVEN AND INDUSTRY-LEADING ESG INITIATIVES

Driving High-Performance Building Design and Operations and Mitigating Climate Risk

CLIMATE CHANGE FRAMEWORKS

TCFD

EC3

RECOGNIZED ENVIRONMENTAL LEADERSHIP

GRESB
REAL ESTATE
sector leader 2021

#5
Most Sustainable U.S. REIT⁴

MSCI
"A" RATING

HIGHLY IMPACTFUL SOCIAL RESPONSIBILITY

Catalyzing Positive Change and Lasting Impact to Benefit Human Health and Society

ROBUST PHILANTHROPIC SUPPORT

350+
Non-Profit Organizations Supported

\$10M
Funds Raised or Donated by Alexandria to Mission-Critical Non-Profits

AWARDS AND RECOGNITION



FAST COMPANY
Innovation by Design 2021
IMPACT HONOREE

9/11
MEMORIAL & MUSEUM
2021 Benefit Honoree

STEAM
CODE:RS
CORPORATE VANGUARD AWARD

JIM COLLINS DEFINES DISTINCTIVE IMPACT

A truly great enterprise makes such a unique contribution ... and does its work with such unadulterated excellence that, if it were to disappear, it would leave a gaping hole that could not be easily filled by any other institution on the planet.



DISTINCTIVE

In commemoration of the 20th anniversary of September 11, 2001, Alexandria joined organizations across New York City to help illuminate the Manhattan skyline as part of the 9/11 Memorial & Museum's Tribute in Lights.

IMPACT
IMPACT
IMPACT
IMPACT
IMPACT
IMPACT
IMPACT



201 Brookline Avenue is a 510,116 RSF development project on the Alexandria Center® for Life Science - Fenway mega campus that is expected to initially deliver in 2022. Since the acquisition in January 2021, we have steadily increased leasing to 96% leased/negotiating (from its original 17% leased) as of year-end 2021 and seen a spectacular 20% rental rate growth over the same time period. These successes highlight the power of the Alexandria brand, visionary mega campus strategy, and long-term strategic relationships.

ALEXANDRIA'S STRATEGIC CATALYZATION OF A NEW LIFE SCIENCE SUBMARKET IN FENWAY

The Alexandria Center® for Life Science – Fenway, a nearly 2 million RSF mega campus, represents a stellar future-growth acquisition that strategically catalyzed our new life science submarket in Fenway.

The foundational campus offers a nearly 1 million RSF operating property, which is home to a strong mix of

tenants, as well as significant active and intermediate-term development opportunities. Boasting a wealth of amenities, critical adjacency to Cambridge and world-renowned medical and research institutions, and convenient access to transportation, the new mega campus provides a highly differentiated ecosystem to enable our tenants to attract and retain top talent. Alexandria's bold and pioneering vision for Fenway has created exceptional value since its acquisition in January 2021 while providing an important path to meet continuing robust demand.

EPIC LEASING MOMENTUM FUELS EXPANSION OF THE ALEXANDRIA CENTER® AT KENDALL SQUARE MEGA CAMPUS

One Rogers Street, acquired in December 2021, is a 408,259 RSF Class A redevelopment project that expands the Alexandria Center® at Kendall Square mega campus in Cambridge.

This highly coveted acquisition further enhances Alexandria's impactful portfolio of over 5 million RSF in Kendall Square, "the most innovative square mile on the planet." Alexandria was able to fully lease the redevelopment property to a collection of groundbreaking biotechnology companies before the One Rogers Street acquisition closed at the end of 2021. Our team's tremendous execution of our acquisition strategy in Cambridge's Kendall Square is another example of the power of the Alexandria brand and the depth of our longstanding relationships in Greater Boston to meet the life science industry's historic demand for our space.



ALEXANDRIA CENTER AT KENDALL SQUARE'S GROWING FOOTPRINT
Alexandria is developing, operating, and activating space in Greater Boston's thriving life science ecosystem. One Rogers Street strategically expands our Alexandria Center at Kendall Square mega campus to 2.8 million RSF across 11 properties.

One Rogers Street offers tenants a collaborative environment for their cutting-edge science within the internationally renowned epicenter of life science investment and innovation. The project commands a highly desirable location along supply-constrained East Cambridge's First Street Corridor, an unmatched mixed-use district undergoing rapid and significant redevelopment.

ESG LEADERSHIP

Alexandria’s mission-driven and industry-leading environmental initiatives are focused on driving high-performance building design and operations and mitigating climate-related risk.

ESG AWARDS AND RECOGNITION



G R E S B
REAL ESTATE
sector leader 2021

#1

BUILDINGS IN DEVELOPMENT
DIVERSIFIED LIST

#2

BUILDINGS IN OPERATION
SCIENCE & TECHNOLOGY

A

GRESB DISCLOSURE SCORE
2018-2021



FITWEL IMPACT AWARD
HIGHEST-SCORING PROJECT
2020 | 2021



Fitwel
Viral Response Certified
2020 | 2021

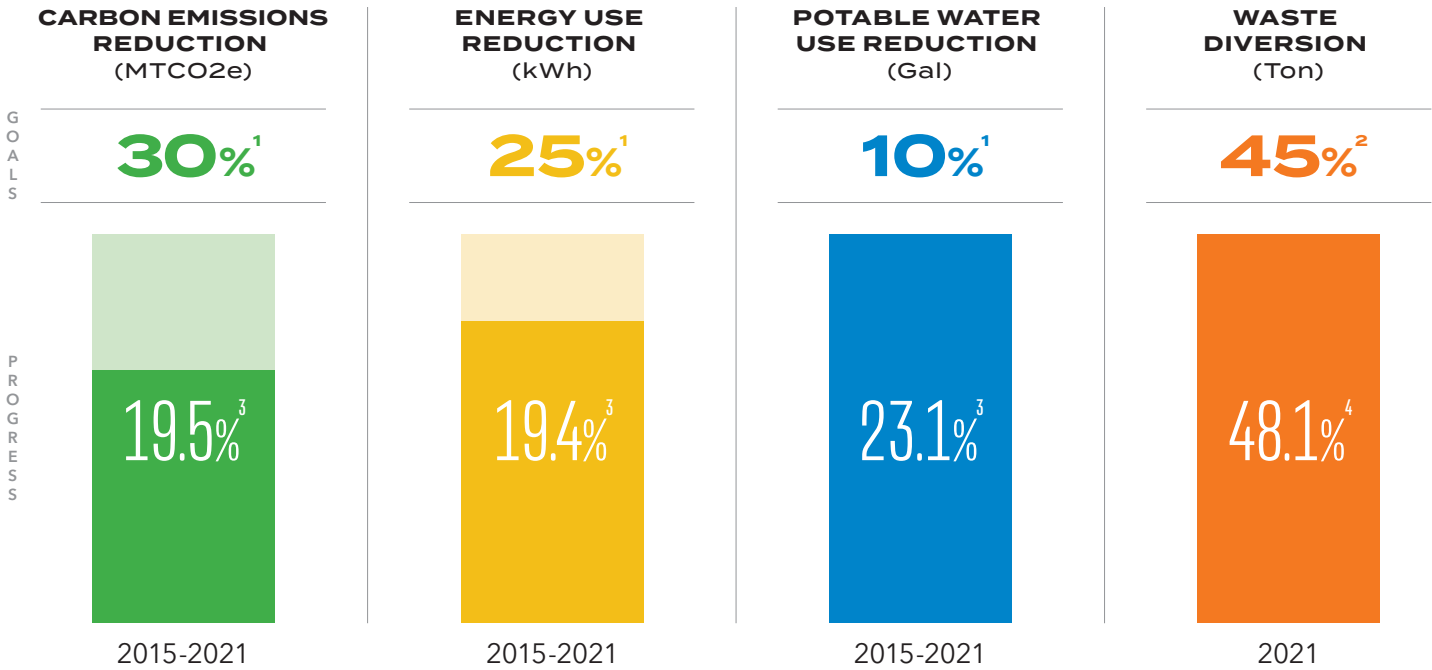
MSCI


“A” RATING



SUSTAINALYTICS
a Morningstar company
LOW RISK

2025 ENVIRONMENTAL GOALS AND PROGRESS



Environmental data for 2021 reflected in the chart above received independent limited assurance from DNV Business Assurance USA, Inc.

1. Relative to a 2015 baseline for buildings in operation that Alexandria directly manages.

2. For buildings in operation that Alexandria indirectly and directly manages.

3. Reflects sum of annual like-for-like progress from 2015 through 2021.

4. Reflects progress for buildings in operation in 2021 that Alexandria indirectly and directly manages.

325 BINNEY STREET

Designed to Be the Most Sustainable Laboratory Building in Cambridge

OUTDOOR SPACE
to promote health and wellness by including access to outdoor fitness options

NATURAL LIGHT
to promote mental wellness

WHITE ROOF
to reduce heat island effect



LARGE PERMEABLE LANDSCAPE
increases infiltration of stormwater into the ground, decreasing surface runoff

FEATURE STAIR
prominently located, with environmental graphics to encourage walking

LARGE LOBBY
to double as an area of refuge in case of an extreme weather event

SEVERAL STORMWATER CHAMBERS
for water to infiltrate into the ground, reducing surface runoff

10" WATERPROOFED CONCRETE CURB
at first-level windows

ELEVATION
of first floor above 2070 flood elevation

ACCESSIBLE LOCATION
for easy evacuation in emergency

325 BINNEY STREET is a 462,100 RSF development project selected by Moderna for its new HQ and core R&D operations. The high-performance development is expected to reduce 95% of the fossil fuel consumption for building heating and enable the building to operate as a net-zero energy commercial laboratory facility. The project, which is targeting LEED Platinum Core & Shell, LEED Zero Energy, and Fitwel certifications, will incorporate ultra-efficient mechanical and envelope systems, geothermal energy, on- and off-site renewable energy, and resilience measures to proactively mitigate climate risk.

INVESTMENT COMMITMENTS TO CLIMATE CHANGE TECHNOLOGY

\$100M+

Committed by Alexandria Venture Investments to innovative climate change technology-related investments in 2021

CLIMATE CHANGE FRAMEWORKS

TCFD

Alexandria aligns our sustainability reporting with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD).

EC3

Alexandria was the first REIT to use the Embodied Carbon in Construction Calculator (EC3) tool, an open-source tool to measure and reduce embodied carbon emissions from construction materials.

ALEXANDRIA'S SOCIAL RESPONSIBILITY PILLARS

As a mission-driven company, Alexandria is profoundly committed to driving forward solutions to address society's most pressing challenges through our bedrock social responsibility pillars.

In 2021, Alexandria continued to enhance our pioneering social responsibility initiatives by launching two new pillars, with the first addressing the growing mental health crisis by focusing on helping children cope with the loss of a parent or family member to suicide and the second supporting museums to preserve history and honor heroic citizens.



**ACCELERATING
GROUNDBREAKING
MEDICAL RESEARCH TO
ADVANCE LIFESAVING
TREATMENTS AND
CURES**



**HARNESSING THE
AGRIFOOD ECOSYSTEM
TO COMBAT HUNGER,
IMPROVE NUTRITION,
AND SUPPORT HUMAN
HEALTH AT ITS MOST
FUNDAMENTAL LEVEL**



**EMPOWERING
UNDERSERVED STUDENTS
TO ACHIEVE LONG-TERM
SUCCESS AND REACH
THEIR POTENTIAL
AS LEADERS IN THE
COMMUNITY THROUGH
EDUCATION**



**BOLSTERING THE
RESILIENCE OF
OUR MILITARY, OUR
VETERANS, AND
THEIR FAMILIES**



**CONQUERING THE
OPIOID EPIDEMIC AND
REVOLUTIONIZING
ADDICTION TREATMENT**



**BUILDING A MODEL FOR
A COMPREHENSIVE,
SUSTAINABLE
SOLUTION TO ADDRESS
HOMELESSNESS**



**ADDRESSING THE
MENTAL HEALTH
CRISIS WITH A
FOCUS ON HELPING
CHILDREN COPE WITH
SUICIDE LOSS**



**SUPPORTING
MUSEUMS TO
PRESERVE HISTORY
AND HONOR OUR
GREATEST HEROES**

CONQUERING THE OPIOID EPIDEMIC AND REVOLUTIONIZING ADDICTION TREATMENT

Determined to reverse the trajectory of the U.S. opioid epidemic, which remains one of the nation’s most pervasive public health challenges, Alexandria partnered with Verily to create OneFifteen, a non-profit learning health system dedicated to the full and sustained recovery of people suffering from opioid addiction.

Together with Verily, we pioneered, designed, and built a fully integrated 4.3-acre, 59,000 RSF campus to house a comprehensive care model, including dedicated facilities and services for crisis stabilization, medication-assisted treatment, residential housing, peer support, family reunification, workforce development, job placement, and community transition. OneFifteen opened its outpatient clinic to patients in the fall of 2019 and its crisis stabilization unit in early 2020. In 2021, OneFifteen celebrated its second anniversary of opening its doors to its first patients; it also welcomed its first residents to OneFifteen Living, the health system’s residential housing component. The campus continues its critical work with patients to slow the opioid crisis and reverse the devastation it has caused to countless individuals, families, and communities across the country.

ALEXANDRIA & ONEFIFTEEN’S IMPACT SINCE OCTOBER 2019

4,000+

Patients Treated by OneFifteen

11,500+

Telehealth Visits Conducted

100,000+
“OVERDOSE DEATHS REACHED RECORD HIGH AS THE PANDEMIC SPREAD”

— THE NEW YORK TIMES, NOVEMBER 17, 2021

In September 2021, OneFifteen received an honorable mention in *Fast Company*’s prestigious Innovation by Design Awards in its Impact category, which recognizes designs that have a major cultural or social impact. OneFifteen’s distinction by *Fast Company* acknowledges Alexandria’s work leading the design and development of the first-of-its-kind holistic campus ecosystem in Dayton, Ohio.



TRANSFORMING PATIENTS’ LIVES

After years of battling drug addiction, Sam was hospitalized due to an overdose in June 2020 and took the brave step to seek treatment at OneFifteen. Unlike previous programs, OneFifteen provided Sam the support and resources she needed to put herself on the path to recovery. Her Care Coordinator, Eric, checked in with her daily and became a source of consistent support. For the first time, Sam did not feel alone in her recovery. Eric and the OneFifteen team stood by

her through every step in the recovery process, even helping her to find housing and employment so that she could continue to focus on her sobriety.

Thanks to OneFifteen’s comprehensive model of care, dedicated and compassionate team members, and Sam’s courageous decision to seek treatment, she has been sober for over a year now. She wants to encourage other addicts to see that their lives can be restored too.

On the night of September 11, 2021, Alexandria lit up the Alexandria Center® for Life Science - New York City in "Memorial Blue" to commemorate the 20th anniversary of the 9/11 attacks. To honor those we lost that day and celebrate the city's unbreakable spirit, Alexandria joined organizations across New York City to help illuminate the Manhattan skyline as part of the 9/11 Memorial & Museum's Tribute in Lights.



SUPPORTING MUSEUMS TO PRESERVE HISTORY AND HONOR OUR GREATEST HEROES

Alexandria is committed to ensuring that we never forget the tragic events that shaped our nation and the service members who defended it.

We understand that we all have a responsibility to continue paying tribute to those we lost; recognize the heroism, sacrifice, and resilience of so many; and share lessons learned with new generations.

In September 2021, the National September 11 Memorial & Museum honored Joel S. Marcus, our executive chairman and founder, for Distinction in Civic Engagement and Renewal, recognizing his meaningful contributions to and unwavering support for the 9/11 Memorial & Museum and its mission. As an active supporter of the Memorial & Museum since it opened in 2014, Mr. Marcus has served as a member of its board of trustees since his appointment in 2018 by former New York City Mayor Michael Bloomberg.

“Alexandria’s tremendous support has made a lasting impact on the 9/11 Memorial & Museum and enabled us to fund vital exhibitions and programming to commemorate and honor the nearly 3,000 victims of these attacks and all those who risked their lives to save others.”

ALICE M. GREENWALD
PRESIDENT & CEO OF THE
NATIONAL SEPTEMBER 11
MEMORIAL & MUSEUM

President and CEO of the National September 11 Memorial and Museum Alice Greenwald (pictured above left) and Joel S. Marcus at the 9/11 Memorial, where millions annually from across the country and around the world come to pay tribute to the thousands who lost their lives in the attacks on our country.

EMPOWERING UNDERSERVED STUDENTS THROUGH EDUCATION

Understanding that education is one of the most fundamental foundations for a safe and healthy life, Alexandria is deeply committed to driving educational opportunities and providing the support and resources needed to prepare students for academic success, the 21st-century job market, and beyond.

In Durham, North Carolina, Alexandria works closely with the Emily Krzyzewski Center to help academically focused K-12 students build the scholastic skills required to succeed in college. Since the center opened in 2006, nearly 100% of the graduates from its Scholars to College program have been accepted to college, underscoring the non-profit's truly impactful work in the community.

To encourage the scientific workforce and leaders of the next generation, in 2019 we launched Alexandria Scholars, the company's STEM scholarship program. To date, we have granted 25 high-achieving

public-school students in the San Francisco Bay Area and Maryland \$5,000 annual scholarships to attend either a two- or four-year program at an eligible college/university of their choice.

In October 2021, STEAM:CODERS honored Alexandria with its Corporate Vanguard Award, recognizing our longtime commitment to the non-profit's mission to inspire underrepresented and underserved students and their families in the fields of science, technology, engineering, art, and math (STEAM) in preparation for academic and career opportunities.

ALEXANDRIA'S IMPACT

11
ALEXANDRIA SCHOLARS
STEM Scholarships
Awarded in 2021

7,500 SF
EMILY K CENTER
BUILDING EXPANSION
Completed in 2021

STEAMCODERS
CORPORATE VANGUARD AWARD
Received in 2021



“The Emily K Center is tremendously grateful for our long-term partnership with Alexandria. Their immense support has had a significant and positive impact on the lives of countless students in our programs.”

MIKE “COACH K” KRZYZEWSKI
FOUNDER OF THE EMILY K CENTER & HEAD COACH OF DUKE MEN'S BASKETBALL (1980-2022)



The Emily K Center's new 7,500 square foot building expansion opened in November 2021. The building serves as a college access hub, providing much-needed classroom and advising spaces to serve the growing number of students accessing its programs.



“We are deeply grateful for Alexandria’s incredible support of Camp Kita. With this beautiful property, we now have a dedicated space to make a greater impact on the lives of children who have lost a family member to suicide.”

MORGAN MOSHER
CO-FOUNDER OF CAMP KITA

ADDRESSING THE MENTAL HEALTH CRISIS WITH A FOCUS ON HELPING CHILDREN COPE WITH SUICIDE LOSS

In 2021, Alexandria continued to expand our visionary social responsibility efforts to drive forward solutions to society’s most pressing challenges, with the establishment of a new social responsibility pillar to address mental health and suicide.

Suicide is one of the 10 leading causes of death among all age groups in the United States according to the Centers for Disease Control and Prevention.

The mounting suicide crisis has contributed to a staggering number of survivors of suicide loss. In response, Alexandria partnered with Camp Kita by providing significant financial support. As a result, the non-profit will have free long-term access to 28 acres in Acton, Maine to serve as the camp’s future home. Camp Kita provides a tuition-free summer camp experience for 8- to 17-year-olds who are impacted by the suicide of a parent or family member. The property will enable the organization to advance its mission-critical work of providing children who have endured this particularly difficult loss with professional support in a safe environment.



As survivors of parental suicide, siblings Morgan, Isaiah, and Sydney Mosher started Camp Kita in 2013 to provide young people with a nurturing environment where they can connect with others who have shared a similar loss. The new property will allow the non-profit to expand programming, host more campers, enhance the camp experience, and make an even greater impact on the children it serves.



JIM COLLINS DEFINES LASTING ENDURANCE

A truly great organization prospers over a long period of time, beyond any great idea, market opportunity, technology cycle, or well-funded program.

LASTING

Alexandria's highly complex infrastructure is critical to enabling novel innovation to advance human health and improve patient lives. With over 10,000 diseases known to humankind and less than 10% currently addressable with therapies, our tenants and venture investment companies are working tirelessly to meet massive unmet medical needs.

ENDURANCE

ENDURANCE

ENDURANCE

ENDURANCE

ENDURANCE

ENDURANCE

ENDURANCE

2021

Alexandria's first asset at 10933 North Torrey Pines Road will be transformed into a 299,158 RSF development project commencing construction in 2022. The totally reimagined building will be located on our 1.6 million RSF mega campus, One Alexandria Square.



ALEXANDRIA'S STRATEGIC EVOLUTION FROM VISIONARY PIONEER OF THE LIFE SCIENCE REAL ESTATE NICHE TO LEADER OF A MAINSTREAM ASSET CLASS

In 1994, Alexandria was founded as a garage startup with \$19 million in Series A capital and a bold vision to create a new real estate asset class primarily focused on building the infrastructure needed to catalyze innovation to advance human health. In pursuit of this vision, Alexandria pioneered the life science real estate niche and formed the first-ever REIT uniquely focused on the critically important life science industry.

Today, Alexandria is the leading owner, operator, and developer of collaborative campuses for life science and agtech companies in the nation's top innovation clusters. From our modest beginning, we have grown our business into an investment-grade S&P 500® REIT with a total market capitalization of \$44 billion as of December 31, 2021 and an asset base in North America of 67.0 million SF.



1994

Alexandria acquired our first property with the purchase of 10933 North Torrey Pines Road in San Diego.

OUR CLUSTER MODEL LOCATION + INNOVATION + TALENT + CAPITAL

Our tremendous and sustained growth was accelerated by our bold and visionary cluster campus strategy. Utilizing Harvard Business Professor Michael E. Porter's cluster theory as the basis for our proven cluster model, we identified and brought together four critical components required for life science

companies to thrive – location, innovation, talent, and capital. This informed our crucial move away from single assets to our urban cluster campuses (2004–2006), and then to today's mega campuses, each of which consists of approximately 1 million RSF or more in urban and suburban locations.



The Alexandria® at Torrey Pines, which serves as the anchor of the One Alexandria Square mega campus, is a sophisticated amenities hub for San Diego's life science community. The destination spot includes a state-of-the-art fitness center, a contemporary restaurant serving locally sourced food, an inspiring conference and pre-function space, and an open outdoor patio and green space.

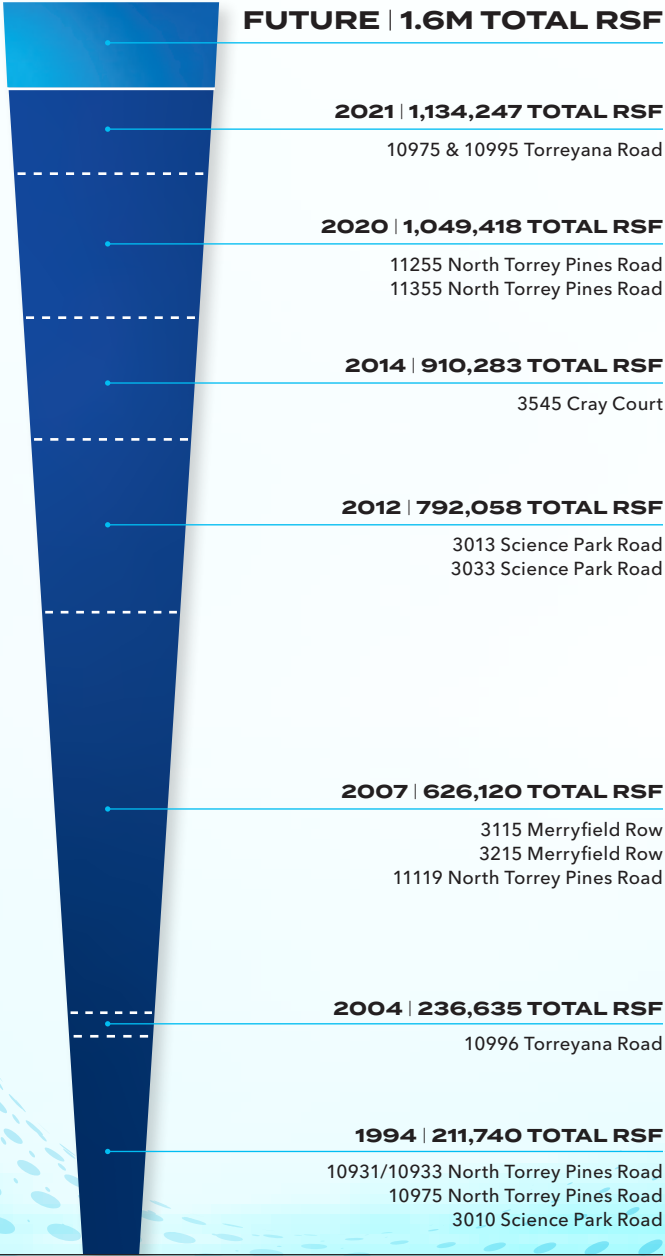
ALEXANDRIA'S WORLD-CLASS COLLABORATIVE MEGA CAMPUSES

Alexandria's visionary mega campus strategy was borne of our vision to provide engaging workplace environments that increase productivity and inspire success for our tenants, who are working to advance human health. Representing our best-in-class brand, we continue to grow our core markets and build trusted partnerships to enable those who seek to innovate for the good of others. At the vanguard and heart of the life science ecosystem, we are proud to be able to deliver our mega campuses as part of our latest bold vision to serve this vital workforce.

Our highly sought-after mega campuses feature core attributes of scale, design, placemaking, activation, community, and function to meet our tenants' needs for immediate space, allow for engaging workplace experiences, and provide expansion space to accommodate future growth. With their superior set of amenities and services, prime locations, and features promoting health and wellness, Alexandria's mega campuses enable our tenants to attract and retain top talent.

THE RISE OF THE MEGA CAMPUS ONE ALEXANDRIA SQUARE SPOTLIGHT

In the heart of our Torrey Pines submarket in San Diego is One Alexandria Square, a 1.6 million RSF mega campus in one of the most prominent life science clusters in the country. Since 1994, we have been strategically assembling this important campus, which includes 10933 North Torrey Pines Road, the very first of Alexandria's assets. Fully leased to a commercial-stage company developing next-gen genomic platforms to accelerate science and medicine, the facility is now being reimaged as part of a larger 299,158 RSF development for the next stage of this campus's evolution.



Alexandria's broad base of life science tenants are solving unmet medical needs to transform human health. They rely on our team and their ability to execute at the highest level of operational excellence to ensure their mission-critical R&D facilities are high performing, efficient, and well maintained.



ALEXANDRIA AND OUR LONG-TENURED TENANTS' RELENTLESS PURSUIT OF THE NEXT GENERATION OF LIFE-CHANGING INNOVATION

Alexandria's unrivaled brand power drives epic and long-tenured tenant relationships.

Alexandria's stellar reputation, built over the last 28 years and combined with our team's operational expertise of our best-in-class facilities, has established us at the vanguard of the life science real estate asset class. As the trusted partner to innovative life science companies, we have developed a high-quality tenant roster consisting of more than 850 tenant relationships.

Alexandria's science and technology team applies its strong scientific backgrounds to support, source, and grow our REIT industry-leading roster of life

science tenants working on cutting-edge therapies and technologies. Through these important relationships, Alexandria gleans invaluable insights into our tenants' highly specialized infrastructural needs, giving us a strong competitive advantage. Our strategic approach has enabled us to forge deep, trusted relationships and to build significant brand loyalty for Alexandria. In 2021 alone, nearly 90% of the leasing activity for Alexandria's operating assets and value-creation pipeline was generated from existing relationships.

TENANT SPOTLIGHT INTRA-CELLULAR THERAPIES

Alexandria has been able to identify, invest in, and forge long-term relationships with life science companies addressing massive unmet medical needs. In 2002, Alexandria Venture Investments participated in a Series A financing for Intra-Cellular Therapies, a spin-out from the lab of Nobel Laureate Paul Greengard, PhD, at the Rockefeller University. As the company grew, so did its need for space, and in 2014, Intra-Cellular signed an over 16,000 RSF lease at the Alexandria Center® for Life Science - New York City, where it has since expanded to nearly 40,000 RSF.

Intra-Cellular was one of the first life science startups to establish a presence in New York City. Under the leadership of Sharon Mates, PhD, who has led the company since inception, Intra-Cellular has achieved tremendous success with Caplyta, a treatment to address neuropsychiatric diseases, for which the pace of drug innovation has been slow. In 2019, Caplyta was approved by the FDA to treat schizophrenia, and in 2021 it received another approval to become the only FDA-approved treatment for depressive episodes associated with bipolar I or II disorder in adults. Intra-Cellular is a prime example of a company that has grown with Alexandria and benefited from our ecosystem-building expertise.



ALEXANDRIA TENANTS HAVE MADE ASTOUNDING PROGRESS IN DEVELOPING GROUNDBREAKING MEDICINES

48%

of FDA Novel Therapy Approvals Have Been Granted to Alexandria Tenants Since 2017¹

1. Source: U.S. Food and Drug Administration. Novel therapies approved by the FDA include new molecular entities and new biologics defined as products containing active moieties that have not been previously approved by the FDA. For the period from January 1, 2017 through December 31, 2021.

ALEXANDRIA REAL ESTATE EQUITIES, INC. (NYSE:ARE), an S&P 500® urban office REIT, is the first, longest-tenured, and pioneering owner, operator, and developer uniquely focused on collaborative life science, agtech, and technology campuses in AAA innovation cluster locations, with a total market capitalization of \$44.0 billion as of December 31, 2021, and an asset base in North America of 67.0 million SF. The asset base in North America includes 38.8 million RSF of operating properties and 4.8 million RSF of Class A properties undergoing construction, 8.7 million RSF of near-term and intermediate-term development and redevelopment projects, and 14.7 million SF of future development projects. Founded in 1994, Alexandria pioneered this niche and has since established a significant market presence in key locations, including Greater Boston, the San Francisco Bay Area, New York City, San Diego, Seattle, Maryland, and Research Triangle. Alexandria has a longstanding and proven track record of developing Class A properties clustered in urban life science, agtech, and technology campuses that provide our innovative tenants with highly dynamic and collaborative environments that enhance their ability to successfully recruit and retain world-class talent and inspire productivity, efficiency, creativity, and success. Alexandria also provides strategic capital to transformative life science, agtech, and technology companies through our venture capital platform. We believe our unique business model and diligent underwriting ensure a high-quality and diverse tenant base that results in higher occupancy levels, longer lease terms, higher rental income, higher returns, and greater long-term asset value. For additional information on Alexandria, please visit www.are.com.

Alexandria®, Lighthouse Design® logo, Building the Future of Life-Changing Innovation®, Alexandria Center®, Labspace®, Alexandria Venture Investments®, and Alexandria Summit® are copyrights and trademarks of Alexandria Real Estate Equities, Inc. All other company names, trademarks, and logos referenced herein are the property of their respective owners.

FORWARD-LOOKING STATEMENTS: This document includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such forward-looking statements include, without limitation, statements regarding our 2022 earnings per share attributable to Alexandria’s common stockholders – diluted, 2022 funds from operations per share attributable to Alexandria’s common stockholders – diluted, net operating income, our projected sources and uses of capital, our ESG policies, practices, and performance, our 2025 sustainability goals, and the prospects for success of any treatment approach to the opioid crisis, addiction, mental health, any new medicines or technologies or approach to address other threats to human health, hunger and food insecurity, deficiencies in support for services for the military, educational disparities, and homelessness. You can identify the forward-looking statements by their use of forward-looking words, such as “forecast,” “guidance,” “goals,” “projects,” “estimates,” “anticipates,” “believes,” “expects,” “intends,” “may,” “plans,” “seeks,” “should,” “targets,” or “will,” or the negative of those words or similar words. These forward-looking statements are based on our current expectations, beliefs, projections, future plans and strategies, anticipated events or trends, and similar expressions concerning matters that are not historical facts, as well as a number of assumptions concerning future events. There can be no assurance that actual results will not be materially higher or lower than these expectations. These statements are subject to risks, uncertainties, assumptions, and other important factors that could cause actual results to differ materially from the results discussed in the forward-looking statements. Factors that might cause such a difference include, without limitation, our failure to obtain capital (debt, construction financing, and/or equity) or refinance debt maturities, lower than expected yields, increased interest rates and operating costs, adverse economic or real estate developments in our markets, our failure to successfully place into service and lease any properties undergoing development or redevelopment and our existing space held for future development or redevelopment (including new properties acquired for that purpose), our failure to successfully operate or lease acquired properties, decreased rental rates, increased vacancy rates or failure to renew or replace expiring leases, defaults on or non-renewal of leases by tenants, adverse general and local economic conditions, inflation, supply chain disruptions, construction delays, an unfavorable capital market environment, decreased leasing activity or lease renewals, failure to obtain LEED and other healthy building certifications and efficiencies, the ongoing COVID-19 pandemic, and other risks and uncertainties detailed in our filings with the Securities and Exchange Commission (SEC). Accordingly, you are cautioned not to place undue reliance on such forward-looking statements. All forward-looking statements are made as of the date of this document, and unless otherwise stated, we assume no obligation to update this information and expressly disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise. For more discussion relating to risks and uncertainties that could cause actual results to differ materially from those anticipated in our forward-looking statements, and risks to our business in general, please refer to our SEC filings, including our most recent annual report on Form 10-K and any subsequent quarterly reports on Form 10-Q.



Sandy Alexander Inc., an ISO 14001:2004 certified printer with Forest Stewardship Council® (FSC®) Chain of Custody, printed Alexandria Real Estate Equities, Inc.'s 2021 Annual Report with the use of renewable wind power resulting in nearly zero carbon emissions. This report was printed on FSC®-certified Verso Sterling paper, a process-chlorine-free 10 percent post-consumer waste (PCW) paper manufactured entirely with 100 percent certified wind energy and containing 100 percent post-consumer recycled fiber.

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ALEXANDRIA®
Building the Future of Life-Changing Innovation®

2021 HISTORIC MILESTONES ACHIEVED

ALEXANDRIA
REAL ESTATE EQUITIES, INC.

2021
ANNUAL REPORT
ON FORM 10-K



ALEXANDRIA®
Building the Future of Life-Changing Innovation®



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2021

Commission file number 1-12993



ALEXANDRIA®

ALEXANDRIA REAL ESTATE EQUITIES, INC.

(Exact name of registrant as specified in its charter)

Maryland

95-4502084

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification Number)

26 North Euclid Avenue, Pasadena, California 91101

(Address of principal executive offices) (Zip code)

(626) 578-0777

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	ARE	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the shares of Common Stock held by non-affiliates of registrant was approximately \$27.5 billion based on the closing price for such shares on the New York Stock Exchange on June 30, 2021.

As of January 14, 2022, 159,943,331 shares of common stock were outstanding.

Documents Incorporated by Reference

Part III of this annual report on Form 10-K incorporates certain information by reference from the registrant's definitive proxy statement to be filed within 120 days of the end of the fiscal year covered by this annual report on Form 10-K in connection with the registrant's annual meeting of stockholders to be held on or about May 17, 2022.

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ALEXANDRIA REAL ESTATE EQUITIES, INC.

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GLOSSARY

The following abbreviations or acronyms that may be used in this document shall have the adjacent meanings set forth below:

ASU	Accounting Standards Update
ATM	At the Market
BBA	British Bankers' Association
CIP	Construction in Progress
EPS	Earnings per Share
ESG	Environmental, Social, and Governance
FASB	Financial Accounting Standards Board
FDA	U.S. Food and Drug Administration
FDIC	Federal Deposit Insurance Corporation
FFO	Funds From Operations
GAAP	U.S. Generally Accepted Accounting Principles
HVAC	Heating, Ventilation, and Air Conditioning
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
IRS	Internal Revenue Service
JV	Joint Venture
LEED®	Leadership in Energy and Environmental Design
LIBOR	London Interbank Offered Rate
Nareit	National Association of Real Estate Investment Trusts
NAV	Net Asset Value
NYSE	New York Stock Exchange
REIT	Real Estate Investment Trust
RSF	Rentable Square Feet/Foot
SEC	Securities and Exchange Commission
SF	Square Feet/Foot
SoDo	South of Downtown submarket of Seattle
SOFR	Secured Overnight Financing Rate
SoMa	South of Market submarket of San Francisco
U.S.	United States
VIE	Variable Interest Entity

PART I

Forward-looking statements

Certain information and statements included in this annual report on Form 10-K, including, without limitation, statements containing the words “forecast,” “guidance,” “goals,” “projects,” “estimates,” “anticipates,” “believes,” “expects,” “intends,” “may,” “plans,” “seeks,” “should,” or “will,” or the negative of these words or similar words, constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements involve inherent risks and uncertainties regarding events, conditions, and financial trends that may affect our future plans of operations, business strategy, results of operations, and financial position. A number of important factors could cause actual results to differ materially from those included within or contemplated by the forward-looking statements, including, but not limited to, the description of risks and uncertainties in “Item 1A. Risk factors” in this annual report on Form 10-K. Additional information regarding risk factors that may affect us is included in “Item 7. Management’s discussion and analysis of financial condition and results of operations” in this annual report on Form 10-K. Readers of our annual report on Form 10-K should also read our SEC and other publicly filed documents for further discussion regarding such factors.

As used in this annual report on Form 10-K, references to the “Company,” “Alexandria,” “ARE,” “we,” “us,” and “our” refer to Alexandria Real Estate Equities, Inc. and its consolidated subsidiaries. The following discussion should be read in conjunction with our consolidated financial statements and notes thereto under “Item 15. Exhibits and financial statement schedules” in this annual report on Form 10-K.

ITEM 1. BUSINESS

Overview

We are a Maryland corporation formed in October 1994 that has elected to be taxed as a REIT for federal income tax purposes. We are an S&P 500[®] urban office REIT and the first, longest-tenured, and pioneering owner, operator, and developer uniquely focused on collaborative life science, agtech, and technology campuses in AAA innovation cluster locations, with a total market capitalization of \$44.0 billion as of December 31, 2021, and an asset base in North America of 67.0 million SF. The asset base in North America includes 38.8 million RSF of operating properties and 4.8 million RSF of Class A properties undergoing construction, 8.7 million RSF of near-term and intermediate-term development and redevelopment projects, and 14.7 million SF of future development projects. Founded in 1994, we pioneered this niche and have since established a significant market presence in key locations, including Greater Boston, the San Francisco Bay Area, New York City, San Diego, Seattle, Maryland, and Research Triangle.

We develop dynamic urban cluster campuses and vibrant ecosystems that enable and inspire the world’s most brilliant minds and innovative companies to create life-changing scientific and technological breakthroughs. We believe in the utmost professionalism, humility, and teamwork. Our tenants include multinational pharmaceutical companies; public and private biotechnology companies; life science product, service, and medical device companies; digital health, technology, and agtech companies; academic and medical research institutions; U.S. government research agencies; non-profit organizations; and venture capital firms. We have a longstanding and proven track record of developing Class A properties clustered within urban life science, agtech, and technology campuses that provide our innovative tenants with highly dynamic and collaborative environments that enhance their ability to successfully recruit and retain world-class talent and inspire productivity, efficiency, creativity, and success. Alexandria also provides strategic capital to transformative life science, agtech, and technology campuses through our venture capital platform. We believe these advantages result in higher occupancy levels, longer lease terms, higher rental income, higher returns, and greater long-term asset value.

Our operating properties and development projects include 54 properties that are held by consolidated real estate joint ventures and four properties that are held by unconsolidated real estate joint ventures. The occupancy percentage of our operating properties in North America was 94.0% as of December 31, 2021. Our 10-year average occupancy percentage of our operating properties as of December 31, 2021, was 96%. Investment-grade or publicly traded large cap tenants represented 51% of our total annual rental revenue in effect as of December 31, 2021. Additional information regarding our consolidated and unconsolidated real estate joint ventures is included in “Item 7. Management’s discussion and analysis of financial condition and results of operations” in this annual report on Form 10-K. Additional information regarding risk factors that may affect us is included in “Item 1A. Risk factors” and “Item 7. Management’s discussion and analysis of financial condition and results of operations” in this annual report on Form 10-K.

Business objective and strategies

Our primary business objective is to maximize long-term asset value and shareholder returns based on a multifaceted platform of internal and external growth. A key element of our strategy is our unique focus on Class A properties clustered in urban campuses located in AAA innovation cluster locations. These key urban campus locations are characterized by high barriers to entry for new landlords, high barriers to exit for tenants, and a limited supply of available space. They represent highly desirable locations for tenancy by life science, agtech, and technology entities because of their close proximity to concentrations of specialized skills, knowledge, institutions, and related businesses. Our strategy also includes drawing upon our deep and broad real estate, life science, agtech, and technology relationships in order to identify and attract new and leading tenants and to source additional value-creation real estate.

Our tenant base is broad and diverse within the life science, agtech, and technology industries and reflects our focus on regional, national, and international tenants with substantial financial and operational resources. For a more detailed description of our properties and tenants, refer to “Item 2. Properties” in this annual report on Form 10-K. We have an experienced Board of Directors and are led by an executive and senior management team with extensive experience in the real estate, life science, agtech, and technology industries.

Acquisitions

We seek to identify and acquire high-quality properties in our target cluster markets. Critical evaluation of prospective property acquisitions is an essential component of our acquisition strategy. When evaluating acquisition opportunities, we assess a full range of matters relating to the prospective property or properties, including:

- Proximity to centers of innovation and technological advances;
- Location of the property and our strategy in the relevant market, including our mega campus strategy;
- Quality of existing and prospective tenants;
- Condition and capacity of the building infrastructure;
- Physical condition of the structure and common area improvements;
- Quality and generic characteristics of the improvements;
- Opportunities available for leasing vacant space and for re-tenanting or renewing occupied space;
- Availability of and/or ability to add appropriate tenant amenities;
- Availability of land for future ground-up development of new space;
- Opportunities to generate higher rent through redevelopment of existing space;
- The property’s unlevered yields;
- Potential impacts of climate change and extreme weather conditions; and
- Our ability to increase the property’s long-term financial returns.

Development, redevelopment, and pre-construction

A key component of our business model is our disciplined allocation of capital toward the development and redevelopment of new Class A properties, as well as property enhancements of certain acquired properties. These projects are generally located in collaborative life science, agtech, and technology campuses in AAA innovation clusters and are focused on providing high-quality, generic, and reusable spaces that meet the real estate requirements of our diverse group of tenants.

Development projects generally consist of the ground-up development of generic and reusable facilities. Redevelopment projects consist of the permanent change in use of office, warehouse, and shell space into office/laboratory, agtech, or tech office space. We generally will not commence new development projects for aboveground construction of new Class A office/laboratory, agtech, and tech office space without first securing significant pre-leasing for such space, except when there is solid market demand for high-quality Class A properties.

We seek to meet growing demand from our stakeholders and continuously improve the efficiency of our buildings. Additionally, we have committed to significant building goals to promote wellness and productivity for our buildings’ occupants, including targeting a LEED® Gold or Platinum certification on all new ground-up construction projects.

Pre-construction activities include entitlements, permitting, design, site work, and other activities preceding commencement of construction of aboveground building improvements, which are focused on reducing the time required to deliver projects to prospective tenants. These critical activities add significant value to our future ground-up development and are required for the vertical construction of buildings.

Another key component of our business model is our value-creation redevelopment of existing office, warehouse, or shell space, or newly acquired properties, into high-quality, generic, and reusable office/laboratory space that can be leased at higher rental rates. Our redevelopment strategy generally includes significant pre-leasing of projects prior to the commencement of redevelopment. We generally do not commence vertical construction of new projects prior to achieving significant pre-leasing.

Non-real estate investments

We also hold investments in publicly traded companies and privately held entities primarily involved in the life science, agtech, and technology industries. We invest primarily in highly innovative entities whose focus on the development of therapies and products that advance human health and transform patients' lives is aligned with Alexandria's purpose of making a positive and meaningful impact on the health, safety, and well-being of the global community. Our status as a REIT limits our ability to make such non-real estate investments. Therefore, we conduct, and will continue to conduct, our non-real estate investment activities in a manner that complies with REIT requirements.

Balance sheet and financial strategy

We seek to maximize balance sheet liquidity and flexibility, cash flows, and cash available for distribution to our stockholders through the ownership, operation, management, and selective acquisition, development, and redevelopment of new Class A properties located in collaborative life science, agtech, and technology campuses in AAA innovation clusters, as well as the prudent management of our balance sheet. In particular, we seek to maximize balance sheet liquidity and flexibility, cash flows, and cash available for distribution to our stockholders by:

- Maintaining access to diverse sources of capital, which include cash flows from operating activities after dividends, incremental leverage-neutral debt supported by growth in EBITDA, strategic value harvesting and asset recycling through real estate dispositions and sales of partial interests, non-real estate investment sales, sales of equity, and other capital;
- Maintaining significant liquidity through borrowing capacity under our unsecured senior line of credit and commercial paper program, secured construction loans, marketable securities, issuances of forward equity contracts from time to time, and cash, cash equivalents, and restricted cash;
- Continuing to improve our credit profile;
- Minimizing the amount of debt maturing in a single year;
- Maintaining commitment to long-term capital to fund growth;
- Maintaining low to modest leverage;
- Minimizing variable interest rate risk;
- Generating high-quality, strong, and increasing operating cash flows;
- Selectively selling real estate assets, including land parcels, non-core and "core-like" operating assets, and sales of partial interests, and reinvesting the proceeds into our highly leased value-creation development and redevelopment projects;
- Allocating capital to Class A properties located in collaborative life science, agtech, and technology campuses in AAA urban innovation clusters;
- Maintaining geographic diversity in urban intellectual centers of innovation;
- Selectively acquiring high-quality office/laboratory, agtech, and tech office space in our target urban innovation cluster submarkets at prices that enable us to realize attractive returns;
- Selectively developing properties in our target urban innovation cluster submarkets;
- Selectively redeveloping existing office, warehouse, or shell space, or newly acquired properties, into high-quality, generic, and reusable office/laboratory space that can be leased at higher rental rates in our target urban innovation cluster submarkets;
- Renewing existing tenant space at higher rental rates to the extent possible;
- Minimizing tenant improvement costs;
- Improving investment returns through the leasing of vacant space and the replacing of existing tenants with new tenants at higher rental rates;
- Executing leases with high-quality tenants and proactively monitoring tenant health;
- Maintaining solid occupancy while attaining high rental rates;
- Realizing contractual rental rate escalations; and
- Implementing effective cost control measures, including negotiating pass-through provisions in tenant leases for operating expenses and certain capital expenditures.

Competition

In general, other office/laboratory and tech office properties are located in close proximity to our properties. The amount of rentable space available in any market could have a material effect on our ability to rent space and on the rental rates we can attain for our properties. In addition, we compete for investment opportunities with other REITs, insurance companies, pension and investment funds, private equity entities, partnerships, developers, investment companies, owners/occupants, and foreign investors. Many of these entities have substantially greater financial resources than we do and may be able to invest more than we can or accept more risk than we are willing to accept. These entities may be less sensitive to risks with respect to the creditworthiness of a tenant or the overall expected returns from real estate investments. In addition, as a result of their financial resources, our competitors may offer more free rent concessions, lower rental rates, or higher tenant improvement allowances in order to attract tenants. These leasing incentives could hinder our ability to maintain or raise rents and attract or retain tenants. Competition may also reduce the number of suitable investment opportunities available to us or may increase the bargaining power of property owners seeking to sell. Competition in acquiring existing properties and land, both from institutional capital sources and from other REITs, has been very strong over the past several years; however, we believe we have differentiated ourselves from our competitors. As the first, longest-tenured, and pioneering publicly traded urban office REIT to focus primarily on the office/laboratory real estate niche, we provide world-class collaborative life science, agtech, and technology campuses in AAA innovation cluster locations and maintain and cultivate many of the most important and strategic relationships in the life science, agtech, and technology industries.

Financial information about our reportable segment

Refer to Note 2 – “Summary of significant accounting policies” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for information about our one reportable segment.

Regulation

General

Properties in our markets are subject to various laws, ordinances, and regulations, including regulations relating to common areas. We believe we have the necessary permits and approvals to operate each of our properties.

Americans with Disabilities Act

Our properties must comply with Title III of the Americans with Disabilities Act of 1990 (“ADA”) to the extent that such properties are “public accommodations” as defined by the ADA. The ADA may require removal of structural barriers to permit access by persons with disabilities in certain public areas of our properties where such removal is readily achievable. We believe that our properties are in substantial compliance with the ADA and that we will not be required to incur substantial capital expenditures to address the requirements of the ADA. However, noncompliance with the ADA could result in the imposition of fines or an award of damages to private litigants. The obligation to make readily achievable accommodations is an ongoing one, and we will continue to assess our properties and make alterations as appropriate in this respect.

Environmental matters

Under various environmental protection laws, a current or previous owner or operator of real estate may be liable for contamination resulting from the presence or discharge of hazardous or toxic substances at that property and may be required to investigate and remediate contamination located on or emanating from that property. Such laws often impose liability without regard to whether the owner or operator knew of, or was responsible for, the presence of the contaminants, and the liability may be joint and several. Previous owners may have used some of our properties for industrial and other purposes, so those properties may contain some level of environmental contamination. The presence of contamination or the failure to remediate contamination at our properties may expose us to third-party liability or may materially adversely affect our ability to sell, lease, or develop the real estate or to borrow using the real estate as collateral.

State regulations, such as California’s Connelly Act and Proposition 65, among others, require certain building owners and operators to disclose information on the presence of asbestos or other harmful substances. Some of our properties may have asbestos-containing building materials. Environmental laws require that asbestos-containing building materials be properly managed and maintained and may impose fines and penalties on building owners or operators for failure to comply with these requirements. These laws may also allow third parties to seek recovery from owners or operators for personal injury associated with exposure to asbestos-containing building materials.

In addition, some of our tenants handle hazardous substances and wastes as part of their routine operations at our properties. Environmental laws and regulations subject our tenants, and potentially us, to liability resulting from such activities. Environmental liabilities could also affect a tenant’s ability to make rental payments to us. We require our tenants to comply with these environmental laws and regulations and to indemnify us against any related liabilities.

Independent environmental consultants have conducted Phase I or similar environmental site assessments on the properties in our portfolio. Site assessments are intended to discover and evaluate information regarding the environmental condition of the surveyed property and surrounding properties and do not generally include soil samplings, subsurface investigations, or an asbestos survey. To date, these assessments have not revealed any material environmental liability that we believe would have a material adverse effect on our business, assets, or results of operations, and ongoing expenditures to comply with existing environmental regulations are not expected to be material. Nevertheless, it is possible that the assessments on our properties have not revealed all environmental conditions, liabilities, or compliance concerns that may have arisen after the review was completed or may arise in the future; and future laws, ordinances, or regulations may also impose additional material environmental liabilities.

Insurance

With respect to our properties, we carry commercial general liability insurance, and all-risk property insurance, including business interruption and loss of rental income coverage. We select policy specifications and insured limits that we believe to be appropriate given the relative risk of loss and the cost of the coverage. In addition, we have obtained earthquake insurance for certain properties located in the vicinity of known active earthquake zones in an amount and with deductibles we believe are commercially reasonable. We also carry environmental insurance and title insurance policies on our properties. We generally obtain title insurance policies when we acquire a property, with each policy covering an amount equal to the initial purchase price of each property. Accordingly, any of our title insurance policies may be in an amount less than the current value of the related property. Additional information about risk factors that may affect us is included in “Item 1A. Risk factors” in this annual report on Form 10-K.

Available information

Copies of our annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K, including any amendments to the foregoing reports, are available, free of charge, through our corporate website at www.are.com as soon as is reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The current charters of our Board of Directors’ Audit, Compensation, and Nominating & Governance Committees, along with our corporate governance guidelines and Business Integrity Policy and Procedures for Reporting Non-Compliance (the “Business Integrity Policy”), are also available on our corporate website. Additionally, any amendments to, and waivers of, our Business Integrity Policy that apply to our Co-Chief Executive Officers or our Chief Financial Officer will be available free of charge on our corporate website in accordance with applicable SEC and NYSE requirements. Written requests should be sent to Alexandria Real Estate Equities, Inc., 26 North Euclid Avenue, Pasadena, California 91101, Attention: Investor Relations. The public may also download these materials from the SEC’s website at www.sec.gov.

Human Capital

As of December 31, 2021, we had 559 employees. We believe that we maintain good relations with our employees. We have adopted a Business Integrity Policy that applies to all of our employees, and its receipt and review by each employee is documented and verified annually. In order to promote an exceptional corporate culture, Alexandria continuously monitors employee satisfaction, seeks employee feedback, and proactively seeks opportunities to enhance our employee offerings. We participate in annual performance reviews with our employees and conduct formal employee surveys, and our talent management team holds annual meetings with employees to continuously gather feedback and improve the employee experience. The positive employee experience is evidenced by our low voluntary and total turnover rates averaging 3.5% and 7.4%, respectively, over the last five years, from 2017 to 2021, which are substantially lower than the reported median voluntary and total turnover rates of 7.0% and 13.0%, respectively, in the Nareit 2021 Compensation & Benefits Survey (data for 2020).

We have an exceptional track record of identifying highly qualified candidates for promotion from within the Company. Alexandria's executive and senior management teams, represented by our senior vice presidents and above, consist of 53 individuals, averaging 25 years of real estate experience, including 12 years with Alexandria. Moreover, our executive management team alone averages 18 years of experience with the Company. Alexandria's executive and senior management teams have unique experience and expertise in creating, owning, and operating highly dynamic and collaborative campuses in key urban life science, agtech, and technology cluster locations. These teams also include regional market directors with leading reputations and longstanding relationships within the life science, agtech, and technology communities in their respective urban innovation clusters. We believe that our expertise, experience, reputation, and key relationships in the real estate, life science, agtech, and technology industries provide Alexandria with significant competitive advantages in attracting new business opportunities.

Building a diverse and inclusive workforce

We work diligently every day to create an open and respectful environment where our employees can actively contribute, have access to opportunities and resources, and realize their potential.

Our Corporate Governance Guidelines highlight our Board of Directors' focus on diversity, which explicitly states our Board's commitment to considering qualified women and minority director candidates, as well its policy of requesting an initial list of diverse candidates of any search firm it retains. As an equal opportunity employer, we have a diversity, equal employment opportunity, and fair labor policy that emphasizes inclusion through hiring and compensation practices and considers a pool of diverse candidates for open positions and internal advancement opportunities. To address issues related to pay discrimination, we do not ask potential candidates about their current or previous compensation during the hiring process, and we incorporate fair pay reviews into every employment compensation decision. To reinforce our corporate culture of respect, diversity, and inclusion, we provide anti-harassment training annually.

Providing exceptional benefits to support our employees' well-being, medical, and financial health

We provide a comprehensive benefits package intended to meet and/or exceed the needs of our employees and their families. Our Company-sponsored suite of benefits covers 100% of the premiums for our employees and their dependents and includes, but is not limited to, a high-coverage, low-deductible PPO medical plan, medical care and services program, PPO dental and orthodontia coverage, a generous vision plan, comprehensive prescription drug plan, infertility and family planning benefits, short- and long-term disability benefits, and life and accidental death and dismemberment coverage. These benefits support the health of our employees and their families, their overall well-being, their plans for the future, and reward and recognize their operational excellence.

In addition, we have prioritized our employees' total well-being with additional benefits that focus on their emotional, mental, physical, financial, and social health:

- **100% Company-paid unlimited therapy and life-coaching** for our employees and their eligible dependents to prioritize their mental health and make it accessible and available
- **24/7 telehealth** and medical care including COVID-19 testing
- **Bimonthly expert-led wellness webinars** addressing relevant and engaging topics such as "Caring for Your Mental Health" and "Staying Healthy while Working from Home"
- **Additional Company-paid holidays and paid time off** to encourage employees to properly rest and recharge
- **Internal webinar series** featuring leading experts on COVID-19 to educate and inform our employees with the most up-to-date and reliable information by leveraging our world-class life sciences network
- **Wellness reimbursement benefit** for fitness and mindfulness applications, online classes, and home exercise equipment that encourages our employees to stay mentally and physically fit
- **Enhancing employee social connectedness through Alexandria's Operation CARE program** for corporate giving, fundraising, and volunteerism opportunities, which consists of several programs including:
 - **Paid volunteer time off** up to 16 hours per calendar year to use at eligible non-profit organizations of their choice
 - **Matching gifts** up to \$2,500 per person each calendar year to double the impact of their charitable giving

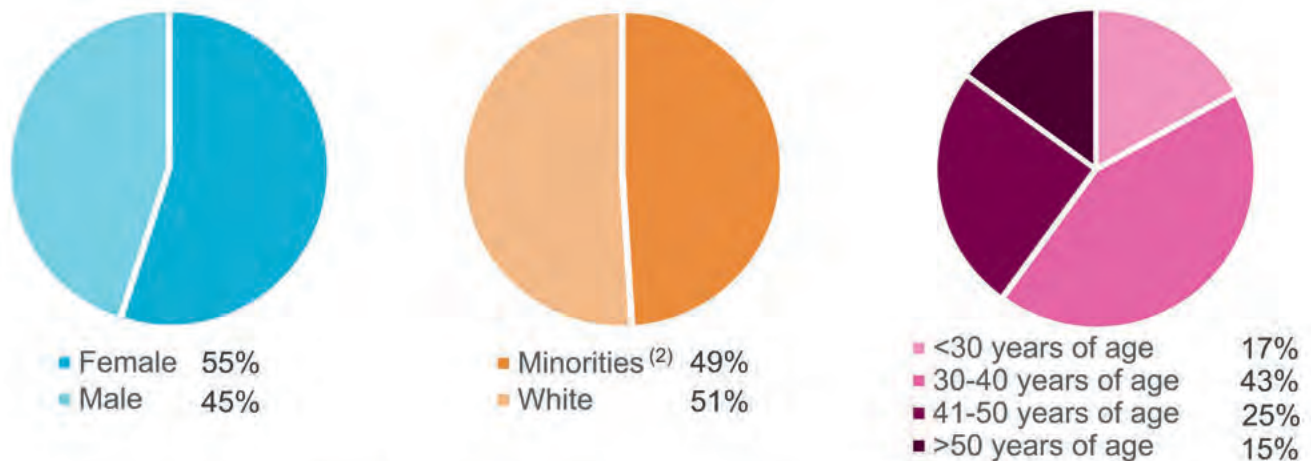
- **Volunteer rewards** initiated when an employee volunteers more than 25 hours in any quarter at eligible nonprofit organizations, for which Alexandria donates a total of \$2,500 to the eligible non-profit organizations of their choice, up to \$10,000 annually
- **Alexandria Access.** Alexandria's network in the life science community affords us access to deep medical expertise. Alexandria Access makes this expertise available to our employees and their immediate family members with an illness or injury who would benefit from specialized expertise.

Investing in professional development and training

We understand that to attract and retain the best talent, we must provide opportunities for our people to grow and develop. Therefore, we invest in training and development programs to enhance our employees' engagement, effectiveness, and well-being.

Training topics include project management, business writing, change management, presentations, productivity, effective one-on-ones, goal setting, delegation, and feedback. Our mentoring program enables employees to partner with senior leaders for support and career guidance. To further customize development, we partner with key functional leaders to identify opportunities and design and deploy training programs for specific functional teams. Through a bespoke coaching program, we support new and high-potential leaders in their career progression. We also provide on-demand learning resources, such as LinkedIn Learning, as well as internally developed, ARE-specific on-demand content.

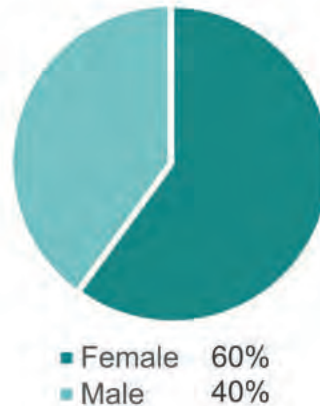
TOTAL WORKFORCE⁽¹⁾



MANAGER ROLE & ABOVE⁽³⁾



PROMOTIONS⁽⁴⁾



(1) As of December 31, 2021, unless stated otherwise.

(2) Minorities are defined to include individuals of Asian, Black/African American, Hispanic/Latino, Native American, Pacific Islander, or multiracial background. We determine race and gender based on our employees' self-identification or other information compiled to meet requirements of the U.S. government.

(3) Managers and above include individuals who lead others and/or oversee projects.

(4) Represents a five-year average from 2017 to 2021.

ITEM 1A. RISK FACTORS

Overview

The following risk factors may adversely affect our overall business, financial condition, results of operations, and cash flows; our ability to make distributions to our stockholders; our access to capital; or the market price of our common stock, as further described in each risk factor below. In addition to the information set forth in this annual report on Form 10-K, one should carefully review and consider the information contained in our other reports and periodic filings that we make with the SEC. Those risk factors could materially affect our overall business, financial condition, results of operations, and cash flows; our ability to make distributions to our stockholders; our access to capital; or the market price of our common stock. The risks that we describe in our public filings are not the only risks that we face. Additional risks and uncertainties not presently known to us, or that we currently consider immaterial, also may materially adversely affect our business, financial condition, and results of operations. Additional information regarding forward-looking statements is included in the beginning of Part I in this annual report on Form 10-K.

Risk factors summary

An investment in our securities involves various risks. Such risks, including those set forth in the summary of material risks in this Item 1A, should be carefully considered before purchasing our securities.

Risks related to operating factors

- We may be unable to identify and complete acquisitions, investments, or development or redevelopment projects or to successfully and profitably operate properties.
- We could default on our ground leases or be unable to renew or re-lease our land or space on favorable terms or at all. Our tenants may also be unable to pay us rent.
- The cost of maintaining and improving the quality of our properties may be higher than anticipated, and we may be unable to pass any increased operating costs through to our tenants, which can result in reduced cash flows and profitability.
- We could be held liable for environmental damages resulting from our tenants' use of hazardous materials, or from harmful mold, poor air quality, or other defects from our properties, or we could face increased costs in complying with other environmental laws.
- The loss of services of any of our senior officers or key employees and increased competition for skilled personnel could adversely affect us and/or increase our labor costs.
- We rely on a limited number of vendors to provide utilities and other services at our properties, and disruption in such services may have an adverse effect on our operations and financial condition.
- Our insurance policies may not adequately cover all of our potential losses, or we may incur costs due to the financial condition of our insurance carriers.
- We may change business policies without stockholder approval.
- Failure to maintain effective internal control over financial reporting could have a material adverse effect on our business.
- If we failed to qualify as a REIT, we would be taxed at corporate rates and would not be able to take certain deductions when computing our taxable income.
- We may not be able to raise sufficient capital to fund our operations due to adverse changes in our credit ratings, our inability to refinance our existing debt or issue new debt, or our inability to sell existing properties timely.
- We may invest or spend the net proceeds from our equity or debt offerings in ways with which our investors may not agree and in ways that may not earn a profit.
- Our debt service obligations may restrict our ability to engage in some business activities or cause other adverse effects on our business.
- We face risks and liabilities associated with our investments (including those in connection with short-term liquid investments) and the companies in which we invest (including properties owned through partnerships, limited liability companies, and joint ventures, as well as through our non-real estate venture investment portfolio), which expose us to risks similar to those of our tenant base and additional risks inherent in venture capital investing. We may be limited in our ability to diversify our investments.

Risks related to market and industry factors

- There are limits on ownership of our stock under which a stockholder may lose beneficial ownership of its shares, as well as certain provisions of our charter and bylaws that may delay or prevent transactions that otherwise may be desirable to our stockholders.
- Possible future sales of shares of our common stock could adversely affect its market price.
- We are dependent on the health of the life science, agtech, and technology industries, and changes within these industries, increased competition, or the inability of our tenants and non-real estate equity investments within these industries to obtain funding for research, development, and other operations may adversely impact their ability to make rental payments to us or adversely impact their value.
- Market disruption and volatility, poor economic conditions in the capital markets and global economy, including in connection with the COVID-19 pandemic, and high unemployment levels could adversely affect the value of the companies in which we hold equity investments or the ability of tenants and the companies in which we invest to raise additional capital or access capital from venture capital investors or financial institutions on favorable terms or at all.

Risks related to government and global factors

- Actions, policy, or key leadership changes in government agencies, or changes to laws or regulations, including those related to tax, accounting, debt, derivatives, government spending, or funding (including those related to the FDA, the National Institutes of Health (the “NIH”), the SEC, and other agencies), and drug and healthcare pricing, costs, and programs could have a significant negative impact on the overall economy, our tenants and companies in which we invest, and our business.
- Partial or complete government shutdown resulting in temporary closures of agencies could adversely affect our tenants (some of which are also government agencies) and the companies in which we invest, including delays in the commercialization of such companies’ products, decreased funding of research and development, or delays surrounding approval of budget proposals.
- The replacement of LIBOR with an alternative reference rate may adversely affect interest expense related to outstanding debt.
- The current outbreak of COVID-19, or the future outbreak of any other highly infectious or contagious diseases, could adversely impact or cause disruption to our financial condition and results of operations, and/or to the financial condition and results of operations of our tenants and non-real estate investments.

Risks related to general and other factors

- Social, political, and economic instability, unrest, significant changes, and other circumstances beyond our control, including circumstances related to changes in the U.S. political landscape, could adversely affect our business operations.
- Seasonal weather conditions, climate change and severe weather, changes in the availability of transportation or labor, especially in connection with the COVID-19 pandemic, and other related factors may affect our ability to conduct business, the products, and services of our tenants, or the availability of such products and services of our tenants and the companies in which we invest.
- We may be unable to meet our sustainability goals.
- System failures or security incidents through cyber attacks, intrusions, or other methods could disrupt our information technology networks and related systems, cause a loss of assets or data, give rise to remediation or other expenses, expose us to liability under federal and state laws, and subject us to litigation and investigations, which could result in substantial reputational damage and adversely affect our business and financial condition.
- We are subject to risks from potential fluctuations in exchange rates between the U.S. dollar and certain foreign currencies and downgrades of domestic and foreign government sovereign credit ratings.

We attempt to mitigate the foregoing risks. However, if we are unable to effectively manage the impact of these and other risks, our ability to meet our investment objectives would be substantially impaired and any of the foregoing risks could materially adversely affect our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, or the market price of our common stock.

Operating factors

We may be unable to identify and complete acquisitions and successfully operate acquired properties.

We continually evaluate the market of available properties and may acquire properties when opportunities exist. Our ability to acquire properties on favorable terms and successfully operate them may be exposed to significant risks, including, but not limited to the following:

- We may be unable to acquire a desired property because of competition from other real estate investors with significant capital, including both publicly traded REITs and institutional funds;
- Even if we are able to acquire a desired property, competition from other potential acquirers may significantly increase the purchase price or result in other less favorable terms;
- Even if we enter into agreements for the acquisition of properties, these agreements are subject to customary conditions to closing, including completion of due diligence investigations to our satisfaction;
- We may be unable to complete an acquisition because we cannot obtain debt and/or equity financing on favorable terms or at all;
- We may spend more than budgeted amounts to make necessary improvements or renovations to acquired properties;
- We may be unable to quickly and efficiently integrate new acquisitions, particularly acquisitions of operating properties or portfolios of properties, into our existing operations;
- Acquired properties may be subject to reassessment, which may result in higher-than-expected property tax payments;
- Market conditions may result in higher-than-expected vacancy rates and lower-than-expected rental rates; and
- We may acquire properties subject to liabilities and without any recourse, or with only limited recourse, with respect to unknown liabilities, such as liabilities for the remediation of undisclosed environmental contamination; claims by tenants, vendors, or other persons dealing with the former owners of the properties; and claims for indemnification by general partners, directors, officers, and others indemnified by the former owners of the properties.

The realization of any of the above risks could significantly and adversely affect our ability to meet our financial expectations, our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, the market price of our common stock, and our ability to satisfy our debt service obligations.

We may suffer economic harm as a result of making unsuccessful acquisitions in new markets.

We may pursue selective acquisitions of properties in markets where we have not previously owned properties. These acquisitions may entail risks in addition to those we face in other acquisitions where we are familiar with the markets, such as the risk of not correctly anticipating conditions or trends in a new market and therefore not being able to generate profit from the acquired property. If this occurs, it could adversely affect our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, our ability to satisfy our debt service obligations, and the market price of our common stock.

The acquisition of new properties or the development of new properties may give rise to difficulties in predicting revenue potential.

We may continue to acquire additional properties and/or land and may seek to develop our existing land holdings strategically as warranted by market conditions. These acquisitions and developments could fail to perform in accordance with expectations. If we fail to accurately estimate occupancy levels, rental rates, lease commencement dates, operating costs, or costs of improvements to bring an acquired property or a development property up to the standards established for our intended market position, the performance of the property may be below expectations. Acquired properties may have characteristics or deficiencies affecting their valuation or revenue potential that we have not yet discovered. We cannot assure our stockholders that the performance of properties acquired or developed by us will increase or be maintained under our management.

We may fail to achieve the financial results expected from development or redevelopment projects.

There are significant risks associated with development and redevelopment projects, including, but not limited to, the following possibilities:

- We may not complete development or redevelopment projects on schedule or within budgeted amounts;
- We may be unable to lease development or redevelopment projects on schedule or within budgeted amounts;
- We may encounter project delays or cancellations due to unavailability of necessary labor and construction materials;
- We may expend funds on, and devote management's time to, development and redevelopment projects that we may not complete;
- We may abandon development or redevelopment projects after we begin to explore them, and as a result, we may lose deposits or fail to recover costs already incurred;
- Market and economic conditions may deteriorate, which can result in lower-than-expected rental rates;

- We may face higher operating costs than we anticipated for development or redevelopment projects, including insurance premiums, utilities, real estate taxes, and costs of complying with changes in government regulations or increases in tariffs;
- We may face higher requirements for capital improvements than we anticipated for development or redevelopment projects, particularly in older structures;
- We may be unable to proceed with development or redevelopment projects because we cannot obtain debt and/or equity financing on favorable terms or at all;
- We may fail to retain tenants that have pre-leased our development or redevelopment projects if we do not complete the construction of these properties in a timely manner or to the tenants' specifications;
- Tenants that have pre-leased our development or redevelopment projects may file for bankruptcy or become insolvent, or otherwise elect to terminate their lease prior to delivery, which may adversely affect the income produced by, and the value of, our properties or require us to change the scope of the project, which may potentially result in higher construction costs, significant project delays, or lower financial returns;
- We may encounter delays, refusals, unforeseen cost increases, and other impairments resulting from third-party litigation, natural disasters, or severe weather conditions;
- We may encounter delays or refusals in obtaining all necessary zoning, land use, building, occupancy, and other required government permits and authorizations; and
- Development or redevelopment projects may have defects we do not discover through our inspection processes, including latent defects that may not reveal themselves until many years after we put a property in service.

The realization of any of the above risks could significantly and adversely affect our ability to meet our financial expectations, our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, the market price of our common stock, and our ability to satisfy our debt service obligations.

We may face increased risks and costs associated with volatility in commodity and labor prices or as a result of supply chain or procurement disruptions, which may adversely affect the status of our construction projects.

The price of commodities and skilled labor for our construction projects may increase unpredictably due to external factors, including, but not limited to, performance of third-party suppliers and contractors; overall market supply and demand; government regulation; international trade; and changes in general business, economic, or political conditions. As a result, the costs of raw construction materials and skilled labor required for the completion of our development and redevelopment projects may fluctuate significantly from time to time.

We rely on a number of third-party suppliers and contractors to supply raw materials and skilled labor for our construction projects. We believe we have favorable relationships with our suppliers and contractors. We have not encountered significant difficulty collaborating with our suppliers and contractors and obtaining materials and skilled labor, nor experienced significant delays or increases in overall project costs due to disputes, work stoppages, or contractors' misconduct or failure to perform. While we do not rely on any single supplier or vendor for the majority of our materials and skilled labor, we may experience difficulties obtaining necessary materials from suppliers or vendors whose supply chains might become impacted by economic or political changes, or difficulties obtaining adequate skilled labor from third-party contractors in a tightening labor market. It is uncertain whether we would be able to source the essential commodities, supplies, materials, and skilled labor timely or at all without incurring significant costs or delays, particularly during times of economic uncertainty resulting from events outside of our control, including, but not limited to, effects of COVID-19. We may be forced to purchase supplies and materials in larger quantities or in advance of when we would typically purchase them. This may cause us to require use of capital sooner than anticipated. Alternatively, we may also be forced to seek new third-party suppliers or contractors, whom we have not worked with in the past, and it is uncertain whether these new suppliers will be able to adequately meet our materials or labor needs. Our dependence on unfamiliar supply chains or relatively small supply partners may adversely affect the cost and timely completion of our construction projects. In addition, we may be unable to compete with entities that may have more favorable relationships with their suppliers and contractors or greater access to the required construction materials and skilled labor.

During 2021, industry prices for certain construction materials, including steel, copper, lumber, plywood, electrical materials, and HVAC materials, experienced significant increases as a result of low inventories; surging demand fueled by the U.S. economy rebounding from the effects of COVID-19; tariffs imposed on imports of foreign steel, including on products from key competitors in the European Union ("EU") and China; and significant changes in the U.S. steel production landscape stemming from the consolidation of certain steel-producing companies. Price surges on construction materials may result in corresponding increases in our overall construction costs as our projects undergo construction. Certain increases in the costs of construction materials, however, can often be managed in our development and redevelopment projects through either (i) general budget contingencies built into our overall construction costs estimates for each of our projects or (ii) inflation risk borne by our construction general contractors in the form of Guaranteed Maximum Price construction contracts, which stipulate a maximum price for certain construction costs in many of our projects.

In addition, as of October 2021, the U.S. was widely reported to be experiencing serious supply chain disruptions as a result of substantial backlogs of container ships seeking to unload cargo at major ports on both the west and east coasts, with delays caused or

exacerbated by port and trucking labor shortages, railway logistics issues, and a shortage of warehouse space in close proximity to the affected ports. Widespread shortages of supplies and consumer goods resulting from these supply chain disruptions are expected to continue into 2022. While we have not been significantly impacted by these backlogs to date, if not resolved, these backlogs and related logistics issues could result in material delays and increased costs for our construction activities and the U.S. economy generally.

The Biden administration and the EU have started discussions to revisit restrictions on steel imports from the EU. However, it is not known whether these discussions will lead to the elimination or easing of tariffs, especially in light of the U.S. steel companies' demands to keep the tariffs in effect.

Separately, new energy-related initiatives entered into in collaboration with partner countries through global climate agreements may impose stricter requirements for building materials, such as lumber, steel, and concrete, which could significantly increase our construction costs if the manufacturers and suppliers of our materials are burdened with expensive cap-and-trade or similar energy-related regulations or requirements, and the costs of which are passed onto customers like us. As a result of the factors discussed above, we may be unable to complete our development or redevelopment projects timely and/or within our budget, which may affect our ability to lease space to potential tenants and adversely affect our business, financial condition, and results of operations.

If we fail to identify and develop relationships with a sufficient number of qualified suppliers and contractors, the quality and status of our construction projects may be adversely affected.

We believe we have favorable relationships with our existing suppliers and contractors, and we generally have not encountered difficulty collaborating with and obtaining materials and skilled labor, nor experienced significant delays or increases in overall project costs due to disputes, work stoppages, or contractors' misconduct or failure to perform. However, it is possible we may experience these events in the future, or our existing suppliers and contractors may encounter supply chain disruptions from time to time that hinder their ability to supply necessary materials and labor to us. As a result, we may be forced to seek new resources for our construction needs. We may become reliant on unfamiliar supply chains or relatively small supply partners, which may cause uncertainty in the quality, cost, and timely completion of our construction projects.

Our ability to continue to identify and develop relationships with a sufficient network of qualified suppliers who can adequately meet our construction timing and quality standards can be a significant challenge, particularly if global supply chain disruptions continue to persist into 2022. If we fail to identify and develop relationships with a sufficient number of suppliers and contractors who can appropriately address our construction needs, we may experience disruptions in our suppliers' logistics or supply chain networks or information technology systems, and other factors beyond our or our suppliers' control. If we are unable to access materials and labor to complete our construction projects within our expected budgets and meet our tenants' demands and expectations in a timely and efficient manner, our results of operations, cash flows, and reputation may be adversely impacted.

Our tenants may face increased risks and costs associated with volatility in commodity and labor prices or the prices or availability of specialized materials or equipment, or as a result of supply chain or procurement disruptions of such items, which may adversely affect their businesses or financial condition.

Our tenants are generally subject to the same generalized risks of commodity and labor price increases and supply chain or procurement as we and many other companies are. A number of our tenants, however, are also involved in highly specialized research or manufacturing activities that may require unique or custom chemical or biologic materials or sophisticated specialty equipment that is not widely available and therefore may be particularly susceptible to supply chain disruption. In addition, these tenants may have complex supply chains due to their specialized activities that are subject to stringent government regulations, which may further hinder their access to necessary materials and equipment. While we are not aware of such issues materially affecting our tenants to date, it is possible that these issues may affect our tenants in the future, and continued supply chain and procurement disruptions could potentially impact such tenants adversely.

We could default on leases for land on which some of our properties are located or held for future development.

If we default under the terms of a ground lease obligation, we may lose the ownership rights to the property subject to the lease. Upon expiration of a ground lease and all of its options, we may not be able to renegotiate a new lease on favorable terms, if at all. The loss of the ownership rights to these properties or an increase in rental expense could have a material adverse effect on our financial condition, results of operations, and cash flows, and our ability to satisfy our debt service obligations and make distributions to our stockholders, as well as the market price of our common stock. Refer to "Ground lease obligations" in the "Uses of capital" subsection of the "Capital resources" section under "Item 7. Management's discussion and analysis of financial condition and results of operations" in this annual report on Form 10-K for additional information on our ground lease obligations.

We may not be able to operate properties successfully and profitably.

Our success depends in large part upon our ability to operate our properties successfully. If we are unable to do so, our business could be adversely affected. The ownership and operation of real estate is subject to many risks that may adversely affect our business and our ability to make payments to our stockholders, including, but not limited to, the following risks:

- Our properties may not perform as we expect;
- We may have to lease space at rates below our expectations;
- We may not be able to obtain financing on acceptable terms;
- We may not be able to acquire or sell properties when desired or needed, due to the illiquid nature of real estate assets;
- We may underestimate the cost of improvements required to maintain or improve space to meet standards established for the market position intended for that property; and
- We may not be able to complete the improvements required to maintain or improve space, due to unanticipated delays, significant cost increases by our vendors, or cancellation of construction resulting from shortages in the supply of necessary construction materials.

The realization of any of the above risks could significantly and adversely affect our ability to meet our financial expectations, our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, the market price of our common stock, and our ability to satisfy our debt service obligations.

We may not be able to attain the expected return on our investments in real estate joint ventures.

We have consolidated and unconsolidated real estate joint ventures in which we share ownership and decision-making power with one or more parties. Our joint venture partners must agree in order for the applicable joint venture to take specific major actions, including budget approvals, acquisitions, sales of assets, debt financing, execution of lease agreements, and vendor approvals. Under these joint venture arrangements, any disagreements between our partners and us may result in delayed decisions. Our inability to take unilateral actions that we believe are in our best interests may result in missed opportunities and an ineffective allocation of resources and could have an adverse effect on the financial performance of the joint venture and our operating results.

We may experience increased operating costs, which may reduce profitability to the extent that we are unable to pass those costs through to our tenants.

Our properties are subject to increases in operating expenses, including insurance, property taxes, utilities, administrative costs, and other costs associated with security, landscaping, and repairs and maintenance of our properties. As of December 31, 2021, approximately 91% of our leases (on an RSF basis) were triple net leases, which require tenants to pay substantially all real estate and other rent-related taxes, insurance, utilities, common area expenses, and other operating expenses (including increases thereto) in addition to base rent.

Our operating expenses may increase as a result of tax reassessments that our properties are subject to on a regular basis (annually, triennially, etc.), which normally result in increases in property taxes over time as property values increase. In California, however, pursuant to the existing state law commonly referred to as Proposition 13, properties are generally reassessed to market value at the time of change in ownership or completion of construction; thereafter, annual property reassessments are limited to 2% of previously assessed values. As a result, Proposition 13 generally results in significant below-market assessed values over time. From time to time, lawmakers and political coalitions initiate efforts to repeal or amend Proposition 13 to eliminate its application to commercial and industrial properties, including by introducing Proposition 15 on the ballot in California, which failed to pass adoption on November 3, 2020.

Our triple net leases allow us to pass through, among other costs, substantially all real estate and rent-related taxes to our tenants in the form of tenant recoveries. Consequently, as a result of our triple net leases, we do not expect potential increases in property taxes as a result of tax reassessments to significantly impact our operating results. We cannot be certain, however, that we will be able to continue to negotiate pass-through provisions related to taxes in tenant leases in the future, or that higher pass-through expenses will not lead to lower base rents in the long run as a result of tenants' not being able to absorb higher overall occupancy costs. Thus, the repeal of or amendment to Proposition 13 could lead to a decrease in our income from rentals over time. If our operating expenses increase without a corresponding increase in revenues, our profitability could diminish. In addition, we cannot be certain that increased costs will not lead our current or prospective tenants to seek space outside of the state of California, which could significantly hinder our ability to increase our rents or to maintain existing occupancy levels. The repeal of or amendment to Proposition 13 in California may significantly increase occupancy costs for some of our tenants and may adversely impact their financial condition, ability to make rental payments, and ability to renew lease agreements, which in turn could adversely affect our financial condition, results of operations, and cash flows and our ability to make distributions to our stockholders.

In addition, we expect to incur higher costs as a result of doing business in California and other states. For example, compliance with various laws passed in California and civil unrest in Washington may result in cost increases due to new constraints on our business and the effects of potential non-compliance by us or third-party service providers. Any changes in connection with compliance could be time consuming and expensive, while failure to timely implement required changes could subject us to liability for non-compliance, any of which could adversely affect our business, operating results, and financial condition.

Most of our costs, such as operating and general and administrative expenses, interest expense, and real estate acquisition and construction costs, are subject to inflation.

A significant portion of our operating expenses is sensitive to inflation. These include expenses for property-related contracted services such as janitorial and engineering services, utilities, repairs and maintenance, and insurance. Property taxes are also impacted by inflationary changes as taxes are regularly reassessed based on changes in the fair value of our properties located outside of California. In California, property taxes are not reassessed based on changes in the fair value of the underlying real estate asset but are instead limited to a maximum 2% annual increase by law. We also have ground lease expenses in certain of our properties. Ground lease costs are contractual, but in some cases, lease payments reset every few years based on changes on consumer price indexes.

Our operating expenses, with the exception of ground lease rental expenses, are typically recoverable through our lease arrangements, which allow us to pass through substantially all expenses associated with property taxes, insurance, utilities, repairs and maintenance, and other operating expenses (including increases thereto) to our tenants. As of December 31, 2021, 91% of our existing leases (on an RSF basis) were triple net leases, which allow us to recover operating expenses, and 94% of our existing leases (on an RSF basis) also provided for the recapture of capital expenditures. Our remaining leases are generally gross leases, which provide for recoveries of operating expenses above the operating expenses from the initial year within each lease. During inflationary periods, we expect to recover increases in operating expenses from our triple net leases and our gross leases. As a result, we do not believe that inflation would result in a significant adverse effect on our net operating income, results of operations, and operating cash flows at the property level.

Our general and administrative expenses consist primarily of compensation costs, technology services, and professional service fees. Annually, our employee compensation is adjusted to reflect merit increases; however, to maintain our ability to successfully compete for the best talent, rising inflation rates may require us to provide compensation increases beyond historical annual merit increases, which may significantly increase our compensation costs. Similarly, technology services and professional service fees are also subject to the impact of inflation and expected to increase proportionately with increasing market prices for such services. Consequently, inflation is expected to increase our general and administrative expenses over time and may adversely impact our results of operations and operating cash flows.

Also, during inflationary periods, interest rates have historically increased, which would have a direct effect on the interest expense of our borrowings. Our exposure to increases in interest rates in the short term is limited to our variable-rate borrowings, which consist of borrowings under our unsecured senior line of credit and commercial paper program. As of December 31, 2021, our commitments under our unsecured senior line of credit and commercial paper program aggregated \$3.0 billion, of which no borrowings were outstanding under our unsecured senior line of credit and only \$270.0 million was outstanding under our commercial paper program, and our unhedged variable-rate debt as a percentage of our total debt was 3%. Therefore, we do not expect that the effect of inflation on our interest expense would have a material adverse impact on our financing costs in the short term, but it could increase our financing costs over time as we refinance our existing long-term borrowings, or incur additional interest related to the issuance of incremental debt.

As of December 31, 2021, approximately 95% of our leases (on an RSF basis) contained effective annual rent escalations approximating 3% that were either fixed or indexed based on a consumer price index or other index. We have long-term lease agreements with our tenants, of which 8%-11% (based on occupied RSF) expire each year. We believe these annual lease expirations allow us to reset these leases to market rents upon renewal or re-leasing and that annual rent escalations within our long-term leases are generally sufficient to offset the effect of inflation on non-recoverable costs, such as general and administrative expenses and interest expense. However, it is possible that during higher inflationary periods, the impact of inflation will not be adequately offset by the resetting of rents from our renewal and re-leasing activities or our annual rent escalations. As a result, during inflationary periods in which the inflation rate exceeds the annual rent escalation percentages within our lease contracts, we may not adequately mitigate the impact of inflation, which may adversely affect to our business, financial condition, results of operations, and cash flows.

Additionally, inflationary pricing may have a negative effect on the real estate acquisitions and construction costs necessary to complete our development and redevelopment projects, including, but not limited to, costs of construction materials, labor, and services from third-party contractors and suppliers. Higher acquisition and construction costs could adversely impact our net investments in real estate and expected yields on our development and redevelopment projects, which may make otherwise lucrative investment opportunities less profitable to us. As a result, our financial condition, results of operations, and cash flows, as well as our ability to pay dividends, could be adversely affected over time.

The cost of maintaining the quality of our properties may be higher than anticipated, which can result in reduced cash flows and profitability.

If our properties are not as attractive to current and prospective tenants in terms of rent, services, condition, or location as properties owned by our competitors, we could lose tenants or suffer lower rental rates. As a result, we may, from time to time, be required to make significant capital expenditures to maintain the competitiveness of our properties. However, there can be no assurances that any such expenditures would result in higher occupancy or higher rental rates or deter existing tenants from relocating to properties owned by our competitors.

Our inability to renew leases or re-lease space on favorable terms as leases expire may significantly affect our business.

Our revenues are derived primarily from rental payments and reimbursement of operating expenses under our leases. If our tenants experience a downturn in their business or other types of financial distress, they may be unable to make timely payments under their leases. In addition, because of the impact to the business environment due to civil unrest, high cost of living, taxes, and other increased region-specific costs of doing business in certain of our markets and submarkets, such as those located in the states of California and Washington, tenants may choose not to renew or re-lease space. Also, if our tenants terminate early or decide not to renew their leases, we may not be able to re-lease the space. Even if tenants decide to renew or lease space, the terms of renewals or new leases, including the cost of any tenant improvements, concessions, and lease commissions, may be less favorable to us than current lease terms. Consequently, we could generate less cash flows from the affected properties than expected, which could negatively impact our business. We may have to divert cash flows generated by other properties to meet our debt service payments, if any, or to pay other expenses related to owning the affected properties.

The inability of a tenant to pay us rent could adversely affect our business.

Our revenues are derived primarily from rental payments and reimbursement of operating expenses under our leases. If our tenants, especially significant tenants, fail to make rental payments under their leases, our financial condition, cash flows, and ability to make distributions to our stockholders could be adversely affected. Additionally, the inability of the U.S. Congress to enact a budget for a fiscal year or the occurrence of partial or complete U.S. government shutdowns may result in financial difficulties for tenants that are dependent on federal funding, which could adversely affect the ability of those tenants to pay us rent.

The bankruptcy or insolvency of a major tenant may also adversely affect the income produced by a property. If any of our tenants becomes a debtor in a case under the U.S. Bankruptcy Code, as amended, we cannot evict that tenant solely because of its bankruptcy. The bankruptcy court may authorize the tenant to reject and terminate its lease with us. Our claim against such a tenant for uncollectible future rent would be subject to a statutory limitation that might be substantially less than the remaining rent actually owed to us under the tenant's lease. Any shortfall in rent payments could adversely affect our cash flows and our ability to make distributions to our stockholders.

We could be held liable for damages resulting from our tenants' use of hazardous materials.

Many of our tenants engage in research and development activities that involve controlled use of hazardous materials, chemicals, and biologic and radioactive compounds. In the event of contamination or injury from the use of these hazardous materials, we could be held liable for damages that result. This liability could exceed our resources and any recovery available through any applicable insurance coverage, which could adversely affect our ability to make distributions to our stockholders.

Together with our tenants, we must comply with federal, state, and local laws and regulations governing the use, manufacture, storage, handling, and disposal of hazardous materials and waste products. Failure to comply with these laws and regulations, or changes thereto, could adversely affect our business or our tenants' businesses and their ability to make rental payments to us.

Our properties may have defects that are unknown to us.

Although we thoroughly review the physical condition of our properties before they are acquired, and as they are developed or redeveloped, any of our properties may have characteristics or deficiencies unknown to us that could adversely affect the property's value or revenue potential.

Our properties may contain or develop harmful mold or suffer from other air quality issues, which could lead to liability for adverse health effects and costs to remedy the problem.

When excessive moisture accumulates in buildings or on building materials, mold may grow, particularly if the moisture problem remains undiscovered or is not addressed over a period of time. Some molds may produce airborne toxins or irritants. Indoor air quality issues can also stem from inadequate ventilation, chemical contamination from indoor or outdoor sources, and other biological contaminants such as pollen, viruses, and bacteria. Indoor exposure to airborne toxins or irritants above certain levels may cause a variety of adverse health effects and symptoms, including allergic or other reactions. As a result, the presence of significant mold or other airborne contaminants at any of our properties could require us to undertake a costly remediation program to contain or remove the mold or other airborne contaminants from the affected property or increase indoor ventilation. In addition, the presence of significant mold or other airborne contaminants could expose us to liability from our tenants, employees of our tenants, and others if property damage or health concerns arise.

We may not be able to obtain additional capital to further our business objectives.

Our ability to acquire, develop, or redevelop properties depends upon our ability to obtain capital. The real estate industry has historically experienced periods of volatile debt and equity capital markets and/or periods of extreme illiquidity. A prolonged period in which we cannot effectively access the public debt or equity markets may result in heavier reliance on alternative financing sources to undertake new investments. An inability to obtain debt or equity capital on acceptable terms could delay or prevent us from acquiring, financing, and completing desirable investments and could otherwise adversely affect our business. Also, the issuance of additional shares of capital stock or interests in subsidiaries to fund future operations could dilute the ownership of our then-existing stockholders. Even as liquidity returns to the market, debt and equity capital may be more expensive than in prior years.

We may not be able to sell our properties quickly to raise capital.

Investments in real estate are relatively illiquid compared to other investments. Accordingly, we may not be able to sell our properties when we desire or at prices acceptable to us in response to changes in economic or other conditions. In addition, certain of our properties have low tax bases relative to their estimated current market values. As such, the sale of these assets would generate significant taxable gains unless we sold such properties in a tax-deferred exchange under Section 1031 of the Internal Revenue Code ("Section 1031 Exchange") or in a similar tax-free or tax-deferred transaction or applied an offsetting tax deduction. For an exchange to qualify for tax-deferred treatment under Section 1031, net proceeds from the sale of a property must be held by a third party escrow agent until applied toward the purchase of a qualifying real estate asset. It is possible we may encounter delays in reinvesting such proceeds, or we may be unable to reinvest such proceeds at all, due to a inability to procure qualifying real estate. Any delay or limitation in using the reinvestment proceeds to acquire additional real estate assets may cause the reinvestment proceeds to become taxable to us. Furthermore, if current laws applicable to such tax-deferred transactions are later amended or repealed, we may no longer be able to sell properties on a tax-deferred basis, which may adversely affect our results of operations and cash flows.

In addition, the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), limits our ability to sell properties held for less than two years. These limitations on our ability to sell our properties may adversely affect our cash flows, our ability to repay debt, and our ability to make distributions to our stockholders.

Adverse changes in our credit ratings could negatively affect our financing ability.

Our credit ratings may affect the amount of capital we can access, as well as the terms and pricing of any debt we may incur. There can be no assurance that we will be able to maintain and/or improve our current credit ratings. In the event that our current credit ratings are downgraded or removed, we would most likely incur higher borrowing costs and experience greater difficulty in obtaining additional financing, which in turn would have a material adverse impact on our financial condition, results of operations, cash flows, and liquidity.

We may not be able to refinance our debt, and/or our debt may not be assumable.

Due to the high volume of real estate debt financing in recent years, the real estate industry may require more funds to refinance debt maturities than are available from lenders. This potential shortage of available funds from lenders and stricter credit underwriting guidelines may limit our ability to refinance our debt as it matures or may adversely affect our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, and the market price of our common stock.

We may not be able to borrow additional amounts through the issuance of unsecured bonds or under our unsecured senior line of credit or commercial paper program.

There is no assurance that we will be able to continue to access the unsecured bond market on favorable terms. Our ability to borrow additional amounts through the issuance of unsecured bonds may be negatively impacted by periods of illiquidity in the bond market.

Aggregate borrowings under our unsecured senior line of credit require compliance with certain financial and non-financial covenants. Borrowings under our unsecured senior line of credit are funded by a group of banks. Our ability to borrow additional amounts under our unsecured senior line of credit and commercial paper program may be negatively impacted by a decrease in cash flows from our properties, a default or cross-default under our unsecured senior line of credit and commercial paper program, non-compliance with one or more loan covenants associated with our unsecured senior line of credit, and non-performance or failure of one or more lenders under our unsecured senior line of credit. In addition, we may not be able to refinance or repay outstanding borrowings on our unsecured senior line of credit or commercial paper program.

Our inability to borrow additional amounts on an unsecured basis could delay us in or prevent us from acquiring, financing, and completing desirable investments, which could adversely affect our business; and our inability to refinance or repay amounts under our unsecured senior line of credit or commercial paper program may adversely affect our cash flows, ability to make distributions to our stockholders, financial condition, and results of operations.

If interest rates rise, our debt service costs will increase and the value of our properties may decrease.

Our unsecured senior line of credit and secured construction loans bear interest at variable rates, and we may incur additional variable-rate debt in the future. Amounts issued under our commercial paper program typically mature in less than 30 days and no later than 397 days from the date of issuance and require repayment or refinancing upon maturity. Increases in market interest rates would increase our interest expense under these debt instruments and would increase the costs of refinancing existing indebtedness or obtaining new debt. Additionally, increases in market interest rates may result in a decrease in the value of our real estate and a decrease in the market price of our common stock. Accordingly, these increases could adversely affect our financial condition and our ability to make distributions to our stockholders.

Our unsecured senior line of credit restricts our ability to engage in some business activities.

Our unsecured senior line of credit contains customary negative covenants and other financial and operating covenants that, among other things:

- Restrict our ability to incur additional indebtedness;
- Restrict our ability to make certain investments;
- Restrict our ability to merge with another company;
- Restrict our ability to make distributions to our stockholders;
- Require us to maintain financial coverage ratios; and
- Require us to maintain a pool of qualified unencumbered assets.

Complying with these restrictions may prevent us from engaging in certain profitable activities and/or constrain our ability to effectively allocate capital. Failure to comply with these restrictions may result in our defaulting on these and other loans, which would likely have a negative impact on our operations, financial condition, and ability to make distributions to our stockholders.

Our debt service obligations may have adverse consequences on our business operations.

We use debt to finance our operations, including the acquisition, development, and redevelopment of properties. Our use of debt may have adverse consequences, including, but not limited to, the following:

- Our cash flows from operations may not be sufficient to meet required payments of principal and interest;
- We may be forced to dispose of one or more of our properties, possibly on disadvantageous terms, to make payments on our debt;
- If we default on our secured debt obligations, the lenders or mortgagees may foreclose on our properties that secure those loans;
- A foreclosure on one of our properties could create taxable income without any accompanying cash proceeds to pay the tax;
- A default under a loan that has cross-default provisions may cause us to automatically default on another loan;
- We may not be able to refinance or extend our existing debt;
- The terms of any refinancing or extension may not be as favorable as the terms of our existing debt;
- We may be subject to a significant increase in the variable interest rates on our unsecured senior line of credit, secured construction loans, or commercial paper program, which could adversely impact our cash flows and operations; and
- The terms of our debt obligations may require a reduction in our distributions to stockholders.

If our revenues are less than our expenses, we may have to borrow additional funds, and we may not be able to make distributions to our stockholders.

If our properties do not generate revenues sufficient to cover our operating expenses, including our debt service obligations and capital expenditures, we may have to borrow additional amounts to cover fixed costs and cash flow needs. This could adversely affect our ability to make distributions to our stockholders. Factors that could adversely affect the revenues we generate from, and the values of, our properties include, but are not limited to, the following:

- National, local, and worldwide economic and political conditions;
- Competition from other properties;
- Changes in the life science, agtech, and technology industries;
- Real estate conditions in our target markets;
- Our ability to collect rent payments;
- The availability of financing;
- Changes to the financial and banking industries;
- Changes in interest rate levels;
- Vacancies at our properties and our ability to re-lease space;
- Changes in tax or other regulatory laws;
- The costs of compliance with government regulation;
- The lack of liquidity of real estate investments;
- Increases in operating costs; and
- Increases in costs to address environmental impacts related to climate change or natural disasters.

In addition, if a lease at a property is not a triple net lease, we will have greater exposure to increases in expenses associated with operating that property. Certain significant expenditures, such as mortgage payments, real estate taxes, insurance, and maintenance costs, are generally fixed and do not decrease when revenues at the related property decrease.

If we fail to effectively manage our debt obligations, we could become highly leveraged, and our debt service obligations could increase to unsustainable levels.

Our organizational documents do not limit the amount of debt that we may incur. Therefore, if we fail to prudently manage our capital structure, we could become highly leveraged. This would result in an increase in our debt service obligations that could adversely affect our cash flows and our ability to make distributions to our stockholders. Higher leverage could also increase the risk of default on our debt obligations or may result in downgrades to our credit ratings.

Failure to meet market expectations for our financial performance would likely adversely affect the market price and volatility of our stock.

Our actual financial results may differ materially from expectations. This may be a result of various factors, including, but not limited to, the following:

- The status of the economy;
- The status of capital markets, including availability and cost of capital;
- Changes in financing terms available to us;
- Negative developments in the operating results or financial condition of tenants, including, but not limited to, their ability to pay rent;
- Our ability to re-lease space at similar rates as leases expire;
- Our ability to reinvest sale proceeds in a timely manner at rates similar to the rate at which assets are sold;
- Our ability to successfully complete developments or redevelopments of properties for lease on time and/or within budget;
- Our ability to procure third-party suppliers or providers of necessary construction materials for our developments and redevelopments of properties;
- Regulatory approval and market acceptance of the products and technologies of tenants;
- Liability or contract claims by or against tenants;
- Unanticipated difficulties and/or expenditures relating to future acquisitions;
- Environmental laws affecting our properties;
- Changes in rules or practices governing our financial reporting; and
- Other legal and operational matters, including REIT qualification and key management personnel recruitment and retention.

Failure to meet market expectations, particularly with respect to earnings estimates, funds from operations per share, operating cash flows, and revenues, would likely result in a decline and/or increased volatility in the market price of our common stock or other outstanding securities.

The price per share of our stock may fluctuate significantly.

The market price per share of our common stock may fluctuate significantly in response to many factors, including, but not limited to, the following:

- The availability and cost of debt and/or equity capital;
- The condition of our balance sheet;
- Actual or anticipated capital requirements;
- The condition of the financial and banking industries;
- Actual or anticipated variations in our quarterly operating results or dividends;
- The amount and timing of debt maturities and other contractual obligations;
- Changes in our net income, funds from operations, or guidance;
- The publication of research reports and articles about us, our tenants, the real estate industry, or the life science, agtech, and technology industries;
- The general reputation of REITs and the attractiveness of their equity securities in comparison to other debt or equity securities (including securities issued by other real estate-based companies);
- General stock and bond market conditions, including changes in interest rates on fixed-income securities, that may lead prospective stockholders to demand a higher annual yield from future dividends;
- Fluctuations from general market volatility;
- Changes in our analyst ratings;
- Changes in our corporate credit ratings or credit ratings of our debt or other securities;
- Changes in market valuations of similar companies;
- Adverse market reaction to any additional debt we incur in the future;
- Additions, departures, or other announcements regarding our key management personnel;
- Actions by institutional stockholders;
- Speculation in the press or investment community;
- Terrorist activity adversely affecting the markets in which our securities trade, possibly increasing market volatility and causing the further erosion of business and consumer confidence and spending;
- Government regulatory action and changes in tax laws;
- Fiscal policies or inaction at the U.S. federal government level that may lead to federal government shutdowns or negative impacts on the U.S. economy;
- Global market factors adversely affecting the U.S. economic and political environment;
- The realization of any of the other risk factors included in this annual report on Form 10-K; and
- General market and economic conditions.

Many of the factors listed above are beyond our control. These factors may cause the market price of shares of our common stock to decline, regardless of our financial condition, results of operations, business, or prospects.

Possible future sales of shares of our common stock could adversely affect its market price.

We cannot predict the effect, if any, of future sales of shares of our common stock or the market price of our common stock. Sales of substantial amounts of capital stock (including the conversion or redemption of preferred stock), or the perception that such sales may occur, could adversely affect prevailing market prices for our common stock. Refer to “Other sources” in the “Sources of capital” subsection of the “Capital resources” section under “Item 7. Management’s discussion and analysis of financial condition and results of operations” in this annual report on Form 10-K.

We have reserved a number of shares of common stock for issuance to our directors, officers, and employees pursuant to our Amended and Restated 1997 Stock Award and Incentive Plan (sometimes referred to herein as our “equity incentive plan”). We have filed a registration statement with respect to the issuance of shares of our common stock pursuant to grants under our equity incentive plan. In addition, any shares issued under our equity incentive plan will be available for sale in the public market from time to time without restriction by persons who are not our “affiliates” (as defined in Rule 144 adopted under the Securities Act of 1933, as amended). Affiliates will be able to sell shares of our common stock subject to restrictions under Rule 144.

Our distributions to stockholders may decline at any time.

We may not continue our current level of distributions to our stockholders. Our Board of Directors will determine future distributions based on a number of factors, including, but not limited to, the following:

- The amount of net cash provided by operating activities available for distribution;
- Our financial condition and capital requirements;
- Any decision to reinvest funds rather than to distribute such funds;
- Our capital expenditures;
- The annual distribution requirements under the REIT provisions of the Internal Revenue Code;
- Restrictions under Maryland law; and
- Other factors our Board of Directors deems relevant.

A reduction in distributions to stockholders may negatively impact our stock price.

Distributions on our common stock may be made in the form of cash, stock, or a combination of both.

As a REIT, we are required to distribute at least 90% of our taxable income to our stockholders. Typically, we generate cash for distributions through our operations, the disposition of assets, including partial interest sales, or the incurrence of additional debt. Our Board of Directors may determine in the future to pay dividends on our common stock in cash, in shares of our common stock, or in a combination of cash and shares of our common stock. For example, we may declare dividends payable in cash or stock at the election of each stockholder, subject to a limit on the aggregate cash that could be paid. Any such dividends would be distributed in a manner intended to count in full toward the satisfaction of our annual distribution requirements and to qualify for the dividends paid deduction. While the IRS privately has ruled that such a dividend would so qualify if certain requirements are met, no assurances can be provided that the IRS would not assert a contrary position in the future. Moreover, a reduction in the cash yield on our common stock may negatively impact our stock price.

We have certain ownership interests outside the U.S. that may subject us to risks different from or greater than those associated with our domestic operations.

We have six operating properties in Canada and one operating property in China. Acquisition, development, redevelopment, ownership, and operating activities outside the U.S. involve risks that are different from those we face with respect to our domestic properties and operations. These risks include, but are not limited to:

- Adverse effects of changes in exchange rates for foreign currencies;
- Challenges and/or taxation with respect to the repatriation of foreign earnings or repatriation of proceeds from the sale of one or more of our foreign investments;
- Changes in foreign political, regulatory, and economic conditions, including nationally, regionally, and locally;
- Challenges in managing international operations;
- Challenges in hiring or retaining key management personnel;
- Challenges of complying with a wide variety of foreign laws and regulations, including those relating to real estate, corporate governance, operations, taxes, employment, and legal proceedings;
- Differences in lending practices;
- Differences in languages, cultures, and time zones;
- Changes in applicable laws and regulations in the U.S. that affect foreign operations;
- Challenges in managing foreign relations and trade disputes that adversely affect U.S. and foreign operations;
- Future partial or complete U.S. federal government shutdowns, trade disagreements with other countries, or uncertainties that could affect business transactions within the U.S. and with foreign entities;
- Changes in tax and local regulations with potentially adverse tax consequences and penalties; and
- Foreign ownership and transfer restrictions.

In addition, our foreign investments are subject to taxation in foreign jurisdictions based on local tax laws and regulations and on existing international tax treaties. We have invested in foreign markets under the assumption that our future earnings in each of those countries will be taxed at the current prevailing income tax rates. There are no guarantees that foreign governments will continue to honor existing tax treaties we have relied upon for our foreign investments or that the current income tax rates in those countries will not increase significantly, thus impacting our ability to repatriate our foreign investments and related earnings.

Investments in international markets may also subject us to risks associated with establishing effective controls and procedures to regulate the operations of new offices and to monitor compliance with U.S. laws and regulations, including the Foreign Corrupt Practices Act and similar foreign laws and regulations. The Foreign Corrupt Practices Act and similar applicable anti-corruption laws prohibit individuals and entities from offering, promising, authorizing, or providing payments or anything of value, directly or indirectly, to government officials in order to obtain, retain, or direct business. Failure to comply with these laws could subject us to civil and criminal penalties that could materially adversely affect our results of operations or the value of our international investments. In addition, if we fail to effectively manage our international operations, our overall financial condition, results of operations, and cash flows, and the market price of our common stock could be adversely affected.

Furthermore, we may in the future enter into agreements with foreign entities that are governed by the laws of, and are subject to dispute resolution rules of, another country or region. In some cases, such a country or region might not have a forum that provides us an effective or efficient means for resolving disputes that may arise under these agreements.

We are subject to risks and liabilities in connection with properties owned through partnerships, limited liability companies, and joint ventures.

Our organizational documents do not limit the amount of funds that we may invest in non-wholly owned partnerships, limited liability companies, or joint ventures. Partnership, limited liability company, or joint venture investments involve certain risks, including, but not limited to, the following:

- Upon bankruptcy of non-wholly owned partnerships, limited liability companies, or joint venture entities, we may become liable for the liabilities of the partnership, limited liability company, or joint venture;
- We may share certain approval rights over major decisions with third parties;
- We may be required to contribute additional capital if our partners fail to fund their share of any required capital contributions;
- Our partners, co-members, or joint venture partners might have economic or other business interests or goals that are inconsistent with our business interests or goals and that could affect our ability to lease or re-lease the property, operate the property, or maintain our qualification as a REIT;
- Our ability to sell the interest on advantageous terms when we so desire may be limited or restricted under the terms of our agreements with our partners; and
- We may not continue to own or operate the interests or assets underlying such relationships or may need to purchase such interests or assets at an above-market price to continue ownership.

We generally seek to maintain control of our partnerships, limited liability companies, and joint venture investments in a manner sufficient to permit us to achieve our business objectives. However, we may not be able to do so, and the occurrence of one or more of the events described above could adversely affect our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, and the market price of our common stock.

We could incur significant costs due to the financial condition of our insurance carriers.

We insure our properties with insurance companies we believe have good ratings at the time our policies are put into effect. The financial condition of one or more of the insurance companies we hold policies with may be negatively impacted, which can result in their inability to pay on future insurance claims. Their inability to pay future claims may have a negative impact on our financial results. In addition, the failure of one or more insurance companies may increase the cost of renewing our insurance policies or increase the cost of insuring additional properties and recently developed or redeveloped properties.

Our insurance may not adequately cover all potential losses.

If we experience a loss at any of our properties that is not covered by insurance, that exceeds our insurance policy limits, or that is subject to a policy deductible, we could lose the capital invested in the affected property and, possibly, future revenues from that property. In addition, we could continue to be obligated on any mortgage indebtedness or other obligations related to the affected properties. All properties carry comprehensive liability, fire, extended coverage, and rental loss insurance with respect to our properties, including properties partially owned through joint ventures that are managed by our joint venture partners.

We have obtained earthquake insurance for our properties that are located in the vicinity of active earthquake zones in an amount and with deductibles we believe are commercially reasonable. However, a significant portion of our real estate portfolio is located in seismically active regions, including the San Francisco Bay Area, San Diego, and Seattle, and a damaging earthquake in any of these regions could significantly impact multiple properties. As a result, the amount of our earthquake insurance coverage may be insufficient to cover our losses, and aggregate deductible amounts may be material, which could adversely affect our business, financial condition, results of operations, and cash flows. We also carry environmental insurance and title insurance policies for our properties. We generally obtain title insurance policies when we acquire a property, with each policy covering an amount equal to the initial purchase price of each property. Accordingly, any of our title insurance policies may be in an amount less than the current value of the related property.

Our tenants are also required to maintain comprehensive insurance policies, including liability and casualty insurance that is customarily obtained for similar properties. There are, however, certain types of losses that we and our tenants do not generally insure against because they are uninsurable or because it is not economical to insure against them. The availability of coverage against certain types of losses, such as from terrorism or toxic mold, has become more limited and, when available, carries a significantly higher cost. We cannot predict whether insurance coverage against terrorism or toxic mold will remain available for our properties because insurance companies may no longer offer coverage against such losses, or such coverage, if offered, may become prohibitively expensive. We have not had material losses from terrorism or toxic mold at any of our properties.

The loss of services of any of our senior officers could adversely affect us.

We depend upon the services and contributions of relatively few senior officers. The loss of services or contributions of any one of them may adversely affect our business, financial condition, and prospects. We use the extensive personal and business relationships that members of our management have developed over time with owners of office/laboratory and tech office properties and with major tenants and venture investment portfolio companies in the life science, agtech, and technology industries. We cannot assure our stockholders that our senior officers will remain employed with us. In California and certain other regions where we have operations, there is intense competition for individuals with skill sets needed for our business. Moreover, the high cost of living in California, where our headquarters and many of our properties are located, as a result of high state and local taxes and increased home prices, may impair our ability to attract and retain employees locally in the future. Due to the long-term nature of our investments and properties, we are unable to predict and may be unable to effectively control such costs. If we do not succeed in attracting new personnel and retaining and motivating existing personnel, our business may suffer, and we may be unable to implement our current initiatives or grow effectively.

Failure to maintain effective internal control over financial reporting could have a material adverse effect on our business, results of operations, financial condition, and stock price.

Pursuant to the Sarbanes-Oxley Act of 2002, we are required to provide a report by management on internal control over financial reporting, including management's assessment of the effectiveness of internal control. Changes to our business will necessitate ongoing changes to our internal control systems and processes. Internal control over financial reporting may not prevent or detect misstatement because of its inherent limitations, including the possibility of human error, the circumvention or overriding of controls, or fraud. Therefore, even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. If we fail to maintain the adequacy of our internal controls, including any failure to implement required new or improved controls, or if we experience difficulties in their implementation, our business, results of operations, and financial condition could be materially harmed, we could fail to meet our reporting obligations, and there could be a material adverse effect on the market price of our common stock.

If we failed to qualify as a REIT, we would be taxed at corporate rates and would not be able to take certain deductions when computing our taxable income.

We have elected to be taxed as a REIT under the Internal Revenue Code. If, in any taxable year, we failed to qualify as a REIT:

- We would be subject to federal and state income taxes on our taxable income at regular corporate rates;
- We would not be allowed a deduction for distributions to our stockholders in computing taxable income;
- We would be disqualified from treatment as a REIT for the four taxable years following the year during which we lost qualification, unless we were entitled to relief under the Internal Revenue Code; and
- We would no longer be required by the Internal Revenue Code to make distributions to our stockholders.

As a result of any additional tax liability, we may need to borrow funds or liquidate certain investments in order to pay the applicable tax. Accordingly, funds available for investment or distribution to our stockholders would be reduced for each of the years involved.

Qualification as a REIT involves the application of highly technical and complex provisions of the Internal Revenue Code to our operations and financial results, as well as the determination of various factual matters and circumstances not entirely within our control. There are only limited judicial or administrative interpretations of these provisions. Although we believe that our current organization and method of operation comply with the rules and regulations promulgated under the Internal Revenue Code to enable us to qualify as a REIT, we cannot assure our stockholders that we are or will remain so qualified.

From time to time, we dispose of properties in transactions qualified as Section 1031 Exchanges. If a transaction intended to qualify as a Section 1031 Exchange is later determined by the IRS to be taxable or if we are unable to identify and complete the acquisition of a suitable replacement property to effect a Section 1031 Exchange or if the laws surrounding Section 1031 Exchanges are amended or repealed, we may not be able to dispose of properties on a tax-deferred basis. In such a case, our earnings and profits and our taxable income would increase, which could increase the dividend income and reduce the return of capital to our stockholders. As a result, we may be required to pay additional dividends to stockholders, or if we do not pay additional dividends, our corporate income tax liability could increase and we may be subject to interest and penalties.

We may not be able to participate in certain sales that the IRS characterizes as “prohibited transactions.” The tax imposed on REITs engaging in prohibited transactions is a 100% tax on net income from the transaction. Whether or not the transaction is characterized as a prohibited transaction is a factual matter. Generally, prohibited transactions are sales or other dispositions of property, other than foreclosures, characterized as held primarily for sale to customers in the ordinary course of business. However, a sale will not be considered a prohibited transaction if it meets certain safe harbor requirements. Although we do not intend to participate in prohibited transactions, there is no guarantee that the IRS would agree with our characterization of our properties or that we will meet the safe harbor requirements.

Federal income tax rules are constantly under review by the U.S. Congress and the IRS. Changes to tax laws could adversely affect our investors or our tenants, and we cannot predict how those changes may affect us in the future. New legislation, U.S. Treasury Department regulations, administrative interpretations, or court decisions could significantly and negatively affect our ability to qualify as a REIT, the federal income tax consequences of such qualification, or an investment in our stock. Also, laws relating to the tax treatment of investment in other types of business entities could change, making an investment in such other entities more attractive relative to an investment in a REIT.

We are dependent on third parties to manage the amenities at our properties.

We retain third-party managers to manage certain amenities at our properties, such as restaurants, conference centers, exercise facilities, and parking garages. Our income from our properties may be adversely affected if these parties fail to provide quality services and amenities with respect to our properties. While we monitor the performance of these third parties, we may have limited recourse if we believe they are not performing adequately. In addition, these third-party managers may operate, and in some cases may own or invest in, properties that compete with our properties, which may result in conflicts of interest. As a result, these third-party managers may have made, and may in the future make, decisions that are not in our best interests.

We rely on a limited number of vendors to provide utilities and certain other services at our properties, and disruption in these services may have a significant adverse effect on our business operations, financial condition, and cash flows.

We rely on a limited number of vendors to provide key services, including, but not limited to, utilities and construction services, at certain of our properties. Our business and property operations may be adversely affected if key vendors fail to adequately provide key services at our properties as a result of natural disasters (such as fires, floods, earthquakes, etc.), power interruptions, bankruptcies, war, acts of terrorism, public health emergencies, cyber attacks, pandemics, or other unanticipated catastrophic events. If a vendor encounters financial difficulty such as bankruptcy or other events beyond our control that cause it to fail to adequately provide utilities, construction, or other important services, we may experience significant interruptions in service and disruptions to business operations at our properties, incur remediation costs, and become subject to claims and damage to our reputation.

In addition, difficulties encountered by key vendors in providing necessary services at our properties could result in significant market rate increases for such services. Our triple net leases allow us to pass through substantially all operating expenses and certain capital expenditures to our tenants in the form of additional rent. However, we cannot be certain that we will be able to continue to negotiate pass-through provisions in tenant leases in the future, which could lead to a decrease in our recovery of operating expenses. If our operating expenses increase without a corresponding increase in revenues, our profitability could diminish. Also, we cannot be certain that increased costs will not lead our current or prospective tenants to seek space elsewhere, which could significantly hinder our ability to increase our rents or to maintain existing occupancy levels. Additionally, this may significantly increase occupancy costs for some of our tenants and may adversely impact their financial condition, ability to make rental payments, and ability to renew their lease agreements.

Pacific Gas and Electric Company ("PG&E") is the primary public utility company providing electrical and gas service to residential and commercial customers in northern California, including the San Francisco Bay Area. Most of our properties located in our San Francisco Bay Area market depend on PG&E for the delivery of these essential services. PG&E initiated voluntary reorganization proceedings under Chapter 11 of the U.S. Bankruptcy Code in January 2019 in response to potential liabilities arising from a series of catastrophic wildfires that occurred in Northern California in 2017 and 2018. While PG&E emerged from bankruptcy in July 2020, there is no guarantee that PG&E will be able to sustain safe operations and continue to provide consistent utilities services. During periods of high winds and high fire danger in recent fire seasons, PG&E preemptively shut off power to areas of Central and Northern California. The shutoffs were designed to help guard against fires ignited in areas with high winds and dry conditions. PG&E has warned that it may have to employ shutoffs while the utility company addresses maintenance issues. Future shutoffs of power may impact the reliability of access to a stable power supply at our properties and, in turn, adversely impact our tenants' businesses. In addition, there is no guarantee that PG&E's safety measures mandated by regulators will be timely and sufficient to prevent future catastrophic wildfires.

The realization of any of the above risks could significantly and adversely affect our ability to meet our financial expectations, our financial condition, results of operations, and cash flows, our ability to make distributions to our stockholders, the market price of our common stock, and our ability to satisfy our debt service obligations.

We may change our business policies without stockholder approval.

Our Board of Directors determines all of our material business policies, with management's input, including those related to our:

- Status as a REIT;
- Incurrence of debt and debt management activities;
- Selective acquisition, disposition, development, and redevelopment activities;
- Stockholder distributions; and
- Other policies, as appropriate.

Our Board of Directors may amend or revise these policies at any time without a vote of our stockholders. A change in these policies could adversely affect our business and our ability to make distributions to our stockholders.

There are limits on the ownership of our capital stock under which a stockholder may lose beneficial ownership of its shares and that may delay or prevent transactions that might otherwise be desired by our stockholders.

In order for a company to qualify as a REIT under the Internal Revenue Code, not more than 50% of the value of its outstanding stock may be owned, directly or constructively, by five or fewer individuals or entities (as set forth in the Internal Revenue Code) during the last half of a taxable year. Furthermore, shares of our company's outstanding stock must be beneficially owned by 100 or more persons during at least 335 days of a taxable year of 12 months or during a proportionate part of a shorter taxable year.

In order for us to maintain our qualification as a REIT, among other things, our charter provides for an ownership limit, which prohibits, with certain exceptions, direct or constructive ownership of shares of stock representing more than 9.8% of the combined total value of our outstanding shares of stock by any person, as defined in our charter. Our Board of Directors, in its sole discretion, may waive the ownership limit for any person. However, our Board of Directors may not grant such waiver if, after giving effect to such waiver, we would be "closely held" under Section 856(h) of the Internal Revenue Code. As a condition to waiving the ownership limit, our Board of Directors may require a ruling from the IRS or an opinion of counsel in order to determine our status as a REIT. Notwithstanding the receipt of any such ruling or opinion, our Board of Directors may impose such conditions or restrictions as it deems appropriate in connection with granting a waiver.

Our charter further prohibits transferring shares of our stock if such transfer would result in our being "closely held" under Section 856(h) of the Internal Revenue Code or would result in shares of our stock being owned by fewer than 100 persons.

The constructive ownership rules are complex and may cause shares of our common stock owned directly or constructively by a group of related individuals or entities to be constructively owned by one individual or entity. A transfer of shares to a person who, as a result of the transfer, violates these limits shall be void or these shares shall be exchanged for shares of excess stock and transferred to a trust for the benefit of one or more qualified charitable organizations designated by us. In that case, the intended transferee will have only a right to share, to the extent of the transferee's original purchase price for such shares, in proceeds from the trust's sale of those shares and will effectively forfeit its beneficial ownership of the shares. These ownership limits could delay, defer, or prevent a transaction or a change in control that might involve a premium price for the holders of our common stock or that might otherwise be desired by such holders.

In addition to the ownership limit, certain provisions of our charter and bylaws may delay or prevent transactions that may be deemed to be desirable to our stockholders.

As authorized by Maryland law, our charter allows our Board of Directors to cause us to issue additional authorized but unissued shares of our common stock or preferred stock and to classify or reclassify unissued shares of common or preferred stock without any stockholder approval. Our Board of Directors could establish a series of preferred stock that could delay, defer, or prevent a transaction that might involve a premium price for our common stock or that might, for other reasons, be desired by our common stockholders, or a series of preferred stock that has a dividend preference that may adversely affect our ability to pay dividends on our common stock.

Our charter permits the removal of a director only upon a two-thirds majority of the votes entitled to be cast generally in the election of directors, and our bylaws require advance notice of a stockholder's intention to nominate directors or to present business for consideration by stockholders at an annual meeting of our stockholders. Our charter and bylaws also contain other provisions that may delay, defer, or prevent a transaction or change in control that involves a premium price for our common stock or that, for other reasons, may be desired by our stockholders.

Market and industry factors

We face substantial competition in our target markets.

The significant competition for business in our target markets could have an adverse effect on our operations. We compete for investment opportunities with:

- Other REITs;
- Insurance companies;
- Pension and investment funds;
- Private equity entities;
- Partnerships;
- Developers;
- Investment companies;
- Owners/occupants; and
- Foreign investors, including sovereign wealth funds.

Many of these entities have substantially greater financial resources than we do and may be able to pay more than we can or accept more risk than we are willing to accept. These entities may be less sensitive to risks with respect to the creditworthiness of a tenant or the geographic concentration of their investments. These entities may also have more favorable relationships and pricing with suppliers and contractors and may complete construction projects sooner and at lower costs than we are able. We may also face competition with these entities for access to the same or similar raw materials and labor resources from suppliers and contractors, as well as access to the specific suppliers and contractors we use. Competition may also reduce the number of suitable investment opportunities available to us or may increase the bargaining power of property owners seeking to sell. If there is no matching growth in demand, the intensified competition may lead to oversupply of available space comparable to ours and result in the pressure on rental rates and greater incentives awarded to tenants. To maintain our ability to retain current and attract new tenants, we may be forced to reduce the rental rates that our tenants are currently willing to pay or offer greater tenant concessions. Should we encounter intensified competition or oversupply, we cannot be certain that we will be able to compete successfully, maintain our occupancy and rental rates, and continue to expand our business. As a result, our financial condition, results of operations, and cash flows, our ability to pay dividends, and our stock price may be adversely affected.

Poor economic conditions in our markets could adversely affect our business.

Our properties are primarily located in the following markets:

- Greater Boston;
- San Francisco Bay Area;
- New York City;
- San Diego;
- Seattle;
- Maryland; and
- Research Triangle.

As a result of our geographic concentration, we depend upon the local economic and real estate conditions in these markets. We are therefore subject to increased exposure (positive or negative) to economic, tax, and other competitive factors specific to markets in confined geographic areas. Our operations may also be affected if too many competing properties are built in any of these markets. An economic downturn in any of these markets could adversely affect our operations and our ability to make distributions to our stockholders. We cannot assure our stockholders that these markets will continue to grow or remain favorable to the life science, agtech, and technology industries.

Improvements to our properties are significantly more costly than improvements to traditional office space.

Many of our properties generally contain infrastructure improvements that are significantly more costly than improvements to other property types. Although we have historically been able to recover the additional investment in infrastructure improvements through higher rental rates, there is the risk that we will not be able to continue to do so in the future. Typical improvements include:

- Reinforced concrete floors;
- Upgraded roof loading capacity;
- Increased floor-to-ceiling heights;
- Heavy-duty HVAC systems;
- Enhanced environmental control technology;
- Significantly upgraded electrical, gas, and plumbing infrastructure; and
- Laboratory benches.

Because many of our infrastructure improvements are specialized and costlier than those for other property types, we may be more significantly impacted by any unanticipated delays or increased costs due to price volatility or supply shortages of construction materials or labor. As a result, we may be unable to complete our improvements as scheduled or within budgeted amounts, which may adversely affect our ability to lease available space to potential tenants or to reduce our projected project returns.

We are dependent on the life science, agtech, and technology industries, and changes within these industries may adversely impact our revenues from lease payments, the value of our non-real estate investments, and our results of operations.

In general, our business strategy is to invest primarily in properties used by tenants in the life science, agtech, and technology industries. Through our venture investment portfolio, we also hold investments in companies that, similar to our tenant base, are concentrated in the life science, agtech, and technology industries. Our business could be adversely affected if the life science, agtech, and technology industries are impacted by an economic, financial, or banking crisis, or if the life science, agtech, and technology industries migrate from the U.S. to other countries. Because of our industry focus, events within these industries may have a more pronounced effect on our results of operations and ability to make distributions to our stockholders than if we had more diversified tenants and investments. Also, some of our properties may be better suited for a particular life science, agtech, or technology industry tenant and could require significant modification before we are able to re-lease space to another tenant. Generally, our properties may not be suitable for lease to traditional office tenants without significant expenditures on renovations.

Our ability to negotiate contractual rent escalations on future leases and to achieve increases in rental rates will depend upon market conditions and the demand for office/laboratory and tech office space at the time the leases are negotiated and the increases are proposed.

It is common for businesses in the life science, agtech, and technology industries to undergo mergers or consolidations. Mergers or consolidations of life science, agtech, and technology entities in the future could reduce the RSF requirements of our tenants and prospective tenants, which may adversely impact the demand for office/laboratory and tech office space and our future revenue from lease payments and our results of operations.

Some of our current or future tenants may include high-tech companies in their startup or growth phases of their life cycle. Fluctuations in market confidence vested in these companies or adverse changes in economic conditions may have a disproportionate effect on operations of such companies. Deterioration in the financial conditions of our tenants may result in our inability to collect rental payments from them and therefore may negatively impact our results of operations.

Our results of operations depend on our tenants' research and development efforts and their ability to obtain funding for these efforts.

Our tenant base includes entities in the pharmaceutical, biotechnology, medical device, life science, technology, agtech, and related industries; academic institutions; government institutions; and private foundations. Our tenants base their research and development budgets on several factors, including the need to develop new products, the availability of government and other funding, competition, and the general availability of resources. Our investments through our venture investment portfolio are also in companies that, similar to our tenant base, are concentrated in the life science, agtech, and technology industries.

Research and development budgets fluctuate due to changes in available resources, research priorities, general economic conditions, institutional and government budgetary limitations, and mergers and consolidations of entities. Our business could be adversely impacted by a significant decrease in research and development expenditures by our tenants, our venture investment portfolio companies, or the life science, agtech, and technology industries.

Our tenants also include research institutions whose funding is largely dependent on grants from government agencies, such as the NIH, the National Science Foundation, and similar agencies or organizations. U.S. government funding of research and development is subject to the political process, which is often unpredictable. Other programs, such as Homeland Security or defense, could be viewed by the government as higher priorities. Additionally, proposals to reduce or eliminate budgetary deficits have sometimes included reduced allocations to the NIH and other U.S. government agencies that fund research and development activities. Additionally, the inability of the U.S. Congress to enact a budget for a fiscal year or the occurrence of partial or complete U.S. federal government shutdowns may result in temporary closures of agencies such as the FDA or NIH, which could adversely affect business operations of our tenants who are dependent on government approvals and appropriations. Any shift away from funding of research and development or delays surrounding the approval of government budget proposals may adversely impact our tenants' operations, which in turn may impact their demand for office/laboratory and tech office space and their ability to make lease payments to us and thus adversely impact our results of operations.

Our life science industry tenants and venture investment portfolio companies are subject to a number of risks unique to their industry, including (i) changes in technology, patent expiration, and intellectual property protection, (ii) high levels of regulation, (iii) failures in the safety and efficacy of their products, and (iv) significant funding requirements for product research and development. These risks may adversely affect our tenants' ability to make rental payments or satisfy their other lease obligations to us or may impact our venture investment portfolio companies' value and consequently may materially adversely affect our business, results of operations, financial condition, and stock price.

Changes in technology, patent expiration, and intellectual property rights and protection

- Our tenants and venture investment portfolio companies develop and sell products and services in an industry that is characterized by rapid and significant technological changes, frequent new product and service introductions and enhancements, evolving industry standards, and uncertainty over the implementation of new healthcare reform legislation, which may cause them to lose competitive positions and adversely affect their operations.
- Many of our tenants and venture investment portfolio companies, and their licensors, require patent, copyright, or trade secret protection and/or rights to use third-party intellectual property to develop, make, market, and sell their products and technologies. A tenant or venture investment portfolio company may be unable to commercialize its products or technologies if patents covering such products or technologies are not issued or are successfully challenged, narrowed, invalidated, or circumvented by third parties. Additionally, a third party may own intellectual property that limits a tenant's or venture investment portfolio company's ability to bring to market its product or technology without securing a license or other rights to use the third-party intellectual property, which may require the tenant to pay an upfront fee or royalty. Failure to obtain these rights from third parties may make it challenging or impossible for a tenant or venture investment portfolio company to develop and commercialize its products or technologies, which could adversely affect its competitive position and operations.
- Many of our tenants and venture investment portfolio companies depend upon patents to provide exclusive marketing rights for their products. As their product patents expire, competitors of these tenants or venture investment portfolio companies may be able to legally produce and market products similar to those products of our tenants or venture investment portfolio companies, which could have a material adverse effect on their sales and results of operations.

High levels of regulation

- Some of our life science industry tenants and venture investment portfolio companies develop and manufacture drugs that require regulatory approval, including approval from the FDA, prior to being made, marketed, sold, and used. The regulatory approval process to manufacture and market drugs is costly, typically takes many years, requires validation through clinical trials and the use of substantial resources, and is often unpredictable. A tenant or venture investment portfolio company may fail to obtain or may experience significant delays in obtaining these approvals. Even if the tenant or venture investment portfolio company obtains regulatory approvals, marketed products will be subject to ongoing regulatory review and potential loss of approvals.
- The ability of some of our life science industry tenants and venture investment portfolio companies to commercialize any future products successfully will depend in part on the coverage and reimbursement levels set by government authorities, private health insurers, and other third-party payers. Additionally, reimbursements may decrease in the future.

Failures in the safety and efficacy of their products

- Some of our life science industry tenants and venture investment portfolio companies developing potential products may find that their products are not effective, or are even harmful, when tested in humans.
- Some of our life science industry tenants and venture investment portfolio companies depend upon the commercial success of certain products. Even if a product made by a life science industry tenant or venture investment portfolio company is successfully developed and proven safe and effective in human clinical trials, and the requisite regulatory approvals are obtained, subsequent discovery of safety issues with these products could cause product liability events, additional regulatory scrutiny and requirements for additional labeling, loss of approval, withdrawal of products from the market, and the imposition of fines or criminal penalties.
- A drug made by a life science industry tenant or venture investment portfolio company may not be well accepted by doctors and patients, or may be less effective or accepted than a competitor's drug, even if it is successfully developed.
- The negative results of safety signals arising from the clinical trials of the competitors of our life science industry tenants or venture investment portfolio companies may prompt regulatory agencies to take actions that may adversely affect the clinical trials or products of our tenants or venture investment portfolio companies.

Significant funding requirements for product research and development

- Some of our life science industry tenants and venture investment portfolio companies require significant funding to develop and commercialize their products and technologies, which funding must be obtained from venture capital firms; private investors; public markets; other companies in the life science industry; or federal, state, and local governments. Such funding may become unavailable or difficult to obtain. The ability of each tenant or venture investment portfolio company to raise capital will depend on its financial and operating condition, viability of its products and technology, and the overall condition of the financial, banking, and economic environment, as well as government budget policies.
- Even with sufficient funding, some of our life science industry tenants or venture investment portfolio companies may not be able to discover or identify potential drug targets in humans, or potential drugs for use in humans, or to create tools or technologies that are commercially useful in the discovery or identification of potential drug targets or drugs.
- Some of our life science industry tenants or venture investment portfolio companies may not be able to successfully manufacture their drugs economically, even if such drugs are proven through human clinical trials to be safe and effective in humans.
- Marketed products also face commercialization risk, and some of our life science industry tenants and venture investment portfolio companies may never realize projected levels of product utilization or revenues.
- Negative news regarding the products, the clinical trials, or other business developments of our life science industry tenants or venture investment portfolio companies may cause their stock price or credit profile to deteriorate.

We cannot assure our stockholders that our life science industry tenants or venture investment portfolio companies will be able to develop, make, market, or sell their products and technologies due to the risks inherent in the life science industry. Any life science industry tenant or venture investment portfolio company that is unable to avoid, or sufficiently mitigate, the risks described above may have difficulty making rental payments or satisfying its other lease obligations to us or may have difficulty maintaining the value of our investment. Such risks may also decrease the credit quality of our life science industry tenants and venture investment portfolio companies or cause us to expend more funds and resources on the space leased by these tenants than we originally anticipated. The increased burden on our resources due to adverse developments relating to our life science industry tenants may cause us to achieve lower-than-expected yields on the space leased by these tenants. Negative news relating to our more significant life science industry tenants and venture investment portfolio companies may also adversely impact our stock price.

Our technology industry tenants and venture investment portfolio companies are subject to a number of risks unique to their industry, including (i) an uncertain regulatory environment, (ii) rapid technological changes, (iii) a dependency on the maintenance and security of the Internet infrastructure, (iv) significant funding requirements for product research and development and sales growth, and (v) inadequate intellectual property protections. These risks may adversely affect our tenants' ability to make rental payments to us or satisfy their other lease obligations or may impact our venture investment portfolio companies' value, which consequently may materially adversely affect our business, results of operations, financial condition, and stock price.

Uncertain regulatory environment

- Laws and regulations governing the Internet, e-commerce, electronic devices, and other services are evolving. Existing and future laws and regulations and the halting of operations at certain agencies resulting from partial or complete U.S. federal government shutdowns may impede the growth of our technology industry tenants and venture investment portfolio companies. These laws and regulations may cover, among other areas, taxation, worker classification, privacy, data protection, pricing, content, copyrights, distribution, mobile communications, business licensing, and consumer protection.

Rapid technological changes

- The technology industry is characterized by rapid changes in customer requirements and preferences, frequent new product and service introductions, and the emergence of new industry standards and practices. A failure to respond in a timely manner to these market conditions could materially impair the operations of our technology industry tenants and venture investment portfolio companies.

Dependency on the maintenance and security of the Internet infrastructure

- Some of our technology industry tenants and venture investment portfolio companies depend on continued and unimpeded access to the Internet by users of their products and services, as well as access to mobile networks. Internet service providers and mobile network operators may be able to block, degrade, or charge additional fees to these tenants, venture investment portfolio companies, or users of their products and services.
- The Internet has experienced, and is likely to continue to experience, outages and other delays. These outages and delays, as well as problems caused by cyber attacks and computer malware, viruses, worms, and similar programs, may materially affect the ability of our technology industry tenants and venture investment portfolio companies to conduct business.
- Reliance on a limited number of cloud provider vendors may result in detrimental impacts on or halts of operations during instances of network outages or interruptions.
- Security breaches or network attacks may delay or interrupt the services provided by our technology industry tenants and venture investment portfolio companies and could harm their reputations or subject them to significant liability.

Significant funding requirements for product research and development

- Some of our technology industry tenants and venture investment portfolio companies require significant funding to develop and commercialize their products and technologies, which funding must be obtained from venture capital firms; private investors; public markets; companies in the technology industry; or federal, state, and local governments. Such funding may become unavailable or difficult to obtain. The ability of each tenant or venture investment portfolio company to raise capital will depend on its financial and operating condition, viability of their products, and the overall condition of the financial, banking, governmental budget policies, and economic environment.
- Even with sufficient funding, some of our technology industry tenants and venture investment portfolio companies may not be able to discover or identify potential customers or may not be able to create tools or technologies that are commercially useful.
- Some of our technology industry tenants and venture investment portfolio companies may not be able to successfully manufacture their products economically.
- Marketed products also face commercialization risk, and some of our technology industry tenants and venture investment portfolio companies may never realize projected levels of product utilization or revenues.
- Unfavorable news regarding the products or other business developments of our technology industry tenants or venture investment portfolio companies may cause their stock price or credit profile to deteriorate.

Inadequate intellectual property protections

- The products and services provided by some of our technology industry tenants and venture investment portfolio companies are subject to the threat of piracy and unauthorized copying, and inadequate intellectual property laws and other inadequate protections could prevent them from enforcing or defending their proprietary technologies. These tenants and venture investment portfolio companies may also face legal risks arising out of user-generated content.
- Trademark, copyright, patent, domain name, trade dress, and trade secret protection is very expensive to maintain and may require our technology industry tenants and venture investment portfolio companies to incur significant costs to protect their intellectual property rights.

We cannot assure our stockholders that our technology industry tenants and venture investment portfolio companies will be able to develop, make, market, or sell their products and services due to the risks inherent in the technology industry. Any technology industry tenant or venture investment portfolio company that is unable to avoid, or sufficiently mitigate, the risks described above may have difficulty making rental payments or satisfying its other lease obligations to us or may have difficulty maintaining the value of our investment. Such risks may also decrease the credit quality of our technology industry tenants or venture investment portfolio companies or cause us to expend more funds and resources on the space leased by these tenants than we originally anticipated. The increased burden on our resources due to adverse developments relating to our technology industry tenants may cause us to achieve lower-than-expected yields on the space leased by these tenants. Unfavorable news relating to our more significant technology industry tenants and venture investment portfolio companies may also adversely impact our stock price.

Our agtech industry tenants and venture investment portfolio companies are subject to a number of risks unique to their industry, including (i) uncertain regulatory environment, (ii) seasonality in business, (iii) unavailability of transportation mechanisms for carrying products and raw materials, (iv) changes in costs or constraints on supplies or energy used in operations, (v) strikes or labor slowdowns or labor contract negotiations, and (vi) rapid technological changes in agriculture. These risks may adversely affect our tenants' ability to make rental payments or satisfy their other lease obligations to us or may impact our venture investment portfolio companies' value, which consequently may materially adversely affect our business, results of operations, financial condition, and stock price.

Uncertain regulatory environment

- Laws and regulations governing the Internet, e-commerce, electronic devices, and other services and products developed by the agtech industry are evolving. Existing and future laws and regulations and the halting of operations at certain agencies resulting from partial or complete U.S. federal government shutdowns may impede the growth of our agtech industry tenants and venture investment portfolio companies. These laws and regulations may cover, among other areas, taxation, privacy, data protection, pricing, content, copyrights, distribution, mobile communications, business licensing, and consumer protection.

Seasonality in business

- Our agtech industry tenants' and venture investment portfolio companies' businesses may fluctuate from time to time due to seasonal weather conditions and other factors out of their control, affecting products and services our agtech industry tenants and venture investment portfolio companies offer.

Unavailability of transportation mechanisms for carrying products and raw materials

- Some of our agtech industry tenants' and venture investment portfolio companies' businesses depend on transportation services to deliver their products or to deliver raw materials to their clients. If transportation service providers are unavailable or fail to deliver our agtech industry tenants' or venture investment portfolio companies' products in a timely manner, they may be unable to manufacture and deliver their services and products on a timely basis.

Changes in costs or constraints on supplies or energy used in operations

- Similarly, if fuel or other energy prices increase, it may increase transportation costs, which could affect our agtech industry tenants' and venture investment portfolio companies' businesses.

Strikes or labor slowdowns or labor contract negotiations

- Our agtech industry tenants and venture investment portfolio companies may face labor strikes, work slowdowns, labor contract negotiations, or other job actions from their employees or third-party contractors. In the event of a strike, work slowdown, or other similar labor unrest, our agtech industry tenants or venture investment portfolio companies may not have the ability to adequately staff their businesses, which could have an adverse effect on their operations and revenue.

Rapid technological changes in agriculture

- The agtech industry is characterized by regular new product and service introductions, and the emergence of new industry standards and practices. A failure to respond in a timely manner to these market conditions could materially impair the operations of our agtech industry tenants and venture investment portfolio companies.
- Technological advances in agriculture could decrease the demand for crop nutrients, energy, and other crop input products and services our agtech industry tenants and venture investment portfolio companies provide. Genetically engineered crops that resist disease and insects could affect the demand for certain of our tenants' or venture investment portfolio companies' products. Demand for fuel could decline as technology allows for more efficient usage of equipment.

We cannot assure our stockholders that our agtech industry tenants and venture investment portfolio companies will be able to develop, make, market, or sell their products and services due to the risks inherent in the agtech industry. Any agtech industry tenant or venture investment portfolio company that is unable to avoid, or sufficiently mitigate, the risks described above may have difficulty making rental payments or satisfying its other lease obligations to us. Such risks may also decrease the credit quality of our agtech industry tenants or venture investment portfolio companies or cause us to expend more funds and resources on the space leased by these tenants than we originally anticipated. The increased burden on our resources due to adverse developments relating to our agtech industry tenants may cause us to achieve lower-than-expected yields on the space leased by these tenants. Unfavorable news relating to our more significant agtech industry tenants and venture investment portfolio companies may also adversely impact our stock price.

The companies in which we invest through our non-real estate venture investment portfolio expose us to risks similar to those of our tenant base and additional risks inherent in venture capital investing, which could materially affect our reported asset and liability values and earnings, and may materially and adversely affect our reported results of operations.

Through our strategic venture investment portfolio, we hold investments in companies that, similar to our tenant base, are concentrated in the life science, agtech, and technology industries. The venture investment portfolio companies in which we invest are accordingly subject to risks similar to those posed by our tenant base, including those disclosed in this annual report on Form 10-K. In addition, the companies in which we invest through our venture investment portfolio are subject to the risks inherent in venture capital investing and may be adversely affected by external factors beyond our control and other risks, including, but not limited to the following:

- Risks inherent in venture capital investing, which typically focuses on relatively new and small companies with unproven technologies and limited access to capital and is therefore generally considered more speculative than investment in larger, more established companies;
- Market disruption and volatility, which may adversely affect the value of the companies in which we hold equity investments and, in turn, our ability to realize gains upon sales of these investments.
- Disruptions, uncertainty, or volatility in the capital markets and global economy, which may impact the ability of the companies in which we invest to raise additional capital or access capital from venture capital investors or financial institutions on favorable terms;
- Liquidity of the companies in which we invest, which may (i) impede our ability to realize the value at which these investments are carried if we are required to dispose of them, (ii) make it difficult for us to sell these investments on a timely basis, and (iii) impair the value of such investments;
- Changes in the political climate, potential reforms and changes to government negotiation and regulation, the effect of healthcare reform legislation, including those that may limit pricing of pharmaceutical products and drugs, market prices and conditions, prospects for favorable or unfavorable clinical trial results, new product initiatives, the manufacturing and distribution of new products, product safety and efficacy issues, and new collaborative agreements, all of which may affect the valuation, funding opportunities, business operations, and financial results of the companies in which we invest;
- Changes in U.S. federal government organizations or other agencies, including changes in policy, regulations, budgeting, retention of key leadership and other personnel, administration of drug approvals or restrictions on drug product or service development or commercialization, or a partial or complete future government shutdown resulting in temporary closures of agencies such as the FDA and SEC, could adversely affect the companies in which we invest, including delays in the commercialization of such companies' products, decreased funding of research and development in the life science, agtech, and technology industries, or delays surrounding approval of budget proposals for any of these industries;
- Impacts or changes in business in connection with the COVID-19 pandemic or for other reasons, including diversion of healthcare resources away from clinical trials, delays, or difficulties enrolling patients or maintaining scheduled appointments in clinical trials, interruptions, and delays in laboratory research due to the reduction in employee resources stemming from social distancing requirements and the desire of employees to avoid contact with people, insufficient inventory of supplies and reagents necessary for laboratory research due to interruptions in supply chain, delays or difficulties obtaining clinical site locations or engaging clinical site staff, interruptions on clinical site monitoring due to travel restrictions, delays in interacting with or receiving approval from regulatory agencies in connection with research activities or clinical trials, and disruptions to manufacturing facilities and supply lines;
- Reduction in revenue or revenue growth, including in connection with the COVID-19 pandemic, deterioration in the global economy, or other reasons, may impair the value of the companies in which we hold equity investments or impede their ability to raise additional capital; and
- Seasonal weather conditions, changes in availability of transportation or labor, especially in connection with the COVID-19 pandemic, and other related factors may affect the products and services or the availability of the products and services of the companies in which we invest in the agtech sector.

Many of the factors listed above are beyond our control and, if the venture investment portfolio companies are adversely affected by any of the foregoing, could materially affect our reported asset and liability values and earnings and may materially and adversely affect our reported results of operations. The occurrence of any of these adverse events could cause the market price of shares of our common stock to decline regardless of the performance of our primary real estate business.

Market and other external factors may adversely impact the valuation of our equity investments.

We hold equity investments in certain publicly traded companies, limited partnerships, and privately held entities primarily involved in the life science, agtech, and technology industries through our venture investment portfolio. The valuation of these investments is affected by many external factors beyond our control, including, but not limited to, market prices, market conditions, the effect of healthcare reform legislation, prospects for favorable or unfavorable clinical trial results, new product initiatives, the manufacturing and distribution of new products, product safety and efficacy issues, and new collaborative agreements. In addition, partial or complete future government shutdowns that may result in temporary closures of agencies such as the FDA and SEC may adversely affect the processing of initial public offerings, business operations, financial results, and funding for projects of the companies in which we hold equity investments. Unfavorable developments with respect to any of these factors may have an adverse impact on the valuation of our equity investments.

Market and other external factors may negatively impact the liquidity of our equity investments.

We make and hold investments in privately held life science, agtech, and technology companies through our venture investment portfolio. These investments may be illiquid, which could impede our ability to realize the value at which these investments are carried if we are required to dispose of them. The lack of liquidity of these investments may make it difficult for us to sell these investments on a timely basis and may impair the value of these investments. If we are required to liquidate all or a portion of these investments quickly, we may realize significantly less than the amounts at which we had previously valued these investments.

Government factors

Negative impact on economic growth resulting from the combination of federal income tax policy, debt policy, and government spending may adversely affect our results of operations.

Global macroeconomic conditions affect our tenants' businesses. Instability in the banking and government sectors of the U.S. and/or the negative impact on economic growth resulting from the combination of government tax policy, debt policy, and government spending, may have an adverse effect on the overall economic growth and our future revenue growth and profitability. Volatile, negative, or uncertain economic conditions could undermine business confidence in our significant markets or in other markets and cause our tenants to reduce or defer their spending, which would negatively affect our business. Growth in the markets we serve could be at a slow rate or could stagnate or contract in each case for an extended period of time. Differing economic conditions and patterns of economic growth and contraction in the geographic regions in which we operate and the industries we serve may in the future affect demand for our services. Our revenues and profitability are derived from our tenants in North America, some of which derive significant revenues from their international operations. Ongoing economic volatility and uncertainty affects our business in a number of other ways, including making it more difficult to accurately forecast client demand beyond the short term and to effectively build our revenue and spending plans. Economic volatility and uncertainty are particularly challenging because it may take some time for the effects and resulting changes in demand patterns to manifest themselves in our business and results of operations. Changing demand patterns from economic volatility and uncertainty could have a significant negative impact on our results of operations. These risks may impact our overall liquidity, our borrowing costs, or the market price of our common stock.

Monetary policy actions by the U.S. Federal Reserve could adversely impact our financial condition and our ability to make distributions to our stockholders.

During 2017–2018, the U.S. Federal Reserve gradually increased the target range for the federal funds rate. As of December 31, 2018, the federal funds rate was set at a range from 2.25% to 2.50%. From August 2019 through March 2020, the U.S. Federal Reserve initiated a series of rate cuts. As of December 31, 2020, the federal funds rate was set at a range from 0% to 0.25%. In December 2021, the U.S. Federal Reserve maintained its target range but indicated it would taper its bond purchases in early 2022. It is also expected that due to inflation reaching a nearly 40-year high in 2021, the U.S. Federal Reserve is likely to increase interest rates in 2022. Should the U.S. Federal Reserve raise the rate in the future, this will likely result in an increase in market interest rates, which may increase our interest expense under our variable-rate borrowings and the costs of refinancing existing indebtedness or obtaining new debt. In addition, increases in market interest rates may result in a decrease in the value of our real estate and a decrease in the market price of our common stock. Increases in market interest rates may also adversely affect the securities markets generally, which could reduce the market price of our common stock without regard to our operating performance. Any such unfavorable changes to our borrowing costs and stock price could significantly impact our ability to raise new debt and equity capital going forward.

Changes to the U.S. tax laws could have a significant negative impact on the overall economy, our tenants, and our business.

Changes to U.S. tax laws that may be enacted in the future could negatively impact the overall economy, government revenues, the real estate industry, our tenants, and us, in ways that cannot be reliably predicted. Furthermore, any future changes to U.S. tax laws may negatively impact certain of our tenants' operating results, financial condition, and future business plans. Such changes to the tax laws may also result in reduced government revenues, and therefore reduced government spending, which may negatively impact some of our tenants that rely on government funding. For example, the Tax Cuts and Jobs Act of 2017 was enacted on December 20, 2017, and significantly revised the U.S. corporate income tax law by, among other things, reducing the corporate income tax rate to 21% for tax years beginning in 2018, imposing additional limitations on the deductibility of interest, changing the utilization of net operating loss carryforwards, allowing for the expensing of certain capital expenditures, and implementing a modified territorial system. We are currently unable to predict whether any future changes will occur and any impact such changes could have on our operating results, financial condition, and future business operations.

Actual and anticipated changes to the regulations of the healthcare system may have a negative impact on the pricing of drugs, the cost of healthcare coverage, and the reimbursement of healthcare services and products.

The FDA and comparable agencies in other jurisdictions directly regulate many critical activities of life science, technology, and healthcare industries, including the conduct of preclinical and clinical studies, product manufacturing, advertising and promotion, product distribution, adverse event reporting, and product risk management. In both domestic and foreign markets, sales of products depend in part on the availability and amount of reimbursement by third-party payers, including governments and private health plans. Governments may regulate coverage, reimbursement, and pricing of products to control cost or affect utilization of products. Private health plans may also seek to manage cost and utilization by implementing coverage and reimbursement limitations. Substantial uncertainty exists regarding the reimbursement by third-party payers of newly approved healthcare products. The U.S. and foreign governments regularly consider reform measures that affect healthcare coverage and costs. Such reforms may include changes to the coverage and reimbursement of healthcare services and products. In particular, there have been judicial and Congressional challenges to the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act (collectively, the "ACA"), which could have an impact on coverage and reimbursement for healthcare terms and services covered by plans authorized by the ACA. During 2017 several attempts were made to amend the ACA; however, no amendment proposal gained the 50-vote support from the U.S. Senate needed to pass a repeal bill. As a result, in October 2017, then President Trump issued an executive order, "Promoting Healthcare Choice and Competition Across the United States." It is expected that the Biden administration will repeal the Executive Order, but it is unknown what other changes the new administration will implement through the U.S. Congress or future executive orders and how these would impact our tenants. Government and other regulatory oversight and future regulatory and government interference with the healthcare systems may adversely impact our tenants' businesses and our business.

U.S. government tenants may not receive anticipated appropriations, which could hinder their ability to pay us.

U.S. government tenants are subject to government funding. If one or more of our U.S. government tenants fail to receive anticipated appropriations, we may not be able to collect rental amounts due to us. A significant reduction in federal government spending, particularly a sudden decrease due to the recent tax reform or to a sequestration process, which has occurred in recent years, could also adversely affect the ability of these tenants to fulfill lease obligations or decrease the likelihood that they will renew their leases with us. In addition, recent budgetary pressures have resulted in, and may continue to result in, reduced allocations to government agencies that fund research and development activities, such as the NIH. For example, the NIH budget has been, and may continue to be, significantly impacted by the sequestration provisions of the Budget Control Act of 2011, which became effective on March 1, 2013. Past proposals to reduce budget deficits have included reduced NIH and other research and development budgets. Any shift away from the funding of research and development or delays surrounding the approval of government budget proposals may cause our tenants to default on rental payments or delay or forgo leasing our rental space, which could adversely affect our business, financial condition, or results of operations. Additionally, the inability of the U.S. Congress to enact a budget for a future fiscal year or the occurrence of partial or complete U.S. federal government shutdowns could adversely impact demand for our services by limiting federal funding available to our tenants and their customers. In addition, defaults under leases with U.S. government tenants are governed by federal statute and not by state eviction or rent deficiency laws. As of December 31, 2021, leases with U.S. government tenants at our properties accounted for approximately 1.2% of our aggregate annual rental revenue in effect as of December 31, 2021.

Some of our tenants may be subject to increasing government price controls and other healthcare cost-containment measures.

Government healthcare cost-containment measures can significantly affect our tenants' revenue and profitability. In many countries outside the U.S., government agencies strictly control, directly or indirectly, the prices at which our pharmaceutical industry tenants' products are sold. In a number of EU Member States, the pricing and/or reimbursement of prescription pharmaceuticals are subject to governmental control, and legislators, policymakers, and healthcare insurance funds continue to propose and implement cost-containing measures to keep healthcare costs down, due in part to the attention being paid to healthcare cost containment and other austerity measures in the EU. In the U.S., our pharmaceutical industry tenants are subject to substantial pricing pressures from state Medicaid programs, private insurance programs, and pharmacy benefit managers. In addition, many state legislative proposals could further negatively affect pricing and/or reimbursement for our pharmaceutical industry tenants' products. Also, the pricing environment for pharmaceuticals continues to be in the political spotlight in the U.S. Pharmaceutical and medical device product pricing is subject to enhanced government and public scrutiny and calls for reform. Some states have implemented, and other states are considering, pharmaceutical price controls or patient access constraints under the Medicaid program, and some states are considering price-control regimes that would apply to broader segments of their populations who are not Medicaid eligible. We anticipate that pricing pressures from both governments and private payers inside and outside the U.S. will become more severe over time.

Changes in U.S. federal government funding for the FDA, the NIH, and other government agencies could hinder their ability to hire and retain key leadership and other personnel, properly administer drug innovation, or prevent new products and services from being developed or commercialized by our life science industry tenants and venture investment portfolio companies, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including budget and funding levels, the ability to hire and retain key personnel, and statutory, regulatory, and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the NIH and other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

The ability of the FDA, the NIH, and other government agencies to properly administer their functions is highly dependent on the levels of government funding and the ability to fill key leadership appointments, among various factors. Delays in filling or replacing key positions could significantly impact the ability of the FDA, the NIH, and other agencies to fulfill their functions and could greatly impact healthcare and the drug industry.

In December 2016, the 21st Century Cures Act was signed into law. This legislation is designed to advance medical innovation and empower the FDA with the authority to directly hire positions related to drug and device development and review. In the past, the FDA was often unable to offer key leadership candidates (including scientists) competitive compensation packages as compared to those offered by private industry. The 21st Century Cures Act is designed to streamline the agency's hiring process and enable the FDA to compete for leadership talent by expanding the narrow ranges that are provided in prior compensation structures.

However, any future government proposals to reduce or eliminate budgetary deficits may include reduced allocations to the FDA, the NIH, and other related government agencies. These budgetary pressures may result in a reduced ability by the FDA and the NIH to perform their respective roles and may have a related impact on academic institutions and research laboratories whose funding is fully or partially dependent on both the level and the timing of funding from government sources.

In October 2020, then President Trump signed a stopgap spending bill in order to extend government funding until December 11, 2020. This bill provided necessary funding to government agencies until more fulsome appropriations were approved to provide funding for the remainder of the 2021 fiscal year. In December 2020, the U.S. Congress passed additional stopgap bills before finally enacting a budget for the 2021 fiscal year on December 27, 2020. In December 2021, President Biden signed a continuing resolution to extend government funding through February 18, 2022. It is unclear whether the U.S. federal government will fail to enact a budget in future fiscal years, and if so, it is possible another partial government shutdown similar to the one that took place from December 22, 2018 to January 25, 2019 may occur. If this occurs, the FDA and certain other science agencies may temporarily shut down select non-essential operations. Also, as was the case in the last government shutdown, the FDA may maintain only operations deemed to be essential public health-related functions and halt the acceptance of new medical product applications and routine regulatory and compliance work for medical products and certain drugs and foods during any shutdown.

Disruptions at the FDA and other agencies, such as those resulting from a government shutdown, or uncertainty from stopgap spending bills may slow the time necessary for new drugs and devices to be reviewed and/or approved by necessary government agencies and the healthcare and drug industries' ability to deliver new products to the market in a timely manner, which would adversely affect our tenants' operating results and business. Interruptions to the function of the FDA and other government agencies could adversely affect the demand for office/laboratory space and significantly impact our operating results and our business.

Changes in laws and regulations that control drug pricing for government programs may adversely impact our operating results and our business.

The Centers for Medicare & Medicaid Services is the federal agency within the U.S. Department of Health and Human Services that administers the Medicare program and works in partnership with state governments to administer Medicaid. The Medicare Modernization Act of 2003 that went into effect on January 1, 2006 (which also made changes to the public Part C Medicare health plan program), explicitly prohibits government entities from directly negotiating drug prices with manufacturers. Recently, there has been significant public outcry against price increases viewed to be unfair and unwarranted.

Currently, the outcome of potential reforms and changes to government negotiation/regulation to drug pricing is unknown. Changes in policy that limit prices may reduce the financial incentives for the research and development efforts that lead to discovery and production of new therapies and solutions to life-threatening conditions. Negative impacts of new policies could adversely affect our tenants' and venture investment portfolio companies' businesses, including life science, agtech, and technology companies, which may reduce the demand for office/laboratory space and negatively impact our operating results and our business.

The provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") may subject us to substantial additional federal regulation and may adversely affect our business, results of operations, cash flows, or financial condition.

There are significant corporate governance- and executive compensation-related provisions in the Dodd-Frank Act that required the SEC to adopt additional rules and regulations in these areas. For example, the Dodd-Frank Act requires publicly traded companies to give stockholders a non-binding vote on executive compensation and so-called "golden parachute" payments. Our efforts to comply with these requirements have resulted in, and are likely to continue to result in, an increase in expenses and a diversion of management's time from other business activities. In addition, provisions of the Dodd-Frank Act that directly affect other participants in the real estate and capital markets, such as banks, investment funds, and interest rate hedge providers, could have indirect, but material, impacts on our business. In 2018, several changes were made to the Dodd-Frank Act, including the repeal of certain provisions that eased restrictions on small and medium-sized banks of the Dodd-Frank Act. It is expected that the Biden administration will reverse a number of the Trump administration's policies, includes those that relate to deregulation, and will increase the number of financial regulators as current vacancies in the bureaucracy are prioritized and filled under the new administration.

Many of the provisions of the Dodd-Frank Act have extended implementation periods and delayed effective dates and will require extensive rulemaking by regulatory authorities. Given the uncertainty associated with the Dodd-Frank Act itself and the manner in which its provisions are implemented by various regulatory agencies and through regulations, the full extent of the impact such requirements will have on our future operations is unclear. The provisions of the Dodd-Frank Act may impact the profitability of business activities, require changes to certain business practices, or otherwise adversely affect our business in general. The Dodd-Frank Act, including current and future rules implementing its provisions and the interpretation of those rules, along with other legislative and regulatory proposals directed at the financial or real estate industry or affecting taxation that are proposed or pending in the U.S. Congress, may limit our revenues, impose fees or taxes on us, and/or intensify the regulatory framework within which we operate in ways that are not currently identifiable. The Dodd-Frank Act also has resulted in, and is expected to continue to result in, substantial changes and dislocations in the banking industry and the financial services sector in ways that could have significant effects on, for example, the availability and pricing of unsecured credit, commercial mortgage credit, and derivatives, such as interest rate swaps, which are important aspects of our business. Accordingly, new laws, regulations, and accounting standards, as well as changes to, or new interpretations of, currently accepted accounting practices in the real estate industry, may adversely affect our results of operations.

Global factors

Changes in the method of determining LIBOR, or the replacement of LIBOR with an alternative reference rate, may adversely affect interest expense related to outstanding debt.

From time to time, we utilize interest rate hedge agreements to manage a portion of our exposure to variable interest rates. Historically, our interest rate hedge agreements primarily related to our borrowings with variable interest rates based on LIBOR. Beginning in 2008, concerns were raised that some of the member banks surveyed by the BBA in connection with the calculation of daily LIBOR across a range of maturities and currencies may have underreported, overreported, or otherwise manipulated the interbank lending rate applicable to them in order to profit on their derivatives positions or to avoid an appearance of capital insufficiency or adverse reputational or other consequences that might have resulted from reporting interbank lending rates higher than those they actually submitted.

On September 28, 2012, British regulators published a report on the review of LIBOR. The report concluded that LIBOR should be retained as a benchmark but recommended a comprehensive reform of LIBOR, including replacing the BBA with a new independent administrator of LIBOR. Based on this report, final rules for the regulation and supervision of LIBOR by the Financial Conduct Authority ("FCA") were published and came into effect on April 2, 2013 (the "FCA Rules"), and ICE Benchmark Administration Limited ("IBA") was appointed as the independent LIBOR administrator. On July 27, 2017, the FCA announced that it would phase out LIBOR as a benchmark by the end of 2021. On November 30, 2020, IBA extended the LIBOR transition deadline to June 30, 2023, rather than December 31, 2021, for the overnight and one-, three-, six-, and twelve-month USD LIBOR. These decisions are subject to consultation, and announcements of the official cessation of any LIBOR settings will be made separately.

In June 2017, the Alternative Reference Rates Committee ("ARRC") — a working group composed of large U.S. financial institutions established by the U.S. Federal Reserve — selected the Secured Overnight Financing Rate ("SOFR"), an index calculated by reference to short-term repurchase agreements backed by U.S. Treasury securities, as its preferred replacement for U.S. dollar LIBOR. SOFR is observed and backward looking, which stands in contrast to LIBOR under the current methodology, which is an estimated forward-looking rate and relies, to some degree, on the expert judgment of submitting panel members. Given that SOFR is a secured rate backed by government securities, it does not take into account bank credit risk (as is the case with LIBOR). SOFR is therefore likely to be lower than LIBOR and is less likely to correlate with the funding costs of financial institutions.

In April 2019, the ARRC published its recommendations on fallback language for syndicated loans, which the ARRC encourages companies to use in new contracts that reference LIBOR in order to minimize market disruptions when LIBOR ceases to exist. The ARRC suggested two alternative fallback language approaches for syndicated loan contracts:

- "Hardwired Approach," which clearly specifies the SOFR-based successor rate and spread adjustment to be used when LIBOR ceases to exist.
- "Amendment Approach," which, unlike the Hardwired Approach, does not reference specific rates or spread adjustments but provides a streamlined amendment approach for negotiating a benchmark replacement and introduces clarity with respect to the fallback trigger events and an adjustment to be applied to the successor rate.

In November 2020, the ARRC published best practice recommendations that new LIBOR cash products should have robust fallback language as soon as possible and new use of LIBOR should cease altogether.

Since 2012, we have been closely monitoring developments related to the transition away from LIBOR and have implemented numerous proactive measures to minimize the potential impact of the transition to the Company, specifically:

- We have proactively reduced outstanding LIBOR-based borrowings under our unsecured senior bank term loans and secured construction loans through repayments. From January 2017 to December 2021, we retired approximately \$1.5 billion of such debt.
- We continue to prudently manage outstanding borrowings under our unsecured senior line of credit, our only LIBOR-based debt. As of December 31, 2021, we had no borrowings outstanding under our unsecured senior line of credit.
- Our unsecured senior line of credit contains fallback language generally consistent with the ARRC's Amendment Approach, which provides a streamlined amendment approach for negotiating a benchmark replacement.
- We continue to monitor developments by the FCA, the ARRC, and other governing bodies involved in LIBOR transition.

We continue to be proactive in managing the risk of disruption associated with the cessation of LIBOR; however, it is not possible to predict the effect of the FCA Rules, any changes in the methods pursuant to which LIBOR is determined, the administration of LIBOR by IBA, and any other reforms to LIBOR that will be enacted in the United Kingdom and elsewhere. In addition, any changes announced by the FCA, the BBA, IBA, the ARRC, or any other successor governance or oversight body, or future changes adopted by such body, in the method pursuant to which LIBOR is determined, as well as manipulative practices or the cessation thereof, may result in a sudden or prolonged increase or decrease in reported LIBOR, which could have an adverse impact on the level of the index. Fluctuation or discontinuation of LIBOR could affect our interest expense and earnings and the fair value of certain of our financial instruments. From time to time, we utilize interest rate hedge agreements to mitigate our exposure to such interest rate risk on a portion of our debt obligations. However, there is no assurance these arrangements will be effective in reducing our exposure to changes in interest rates.

At or prior to the cessation of LIBOR on June 30, 2023, we may need to amend our credit facility with our lender to be based on the alternative rate that is established, if any, as a factor in determining the interest rate. The transition to an alternative rate will require careful and deliberate consideration and implementation so as to not disrupt the stability of financial markets. There is no guarantee that a transition from LIBOR to an alternative will not result in financial market disruptions, significant increases in benchmark rates, or borrowing costs to borrowers, any of which could have an adverse effect on our business, results of operations, financial condition, and stock price. If we are unable to transition our contract to an alternative variable rate prior to the discontinuation of LIBOR, we may be unable to utilize our credit facility.

The transition to SOFR may present challenges, including, but not limited to, the illiquidity of SOFR derivatives markets, which could make it difficult for financial institutions to offer SOFR-based debt products, the determination of the spread adjustment required to convert LIBOR to SOFR (and the related determination of a term structure with different maturities), the greater volatility of SOFR compared to that of LIBOR, and that such transition may require substantial negotiations with counterparties. Although daily pricing resets for SOFR have been noted to be more volatile than that of LIBOR, especially at month end, there is no sufficient evidence to establish how SOFR volatility compares to that of LIBOR. Whether or not SOFR attains market acceptance as a LIBOR replacement tool remains in question. As such, the future of LIBOR and potential alternatives at this time remains uncertain.

The outbreak of the coronavirus disease, or COVID-19, or the future outbreak of any other highly infectious or contagious diseases, could adversely impact or cause disruption to our financial condition and results of operations. Further, the spread of COVID-19 has caused severe disruptions in the U.S. and global economies, may further disrupt financial markets, and could create widespread business continuity issues.

In recent years, the outbreaks of a number of diseases, including avian influenza, H1N1, and various other “superbugs,” have increased the risk of a pandemic. Since December 2019, COVID-19 has spread globally, including in the U.S., where COVID-19 has been reported in every state, including those where we own and operate our properties, have executive offices, and conduct principal operations. In March 2020, the World Health Organization declared COVID-19 a pandemic, and the U.S. subsequently declared a national emergency.

The COVID-19 pandemic has had, and continues to have, a significant adverse impact across regional and global economies and financial markets. Countries around the world continue to institute quarantines and restrictions on travel. Almost every state implemented some form of shelter-in-place or stay-at-home directive during 2020, including, among others, the cities of Boston, San Francisco (including five other San Francisco Bay Area counties), and Seattle, and the states of California, Maryland, Massachusetts, and New York, where we own properties. The lockdown restrictions implemented included quarantines, restrictions on travel, shelter-in-place orders, school closures, restrictions on types of business that may continue to operate, and/or restrictions on types of construction projects that could continue. The subsequent gradual reopening of retail, manufacturing, and office facilities came with required or recommended safety protocols.

The global impact of the outbreak has rapidly evolved. In recent months, new COVID-19 variants were discovered in India and South Africa, among other countries, which have spread globally, including to the U.S. While these strains do not appear to cause more severe symptoms in individuals, they have spread faster and more easily. As a result, local governments and businesses reinstated safety protocols. There is no assurance that these new variants will be contained or the recommended safety protocols will continue to be effective in the long term.

Although critical research and development efforts are continuing in our office/laboratory properties, in certain cases such research and development efforts involve fewer workers, and non-critical workers in these buildings and many office buildings are working remotely. When appropriate, certain spaces have been and may continue to be subject to limited operations for safety and proper disinfection measures. Our properties and tenant base include a small number of restaurants, conference centers, fitness centers, and retail spaces, which account for approximately 1.0% of our annual rental revenues as of December 31, 2021. Retail tenants in particular have been severely impacted by residual effects from stay-at-home and lockdown restrictions and social distancing protocols that took place across all of the markets where our properties are located.

The effects of COVID-19 or another pandemic on our (or our tenants’) ability to successfully operate could be adversely impacted due to, among other factors:

- The continued service and availability of personnel, including our executive officers and other leaders who are part of our management team, and our ability to recruit, attract, and retain skilled personnel. To the extent our management or personnel are impacted in significant numbers by the outbreak of pandemic or epidemic disease and are not available or allowed to conduct work, our business and operating results may be negatively impacted;
- Our (or our tenants’) ability to operate, generally or in affected areas, or delays in the supply of products or services from our vendors that are necessary for us to operate effectively;
- Our tenants’ ability to pay rent on their leases in full and timely and, to the extent necessary, our inability to restructure our tenants’ long-term rent obligations on terms favorable to us or to timely recapture the space for re-leasing;
- Difficulty in our accessing debt and equity capital on attractive terms, or at all, and a severe disruption and instability in the global financial markets, or deterioration in credit and financing conditions, which may affect our (or our tenants’) ability to access capital necessary to fund business operations or replace or renew maturing liabilities on a timely basis and may adversely affect the valuation of financial assets and liabilities, any of which could affect our (or our tenants’) ability to meet liquidity and capital expenditure requirements or could have a material adverse effect on our business, financial condition, results of operations, and cash flows;
- Complete or partial closures of, or other operational issues at, one or more of our offices or properties resulting from government action or directives;

- Our (or our tenants') ability to continue or complete construction as planned for our tenants' operations, or delays in the supply of materials or labor necessary for construction, which may affect our (or our tenants') ability to complete construction or to complete it timely, our ability to prevent a lease termination, and our ability to collect rent, which may have a material adverse effect on our business, financial condition, results of operations, and cash flows;
- The cost of implementing precautionary measures against COVID-19 (or another pandemic), including, but not limited to, potential additional health insurance and labor-related costs;
- Governmental efforts (such as moratoriums on or suspensions of eviction proceedings) that may affect our ability to collect rent or enforce remedies for the failure of our tenants to pay rent;
- Uncertainty related to whether the U.S. Congress or state legislatures will pass additional laws providing for additional economic stimulus packages, governmental funding, or other relief programs, whether such measures will be enacted, whether our tenants will be eligible or will apply for any such funds, whether the funds, if available, could be used by our tenants to pay rent, and whether such funds will be sufficient to supplement our tenants' rent and other obligations to us;
- Deterioration of global economic conditions and job losses, which may decrease demand for and occupancy levels of our rental properties and may cause our rental rates and property values to be negatively impacted;
- Our dependence on short-term and long-term debt sources, including our unsecured senior line of credit, commercial paper program, and senior notes, which may affect our ability to continue our investing activities and make distributions to our stockholders;
- Declines in the valuation of our properties, which may affect our ability to dispose of assets at attractive prices or to obtain debt financing secured by our properties and may reduce the availability of debt funding;
- Declines in the valuation of our venture investment portfolio, which may (i) impede our ability to realize the value at which these investments are carried if we are required to dispose of them, (ii) make it difficult for us to sell these investments on a timely basis, and (iii) impair the value of such investments;
- Refusal or failure by one or more of our lenders under our credit facility to fund their financing commitment to us, which we may not be able to replace on favorable terms, or at all;
- To the extent we enter into derivative financial instruments, one or more counterparties to our derivative financial instruments could default on their obligations to us or could fail, increasing the risk that we may not realize the benefits of utilizing these instruments;
- Any possession taken of our properties, in whole or in part, by governmental authorities for public purposes in eminent domain proceedings;
- Our level of insurance coverage and recovery we receive under any insurance we maintain, which may be delayed by, or insufficient to fully offset potential/actual losses caused by, COVID-19 (or another pandemic);
- Any increase in insurance premiums and imposition of large deductibles;
- Our level of dependence on the Internet, as it relates to employees' working remotely, and increases in malware campaigns and phishing attacks preying on the uncertainties surrounding COVID-19 (or another pandemic), which may increase our vulnerability to cyber attacks;
- Our ability to ensure business continuity in the event our continuity of operations plan is not effective or is improperly implemented or deployed during a disruption; and
- Our ability to operate, which may cause our business and operating results to decline or may impact our ability to comply with regulatory obligations and may lead to reputational harm and regulatory issues or fines.

The rapid spread, development, and fluidity of COVID-19 has resulted in, and may continue to result in, significant disruption of the global financial market and labor markets, and it is difficult to ascertain the ultimate impact resulting from the pandemic. Although the FDA has approved certain therapies and three vaccines for use with wide distribution and availability across the country, a significant percentage of the U.S. population remains unvaccinated due to vaccine hesitancy. Overall efficacy of the vaccines also remains uncertain as new strains of COVID-19 continue to be discovered. As a result, the pandemic and public and private responses to the pandemic may lead to a deterioration of economic conditions, an economic downturn, and/or a recession, at a global scale, which could materially affect our (or our tenants') performance, financial condition, results of operations, and cash flows.

The outbreak of the coronavirus disease, or COVID-19, or the future outbreak of any other highly infectious or contagious diseases, could adversely impact or cause disruption to our tenants' financial condition and results of operations, which may adversely impact our ability to generate income sufficient to meet operating expenses or generate income and capital appreciation.

Our tenants, many of which conduct business in the life science, agtech, or technology industries, may incur significant costs or losses responding to the outbreak of a contagious disease (such as COVID-19), lose business due to interruption in their operations, or incur other liabilities related to shelter-in-place orders, quarantines, infection, or other related factors. Tenants that experience deteriorating financial conditions as a result of the outbreak of such a contagious disease may be unwilling or unable to pay rent in full or timely due to bankruptcy, lack of liquidity, lack of funding, operational failures, or other reasons. Our tenants' defaults and delayed or partial rental payments could adversely impact our rental revenues and operating results.

The negative effects of an outbreak of a contagious disease on our tenants in the life science industry may include, but are not limited to:

- Delays or difficulties in enrolling patients or maintaining scheduled study visits in clinical trials;
- Delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and staff;
- Diversion of healthcare resources away from clinical trials, including the diversion of hospitals serving as our tenants' clinical trial sites and hospital staff supporting the conduct of our tenants' clinical trials;
- Interruptions of key clinical trial or other research activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers, and others;
- Limitations in employee resources that would otherwise be focused on our tenants' research, business, or clinical trials, including because of sickness of employees or their families, the desire of employees to avoid contact with large groups of people, or as a result of the governmental imposition of shelter-in-place or similar working restrictions;
- Interruptions in supply chain, manufacturing, and global shipping, or other delays that may affect the transport of materials necessary for our tenants' research, clinical trials, or manufacturing activities;
- Reduction in revenue projections for our tenants' products due to the prioritization of the treatment of affected patients over other treatments, such as specialty and elective procedures and non-COVID-related diagnostics;
- Delays in necessary interactions with ethics committees, regulators, and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees;
- Delays in receiving approval from regulatory authorities to initiate planned clinical trials or research activities;
- Delays in commercialization of our tenants' products and approval by governmental authorities (such as the FDA and the federal and state Emergency Management Agencies) of our tenants' products caused by disruptions, funding shortages, or health concerns, as well as by the prioritization by the FDA of the review and approvals of diagnostics, therapeutics, and vaccines that are related to an outbreak;
- Difficulty in retaining staff or rehiring staff in connection with layoffs caused by deteriorating global market conditions;
- Changes in local regulations as part of a response to an outbreak that may require our tenants to change the ways in which their clinical trials are conducted, which may result in unexpected costs or the discontinuation of the clinical trials altogether;
- Refusal or reluctance of the FDA to accept data from clinical trials in affected geographies outside the U.S.;
- Diminishing public trust in healthcare facilities or other facilities, such as medical office buildings, that are treating (or have treated) patients affected by contagious diseases; and
- Inability to access capital on terms favorable to our tenants because of changes in company valuation and/or investor appetite due to a general downturn in economic and financial conditions and the volatility of the market.

The negative effects of an outbreak of a contagious disease on our tenants in the technology industry may include, but are not limited to:

- Reduction in staff productivity due to business closures, alternative working arrangements, or illness of staff and/or illness in the family;
- Reduction in sales of our tenants' services and products, longer sales cycles, reduction in subscription duration and value, slower adoption of new technologies, and increase in price competition due to economic uncertainties and downturns;
- Disruptions to our tenants' supply chain, manufacturing vendors, or logistics providers of products or services;
- Limitations on business and marketing activities due to travel restrictions, virtualization, or cancellation of related events;
- Adverse impact on customer relationships and our ability to recognize revenues due to our tenants' inability to access their clients' sites for implementation and on-site consulting services;
- Inability to recruit and develop highly skilled employees with appropriate qualifications, to conduct background checks on potential employees, and to provide necessary equipment and training to new and existing employees;
- Network infrastructure and technology system failures of our tenants, or of third-party services used by our tenants, which may result in system interruptions, reputational harm, loss of intellectual property, delays in product development, lengthy interruptions in services, breaches of data security, and loss of critical data;
- Higher employment compensation costs that may not be offset by improved productivity or increased sales; and

- Inability to access capital on terms favorable to our tenants because of changes in company valuation and/or investor appetite due to a general downturn in of economic and financial conditions and the volatility of the market.

The negative effects of an outbreak of a contagious disease on our tenants in the agtech industry may include, but are not limited to:

- Reduction in productive capacity and profitability because of decreased labor availability due, for example, to government restrictions, the inability of employees to report to work, or collective bargaining efforts;
- Potential contract cancellations, project reductions, and reduction in demand for our tenants' products due to the adverse effect on business confidence and consumer sentiments and the general downturn in economic conditions;
- Disruption of the logistics necessary to import, export, and deliver products to target companies and their customers, as ports and other channels of entry may be closed or may operate at only a portion of capacity;
- Disruptions to manufacturing facilities and supply lines; and
- Inability to access capital on terms favorable to our tenants because of changes in company valuation and/or investor appetite due to a general downturn in economic and financial conditions and the volatility of the market.

The potential impact of a pandemic or outbreak of a contagious disease with respect to our tenants or our properties is difficult to predict and could have a material adverse impact on our tenants' operations and, in turn, on our revenues, business, and results of operations, as well as the value of our stock. The recent COVID-19 pandemic, or other pandemics, may directly or indirectly cause the realization of any of the other risk factors included in this annual report on Form 10-K.

Other factors

We may incur significant costs if we fail to comply with laws or if laws change.

Our properties are subject to many federal, state, and local regulatory requirements and to state and local fire, life-safety, environmental, and other requirements. If we do not comply with all of these requirements, we may have to pay fines to government authorities or damage awards to private litigants. We do not know whether these requirements will change or whether new requirements will be imposed. Changes in these regulatory requirements could require us to make significant unanticipated expenditures. These expenditures could have an adverse effect on us and our ability to make distributions to our stockholders.

For example, the California Safe Drinking Water and Toxic Enforcement Act, also referred to as Proposition 65, requires “clear and reasonable” warnings be given to persons who are exposed to chemicals known to the State of California to cause cancer or reproductive toxicity. We believe that we comply with Proposition 65 requirements; however, there can be no assurance that we will not be adversely affected by litigation or regulatory enforcement relating to Proposition 65. In addition, there can be no assurance that the costs of compliance with new environmental laws and regulations will not be significant or will not adversely affect our ability to meet our financial expectations, our financial condition, results of operations, and cash flows.

We may incur significant costs in complying with the Americans with Disabilities Act and similar laws.

Under the ADA, places of public accommodation and/or commercial facilities must meet federal requirements related to access and use by disabled persons. We may be required to make substantial capital expenditures at our properties to comply with this law. In addition, non-compliance could result in the imposition of fines or an award of damages to private litigants.

A number of additional federal, state, and local laws and regulations exist regarding access by disabled persons. These regulations may require modifications to our properties or may affect future renovations. These expenditures may have an adverse impact on overall returns on our investments.

We face possible risks and costs associated with the effects of climate change and severe weather.

We cannot predict the rate at which climate change will progress. However, the physical effects of climate change could have a material adverse effect on our properties, operations, and business. For example, most of our properties are located along the east and west coasts of the U.S. To the extent that climate change impacts changes in weather patterns, our markets could experience severe weather, including hurricanes, severe winter storms, and coastal flooding due to increases in storm intensity and rising sea levels. Certain of our properties are also located along shorelines and may be vulnerable to coastal hazards, such as sea level rise, severe weather patterns and storm surges, land erosion, and groundwater intrusion. Over time, these conditions could result in declining demand for space at our properties, delays in construction, resulting in increased construction costs, or in our inability to operate the buildings at all. Climate change and severe weather may also have indirect effects on our business by increasing the cost of, or decreasing the availability of, property insurance on terms we find acceptable, by increasing the costs of energy, maintenance, repair of water and/or wind damage, and snow removal at our properties.

On November 13, 2021, nearly 200 countries attended the United Nation annual climate summit, COP26, and adopted the Glasgow Climate Pact, with terms including strengthened efforts to address climate change by building resiliency, reducing greenhouse gas emissions, providing additional funding from developed to developing countries, and limiting global temperature increase to 1.5 Celsius above pre-industrial levels. The Pact for the first time includes language that calls upon countries to reduce their reliance on coal power and roll back inefficient fossil fuel subsidies. A number of other notable agreements were made during the COP26 summit, including, among others, an agreement between the U.S. and EU to spearhead an initiative to reduce methane emissions by 30% by 2030. It is unknown how or if the Pact’s measures will be carried out effectively or whether these measures will be sufficient to mitigate the effects of climate change over time.

According to the latest data provided by the U.S. Environmental Protection Agency, the U.S. is responsible for approximately 15% of the global greenhouse gas emissions. To combat the cause of global warming domestically, President Biden identified climate change as one of his administration’s top priorities and pledged to seek measures that would pave the path for the U.S. to eliminate net greenhouse gas pollution by 2050. In April 2021, President Biden announced the administration’s plan to reduce the U.S. greenhouse gas emissions by at least 50% by 2030. These environmental goals earned a prominent place in the Biden administration’s \$1.2 trillion infrastructure bill, which was signed into law on November 15, 2021. It is not yet known what impact this law may have on our properties, business operations, or our tenants.

Numerous states and municipalities have adopted laws and policies on climate change and emission reduction targets, including, but not limited to, the following:

- In California, State Governor Gavin Newsom signed legislation in September 2021 aimed at achieving net-zero GHG emissions associated with cement used within the state no later than 2045. In November 2020, the San Francisco Board of Supervisors adopted an All-Electric New Construction Ordinance that will require all new buildings (residential and non-residential) with initial building permit applications made on or after June 1, 2021 to have all-electric indoor and outdoor space-conditioning, water heating, cooking, and clothes drying systems. In addition, in September 2020, Mr. Newsom signed an executive order requiring all new passenger cars and trucks sold in the state to be emission free by 2035. Also in September 2018, Senate Bill 100 was signed into law in California, accelerating the state's renewable portfolio standard target dates and setting a policy of meeting 100% of retail electricity sales from eligible renewables and zero-carbon resources by December 31, 2045.
- In Massachusetts, Senate Bill 9 was signed into law in March 2021, updating the state's climate policy to ensure net-zero GHG emissions by 2050 and establishing interim emission reduction targets for several sectors, including commercial and industrial buildings.
- In New York, the Climate Leadership and Community Protection Act was signed into law in July 2019, establishing a statewide framework to reduce net GHG emissions to no less than 85% below 1990 levels by 2050. Also, in May 2019, New York City enacted Local Law 97 as a part of the Climate Mobilization Act aimed at reducing GHG emissions by 80% from commercial and residential buildings by 2050. Starting in 2024, this law will place carbon caps on most buildings larger than 25,000 square feet. In addition, in December 2021, New York City passed Local Law 154 of 2021, which will phase out fossil fuel usage in newly constructed residential and commercial buildings starting in 2024 for lower-rise buildings, and in 2027 for taller buildings. With few exceptions, all buildings constructed in New York City must be fully electric by 2027.
- In Washington, the State Legislature has passed a number of bills since 2019 focused on phasing out fossil fuels, achieving carbon neutrality, reducing GHG emissions, supporting the sale of zero-emissions vehicles, and establishing clean fuel standards. In support of these efforts, in 2020, Washington updated its GHG emission goals to require a reduction of 45% below 1990 levels by 2030, of 70% below 1990 levels by 2040, and net-zero emissions by 2050.
- In North Carolina, State Governor Roy Cooper signed an executive order in January 2022 that updates the state's GHG emission goals to require a reduction of 50% below 2005 levels by 2030, and achievement of net-zero emissions by 2050.

Changes in federal, state, and local legislation and regulation based on concerns about climate change could result in increased capital expenditures on our existing properties and our new development properties (for example, to improve their energy efficiency and/or resistance to severe weather) without a corresponding increase in revenue, which may result in adverse impacts to our net income.

We rely on a limited number of vendors to provide key services, including, but not limited to, utilities and construction services, at certain of our properties. Our business and property operations may be adversely affected if these vendors fail to adequately provide key services at our properties as a result of unanticipated events, including those resulting from climate change. If a vendor fails to adequately provide utilities, construction, or other important services, we may experience significant interruptions in service and disruptions to business operations at our properties, incur remediation costs, and become subject to claims and damage to our reputation. We own and operate approximately 40% of our properties in California, where climate change has been linked to the progressively warmer and drier weather associated with ideal conditions for highly destructive wildfires.

For example, most of our properties located in our San Francisco Bay Area market depend on PG&E for the delivery of electric and gas services. In January 2019, in response to potential liabilities arising from a series of catastrophic wildfires that occurred in Northern California in 2017 and 2018, PG&E initiated voluntary reorganization proceedings under Chapter 11 of the U.S. Bankruptcy Code. While PG&E emerged from bankruptcy in July 2020, there is no guarantee that PG&E will be able to sustain safe operations and continue to provide consistent utilities services. During periods of high winds and high fire danger in recent fire seasons, PG&E has preemptively shut off power to areas of Central and Northern California. The shutoffs were designed to help guard against fires ignited in areas with high winds and dry conditions. PG&E has warned that it may have to employ shutoffs while the utility company addresses maintenance issues. Future shutoffs of power may impact the reliability of access to a stable power supply at our properties. There is no guarantee that in the future climate change and severe weather will not adversely affect PG&E or any of our other key vendors, which in turn could have a material adverse effect on our properties and our tenants' operations, as well as on our financial condition, results of operations, and cash flows.

There can be no assurance that climate change and severe weather, or the potential impacts of these events on our vendors and suppliers, will not have a material adverse effect on our properties, operations, or business.

We may incur significant costs in complying with environmental laws.

Federal, state, and local environmental laws and regulations may require us, as a current or prior owner or operator of real estate, to investigate and remediate hazardous or toxic substances or petroleum products released at or from any of our properties. The cost of investigating and remediating contamination could be substantial and could exceed the amount of any insurance coverage available to us. In addition, the presence of contamination, or the failure to properly remediate, may adversely affect our ability to lease or sell an affected property, or to borrow funds using that property as collateral.

Under environmental laws and regulations, we may have to pay government entities or third parties for property damage and for investigation and remediation costs incurred by those parties relating to contaminated properties regardless of whether we knew of or caused the contamination. Even if more than one party was responsible for the contamination, we may be held responsible for all of the remediation costs. In addition, third parties may sue us for damages and costs resulting from environmental contamination, or jointly responsible parties may contest their responsibility or be financially unable to pay their share of such costs.

Environmental laws also govern the presence, maintenance, and removal of asbestos-containing building materials. These laws may impose fines and penalties on us for the release of asbestos-containing building materials and may allow third parties to seek recovery from us for personal injury from exposure to asbestos fibers. We have detected asbestos-containing building materials at some of our properties, but we do not expect that they will result in material environmental costs or liabilities for us.

Environmental laws and regulations also require the removal or upgrading of certain underground storage tanks and regulate:

- The discharge of stormwater, wastewater, and any water pollutants;
- The emission of air pollutants;
- The generation, management, and disposal of hazardous or toxic chemicals, substances, or wastes; and
- Workplace health and safety.

Many of our tenants routinely handle hazardous substances and wastes as part of their operations at our properties. Environmental laws and regulations subject our tenants, and potentially us, to liability resulting from these activities. Environmental liabilities could also affect a tenant's ability to make rental payments to us. We require our tenants to comply with these environmental laws and regulations and to indemnify us against any related liabilities.

Independent environmental consultants have conducted Phase I or similar environmental assessments at our properties. We intend to use consultants to conduct similar environmental assessments on our future acquisitions. This type of assessment generally includes a site inspection, interviews, and a public records review, but no subsurface sampling. These assessments and certain additional investigations of our properties have not to date revealed any environmental liability that we believe would have a material adverse effect on our business, assets, or results of operations.

Additional investigations have included, as appropriate:

- Asbestos surveys;
- Radon surveys;
- Lead-based paint surveys;
- Mold surveys;
- Additional public records review;
- Subsurface sampling; and
- Other testing.

Nevertheless, it is possible that the assessments on our current properties have not revealed, and that assessments on future acquisitions will not reveal, all environmental liabilities. Consequently, there may be material environmental liabilities of which we are unaware that may result in substantial costs to us or our tenants and that could have a material adverse effect on our business.

Environmental, health, or safety matters are subject to evolving regulatory requirements. Costs and capital expenditures relating to the evolving requirements depend on the timing of the promulgation and enforcement of new standards. As discussed in the immediately preceding risk factor, due to concern over the risks of climate change, a more restrictive regulatory framework to reduce greenhouse gas pollution might be implemented, including the adoption of carbon taxes, restrictive permitting, and increased efficiency standards. These requirements could make our operations more expensive and lengthen our project times. The costs of complying with evolving regulatory requirements, including greenhouse gas regulations and policies, could negatively impact our financial results. Moreover, changes in environmental regulations could inhibit or interrupt our operations, or require modifications to our facilities. Accordingly, environmental, health, or safety regulatory matters could result in significant unanticipated costs or liabilities and could have a material adverse effect on our business, financial condition, results of operations, and cash flows, and the market price of our common stock.

We may be unable to meet our sustainability goals.

We seek to make a positive and meaningful impact on the health, safety, and well-being of our tenants, stockholders, employees, and the communities in which we live and work. In support of these efforts, we set specific sustainability goals to reduce the environmental impact of buildings in operation and for new ground-up construction projects. There are significant risks that may prevent us from achieving these goals, including, but not limited to, the following possibilities:

- Change in market conditions may affect our ability to deploy capital for projects that reduce energy consumption, greenhouse gas pollution, and potable water consumption and that provide waste savings.
- Our tenants may be unwilling or unable to accept potential incremental expenses associated with our sustainability programs, including expenses to comply with requirements stipulated under building certification standards such as LEED, WELL, and Fitwel.

The realization of any of the above risks could significantly impact our reputation, our ability to continue developing properties in markets where high levels of LEED certification contribute to our efforts to obtain building permits and entitlements, and our ability to attract tenants who include LEED certification among their priorities when selecting a location to lease.

We may invest or spend the net proceeds from the offering of our unsecured senior notes payable due in April 2026 and May 2032 in ways investors may not agree with and in ways that may not earn a profit.

The net proceeds from the offering of our unsecured senior notes payable due in April 2026 and our unsecured senior notes payable due in May 2032 (collectively, the “Green Bonds”) will be used to fund, in whole or in part, Eligible Green Projects (as defined below), including the development and redevelopment of such projects. The net proceeds from these offerings were initially used to reduce the outstanding balance on our unsecured senior line of credit. We then allocated the funds to recently completed and future Eligible Green Projects.

There can be no assurance that the projects funded with the proceeds from the Green Bonds will meet investor criteria and expectations regarding environmental impact and sustainability performance. In particular, no assurance is given that the use of such proceeds for any Eligible Green Projects will satisfy, whether in whole or in part, any present or future investor expectations or requirements regarding any investment criteria or guidelines with which such investor or its investments are required to comply, whether by any present or future applicable law or regulations or by its own bylaws or other governing rules or investment portfolio mandates (in particular with regard to any direct or indirect environmental, sustainability, or social impact of any projects or uses, the subject of or related to, the relevant Eligible Green Projects). Adverse environmental or social impacts may occur during the design, construction, and operation of the projects, or the projects may become controversial or criticized by activist groups or other stakeholders. In addition, although we will limit the use of proceeds from the Green Bonds to Eligible Green Projects, there can be no assurance that one or more development, redevelopment, and tenant improvement projects that we expect will receive a LEED certification will actually receive such certification. Furthermore, from time to time, we may refinance our debt to take advantage of lower market rates or other favorable terms, and we might pursue this strategy in the future in connection with our Green Bonds. If the terms of the refinanced agreements set different or no restrictions on the range of purposes the funds can be allocated to, we can provide no assurance that allocations to future Eligible Green Projects established prior to the refinancing of our Green Bonds will remain unchanged after the refinancing has been completed.

“Eligible Green Projects” are defined as:

- New class A development properties that have received or are expected to receive Gold or Platinum LEED certification;
- Existing class A redevelopment properties that have received or are expected to receive Gold or Platinum LEED certification; and
- Tenant improvements that have received or are expected to receive Gold or Platinum LEED certification.

Eligible Green Projects include projects with disbursements made in the three years preceding the applicable issue date of the Green Bonds. We intend to spend the remaining net proceeds from the sale of the Green Bonds within two years following the applicable issue date of the Green Bonds. LEED is a voluntary, third party building certification process developed by the U.S. Green Building Council (“USGBC”), a non-profit organization. The USGBC developed the LEED certification process to (i) evaluate the environmental performance from a whole-building perspective over a building’s life cycle, (ii) provide a definitive standard for what constitutes a “green building,” (iii) enhance environmental awareness among architects and building contractors, and (iv) encourage the design and construction of energy-efficient, water-conserving buildings that use sustainable or green resources and materials.

Changes in U.S. accounting standards may adversely impact us.

The regulatory boards and government agencies that determine financial accounting standards and disclosures in the U.S., which include the FASB and the IASB (collectively, the “Boards”) and the SEC, continually change and update the financial accounting standards we must follow.

From time to time, the Boards issue ASUs that could have a material effect on our financial condition or results of operations, which in turn could also significantly impact the market price of our common stock. Such potential impacts include, without limitation, significant changes to our balance sheet, significant changes to the timing or methodology of revenue or expense recognition, or significant fluctuations in our reported results of operations, including an increase in our operating expenses or general and administrative expenses related to payroll costs, legal costs, and other out-of-pocket costs incurred in order to comply with the requirements of these ASUs.

Any difficulties in the implementation of changes in accounting principles, including the ability to modify our accounting systems and to update our policies, procedures, information systems, and internal controls over financial reporting, could result in materially inaccurate financial statements, which in turn could harm our operating results or cause us to fail to meet our reporting obligations. Significant changes in new ASUs could cause fluctuations in revenue and expense recognition and materially affect our results of operations. We may also experience an increase in general and administrative expenses resulting from additional resources required for the initial implementation of such ASUs. This could adversely affect our reported results of operations, profitability, and financial statements. Additionally, the adoption of new accounting standards could also affect the calculation of our debt covenants. It cannot be assured that we will be able to work with our lenders to successfully amend our debt covenants in response to changes in accounting standards.

Security incidents through cyber attacks, cyber intrusions, or other methods could disrupt our information technology networks and related systems; cause a loss of assets, loss of system availability, or loss of data; give rise to remediation or other expenses; expose us to liability under federal and state laws; and subject us to litigation and investigations, which could result in substantial reputational damage and materially and adversely affect our business, financial condition, results of operations, and cash flows, and the market price of our common stock.

Information technology, communication networks, and related systems are essential to the operation of our business. We use these systems to manage our tenant and vendor relationships, internal communications, accounting and record-keeping systems, and many other key aspects of our business. Our operations rely on the secure processing, storage, and transmission of confidential and other information in our computer systems and networks, which also depend on the strength of our procedures and the effectiveness of our internal controls.

A security incident may occur through physical break-ins, disruptions due to power outages or catastrophic events, such as fires, floods, hurricanes, and earthquakes, breaches of our secure network by an unauthorized party, software vulnerabilities, malware, computer viruses, attachments to emails, employee theft or misuse, social engineering, or inadequate use of security controls. Outside parties may attempt to fraudulently induce our employees to disclose sensitive information or transfer funds via illegal electronic spamming, phishing, spoofing, or other tactics. Additionally, cyber attackers can develop and deploy malware, credential theft or guessing tools, and other malicious software programs to gain access to sensitive data or fraudulently obtain assets we hold.

We have implemented security measures to safeguard our systems and data and to manage cybersecurity risk. We monitor and develop our information technology networks and infrastructure, and invest in the development and enhancement of our controls designed to prevent, detect, respond, and mitigate the risk of unauthorized access, misuse, computer viruses, and other events that could have a security impact. We conduct periodic security awareness trainings of our employees to educate them on how to identify and alert management to phishing emails, spoofed or manipulated electronic communications, and other critical security threats. We have implemented periodic phishing tests using a variety of scenarios, including those obtained from phishing samples and intelligence sources. Additionally, we have an internal team and external partners with well-defined processes devoted to responding to threats, including reports of phishing, in real time. We have implemented internal controls around our treasury function, including enhanced payment authorization procedures, verification requirements for new vendor setup and vendor information changes, and bolstered outgoing payment notification process and account reconciliation procedures. Finally, we have policies and procedures in place in order to identify cybersecurity incidents and elevate such incidents to senior management in order to appropriately address and remediate any cyber attack. At least annually, we engage a third party to test our security by acting like an advanced threat and try to break into our computer systems.

There can be no assurance that our actions, security measures, and controls designed to prevent, detect, or respond to intrusion; to limit access to data; to prevent loss, destruction, alteration, or exfiltration of business information; or to limit the negative impact from such attacks can provide absolute security against a security incident. A significant security incident involving our information systems or those of our tenants, vendors, software creators, cloud providers, cybersecurity service providers, or other third parties with whom we do business could lead to, among other things, the following:

- Theft of our cash, cash equivalents, or other liquid assets, including publicly traded securities;

- Interruption in the operation of our systems, which may result in operational inefficiencies and a loss of profits;
- Unauthorized access to, and destruction, loss, theft, misappropriation, or release of, proprietary, confidential, sensitive, or otherwise valuable information of ours or our tenants, and other business partners, which could be used to compete against us or for disruptive, destructive, or otherwise harmful purposes and outcomes;
- Our inability to produce financial and operational data necessary to comply with rules and regulations from the SEC, the IRS, or other state and federal regulatory agencies;
- Our inability to properly monitor our compliance with the rules and regulations regarding our qualification as a REIT;
- Significant management attention and resources required to remedy any damages that result;
- Significant exposure to litigation and regulatory fines, penalties, or other sanctions;
- Violation of our lease agreements or other agreements;
- Damage to our reputation among our tenants, business partners, and investors;
- Loss of business opportunities;
- Difficulties in employee retention and recruitment;
- Unauthorized access to, and destruction, loss, or denial of service to, the computing systems that manage our buildings;
- Increase in the cost of proactive defensive measures to prevent future cyber incidents, including hiring personnel and consultants or investing in additional technologies;
- Increase in our cybersecurity insurance premiums; and
- The wide breadth of software required to run our business, and the increase in supply chain attacks by advanced persistent threats.

A principal reason that we cannot provide absolute protection from security incidents is that it may not always be possible to anticipate, detect, or recognize threats to our systems, or to implement effective preventive measures against all security incidents. We may not be able to immediately address the consequences of a security incident. A successful breach of our computer systems, software, networks, or other technology assets could occur and persist for an extended period of time before being detected due to, among other things:

- The breadth of our operations and the high volume of transactions that our systems process;
- The large number of our business partners;
- The frequency and wide variety of sources from which a cyber attack can originate;
- An increase in supply chain attacks;
- The severity of cyber attacks;
- The proliferation and increasing sophistication and types of cyber attacks.

The extent of a particular cyber attack and the steps that we may need to take to investigate the attack may not be immediately clear. Therefore, in the event of an attack, it may take a significant amount of time before such an investigation can be completed. During an investigation, we may not necessarily know the extent of the damage incurred or how best to remediate it, and certain errors or actions could be repeated or compounded before they are discovered and remediated, which could further increase the costs and consequences of a cyber attack.

Even if we are not targeted directly, cyber attacks on the U.S. government, financial markets, financial institutions, or other businesses, including our tenants, vendors, software creators, cloud providers, cybersecurity service providers, and other third parties with whom we do business, may occur, and such events could disrupt our normal business operations and networks in the future. In December 2020, hackers reportedly linked to the Russian government engaged in a massive cyber attack on the U.S. government and major U.S.-based private companies through malware planted in third-party software. The full extent of the hack to these entities remains unknown, and there is no evidence that we have been impacted by this hack, though a significant number of governmental agencies and companies in the private sector, most of which are U.S.-based, have confirmed breaches.

We have not experienced any material breach of cybersecurity. However, our computer systems will likely be subject to cyber attacks, unauthorized access, computer viruses, or other computer-related penetrations. Our administrative and technical controls as well as other preventive actions we take to reduce the risk of cyber incidents and protect our information technology may be insufficient to prevent physical and electronic break-ins, cyber attacks, or other security breaches to our computer systems.

In response to recent cyber attacks, President Biden issued an executive order, “Improving the Nation’s Cybersecurity” in May 2021, which established a reporting requirement for government contractors and encouraged coordination between the public and private sectors to better protect against cybersecurity incidents. In addition, in June 2021, the SEC increased its focus on the failure of some public companies to disclose that they had been affected by the aforementioned December 2020 cyber attack, by sending investigative letters seeking voluntary information regarding the attack and questions around companies’ disclosures and internal controls. The SEC also communicated that cyber risks would be included on the SEC rulemaking agenda. We expect the federal government and regulatory agencies to continue to focus on ways to increase protection against and oversight and disclosure of cyber attack incidents.

General Risk Factors

We face risks associated with short-term liquid investments.

From time to time, we may have significant cash balances that we invested in a variety of short-term investments that are intended to preserve principal value and maintain a high degree of liquidity while providing current income. These investments may include (either directly or indirectly) obligations (including certificates of deposit) of banks, money market funds, treasury bank securities, and other short-term securities. Investments in these securities and funds are not insured against loss of principal. Under certain circumstances, we may be required to redeem all or part of these securities or funds at less than par value. A decline in the value of our investments, or a delay or suspension of our right to redeem them, may have a material adverse effect on our results of operations or financial condition and our ability to pay our obligations as they become due.

Competition for skilled personnel could increase labor costs.

We compete with various other companies in attracting and retaining qualified and skilled personnel. We depend on our ability to attract and retain skilled management personnel who are responsible for the day-to-day operations of the Company. Competitive pressures may require that we enhance our pay and benefits package to compete effectively for such personnel. We may not be able to offset such additional costs by increasing the rates we charge tenants. If there is an increase in these costs or if we fail to attract and retain qualified and skilled personnel, our business and operating results could be adversely affected.

Failure to hedge effectively against interest rate changes may adversely affect our results of operations.

From time to time, we may enter into interest rate hedge agreements to manage some of our exposure to interest rate volatility. Interest rate hedge agreements involve risks, such as the risk that counterparties may fail to honor their obligations under these arrangements. In addition, these arrangements may not be effective in reducing our exposure to changes in interest rates. These risk factors may lead to failure to hedge effectively against changes in interest rates and therefore could adversely affect our results of operations. As of December 31, 2021, we had no interest rate hedge agreements outstanding.

Market volatility may negatively affect our business.

From time to time, the capital and credit markets experience volatility. In some cases, the markets have produced downward pressure on stock prices and credit capacity for certain issuers without regard to those issuers' underlying financial and/or operating strength. If market disruption and volatility occur, there can be no assurance that we will not experience an adverse effect, which may be material, on our business, financial condition, and results of operations. Market disruption and volatility may adversely affect the value of the companies in which we hold equity investments, including through our non-real estate venture investment portfolio, and we may be required to recognize losses in our earnings. Disruptions, uncertainty, or volatility in the capital markets may also limit our access to capital from financial institutions on favorable terms, or altogether, and our ability to raise capital through the issuance of equity securities could be adversely affected by causes beyond our control through extraordinary disruptions in the global economy and financial systems or through other events.

Changes in financial accounting standards may adversely impact our compliance with financial debt covenants.

Our unsecured senior notes payable contain financial covenants that are calculated based on GAAP at the date the instruments were issued. However, certain debt agreements, including those related to our unsecured senior line of credit, contain financial covenants whose calculations are based on current GAAP, which is subject to future changes. Our unsecured senior line of credit agreement provides that our financial debt covenants be renegotiated in good faith to preserve the original intent of the existing financial covenant when such covenant is affected by an accounting standard change. For those debt agreements that require the renegotiation of financial covenants upon changes in accounting standards, there is no assurance that we will be successful in such negotiations or that the renegotiated covenants will not be more restrictive to us.

Extreme weather and natural or other unforeseen disasters may cause property damage or disrupt operations, which could harm our business and operating results.

We have properties located in areas that may be subject to extreme weather and natural or other disasters, including, but not limited to, earthquakes, winds, floods, hurricanes, fires, power shortages, telecommunication failures, medical epidemics, explosions, or other natural or manmade accidents or incidents. Our corporate headquarters and certain properties are located in areas of California that have historically been subject to earthquakes and wildfires. Such conditions and disastrous events may damage our properties, disrupt our operations, or adversely impact our tenants' or third-party vendors' operations. These events may affect our ability to operate our business and have significant negative consequences on our financial and operating results. Damage caused by these events may result in costly repairs for damaged properties or equipment, delays in the development or redevelopment of our construction projects, or interruption of our daily business operations, which may result in increased costs and decreased revenues.

We maintain insurance coverage at levels that we believe are appropriate for our business. However, we cannot be certain that the amount of coverage will be adequate to satisfy damages or losses incurred in the event of another wildfire or other natural or manmade disaster, which may lead to a material adverse effect on our properties, operations, and our business, or those of our tenants.

Failure of the U.S. federal government to manage its fiscal matters or to raise or further suspend the debt ceiling, and changes in the amount of federal debt, may negatively impact the economic environment and adversely impact our results of operations.

The Budget Control Act of 2011 provided for a reduction of \$1.1 trillion of U.S. federal government discretionary spending over the succeeding decade (later extended through 2023) through a series of automatic, across-the-board spending cuts known as sequestration. Sequestration went into effect on March 1, 2013, and will remain in effect in the absence of further legislative action.

The U.S. federal government has established a limit on the level of federal debt that the U.S. federal government can have outstanding, often referred to as the debt ceiling. The U.S. Congress has authority to raise or suspend the debt ceiling and to approve the funding of U.S. federal government operations within the debt ceiling, and has done both frequently in the past, often on a relatively short-term basis. In July 2019, congressional leaders passed a two-year deal to raise the U.S. borrowing limit, which reduced the threat of default and significantly raised federal spending limits. Absent appropriate action to mitigate increasing government spending and provide fiscal discipline, the U.S. federal government may encounter similar issues that result in a partial or complete shutdown and/or default of its existing loans as a result of reaching the debt ceiling. In December 2021, congressional leaders passed legislation to raise the U.S. borrowing limit to allow the federal government to operate through 2023. Generally, if effective legislation to manage the debt ceiling is not enacted and the debt ceiling is reached in any given year, the federal government may stop or delay making payments on its obligations. A failure by the U.S. Congress to raise the debt limit to the extent necessary in future fiscal years would increase the risk of default by the U.S. on its obligations, the risk of a lowering of the credit rating of the U.S. federal government, and the risk of other economic dislocations. If the U.S. government fails to complete its budget process, another federal government shutdown may result. Such a failure, or the perceived risk of such a failure, could consequently have a material adverse effect on the financial markets and economic conditions in the U.S. and throughout the world.

An inability of the U.S. federal government to manage its fiscal matters, reduce the duration and scope of sequestration, or manage its debt may result in the loss of economic confidence domestically and globally, reduce investment spending, increase borrowing costs, impact availability and cost of capital, and significantly hinder or reduce economic activity. Furthermore, a failure by the U.S. federal government to enact appropriate fiscal legislation may significantly impact the national and global economic and financial environment and affect our business and the businesses of our tenants. If the U.S. Congress fails to enact a budget for a given fiscal year's government operations, it may result in a government shutdown similar to the one that took place from December 22, 2018, to January 25, 2019. The shutdown affected certain key agencies at the federal government level, including the FDA and the SEC, and resulted in partial closures of operations. It is unclear whether the U.S. federal government will fail to enact a budget in future fiscal years, and if so, it is possible another partial government shutdown may occur.

The shutdown in early 2019 had affected certain key agencies at the federal government level, including the SEC, which closed partial non-essential operations. The SEC operated limited functions to address emergency situations involving market integrity and investor protection. However, the SEC suspended key functions, such as those related to enforcement actions and review of applications for initial public offerings. Future closures of the SEC could result in uncertainty regarding regulatory actions, issuance of new or clarifications of existing rules and regulations, disruptions in the initial public offerings of companies, including those of our tenants and companies in which we hold equity investments, and investigations and enforcement actions by the SEC. During this period, the FDA and certain other science agencies temporarily shut down select non-essential operations. Also during this period, the FDA maintained only operations deemed to be essential public health-related functions and halted the acceptance of new medical product applications and routine regulatory and compliance work for medical products and certain drugs and foods during the shutdown. The long-term impacts resulting from a prolonged closure of the SEC, the FDA, and other similar agencies are uncertain and may adversely affect our business operations or our tenants and companies in which we hold equity investments. If economic conditions severely deteriorate as a result of government fiscal gridlock, our operations, or those of our tenants, could be affected, which may adversely impact our financial condition and results of operations. These risks may also impact our overall liquidity, our borrowing costs, or the market price of our common stock.

Changes in laws, regulations, and financial accounting standards may adversely affect our reported results of operations.

As a response, in large part, to perceived abuses and deficiencies in current regulations believed to have caused or exacerbated the recent global financial crisis, legislative, regulatory, and accounting standard-setting bodies around the world are engaged in an intensive, wide-ranging examination and rewriting of the laws, regulations, and accounting standards that have constituted the basic playing field of global and domestic business for several decades. In many jurisdictions, including the U.S., the legislative and regulatory response has included the extensive reorganization of existing regulatory and rule-making agencies and organizations, and the establishment of new agencies with broad powers. This reorganization has disturbed longstanding regulatory and industry relationships and established procedures.

The rule-making and administrative efforts have focused principally on the areas perceived as having contributed to the financial crisis, including banking, investment banking, securities regulation, and real estate finance, with spillover impacts on many other areas. These initiatives have created a degree of uncertainty regarding the basic rules governing the real estate industry, and many other businesses, that is unprecedented in the U.S. at least since the wave of lawmaking, regulatory reform, and government reorganization that followed the Great Depression.

The global financial crisis and the aggressive reaction of the government and accounting profession thereto have occurred against a backdrop of increasing globalization and internationalization of financial and securities regulation that began prior to the recent financial crisis. As a result of this ongoing trend, financial and investment activities previously regulated almost exclusively at a local or national level are increasingly being regulated, or at least coordinated, on an international basis, with national rule-making and standard-setting groups relinquishing varying degrees of local and national control to achieve more uniform regulation and reduce the ability of market participants to engage in regulatory arbitrage between jurisdictions. This globalization trend has continued, arguably with an increased sense of urgency and importance, since the financial crisis.

This high degree of regulatory uncertainty, coupled with considerable additional uncertainty regarding the underlying condition and prospects of global, domestic, and local economies, has created a business environment that makes business planning and projections even more uncertain than is ordinarily the case for businesses in the financial and real estate sectors.

In the commercial real estate sector in which we operate, the uncertainties posed by various initiatives of accounting standard-setting authorities to fundamentally rewrite major bodies of accounting literature constitute a significant source of uncertainty as to the basic rules of business engagement. Changes in accounting standards and requirements, including the potential requirement that U.S. public companies prepare financial statements in accordance with international accounting standards and the adoption of accounting standards likely to require the increased use of “fair value” measures, may have a significant effect on our financial results and on the results of our tenants, which would in turn have a secondary impact on us. New accounting pronouncements and interpretations of existing pronouncements are likely to continue to occur at an accelerated pace as a result of recent Congressional and regulatory actions and continuing efforts by the accounting profession itself to reform and modernize its principles and procedures.

Although we have not been as directly affected by the wave of new legislation and regulation as banks and investment banks, we may also be adversely affected by new or amended laws or regulations; by changes in federal, state, or foreign tax laws and regulations; and by changes in the interpretation or enforcement of existing laws and regulations. In the U.S., the financial crisis and continuing economic slowdown prompted a variety of legislative, regulatory, and accounting profession responses.

The federal legislative response culminated in the enactment on July 21, 2010, of the Dodd-Frank Act. The Dodd-Frank Act contains far-reaching provisions that substantially revise, or provide for the revision of, longstanding, fundamental rules governing the banking and investment banking industries and provide for the broad restructuring of the regulatory authorities in these areas. The Dodd-Frank Act has resulted in, and is expected to continue to result in, profound changes in the ground rules for financial business activities in the U.S. To a large degree, the impacts of the legislative, regulatory, and accounting reforms to date are still not clear.

The ongoing implementation of derivatives regulations could have an adverse impact on our ability to hedge risks associated with our business.

Title VII of the Dodd-Frank Act regulates derivatives transactions, which include certain instruments that we use in our risk management activities. It remains impossible at this time to predict the full effects on our hedging activities of the derivatives-related provisions of the Dodd-Frank Act and rules of the Commodity Futures Trading Commission (“CFTC”) and SEC thereunder, or the timing of such effects. While the CFTC has implemented most of its derivatives-related regulations under the Dodd-Frank Act, it has not yet adopted all of those regulations, and it has proposed revisions to certain of its existing derivatives regulations. The impact of any future new or revised CFTC derivatives regulations, or new or revised CFTC interpretations of existing regulations, is unknown, but they could result in, among other things, increases in the costs to us of swaps and other derivatives contracts, and decreases in the number and/or creditworthiness of available hedge counterparties. Furthermore, at this time, the SEC’s regulations for security-based swaps have generally not yet been implemented, and their potential impact on our ability to hedge risks cannot yet be known.

In addition, we may enter into hedging transactions with counterparties based in the EU, Canada, or other jurisdictions that, like the U.S., are in the process of implementing regulations for derivatives. Non-U.S. regulations may apply to such derivatives transactions. The potential impact of such non-U.S. regulations is not fully known and may include, among other things, increased costs for our hedging transactions.

A global financial stress, high structural unemployment levels, and other events or circumstances beyond our control may adversely affect our industry, business, results of operations, contractual commitments, and access to capital.

The COVID-19 pandemic that has taken place in 2020 across the U.S. and worldwide has precipitated widespread structural economic and financial stress. In addition, from 2008 through 2010, significant concerns over energy costs, geopolitical issues, the availability and cost of credit, the U.S. mortgage market, and a declining real estate market in the U.S. contributed to increased volatility, diminished expectations for the economy and the markets, and high levels of structural unemployment by historical standards. These factors, combined with volatile oil prices and fluctuating business and consumer confidence, precipitated a steep economic decline. Since 2011, the U.S. economy has showed significant signs of improvement, but other economies around the world, including Latin America, continue to demonstrate sluggish, stagnant, or slowing growth. Further, severe financial and structural strains on the banking and financial systems have led to significant lack of trust and confidence in the global credit and financial system. Consumers and money managers have liquidated and may liquidate equity investments, and consumers and banks have held and may hold cash and other lower-risk investments, which has resulted in significant and, in some cases, catastrophic declines in the equity capitalization of companies and failures of financial institutions. Although U.S. bank earnings and liquidity have rebounded in recent years, though tapered by the recent COVID-19 pandemic, the potential of significant future bank credit losses creates uncertainty for the lending outlook.

Future downgrades of the U.S. government's sovereign credit rating and an economic crisis in Europe could negatively impact our liquidity, financial condition, and earnings.

Previous U.S. debt ceiling and budget deficit concerns, together with sovereign debt conditions in Europe, have increased the possibility of additional downgrades of sovereign credit ratings and economic slowdowns. There is no guarantee that future debt ceiling or federal spending legislation will not fail and cause the U.S. to default on its obligations, which would likely cause the U.S. credit rating to degrade.

Standard & Poor's Ratings Services lowered its long-term sovereign credit rating on the U.S. from "AAA" to "AA+" in August 2011, which was affirmed in April 2020. Although Standard & Poor's Ratings Services maintains a stable outlook on the U.S. credit rating, further fiscal impasses within the federal government may result in future downgrades. Moody's Investor Services, Inc. affirmed its "Aaa" long-term issuer and senior unsecured ratings in June 2020 and maintains a stable outlook on the U.S. credit rating but has warned that the U.S. fiscal strength has been deteriorating. Fitch Ratings Inc. maintains a "AAA" sovereign rating for U.S. but shifted its outlook from stable to negative in July 2020 to reflect the ongoing deterioration in the U.S. public finances and the absence of a credible fiscal consolidation plan. The impact of any further downgrades to the U.S. government's sovereign credit rating, or its perceived creditworthiness, is inherently unpredictable and could adversely affect the U.S. and global financial markets and economic conditions.

In addition, certain European nations experienced in the recent past varying degrees of financial stress, including Greece, Ireland, Italy, Portugal, and Spain. Although these economies are continuing to recover or have already gone through a gradual recovery, we do not know whether the economic growth will be slowed by the U.K.'s leaving the EU or whether the prior sovereign financial difficulties within the EU governments will reemerge with a higher degree of negative impact to the financial markets. Market concerns over the direct and indirect exposure of European banks and insurers to these EU peripheral nations have resulted in a widening of credit spreads and increased costs of funding for some EU financial institutions. There can be no assurance that government or other measures to aid economic recovery will be effective.

These developments, and concerns over the U.S. government's fiscal policies in general, could cause interest rates and borrowing costs to rise, which may negatively impact our ability to access the debt markets on favorable terms. In addition, the lowered credit rating could create broader financial turmoil and uncertainty, which may exert downward pressure on the market price of our common stock. Continued adverse economic conditions could have a material adverse effect on our business, financial condition, and results of operations.

Financial volatility and geopolitical instability outside of the U.S. may adversely impact the U.S. and global economies.

Many economies have experienced, and continue to experience, financial turmoil, high unemployment, soaring inflation and interest rates, and a significant depreciation of their local currencies. Economies of developing countries like Venezuela and Argentina remain in a long-term crisis, with their current political turmoil exacerbating their economic problems and rendering a bleak near-term outlook. Policies of advanced economies have a profound effect on emerging markets, and ramifications of any trade war involving an advanced economy, like of that between the U.S. and China, could further contribute to the adverse economic and political conditions of emerging and other developed economies. In addition, there are tensions among the U.S., the North Atlantic Treaty Organization ("NATO"), and Russia that have escalated and are culminating in the increasing threat of a potential Russian invasion of Ukraine, ongoing security concerns about North Korea and Iran's nuclear weapons and ballistic missile capabilities, uncertainty regarding Russia, North Korea, and Iran's actions, and their relations with the U.S. and the international community in general, which have created a global security issue that may adversely affect international business and economic conditions.

During 2018–2019, disputes on trade policy between the U.S. and China resulted in increased tariffs and escalating tensions between the two countries. On January 15, 2020, the two parties signed a trade deal representing the first phase of trade negotiations between the two countries. The agreement reduced certain existing tariffs, obligated China to purchase additional products from the U.S. in 2020 and 2021, and provided for stronger protection of American intellectual property and trade secrets (the “Phase One deal”). The Phase One deal expired at the end of 2021, and while China’s purchase of products increased during this two-year period, it fell far below stated targets. U.S. President Biden has not announced immediate plans to increase tariffs after the expiration of the Phase One deal, but the administration is expected to make changes to its U.S.-China tariff policies. In 2021, U.S.-China trade activities for goods rebounded above levels prior to the disputes taking place. However, tensions between the two countries have persisted, and the possibility of future trade disputes may result in the imposition of further tariffs or other retaliatory actions that may affect us, the industry in which we operate, or that of our tenants and vendors.

In 2021 and into January 2022, North Korea has continued to test and develop various ballistic missiles. The U.S. and North Korea have not made progress in reaching an agreement to reduce existing sanctions due to North Korea’s unwillingness to end its nuclear weapons program. In January 2020, the U.S. imposed new sanctions on Iran after tensions escalated in a U.S. airstrike killing a top Iranian military leader and Iran retaliated with ballistic missile strikes targeted at U.S. bases located in Iraq. The sanctions targeted the construction, mining, manufacturing, and textiles sectors, which are key sectors of Iran’s economy, in an attempt to deny the Iranian government revenues derived from these activities. Tensions with Iran have continued into 2021, even as President Biden has stated his intention to reengage with Iran, ease relations between the two countries, and rejoin the Iran nuclear deal under the Joint Comprehensive Plan of Action. However, these goals have proven difficult due to ongoing tense relations between the two countries. If discussions fail and Iran carries out retaliatory actions against the U.S., the U.S. economy, safety, and lives of U.S. residents and businesses may be significantly impacted, resulting in financial volatility and social instability for those affected. This may include, but not be limited to, our company, tenants, employees, investors, and others located in affected communities in which we hold properties.

At the end of 2021 and into January 2022, tensions between the U.S. and Russia escalated when Russia amassed large numbers of military ground forces and support personnel on the Ukraine-Russia border, increasing speculation that Russia may attempt to invade Ukraine in the near future. The possibility of Ukrainian membership to NATO has been a point of contention with Russia, and while talks between U.S., Russian, and NATO leaders are in process, tensions remain high. A potential invasion of Ukraine and any retaliatory measures taken by the U.S. and NATO have created global security concerns that could have a lasting impact on regional and global economies.

It is not possible to predict to what extent regional economic and political instability of emerging economies or trade conflicts may negatively impact economies around the world, including the U.S. If these macroeconomic and political issues are not managed appropriately, they could lead to currency devaluation, sovereign debt increases, banking crises, and other financial and political turmoil and uncertainty. Continued adverse economic conditions could have a material adverse effect on our business, financial condition, and results of operations.

We are subject to risks from potential fluctuations in exchange rates between the U.S. dollar and foreign currencies.

We have properties and operations in countries where the U.S. dollar is not the local currency, and we thus are subject to international currency risk from the potential fluctuations in exchange rates between the U.S. dollar and the local currency. In particular, a significant decrease or volatility in the value of the Canadian dollar or other currencies in countries where we may have an investment could materially affect our results of operations. We may attempt to mitigate such effects by borrowing in the local foreign currency in which we invest. Any international currency gain recognized with respect to changes in exchange rates may not qualify under gross income tests that we must satisfy annually in order to qualify and maintain our status as a REIT.

Adoption of the Basel III standards and other regulatory standards affecting financial institutions may negatively impact our access to financing or affect the terms of our future financing arrangements.

In response to various financial crises and the volatility of financial markets, the Basel Committee on Banking Supervision (the “Basel Committee”) adopted the Basel III regulatory capital framework (“Basel III” or the “Basel III Standards”). The final package of Basel III reforms was approved by the G20 leaders in November 2010. In January 2013, the Basel Committee agreed to delay implementation of the Basel III Standards and expanded the scope of assets permitted to be included in certain banks’ liquidity measurements. U.S. banking regulators have elected to implement substantially all of the Basel III Standards, with implementation of Basel III having commenced in 2014 and incrementally implemented through 2020, though progress was limited during 2020 due to the impact of the COVID-19 pandemic.

Since approving the Basel III Standards, U.S. regulators also issued rules that impose upon the most systemically significant banking organizations in the U.S. supplementary leverage ratio standards (the “SLR Standards”) more stringent than those of the Basel III Standards. In addition, the Federal Reserve Board has adopted a final rule that establishes a methodology to identify whether a U.S. bank holding company is a global systemically important banking organization (“GSIB”). Any firm identified as a GSIB would be subject to a risk-based capital surcharge that is calibrated based on its systemic risk profile. Under the final rule, the capital surcharge began phasing in on January 1, 2016, and became fully effective on January 1, 2019.

On September 3, 2014, U.S. banking regulators issued a final rule to implement the Basel Committee's liquidity coverage ratio (the "LCR") in the U.S. (the "LCR Final Rule"). The LCR is intended to promote the short-term resilience of internationally active banking organizations to improve the banking industry's ability to absorb shocks arising from idiosyncratic or market stress, and to improve the measurement and management of liquidity risk. The LCR Final Rule contains requirements that are in certain respects more stringent than the Basel Committee's LCR. The LCR measures an institution's high-quality liquid assets against its net cash outflows. Under the LCR Final Rule, the LCR transition period occurred from 2015 through 2017.

U.S. regulators have also issued and proposed rules that impose additional restrictions on the business activities of financial institutions, including their trading and investment activities. For example, with effect in April 2014, U.S. regulators adopted a final rule implementing a section of the Dodd-Frank Act that has become known as the "Volcker Rule." The Volcker Rule generally restricts certain U.S. and foreign financial institutions from engaging in proprietary trading and from investing in sponsoring or having certain relationships with "covered funds," which include private equity funds and hedge funds. Amendments effective in January 2020 have provided a certain level of regulatory relief, particularly pertaining to proprietary trading restrictions, by tailoring the Volcker Rule's application, simplifying certain standards and requirements, and reducing compliance burden. Additional amendments related to "covered funds" are expected. The effects of the Volcker Rule are uncertain, but it is in any event likely to curtail various banking activities, which in turn could result in uncertainties in the financial markets.

In March 2020, the Basel Committee announced a deferral of Basel III implementation to January 1, 2023 due to impacts from the recent COVID-19 pandemic. The implementation of the Basel III Standards, the SLR Standards, the GSIB capital surcharge, the LCR Final Rule, the Volcker Rule, and other similar rules and regulations could cause an increase in capital requirements for, and place other financial constraints on, both U.S. and foreign financial institutions from which we borrow, which may negatively impact our access to financing or affect the terms of our future financing arrangements.

Significant developments stemming from recent international trade developments or the U.K.'s referendum on membership in the EU could have a material adverse effect on us.

During his administration, U.S. President Trump imposed significant increases on tariffs on goods imported into the U.S., particularly from China, Mexico, and Canada. The U.S., Mexico, and Canada negotiated and reached an agreement for a new United States-Mexico-Canada Agreement (USMCA), which replaced the North American Free Trade Agreement. U.S. President Biden has committed to focus on domestic investment in jobs and education before entering into any new trade deals. Any changes in U.S. social, political, regulatory, and economic conditions or laws and policies governing the healthcare system and drug prices, foreign trade, manufacturing, and development and investment in the territories and countries where we or our tenants operate could adversely affect our operating results and our business.

On January 31, 2020, the U.K. officially withdrew from the EU, but a transitional period was extended through December 31, 2020 to allow for businesses and individuals to adjust to its changes, during which all EU regulations continued to apply to the U.K. A Trade and Cooperation Agreement ("TCA") was agreed upon by the EU and the U.K. on December 24, 2020 and ratified by the European Council and the U.K. Parliament ahead of the end of the transition period on December 31, 2020. While the TCA has provisions for how both parties will trade, live, and work with one another, financial services are not covered in any detail in the TCA. The nature of much of the future economic and political relationship between the EU and U.K. remains uncertain, and there is no guarantee that both parties will be able to adhere to the terms of the deal effectively. The exit of the U.K. from membership of the EU has created political and economic uncertainty, particularly in the U.K. and the EU, and this uncertainty may last for years. Our business could be affected during this period of uncertainty, and perhaps longer, by the impact of the U.K.'s exit from the EU. In addition, our business could be negatively affected by new trade agreements between the U.K. and other countries, including the U.S., and by the possible imposition of trade or other regulatory barriers in the U.K. These possible negative impacts, and others resulting from the U.K.'s withdrawal from the EU, may adversely affect our operating results and our tenants' businesses.

Social, political, and economic instability, unrest, and other circumstances beyond our control could adversely affect our business operations.

Our business may be adversely affected by social, political, and economic instability, unrest, or disruption in a geographic region in which we operate, regardless of cause, including legal, regulatory, and policy changes by a new presidential administration in the U.S., protests, demonstrations, strikes, riots, civil disturbance, disobedience, insurrection, or social and other political unrest.

Such events may result in restrictions, curfews, or other actions and give rise to significant changes in regional and global economic conditions and cycles, which may adversely affect our financial condition and operations. In 2020, there were protests in cities throughout the U.S. as well as globally, including in Hong Kong, in connection with civil rights, liberties, and social and governmental reform. While protests have been peaceful in many locations, looting, vandalism, and fires have occurred in cities such as Seattle, Portland, Los Angeles, Washington, D.C., New York City, and Minneapolis that have led to the imposition of mandatory curfews and, in some locations, deployment of the U.S. National Guard. Government actions in an effort to protect people and property, including curfews and restrictions on business operations, may disrupt operations, harm perceptions of personal well-being, and increase the need for additional expenditures on security resources. In addition, action resulting from such social or political unrest may pose significant risks to our personnel, facilities, and operations. The effect and duration of demonstrations, protests, or other factors is uncertain, and we cannot ensure there will not be further political or social unrest in the future or that there will not be other events that could lead to social, political, and economic disruptions. If such events or disruptions persist for a prolonged period of time, our overall business and results of operations may be adversely affected.

In addition, a new U.S. President, Joseph R. Biden, was elected in November 2020. On January 6, 2021, a group of supporters of President Trump, some of whom were armed and violent, illegally stormed and vandalized the U.S. Capitol as a response to false claims of widespread voter fraud and encouragement from U.S. President Trump to protest the Congressional certification of the U.S. presidential election results. Several people were killed in the incursion. Following the deadly event at the Capitol, on January 13, 2021, the House of Representatives voted to impeach U.S. President Trump for incitement of insurrection. On January 20, 2021, the presidential inauguration of President Biden was carried out with increased security measures but without further major incident. The aftermath of the November 2020 presidential election, including the January 6, 2021, violent disruption at the Capitol, has left the U.S. in what many consider to be an extremely heightened state of political and social tension, and it is unclear whether this tension will dissipate or intensify in coming months and what resulting impacts may occur to adversely affect our business operations or the safety of our employees, our tenants, and the communities in which we operate.

Changes in federal policy, including tax policies, and at regulatory agencies occur over time through policy and personnel changes following elections, which lead to changes involving the level of oversight and focus on certain industries and corporate entities. The nature, timing, and economic and political effects of potential changes to the current legal and regulatory frameworks affecting the life science, agtech, and technology industries, as well as the real estate industry in general, remain highly uncertain. For example, any proposals to make changes related to U.S. tax law, such as those involving Section 1031 Exchanges, may have a material adverse effect on our future business, financial condition, results of operations, and growth prospects. From time to time, we dispose of properties in transactions qualified as Section 1031 Exchanges. If certain proposed changes were ultimately effected and the laws surrounding Section 1031 Exchanges amended or repealed, we may not be able to dispose of properties on a tax-deferred basis. In such a case, our earnings and profits and our taxable income would increase, which could increase dividend income and reduce the return of capital to our stockholders. As a result, we may be required to pay additional dividends to stockholders, or if we do not pay additional dividends, our corporate income tax liability could increase and we may be subject to interest and penalties.

Terrorist attacks may have an adverse impact on our business and operating results and could decrease the value of our assets.

Terrorist attacks such as those that took place on September 11, 2001, could have a material adverse impact on our business, our operating results, and the market price of our common stock. Future foreign or domestic terrorist attacks may result in declining economic activity, which could reduce the demand for, and the value of, our properties. To the extent that any future foreign or domestic terrorist attacks impact our tenants, their businesses similarly could be adversely affected, including their ability to continue to honor their lease obligations.

Our business and operations would suffer in the event of information technology system failures.

Despite system redundancy, the implementation of security measures, and the existence of a disaster recovery plan for our internal information technology systems, our systems are vulnerable to damages from any number of sources, including computer viruses, unauthorized access, energy blackouts, natural disasters, terrorism, war, and telecommunications failures. Any system failure or accident that causes interruptions in our operations could result in a material disruption to our business. We may also incur additional significant costs to remedy damages caused by such disruptions.

Any or all of the foregoing could have a material adverse effect on our financial condition, results of operations, and cash flows, or the market price of our common stock. Additional risks and uncertainties not currently known to us, or that we presently deem to be immaterial, may also have potential to materially adversely affect our business, financial condition, and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

General

As of December 31, 2021, we had 414 properties in North America containing approximately 43.7 million RSF of operating properties and development and redevelopment of new Class A properties (under construction), including 54 properties that are held by consolidated real estate joint ventures and four properties that are held by unconsolidated real estate joint ventures. Refer to the definitions of “Annual rental revenue” and “Operating statistics” in the “Non-GAAP measures and definitions” section under “Item 7. Management’s discussion and analysis of financial condition and results of operations” in this annual report on Form 10-K for a description of the basis used to compute the aforementioned measures. The occupancy percentage of our operating properties in North America was 94.0% as of December 31, 2021. The exteriors of our properties typically resemble traditional office properties, but the interior infrastructures are designed to accommodate the needs of life science, agtech, and technology tenants. These improvements typically are generic rather than specific to a particular tenant. As a result, we believe that the improvements have long-term value and utility and are usable by a wide range of tenants. Improvements to our properties typically include:

- Reinforced concrete floors;
- Upgraded roof loading capacity;
- Increased floor-to-ceiling heights;
- Heavy-duty HVAC systems;
- Enhanced environmental control technology;
- Significantly upgraded electrical, gas, and plumbing infrastructure; and
- Laboratory benches.

As of December 31, 2021, we held a fee simple interest in each of our properties, with the exception of 39 properties in North America that accounted for approximately 9% of our total number of properties. Of these 39 properties, we held 16 properties in the Greater Boston market, 17 properties in the San Francisco Bay Area market, two properties in the New York City market, one property in the Seattle market, one property in the Maryland market, and two properties in the Research Triangle market pursuant to ground leasehold interests. During the year ended December 31, 2021, our ground lease rental expense aggregated 1.6% as a percentage of net operating income. Refer to further discussion in our consolidated financial statements and notes thereto in “Item 15. Exhibits and financial statement schedules” in this annual report on Form 10-K.

As of December 31, 2021, we had 1,201 leases with a total of 893 tenants, and 188, or 45%, of our 414 properties were single-tenant properties. Leases in our multi-tenant buildings typically have initial terms of four–11 years, while leases in our single-tenant buildings typically have initial terms of 11–21 years. As of December 31, 2021:

- Investment-grade or publicly traded large cap tenants represented 51% of our total annual rental revenue;
- Approximately 95% of our leases (on an RSF basis) contained effective annual rent escalations approximating 3.0% that were either fixed or indexed based on a consumer price index or other index;
- Approximately 91% of our leases (on an RSF basis) were triple net leases, which require tenants to pay substantially all real estate taxes, insurance, utilities, repairs and maintenance, common area expenses, and other operating expenses (including increases thereto) in addition to base rent; and
- Approximately 94% of our leases (on an RSF basis) provided for the recapture of capital expenditures (such as HVAC maintenance and/or replacement, roof replacement, and parking lot resurfacing) that we believe would typically be borne by the landlord in traditional office leases.

Our leases also typically give us the right to review and approve tenant alterations to the property. Generally, tenant-installed improvements to the properties are reusable generic improvements and remain our property after termination of the lease at our election. However, we are permitted under the terms of most of our leases to require that the tenant, at its expense, remove certain non-generic improvements and restore the premises to their original condition.

Locations of properties

The locations of our properties are diversified among a number of life science, agtech, and technology cluster markets. The following table sets forth the total RSF, number of properties, and annual rental revenue in effect as of December 31, 2021, in each of our markets in North America (dollars in thousands, except per RSF amounts):

Market	RSF					Number of Properties	Annual Rental Revenue		
	Operating	Development	Redevelopment	Total	% of Total		Total	% of Total	Per RSF
Greater Boston	9,992,631	972,216	1,440,756	12,405,603	28 %	84	\$ 621,025	36 %	\$ 65.30
San Francisco Bay Area	8,041,015	332,821	34,604	8,408,440	19	67	424,836	24	61.09
New York City	1,174,016	—	96,003	1,270,019	3	5	85,099	5	73.67
San Diego	7,889,614	486,004	121,662	8,497,280	19	103	286,784	16	39.04
Seattle	2,639,312	311,631	213,976	3,164,919	7	44	100,497	6	39.82
Maryland	3,961,376	84,264	157,428	4,203,068	10	52	106,786	6	27.48
Research Triangle	3,308,463	257,644	325,936	3,892,043	9	36	81,706	5	26.10
Canada	552,018	—	—	552,018	1	6	10,070	1	23.20
Non-cluster/other markets	1,277,347	—	—	1,277,347	4	17	29,777	1	31.05
North America	38,835,792	2,444,580	2,390,365	43,670,737	100 %	414	\$ 1,746,580	100 %	\$ 48.65
		4,834,945							

Summary of occupancy percentages in North America

The following table sets forth the occupancy percentages for our operating properties and our operating and redevelopment properties in each of our North America markets, excluding properties held for sale, as of the following dates:

Market	Operating Properties			Operating and Redevelopment Properties		
	12/31/21	12/31/20	12/31/19	12/31/21	12/31/20	12/31/19
Greater Boston	95.2 % ⁽¹⁾	98.1 %	99.1 %	83.2 %	94.8 %	97.1 %
San Francisco Bay Area	93.0 ⁽¹⁾	95.8	98.3	92.6	94.7	93.6
New York City	98.4	97.3	99.2	91.0	87.8	88.1
San Diego	93.1 ⁽¹⁾	93.5	92.3	91.7	92.4	92.3
Seattle	95.6	96.0	98.7	88.5	85.5	98.7
Maryland	99.8	96.1	96.7	96.0	90.6	95.2
Research Triangle	94.6 ⁽¹⁾	89.6	96.5	86.1	72.7	96.5
Subtotal	94.9	95.5	97.0	89.1	90.7	94.6
Canada	78.6	81.8	93.7	78.6	81.8	93.7
Non-cluster/other markets	75.1	52.7	80.1	75.1	52.7	80.1
North America	94.0 % ⁽¹⁾	94.6 %	96.8 %	88.5 %	90.0 %	94.4 %

(1) Includes 1.8 million RSF, or 4.7%, of vacancy at recently acquired properties representing lease-up opportunities that are expected to generate incremental annual rental revenues. This vacancy also includes 20% of various spaces, spread across multiple recently acquired properties, that are expected to be converted to laboratory/office space in the future. Approximately 48% of the vacant 1.8 million RSF is currently leased/negotiating, with occupancy expected primarily over the next two quarters. Excluding recently acquired vacancies, occupancy of operating properties in North America was 98.7% as of December 31, 2021, up 100 bps from 97.7% as of December 31, 2020. The following table provides vacancy detail for our recent acquisitions:

		As of December 31, 2021			Percentage of Vacancy Leased/ Negotiating
Property	Market/Submarket	Vacant RSF	Occupancy Impact		
			Region	Consolidated	
601, 611, and 651 Gateway Boulevard	San Francisco Bay Area/South San Francisco	318,119	4.0%	0.8%	44%
Alexandria Center® for Life Science – Durham	Research Triangle/Research Triangle	150,337	4.5%	0.4	99
275 Grove Street	Greater Boston/Route 128	134,889	1.3%	0.3	48
SD Tech by Alexandria	San Diego/Sorrento Mesa	93,494	1.2%	0.2	8
Other	Greater Boston/Other	94,849	0.9%	0.2	94
Alexandria Center® for Life Science – Fenway	Greater Boston/Fenway	81,831	0.8%	0.2	32
Other acquisitions	Various	937,043	N/A	2.6	42
		1,810,562		4.7%	48%

Top 20 tenants

88% of Top 20 Annual Rental Revenue From Investment-Grade or Publicly Traded Large Cap Tenants⁽¹⁾

Our properties are leased to a high-quality and diverse group of tenants, with no individual tenant accounting for more than 3.0% of our annual rental revenue in effect as of December 31, 2021. The following table sets forth information regarding leases with our 20 largest tenants in North America based upon annual rental revenue in effect as of December 31, 2021 (dollars in thousands, except average market cap):

	Tenant	Remaining Lease Term ⁽¹⁾ (in Years)	Aggregate RSF	Annual Rental Revenue ⁽¹⁾	Percentage of Aggregate Annual Rental Revenue ⁽¹⁾	Investment-Grade Credit Ratings		Average Market Cap ⁽¹⁾ (in billions)
						Moody's	S&P	
1	Bristol-Myers Squibb Company	6.7	916,234	\$ 53,085	3.0 %	A2	A+	\$ 140.6
2	Moderna, Inc.	15.1	855,458	52,709	3.0	—	—	\$ 99.2
3	Eli Lilly and Company	7.5	645,178	40,846	2.3	A2	A+	\$ 214.9
4	Sanofi	6.8	589,464	40,808	2.3	A1	AA	\$ 126.5
5	Takeda Pharmaceutical Company Ltd.	7.6	606,249	39,416	2.3	Baa2	BBB+	\$ 51.9
6	Illumina, Inc.	8.6	891,495	36,141	2.1	Baa3	BBB	\$ 63.4
7	2seventy bio, Inc. ⁽²⁾	11.7	312,805	33,558	1.9	—	—	\$ 0.7
8	Novartis AG	6.6	447,820	30,582	1.8	A1	AA-	\$ 215.8
9	Roche	5.8	561,883	30,149	1.7	Aa3	AA	\$ 322.0
10	Uber Technologies, Inc.	61.0 ⁽³⁾	1,009,188	27,488	1.6	—	—	\$ 91.5
11	Merck & Co., Inc.	10.8	349,429	22,276	1.3	A1	A+	\$ 196.1
12	Maxar Technologies	3.7 ⁽⁴⁾	478,000	21,803	1.2	—	—	\$ 2.4
13	Massachusetts Institute of Technology	7.0	257,626	21,165	1.2	Aaa	AAA	\$ —
14	United States Government	13.2	918,516	20,697	1.2	Aaa	AA+	\$ —
15	The Children's Hospital Corporation	14.8	269,816	20,066	1.1	Aa2	AA	\$ —
16	New York University	9.9	203,500	19,241	1.1	Aa2	AA-	\$ —
17	Pfizer Inc.	3.2	416,996	17,799	1.0	A2	A+	\$ 235.8
18	SAP	3.2	211,293	17,479	1.0	A2	A	\$ 169.2
19	FibroGen, Inc.	6.9	234,249	16,896	1.0	—	—	\$ 2.1
20	Amgen Inc.	2.3	407,369	16,838	1.0	Baa1	A-	\$ 132.5
Total/weighted average		10.9 ⁽³⁾	10,582,568	\$ 579,042	33.1 %			

Annual rental revenue and RSF include 100% of each property managed by us in North America.

- (1) Based on aggregate annual rental revenue in effect as of December 31, 2021. Refer to the definitions of "Annual rental revenue" and "Investment-grade or publicly traded large cap tenants" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information about our methodology on annual rental revenue from unconsolidated real estate joint ventures and average market capitalization.
- (2) 2seventy bio, Inc. is a publicly-traded, commercial-stage cell therapy company developing a pipeline of engineered T cells to better treat cancer. 2seventy bio, Inc. was formerly the oncology division of bluebird bio, Inc. and spun out from bluebird in November 2021.
- (3) Includes (i) ground leases for land at 1455 and 1515 Third Street (two buildings aggregating 422,980 RSF) and (ii) leases at 1655 and 1725 Third Street (two buildings aggregating 586,208 RSF) owned by our unconsolidated real estate joint venture in which we have an ownership interest of 10%. Annual rental revenue is presented using 100% of the annual rental revenue of our consolidated properties and our share of annual rental revenue for our unconsolidated real estate joint ventures. Refer to footnote 1 for additional details. Excluding the ground leases, the weighted-average remaining lease term for our top 20 tenants was 8.4 years as of December 31, 2021.
- (4) Represents remaining lease term at two recently acquired properties with future redevelopment and development opportunities. The leases with this tenant were in place when we acquired the properties in 2019.

Long-Duration Cash Flows From High-Quality, Diverse, and Innovative Tenants

**Investment-Grade or
Publicly Traded Large Cap Tenants**

51%

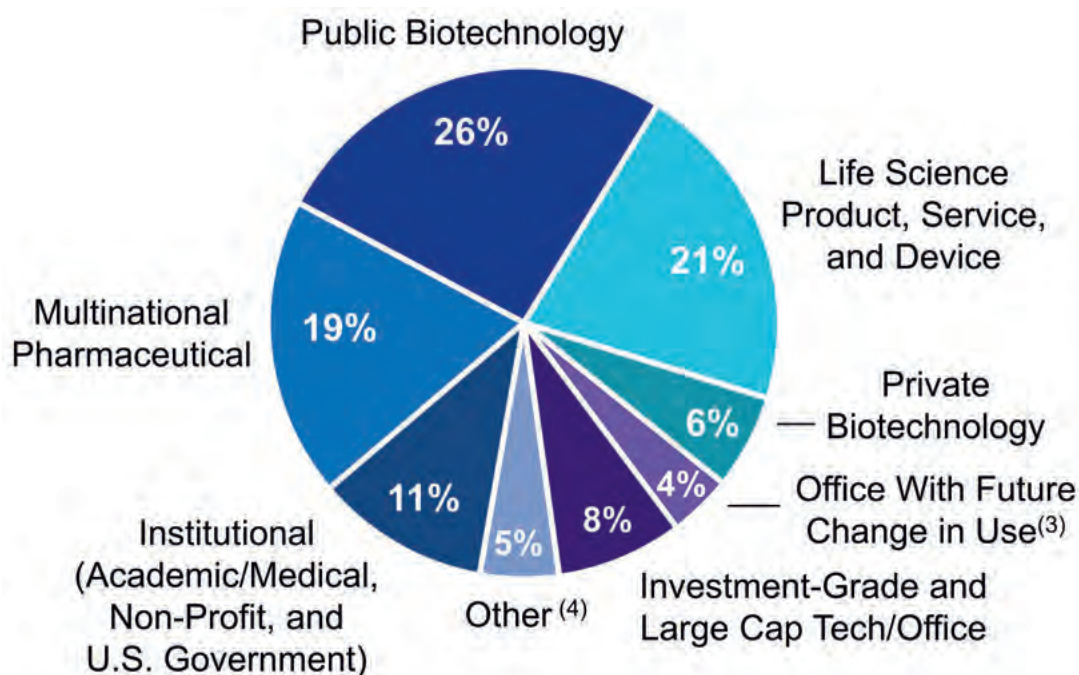
of ARE's Total
Annual Rental Revenue⁽¹⁾

Long-Duration Lease Terms

7.5 Years

Weighted-Average
Remaining Term⁽²⁾

Industry Mix of 850+ Tenants



Percentage of ARE's Annual Rental Revenue⁽¹⁾

(1) Represents annual rental revenue in effect as of December 31, 2021. Refer to the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.

(2) Based on aggregate annual rental revenue in effect as of December 31, 2021. Refer to definition of "Annual rental revenue" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for our methodology on annual rental revenue for unconsolidated real estate joint ventures.

(3) Represents annual rental revenue currently generated from office space that is targeted for a future change in use. The weighted-average remaining term of these leases is 3.8 years.

(4) Our other tenants, aggregating 5.0% of our annual rental revenue, comprise 4.0% of annual rental revenue from technology, professional services, finance, telecommunications, and construction/real estate companies and only 1.0% from retail-related tenants.

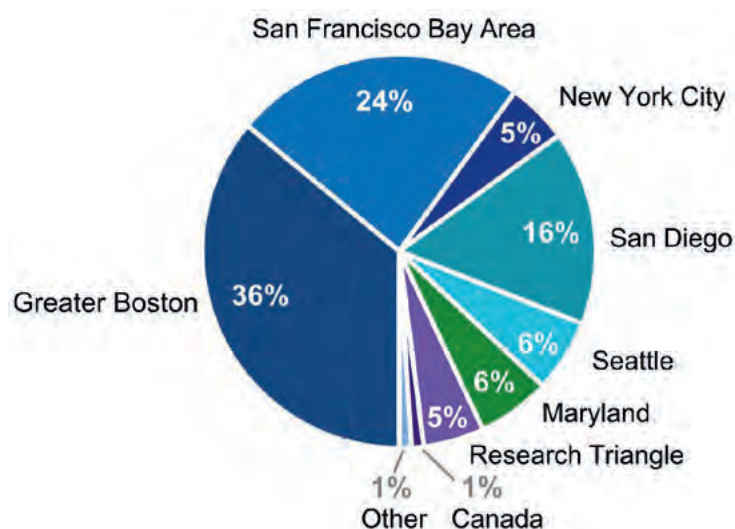
High-Quality Cash Flows From High Quality Tenants and Class A Properties in AAA Locations

Industry-Leading Tenant Roster

88%

of ARE's Top 20
Annual Rental Revenue⁽¹⁾
From Investment-Grade or
Publicly Traded
Large Cap Tenants

AAA Locations



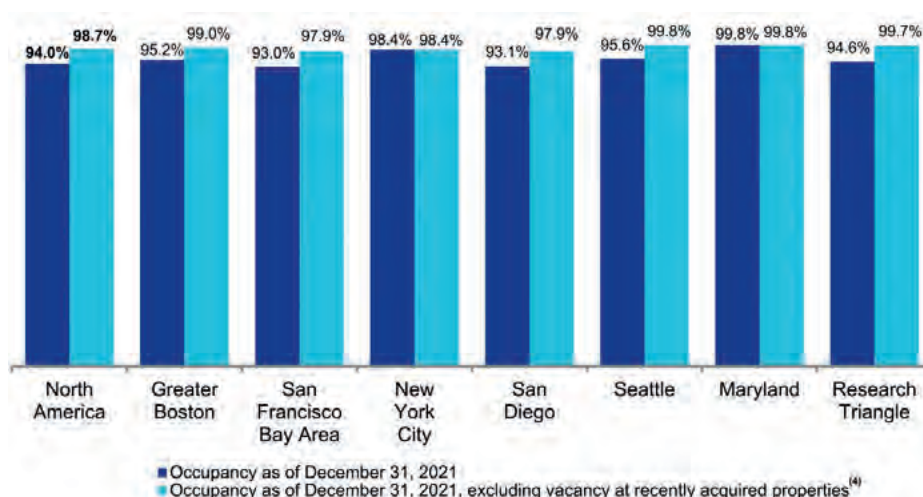
Percentage of ARE's Annual Rental Revenue⁽¹⁾

Solid Historical Occupancy⁽²⁾

96%

Over 10 Years

Occupancy Across Key Locations⁽³⁾



(1) Represents annual rental revenue in effect as of December 31, 2021. Refer to the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.

(2) Represents average occupancy of operating properties in North America as of each December 31 for the last 10 years.

(3) As of December 31, 2021.

(4) Refer to the "Summary of occupancy percentages in North America" section within this Item 2 for additional information on vacancy at recently acquired properties.

Property listing

Mega Campuses Encompass 63% of Our Operating Property RSF⁽¹⁾

The following table provides certain information about our properties as of December 31, 2021 (dollars in thousands):

Market / Submarket / Address	RSF			Number of Properties	Annual Rental Revenue	Occupancy Percentage	
	Operating	Development	Redevelopment			Total	Operating
Greater Boston							
Cambridge/Inner Suburbs							
Mega Campus: Alexandria Center® at Kendall Square 50 ⁽²⁾ , 60 ⁽²⁾ , 75/125 ⁽²⁾ , 100, and 225 ⁽²⁾ Binney Street, 161 and 215 First Street, 150 Second Street, 300 Third Street, 11 Hurley Street, and One Rogers Street	2,369,854	—	403,892	2,773,746	11	\$ 182,839	98.9% 84.5%
Mega Campus: Alexandria Center® at One Kendall Square One Kendall Square – Buildings 100, 200, 300, 400, 500, 600/700, 1400, 1800, and 2000, and 325 and 399 Binney Street	814,779	462,100	—	1,276,879	11	69,341	96.6 96.6
Mega Campus: Alexandria Technology Square® 100, 200, 300, 400, 500, 600, and 700 Technology Square	1,181,635	—	—	1,181,635	7	114,713	99.8 99.8
Mega Campus: The Arsenal on the Charles 311, 321, and 343 Arsenal Street, 300 and 400 North Beacon Street, 1, 2, and 3 Kingsbury Avenue, and 100, 200, and 400 Talcott Avenue	622,098	—	250,567	872,665	11	30,432	93.8 66.9
Mega Campus: 480 and 500 and 550 Arsenal Street 640 Memorial Drive	495,127	—	—	495,127	3	21,227	98.3 98.3
780 and 790 Memorial Drive	225,504	—	—	225,504	1	14,431	100.0 100.0
167 Sidney Street and 99 Erie Street	99,658	—	—	99,658	2	8,786	100.0 100.0
79/96 13th Street (Charlestown Navy Yard)	54,549	—	—	54,549	2	4,027	100.0 100.0
Cambridge/Inner Suburbs	25,309	—	—	25,309	1	797	100.0 100.0
Fenway	5,888,513	462,100	654,459	7,005,072	49	446,593	98.2 88.4
Mega Campus: Alexandria Center® for Life Science – Fenway 401 Park Drive and 201 Brookline Avenue ⁽²⁾	927,499	510,116	—	1,437,615	2	59,023	91.2 91.2
Seaport Innovation District							
Mega Campus: 380 and 420 E Street 5 Necco Street	195,506	—	—	195,506	2	4,209	100.0 100.0
Seaport Innovation District	87,163	—	—	87,163	1	5,888	86.6 86.6
Route 128	282,669	—	—	282,669	3	10,097	95.9 95.9
Mega Campus: One Upland Road, 100 Tech Drive, and One Investors Way Reservoir Woods	706,988	—	—	706,988	4	29,189	96.7 96.7
40, 50, and 60 Sylvan Road	312,845	—	202,428	515,273	3	15,469	100.0 60.7
275 Grove Street	509,702	—	—	509,702	1	15,649	73.5 73.5
Alexandria Park at 128	343,882	—	—	343,882	8	12,949	100.0 100.0
3 and 6/8 Preston Court, 29, 35, and 44 Hartwell Avenue, 35 and 45/47 Wiggins Avenue, and 60 Westview Street							
225, 266, and 275 Second Avenue	316,865	—	—	316,865	3	15,479	90.8 90.8
840 Winter Street	30,009	—	130,000	160,009	1	1,239	95.1 17.8
19 Presidential Way	144,892	—	—	144,892	1	5,362	99.8 99.8
100 Beaver Street	82,330	—	—	82,330	1	4,941	100.0 100.0
285 Bear Hill Road	26,270	—	—	26,270	1	1,167	100.0 100.0
Route 128	2,473,783	—	332,428	2,806,211	23	\$ 101,444	92.3% 81.4%

(1) As of December 31, 2021, Mega campuses are cluster campuses that consist of approximately 1 million or more RSF, including operating, active development/redevelopment, and land RSF less operating RSF expected to be demolished. Refer to the "Summary of pipeline" section within this Item 2 and the definition of "Mega campus" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.

(2) We own a partial interest in this property through a real estate joint venture. Refer to the "Joint venture financial information" section under Item 7 in this annual report on Form 10-K for additional details.

Property listing (continued)

Market / Submarket / Address	RSF			Number of Properties	Annual Rental Revenue	Occupancy Percentage	
	Operating	Development	Redevelopment			Operating	Operating and Redevelopment
Greater Boston (continued)							
Route 495							
111 and 130 Forbes Boulevard	155,846	—	—	2	\$ 1,826	100.0%	100.0%
20 Walkup Drive	91,045	—	—	1	649	100.0	100.0
Route 495	246,891	—	—	3	2,475	100.0	100.0
Other	173,276	—	453,869	4	1,393	44.9	12.4
Greater Boston	9,992,631	972,216	1,440,756	84	621,025	95.2	83.2
San Francisco Bay Area							
Mission Bay							
Mega Campus: Alexandria Center® for Science and Technology – Mission Bay ⁽¹⁾	2,015,177	—	—	9	97,216	98.7	98.7
1455 ⁽²⁾ , 1515 ⁽²⁾ , 1655, and 1725 Third Street, 409 and 499 Illinois Street, 1500 and 1700 Owens Street, and 455 Mission Bay Boulevard South							
Mission Bay	2,015,177	—	—	9	97,216	98.7	98.7
South San Francisco							
Mega Campus: Alexandria Technology Center® – Gateway ⁽¹⁾	1,415,175	230,592	—	12	56,712	76.5	76.5
600 ⁽²⁾ , 601, 611, 630 ⁽²⁾ , 650 ⁽²⁾ , 651, 681, 685, 701, 751, 901 ⁽²⁾ , and 951 ⁽²⁾ Gateway Boulevard							
Mega Campus: 213 ⁽¹⁾ , 249, 259, 269, and 279 East Grand Avenue	919,704	—	—	5	48,951	100.0	100.0
Alexandria Center® for Life Science – South San Francisco	443,447	52,311	—	3	26,509	84.6	84.6
201 Haskins Way and 400 and 450 East Jamie Court							
Mega Campus: 1122 El Camino Real	223,232	—	—	1	3,102	100.0	100.0
500 Forbes Boulevard ⁽¹⁾	155,685	—	—	1	10,680	100.0	100.0
7000 Shoreline Court	139,709	—	—	1	8,632	100.0	100.0
341 and 343 Oyster Point Boulevard	108,208	—	—	2	6,578	100.0	100.0
849/863 Mitten Road/866 Malcolm Road	103,857	—	—	1	4,716	100.0	100.0
South San Francisco	3,509,017	282,903	—	26	165,880	88.6	88.6
Greater Stanford							
Mega Campus: Alexandria Center® for Life Science – San Carlos	689,274	49,918	—	9	43,398	95.3	95.3
825, 835, 960, and 1501-1599 Industrial Road							
3825 and 3875 Fabian Way	478,000	—	—	2	21,802	100.0	100.0
Alexandria Stanford Life Science District	347,381	—	34,604	4	29,597	100.0	90.9
3160, 3165, 3170, and 3181 Porter Drive							
3330, 3412, 3420, 3440, 3450, and 3460 Hillview Avenue	368,495	—	—	6	26,779	87.4	87.4
Alexandria PARC	197,498	—	—	4	9,302	78.0	78.0
2100, 2200, 2300, and 2400 Geng Road							
2475 and 2625/2627/2631 Hanover Street	116,869	—	—	2	9,972	100.0	100.0
2425 Garcia Avenue/2400/2450 Bayshore Parkway	99,208	—	—	1	\$ 4,257	100.0%	100.0%

Mega campuses are cluster campuses that consist of approximately 1 million or more RSF including operating, active development/redevelopment, and land RSF less operating RSF expected to be demolished. Refer to the "Summary of pipeline" section within this Item 2 and the definition of "Mega campus" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.

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(2) We own 100% of this property.

Property listing (continued)

Market / Submarket / Address			Operating	Development	Redevelopment	Total	Number of Properties	Rental Revenue	Operating	Operating and Redevelopment
San Francisco Bay Area (continued)										
Greater Stanford (continued)										
Shoreway Science Center 75 and 125 Shoreway Road			82,462	—	—	82,462	2	\$ 5,220	100.0%	100.0%
1450 Page Mill Road			77,634	—	—	77,634	1	8,009	100.0	100.0
3350 West Bayshore Road			60,000	—	—	60,000	1	3,404	83.3	83.3
Greater Stanford			2,516,821	49,918	34,604	2,601,343	32	161,740	94.7	93.5
San Francisco Bay Area			8,041,015	332,821	34,604	8,408,440	67	424,836	93.0	92.6
New York City										
New York City										
Mega Campus: Alexandria Center® for Life Science – New York City 430 and 450 East 29th Street			740,972	—	—	740,972	3	67,283	97.5	97.5
219 East 42nd Street			349,947	—	—	349,947	1	14,006	100.0	100.0
Alexandria Center® for Life Science – Long Island City 30-02 48th Avenue			83,097	—	96,003	179,100	1	3,810	100.0	46.4
New York City			1,174,016	—	96,003	1,270,019	5	85,099	98.4	91.0
San Diego										
Torrey Pines										
Mega Campus: One Alexandria Square 3115 and 3215 Merryfield Row, 3010, 3013, and 3033 Science Park Road, 10931/10933, 10975, 11119, 11255, and 11355 North Torrey Pines Road, 10975, 10995, and 10996 Torreyana Road, and 3545 Cray Court			987,791	146,456	—	1,134,247	13	40,730	92.4	92.4
ARE Torrey Ridge 10578, 10618, and 10628 Science Center Drive			298,863	—	—	298,863	3	15,570	99.3	99.3
ARE Nautilus 3530 and 3550 John Hopkins Court and 3535 and 3565 General Atomics Court			213,900	—	—	213,900	4	12,323	100.0	100.0
Torrey Pines University Town Center			1,500,554	146,456	—	1,647,010	20	68,623	94.9	94.9
Mega Campus: Alexandria Point ⁽¹⁾ 9880 ⁽²⁾ , 10210, 10260, 10290, and 10300 Campus Point Drive and 4161, 4224, and 4242 Campus Point Court			1,435,916	—	—	1,435,916	8	65,221	96.4	96.4
Mega Campus: 5200 Illumina Way ⁽¹⁾			792,687	—	—	792,687	6	29,978	100.0	100.0
Mega Campus: University District 9625 Towne Centre Drive ⁽¹⁾ , 4755, 4757, and 4767 Nexus Center Drive, and 4796 Executive Drive			406,732	—	—	406,732	5	17,616	100.0	100.0
University Town Center			2,635,335	—	—	2,635,335	19	\$ 112,815	98.1%	98.1%

Mega campuses are cluster campuses that consist of approximately 1 million or more RSF, including operating, active development/redevelopment, and land RSF less operating RSF expected to be demolished. Refer to the “Summary of pipeline” section within this Item 2 and the definition of “Mega campus” in the “Non-GAAP measures and definitions” section under Item 7 in this annual report on Form 10-K for additional information.

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Property listing (continued)

San Diego (continued)	Market / Submarket / Address	RSF			Number of Properties	Annual Rental Revenue	Occupancy Percentage	
		Operating	Development	Redevelopment			Total	Operating
Sorrento Mesa								
Mega Campus: SD Tech by Alexandria ⁽¹⁾ 9605, 9645, 9675, 9685, 9725, 9735, 9808, 9855, and 9868 Scranton Road, 5505 Morehouse Drive ⁽²⁾ , and 10055, 10065, 10121 ⁽²⁾ , and 10151 ⁽²⁾ Barnes Canyon Road		810,517	195,435	51,621	14	\$ 25,338	85.3%	80.2%
Mega Campus: Sequence District by Alexandria 6260, 6290, 6310, 6340, 6350, 6420, and 6450 Sequence Drive		805,223	—	—	7	26,544	92.5	92.5
Pacific Technology Park ⁽¹⁾ 9389, 9393, 9401, 9444, 9455, and 9477 Waples Street		632,732	—	—	6	9,088	88.1	88.1
Summers Ridge Science Park 9965, 9975, 9985, and 9995 Summers Ridge Road		316,531	—	—	4	11,077	100.0	100.0
ARE Portola 6175, 6225, and 6275 Nancy Ridge Drive		101,857	—	—	3	3,603	100.0	100.0
7330 and 7360 Carroll Road 5810/5820 Nancy Ridge Drive		84,441	—	—	2	2,643	85.7	85.7
9877 Waples Street		83,354	—	—	1	1,042	40.9	40.9
5871 Oberlin Drive		63,774	—	—	1	2,374	100.0	100.0
Sorrento Mesa		33,842	—	—	1	815	50.1	50.1
Sorrento Valley		2,932,271	195,435	51,621	39	82,524	88.6	87.1
3911, 3931, 3985, 4025, 4031, and 4045 Sorrento Valley Boulevard		151,406	—	—	6	5,401	100.0	100.0
11025, 11035, 11045, 11055, 11065, and 11075 Roselle Street		121,655	—	—	6	3,290	95.0	95.0
Sorrento Valley		273,061	—	—	12	8,691	97.8	97.8
Other		548,393	144,113	70,041	13	14,131	86.0	76.3
San Diego		7,889,614	486,004	121,662	103	286,784	93.1	91.7
Seattle								
Lake Union								
Mega Campus: The Eastlake Life Science Campus by Alexandria 1150, 1165, 1201 ⁽¹⁾ , 1208 ⁽¹⁾ , 1551, and 1616 Eastlake Avenue East, 188 and 199 ⁽¹⁾ East Blaine Street, and 1600 Fairview Avenue East		937,290	311,631	—	9	54,997	99.5	99.5
Mega Campus: Alexandria Center [®] for Life Science – South Lake Union 400 ⁽¹⁾ and 601 Dexter Avenue North		308,791	—	—	2	15,130	100.0	100.0
219 Terry Avenue North		30,705	—	—	1	1,853	100.0	100.0
Lake Union		1,276,786	311,631	—	12	71,980	99.6	99.6
SoDo								
830 4th Avenue South		42,380	—	—	1	1,576	70.5	70.5
Elliott Bay								
3000/3018 Western Avenue		47,746	—	—	1	1,839	100.0	100.0
410 West Harrison Street and 410 Elliott Avenue West		36,849	—	—	2	1,395	100.0	100.0
Elliott Bay		84,595	—	—	3	3,234	100.0%	100.0%

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Property listing (continued)

Seattle (continued)		Operating		Development		Redevelopment		Total		Expense		Revenue		Operating		Redevelopment	
Bothell																	
Mega Campus: Alexandria Center® for Advanced Technologies – Canyon Park		886,467		—		—		886,467		20		\$ 17,827		90.9%		90.9%	
22121 and 22125 17th Avenue Southeast, 22021, 22025, 22026, 22030, 22118, and 22122 20th Avenue Southeast, 22333, 22422, 22515, 22522, 22722, and 22745 29th Drive Southeast, 21540 30th Drive Southeast, and 1629, 1631, 1725, 1916, and 1930 220th Street Southeast																	
Alexandria Center® for Advanced Technologies – Monte Villa Parkway 3301, 3303, 3305, 3307, 3555, and 3755 Monte Villa Parkway		246,647		—		213,976		460,623		6		4,817		95.4		51.1	
Bothell		1,133,114		—		213,976		1,347,090		26		22,644		91.9		77.3	
Other		102,437		—		—		102,437		2		1,063		93.7		93.7	
Seattle		2,639,312		311,631		213,976		3,164,919		44		100,497		95.6		88.5	
Maryland																	
Rockville																	
Mega Campus: Alexandria Center® for Life Science – Shady Grove 9601, 9603, 9605, 9609, 9613, 9615, 9704, 9708, 9712, 9714, 9800, 9804, 9900, 9920, and 9950 Medical Center Drive, 14920 and 15010 Brochart Road, and 9920 Belward Campus Drive		1,642,741		84,264		76,878		1,803,883		21		42,720		100.0		95.5	
1330 Piccard Drive		131,511		—		—		131,511		1		4,021		100.0		100.0	
1405 and 1450 ⁽¹⁾ Research Boulevard		114,849		—		—		114,849		2		2,947		100.0		100.0	
1500 and 1550 East Gude Drive		91,359		—		—		91,359		2		1,844		100.0		100.0	
5 Research Place		63,852		—		—		63,852		1		2,950		100.0		100.0	
5 Research Court		51,520		—		—		51,520		1		1,788		100.0		100.0	
12301 Parklawn Drive		49,185		—		—		49,185		1		1,530		100.0		100.0	
Rockville		2,145,017		84,264		76,878		2,306,159		29		57,800		100.0		96.5	
Gaithersburg																	
Alexandria Technology Center® – Gaithersburg I 9, 25, 35, 45, 50, and 55 West Watkins Mill Road and 910, 930, and 940 Clopper Road		613,438		—		—		613,438		9		17,384		100.0		100.0	
Alexandria Technology Center® – Gaithersburg II 700, 704, and 708 Quince Orchard Road and 19, 20, 21, and 22 Firstfield Road		486,324		—		—		486,324		7		17,637		100.0		100.0	
20400 Century Boulevard		—		—		80,550		80,550		1		—		N/A		—	
401 Professional Drive		63,154		—		—		63,154		1		1,911		100.0		100.0	
950 Wind River Lane		50,000		—		—		50,000		1		1,004		100.0		100.0	
620 Professional Drive		27,950		—		—		27,950		1		1,207		100.0		100.0	
Gaithersburg		1,240,866		—		80,550		1,321,416		20		\$ 39,143		100.0%		93.9%	

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Property listing (continued)

Market / Submarket / Address	RSF			Number of Properties	Annual Rental Revenue	Occupancy Percentage	
	Operating	Development	Redevelopment			Total	Operating
Maryland (continued)							
Beltsville							
8000/9000/10000 Virginia Manor Road	191,884	—	—	1	\$ 191,884	2,768	96.7%
101 West Dickman Street ⁽¹⁾	135,423	—	—	1	135,423	948	100.0
Beltsville	327,307	—	—	2	327,307	3,716	98.0
Northern Virginia							
14225 Newbrook Drive	248,186	—	—	1	248,186	6,127	100.0
Maryland	3,961,376	84,264	157,428	52	4,203,068	106,786	99.8
Research Triangle							
Research Triangle							
Mega Campus: Alexandria Center® for Life Science – Durham 6, 8, 10, 12, 14, 40, 41, 42, and 65 Moore Drive, 21, 25, 27, 29, and 31 Parmer Way, 2400 Ellis Road, and 14 TW Alexander Drive	1,912,211	—	325,936	16	2,238,147	36,948	92.1
Mega Campus: Alexandria Center® for Advanced Technologies 6, 8, 10, and 12 Davis Drive	182,487	184,753	—	4	367,240	6,089	90.6
Alexandria Center® for AgTech 5 and 9 Laboratory Drive	267,509	72,891	—	2	340,400	11,064	100.0
Alexandria Technology Center® – Alston 100, 800, and 801 Capitola Drive	186,870	—	—	3	186,870	4,405	96.7
108/110/112/114 TW Alexander Drive	158,417	—	—	1	158,417	5,196	97.4
Alexandria Innovation Center® – Research Triangle 7010, 7020, and 7030 Kit Creek Road	136,729	—	—	3	136,729	4,155	100.0
7 Triangle Drive	96,626	—	—	1	96,626	3,156	100.0
2525 East NC Highway 54	82,996	—	—	1	82,996	3,651	100.0
407 Davis Drive	81,956	—	—	1	81,956	1,644	100.0
601 Keystone Park Drive	77,395	—	—	1	77,395	1,375	100.0
6040 George Watts Hill Drive	61,547	—	—	1	61,547	2,148	100.0
5 Triangle Drive	32,120	—	—	1	32,120	1,147	100.0
6101 Quadrangle Drive	31,600	—	—	1	31,600	728	100.0
Research Triangle	3,308,463	257,644	325,936	36	3,892,043	81,706	94.6
Canada	552,018	—	—	6	552,018	10,070	78.6
Non-cluster/other markets	1,277,347	—	—	17	1,277,347	29,777	75.1
Total – North America	38,835,792	2,444,580	2,390,365	414	43,670,737	\$1,746,580	94.0%
							88.5%

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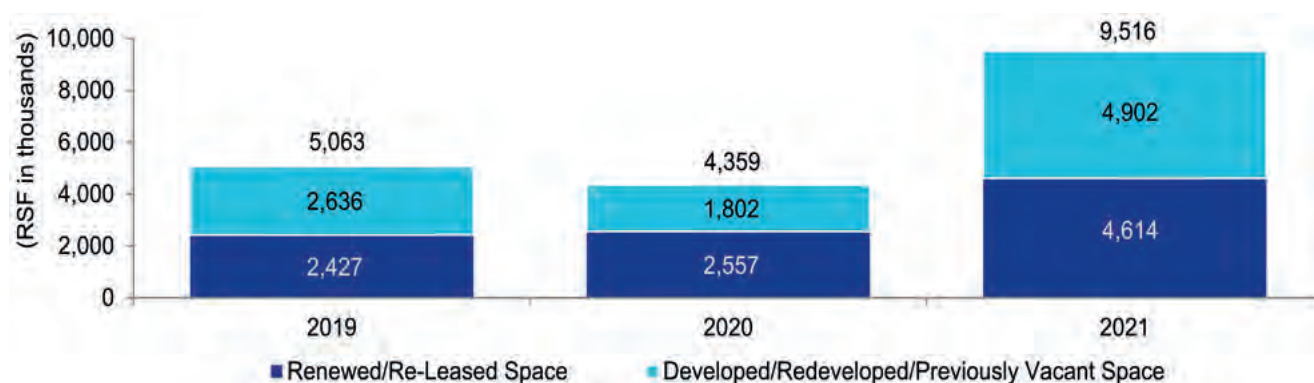
Leasing activity

During the year ended December 31, 2021, historic demand for our high-quality office/laboratory space has translated into record leasing volume and rental rate growth in 2021 for our overall portfolio and our value-creation pipeline.

- Executed a total of 318 leases, with a weighted-average lease term of 8.8 years, for 9.5 million RSF, including 3.9 million RSF related to our development and redevelopment projects, representing the highest annual total leasing volume;
- Highest annual leasing activity of 4.6 million RSF for renewed and re-leased spaces; and
- Highest annual rental rate increases of 37.9% and 22.6% (cash basis) on renewed and re-leased space.

Approximately 54% of the 318 leases executed during the year ended December 31, 2021, did not include concessions for free rent. During the year ended December 31, 2021, we granted tenant concessions/free rent averaging 2.4 months with respect to the 9.5 million RSF leased.

The following chart presents renewed/re-leased space and development/redevelopment/previously vacant space leased for the years ended December 31, 2021, 2020, and 2019:



Lease structure

Our Same Properties total revenue growth of 5.4% for the year ended December 31, 2021, and our Same Properties net operating income and Same Properties net operating income (cash basis) increases for the year ended December 31, 2021, of 4.2% and 7.1%, respectively, benefited significantly from strong market fundamentals. The limited supply of Class A space in AAA locations and strong demand from innovative tenants drove rental rate increases for the year ended December 31, 2021, of 37.9% and 22.6% (cash basis) on 4.6 million renewed/re-leased RSF, while a favorable triple net lease structure with contractual annual rent escalations resulted in both a consistent Same Properties operating margin of 72.0% and occupancy of 96.6% across our 247 Same Properties aggregating 23.5 million RSF. As of December 31, 2021, approximately 91% of our leases (on an RSF basis) were triple net leases, which require tenants to pay substantially all real estate taxes, insurance, utilities, repairs and maintenance, common area expenses, and other operating expenses (including increases thereto) in addition to base rent. Additionally, approximately 95% of our leases (on an RSF basis) contained contractual annual rent escalations approximating 3% that were either fixed or based on a consumer price index or another index, and approximately 94% of our leases (on an RSF basis) provided for the recapture of certain capital expenditures.

Leasing activity (continued)

The following table summarizes our leasing activity at our properties for the years ended December 31, 2021 and 2020:

	Year Ended December 31,			
	2021		2020	
	Including Straight-Line Rent	Cash Basis	Including Straight-Line Rent	Cash Basis
<i>(Dollars per RSF)</i>				
<i>Leasing activity:</i>				
<i>Renewed/re-leased space⁽¹⁾</i>				
Rental rate changes	37.9% ⁽²⁾	22.6% ⁽²⁾	37.6%	18.3%
New rates	\$59.00	\$55.60	\$49.51	\$46.53
Expiring rates	\$42.80	\$45.36	\$35.99	\$39.32
RSF	4,614,040 ⁽³⁾		2,556,833	
Tenant improvements/leasing commissions	\$41.05 ⁽⁴⁾		\$35.08	
Weighted-average lease term	6.3 years		6.0 years	
<i>Developed/redeveloped/previously vacant space leased⁽⁵⁾</i>				
New rates	\$78.52	\$69.42	\$56.67	\$53.61
RSF	4,902,261 ⁽³⁾		1,802,013	
Weighted-average lease term	11.2 years		9.0 years	
<i>Leasing activity summary (totals):</i>				
New rates	\$69.05	\$62.72	\$52.47	\$49.46
RSF	9,516,301 ⁽³⁾⁽⁶⁾		4,358,846	
Weighted-average lease term	8.8 years		7.3 years	
<i>Lease expirations⁽¹⁾</i>				
Expiring rates	\$41.53	\$43.70	\$36.03	\$39.01
RSF	5,747,192		3,560,188	

Leasing activity includes 100% of results for properties in which we have an investment in North America.

(1) Excludes month-to-month leases aggregating 110,180 RSF and 96,383 RSF as of December 31, 2021 and 2020, respectively.

(2) Represents the highest annual rental rate growth in Company history.

(3) Represents the highest annual leasing volumes in Company history.

(4) Includes tenant improvements and leasing commissions averaging \$78.91 per RSF related to long-term lease extensions aggregating 938,004 RSF with two tenants in Greater Boston. The weighted-average lease term of these extensions was 8.0 years, with a weighted-average increase of 50% in net effective rents from the existing leases. Excluding these leases, new tenant improvements and leasing commissions for renewed/re-leased space was \$31.39 per RSF during the year ended December 31, 2021.

(5) Refer to "New Class A development and redevelopment properties: summary of pipeline" section within this Item 2 for additional information on total project costs.

(6) During the year ended December 31, 2021, we granted tenant concessions/free rent averaging 2.4 months with respect to the 9,516,301 RSF leased. Approximately 54% of the leases executed during the year ended December 31, 2021 did not include concessions for free rent.

Summary of contractual lease expirations

The following table summarizes information with respect to the contractual lease expirations at our properties as of December 31, 2021:

Year	RSF	Percentage of Occupied RSF	Annual Rental Revenue (Per RSF) ⁽¹⁾	Percentage of Total Annual Rental Revenue
2022 ⁽²⁾	2,793,222	7.7 %	\$ 40.58	6.5 %
2023	3,827,027	10.5 %	\$ 40.73	8.9 %
2024	3,166,324	8.7 %	\$ 43.36	7.9 %
2025	2,978,305	8.2 %	\$ 50.41	8.6 %
2026	2,267,304	6.2 %	\$ 47.63	6.2 %
2027	2,135,473	5.9 %	\$ 45.41	5.6 %
2028	3,322,877	9.1 %	\$ 52.67	10.0 %
2029	2,089,274	5.7 %	\$ 56.45	6.8 %
2030	2,186,023	6.0 %	\$ 57.85	7.2 %
2031	2,617,681	7.2 %	\$ 59.61	8.9 %
Thereafter	9,000,095	24.8 %	\$ 45.39	23.4 %

(1) Represents amounts in effect as of December 31, 2021.

(2) Excludes month-to-month leases aggregating 110,180 RSF as of December 31, 2021.

The following tables present information by market with respect to our 2022 and 2023 contractual lease expirations in North America as of December 31, 2021:

2022 Contractual Lease Expirations (in RSF)						Annual Rental Revenue (Per RSF) ⁽²⁾
Market	Leased	Negotiating/Anticipating	Targeted for Development/Redevelopment ⁽³⁾	Remaining Expiring Leases ⁽⁴⁾	Total ⁽¹⁾	
Greater Boston	112,267	188,384	—	295,070	595,721	\$ 56.30
San Francisco Bay Area	57,726	60,906	490,127	90,111	698,870	49.09
New York City	14,891	6,918	—	5,085	26,894	N/A
San Diego	123,522	52,652	305,034 ⁽⁵⁾	155,646	636,854	35.85
Seattle	—	26,177	51,255	123,760	201,192	25.94
Maryland	70,933	—	—	88,187	159,120	21.08
Research Triangle	40,884	—	62,490	106,172	209,546	23.24
Canada	26,426	—	—	2,197	28,623	20.18
Non-cluster/other markets	—	65,188	70,700	100,514	236,402	21.84
Total	446,649	400,225	979,606	966,742	2,793,222	\$ 40.58
Percentage of expiring leases	16 %	14 %	35 %	35 %	100 %	

2023 Contractual Lease Expirations (in RSF)						Annual Rental Revenue (Per RSF) ⁽²⁾
Market	Leased	Negotiating/Anticipating	Targeted for Development/Redevelopment	Remaining Expiring Leases	Total	
Greater Boston	66,361	14,857	312,845	751,245	1,145,308	\$ 49.57
San Francisco Bay Area	—	—	—	431,620 ⁽⁶⁾	431,620	66.57
New York City	—	—	—	52,724	52,724	N/A
San Diego	—	269,053	269,048	744,404	1,282,505	34.12
Seattle	—	—	84,782	227,636	312,418	21.95
Maryland	—	144,051	—	207,761	351,812	26.19
Research Triangle	—	—	—	219,521	219,521	31.18
Canada	—	13,224	—	—	13,224	30.65
Non-cluster/other markets	—	—	—	17,895	17,895	68.01
Total	66,361	441,185	666,675	2,652,806	3,827,027	\$ 40.73
Percentage of expiring leases	2 %	12 %	17 %	69 %	100 %	

(1) Excludes month-to-month leases aggregating 110,180 RSF as of December 31, 2021.

(2) Represents amounts in effect as of December 31, 2021.

(3) Represents RSF targeted for development or redevelopment upon expiration of existing in-place leases primarily related to recently acquired properties with an average contractual lease expiration date, weighted by annual rental revenue, of May 2, 2022. Refer to "Investments in real estate – value-creation square footage currently in rental properties" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional details on value-creation square feet currently included in rental properties.

(4) The largest remaining contractual expiration is 113,555 RSF in our Cambridge/Inner Suburbs submarket.

(5) Includes 139,135 RSF at 11255 and 11355 North Torrey Pines Road in our Torrey Pines submarket which we plan to develop into two buildings totaling 309,094 RSF that are fully leased.

(6) Includes 76,752 RSF at 3412 Hillview Avenue in our Greater Stanford submarket which is under evaluation to be redeveloped, subject to market conditions.

Investments in real estate

A key component of our business model is our disciplined allocation of capital to the development and redevelopment of new Class A properties located in collaborative life science, agtech, and technology campuses in AAA innovation clusters. These projects are focused on providing high-quality, generic, and reusable spaces that meet the real estate requirements of, and are reusable by, a wide range of tenants. Upon completion, each value-creation project is expected to generate a significant increase in rental income, net operating income, and cash flows. Our development and redevelopment projects are generally in locations that are highly desirable to high-quality entities, which we believe results in higher occupancy levels, longer lease terms, higher rental income, higher returns, and greater long-term asset value. Our pre-construction activities are undertaken in order to get the property ready for its intended use and include entitlements, permitting, design, site work, and other activities preceding commencement of construction of aboveground building improvements.

Our investments in real estate consisted of the following as of December 31, 2021 (dollars in thousands):

	Operating	Development and Redevelopment				Subtotal	Total
		Under Construction	Near Term	Intermediate Term	Future		
Investments in real estate							
Book value as of December 31, 2021 ⁽¹⁾	\$ 22,204,468	\$ 3,168,442	\$ 1,147,726	\$ 738,464	\$1,474,008	\$6,528,640	\$28,733,108
Square footage							
Operating	38,835,792	—	—	—	—	—	38,835,792
New Class A development and redevelopment properties	—	4,834,945	6,209,111 ⁽²⁾	3,855,608	17,620,857	32,520,521	32,520,521
Value-creation square feet currently included in rental properties ⁽³⁾	—	—	(1,250,525)	(122,991)	(3,012,092)	(4,385,608)	(4,385,608)
Total square footage	38,835,792	4,834,945	4,958,586	3,732,617	14,608,765	28,134,913	66,970,705

- (1) Balances exclude depreciation and our share of the cost basis associated with our properties held by our unconsolidated real estate joint ventures, which is classified as investments in unconsolidated real estate joint ventures in our consolidated balance sheets.
- (2) Includes 2,565,808 RSF currently 89% leased/negotiating expected to commence construction in the next six quarters. Refer to "New Class A development and redevelopment properties: current projects" within this Item 2 for additional details.
- (3) Refer to "Investments in real estate – value-creation square footage currently in rental properties" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional details on value-creation square feet currently included in rental properties.

Acquisitions

Our real estate asset acquisitions for the year ended December 31, 2021 consisted of the following (dollars in thousands):

Acquisitions With Development and Redevelopment Opportunities ⁽¹⁾										Square Footage	
Property	Submarket/Market	Date of Purchase	Number of Properties	Operating Occupancy	Future Development	Active Development/ Redevelopment	Operating With Future Development/ Redevelopment	Operating ⁽²⁾	Operating	Total ⁽³⁾	Purchase Price
Year ended December 31, 2021:											
One Rogers Street	Cambridge/Inner Suburbs Greater Boston	12/30/21	1	100% ⁽⁴⁾	TBD	403,892	—	4,367	—	408,259	\$ 849,422
550 Arsenal Street	Cambridge/Inner Suburbs/Greater Boston	4/21/21	1	98	775,000	—	260,867	—	—	775,000	130,000
Alexandria Center [®] for Life Science – Fenway	Fenway/Greater Boston	1/29/21	2	90 ⁽⁵⁾	305,000 ⁽⁶⁾	510,116	311,066	662,079	— ⁽⁶⁾	1,788,261	1,483,200 ⁽⁵⁾
One Investors Way	Route 128/Greater Boston	4/6/21	1	100	350,000	—	—	240,000 ⁽⁷⁾	—	590,000	105,000
840 Winter Street	Route 128/Greater Boston	1/20/21	1	100	—	130,000	—	30,009	—	160,009	58,126
Other	Other/Greater Boston	8/24/21	4	45	440,992	453,869	173,276	—	—	1,068,137	192,000
1178 El Camino Real	South San Francisco/San Francisco Bay Area	11/5/21	—	N/A	620,000	—	—	—	—	620,000	128,000
1122 El Camino Real	South San Francisco/San Francisco Bay Area	9/14/21	1	100	700,000	—	223,232	—	—	700,000	105,250
3420 and 3440 Hillview Avenue	Greater Stanford/San Francisco Bay Area	10/5/21	2	75	—	—	185,228	—	—	185,228	203,800
1501-1599 Industrial Road	Greater Stanford/San Francisco Bay Area	6/22/21	6	88	—	—	103,063	—	—	103,063	112,000
2475 Hanover Street	Greater Stanford/San Francisco Bay Area	4/28/21	1	100	—	—	83,980	—	—	83,980	105,000
888 Bransten Road	Greater Stanford/San Francisco Bay Area	11/4/21	—	N/A	210,830	—	—	—	—	210,830	55,000
6260, 6290, 6310, 6340, and 6350 Sequence Drive	Sorrento Mesa/San Diego	6/10/21	5	100	887,000	—	487,023	—	—	887,000	298,476
Pacific Technology Park (50% interest in consolidated JV)	Sorrento Mesa/San Diego	8/5/21	5	100	—	—	228,871	315,481	—	544,352	85,750
Other	Other/San Diego	7/21/21	9	77%	64,235	—	211,440	98,428	—	374,103	\$ 135,484

(1) We expect to provide total estimated costs and related yields for development and redevelopment projects in the future, subsequent to the commencement of construction. Refer to "New Class A development and redevelopment properties: current projects" within this Item 2 for additional information on active development and redevelopment projects.

(2) Represents the operating component of our value-creation acquisitions that is not expected to undergo development or redevelopment.

(3) Represents total square footage upon completion of development or redevelopment of a new Class A property. Square footage presented includes RSF of buildings currently in operations with future development or redevelopment opportunities. We intend to demolish and develop or redevelop the existing properties upon expiration of the existing in-place leases. Refer to the definition of "Investments in real estate – value-creation square footage currently in rental properties" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.

(4) We pre-leased the entire building by executing leases aggregating 403,892 RSF prior to closing of the acquisition in December 2021.

(5) The campus includes an operating property with future redevelopment opportunities at 401 Park Drive, a development project at 201 Brookline Avenue, and a future development opportunity, 401 Park Drive, aggregating 973,145 RSF, is 90% occupied, with an additional 3% of leased space that is under renovation, and has initial stabilized yields of 5.7% and 4.5% (cash basis). We expect to provide total estimated costs and related yields for the development projects at 201 Brookline Avenue and the future development/redevelopment opportunities in the future, subsequent to the commencement of construction. Refer to "New Class A development and redevelopment properties: current projects" within this Item 2 for additional information.

(6) Excludes the 202,997 RSF in additional development entitlements achieved during the three months ended December 31, 2021 at our 421 Park Drive future development site. We expect to settle this acquisition consideration during the three months ending March 31, 2022.

(7) Upon acquisition of this property, we entered into a 12-year lease with Moderna, Inc.

Acquisitions (continued)

Property	Submarket/Market	Date of Purchase	Number of Properties	Operating Occupancy	Square Footage							
					Acquisitions With Development and Redevelopment Opportunities ⁽¹⁾					Operating ⁽²⁾	Total ⁽³⁾	Purchase Price
					Future Development	Active Development/ Redevelopment	Operating With Future Development/ Redevelopment	Operating				
Year ended December 31, 2021:												
9601, 9605, 9609, 9613, and 9615 Medical Center Drive ⁽⁴⁾	Rockville/Maryland	5/12/21	5	100%	258,000	94,256	—	595,381	—	947,637	\$ 80,382	
3029 East Cornwallis Road	Research Triangle/ Research Triangle	7/30/21	—	N/A	1,055,000	—	—	—	—	1,055,000	91,000	
Other	Various	Various	43	89	4,999,768	390,675	1,229,735	859,663	426,460 ⁽⁵⁾	7,906,301	1,251,264	
			87	91%	10,665,825	1,982,808	3,497,781	2,805,408	426,460	18,407,160	\$ 5,469,154	

- (1) We expect to provide total estimated costs and related yields for development and redevelopment projects in the future, subsequent to the commencement of construction. Refer to "New Class A development and redevelopment properties: current projects" within this Item 2 for additional information on active development and redevelopment projects.
- (2) Represents the operating component of our value-creation acquisitions that is not expected to undergo development or redevelopment.
- (3) Represents total square footage upon completion of development or redevelopment of a new Class A property. Square footage presented includes RSF of buildings currently in operations with future development or redevelopment opportunities. We intend to demolish and develop or redevelop the existing properties upon expiration of the existing in-place leases. Refer to the definition of "Investments in real estate – value-creation square footage currently in rental properties" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.
- (4) We acquired land subject to two ground leases aggregating 595,381 RSF at 9609, 9613, and 9615 Medical Center Drive. We also acquired the land at 9605 Medical Center Drive, where we had previously acquired the building subject to a ground lease during the three months ended March 31, 2020.
- (5) Includes the acquisition of our partner's 43.2% ownership interest in our previously unconsolidated real estate joint venture at 704 Quince Orchard Road for \$9.4 million. We completed the redevelopment of this stabilized property during the three months ended June 30, 2019.

Dispositions and sales of partial interests

Our completed dispositions of and sales of partial interests in real estate assets during the year ended December 31, 2021 consisted of the following (dollars in thousands, except for sales price per RSF):

Property	Submarket/Market	Date of Sale	Interest Sold	RSF	Capitalization Rate	Capitalization Rate (Cash Basis)	Sales Price ⁽¹⁾	Sales Price per RSF	Gain (Loss) or Consideration in Excess of Book Value
Year ended December 31, 2021:									
50 and 60 Binney Street	Cambridge/Inner Suburbs/ Greater Boston	12/15/21	66% ⁽²⁾	532,395	4.3%	3.9%	\$ 782,259	\$ 2,226	\$ 457,529 ⁽³⁾
409 and 499 Illinois Street	Mission Bay/San Francisco Bay Area	10/5/21	35% ⁽²⁾⁽⁴⁾	455,069	5.0%	4.2%	274,681	\$ 1,366	113,756 ⁽³⁾
1500 Owens Street	Mission Bay/San Francisco Bay Area		25.1% ⁽²⁾⁽⁴⁾	158,267					
455 Mission Bay Boulevard South	Mission Bay/San Francisco Bay Area	12/16/21	75.0% ⁽²⁾	228,140	4.1%	3.8%	381,355	\$ 1,295	221,868 ⁽³⁾
1700 Owens Street	Mission Bay/San Francisco Bay Area			164,513					
213 East Grand Avenue	South San Francisco/ San Francisco Bay Area	4/22/21	70% ⁽²⁾	300,930	4.5%	4.0%	301,000	\$ 1,429	103,679 ⁽³⁾
Menlo Gateway	Greater Stanford/ San Francisco Bay Area	12/21/21	⁽⁵⁾ ⁽²⁾	772,983	5.4%	5.1%	397,851 ⁽⁶⁾	\$ 1,430	101,050 ⁽⁷⁾
260 Townsend Street	SoMa/San Francisco Bay Area	7/30/21	100%	66,682	N/A	N/A	49,000 ⁽⁸⁾	\$ 735	(435) ⁽⁷⁾
9444 Waples Street	Sorrento Mesa/San Diego	8/5/21	50% ⁽²⁾	88,380	N/A	N/A	11,469	\$ 260	—
400 Dexter Avenue North	Lake Union/Seattle	7/23/21	70% ⁽²⁾	290,111	4.1%	4.2%	254,814	\$ 1,255	95,467 ⁽³⁾
2301 5th Avenue	Lake Union/Seattle	12/22/21	100%	197,135	6.3%	4.9%	118,707	\$ 602	23,175 ⁽⁷⁾
220 and 240 2nd Avenue South	SoDo/Seattle	7/29/21	100%	80,160	N/A	N/A	24,100	\$ 301	—
Other	Various	Various	100%	264,007	N/A	N/A	34,900	N/A	2,779 ⁽⁷⁾
				3,598,772			\$ 2,630,136 ⁽⁹⁾	\$ 1,118,868 ⁽¹⁰⁾	

(1) For sales of partial interests; represents the contractual sales price for the percentage interest of the property sold by us.

(2) Refer to Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional details.

(3) For each partial interest sale, we control the newly formed real estate joint venture and therefore continue to consolidate this property. We accounted for the difference between the consideration received and the book value of the interest sold as an equity transaction, with no gain or loss recognized in earnings.

(4) We recapitalized these consolidated real estate joint ventures and sold: (i) a 35% interest in 409 and 499 Illinois Street and (ii) a 25.1% interest in 1500 Owens Street, resulting in an acquisition by the investor of a 75% ownership interest in each joint venture, including the interest held by our previous joint venture partners.

(5) We sold our 49.0% interest in Menlo Gateway, which represented our entire equity interest in this unconsolidated real estate joint venture.

(6) Represents a sales price of \$541.5 million less our share of the debt held by the unconsolidated real estate joint venture assumed by the buyer aggregating \$143.6 million.

(7) We sold our entire interest in this property and recognized the related gains (losses) in earnings, classified within gain on sales of real estate in our consolidated statements of operations.

(8) Includes the assumption by the buyer of a secured loan of \$28.2 million.

(9) Represents the highest total volume of dispositions in Company history, at a weighted-average capitalization rate (cash basis) of 4.1%.

(10) We achieved a weighted-average value-creation margin of 75% on our completed dispositions and sales of partial interest.

Demand for our value-creation development and redevelopment projects of high-quality office/laboratory space and our continued operational excellence at our world-class, sophisticated laboratory facilities and strong execution by our team has translated into record leasing activity.

Projects Either Under Construction or
Expected to Commence Construction in the Next Six Quarters

>\$610 Million

Projected Incremental Annual Rental Revenues
Primarily commencing from the first quarter of 2022
through the fourth quarter of 2024

7.4 million RSF⁽¹⁾

83% Leased/Negotiating

As of December 31, 2021.

(1) Includes 4.8 million RSF under construction and 2.6 million RSF expected to commence construction in the next six quarters.

The Arsenal on the Charles Greater Boston/ Cambridge/Inner Suburbs 137,111 RSF 100% Occupancy		201 Haskins Way San Francisco Bay Area/ South San Francisco 270,879 RSF 100% Occupancy		825 and 835 Industrial Road San Francisco Bay Area/ Greater Stanford 476,211 RSF 100% Occupancy	
3160 Porter Drive San Francisco Bay Area/ Greater Stanford 57,696 RSF 100% Occupancy		30-02 48 Avenue New York City/New York City 41,848 RSF 100% Occupancy		5505 Morehouse Drive San Diego/Sorrento Mesa 28,324 RSF 100% Occupancy	

New Class A development and redevelopment properties: recent deliveries (continued)

1165 Eastlake Avenue East Seattle/Lake Union 100,086 RSF 100% Occupancy		9601 and 9603 Medical Center Drive Maryland/Rockville 17,378 RSF 100% Occupancy		9804 Medical Center Drive Maryland/Rockville 176,832 RSF 100% Occupancy	
700 Quince Orchard Road Maryland/Gaithersburg 171,239 RSF 100% Occupancy		2400 Ellis Road, 40 Moore Drive, and 14 TW Alexander Drive⁽¹⁾ Research Triangle/Research Triangle 326,445 RSF 100% Occupancy		5 and 9 Laboratory Drive⁽²⁾ Research Triangle/Research Triangle 87,109 RSF 100% Occupancy	
		8 and 10 Davis Drive⁽³⁾ Research Triangle/Research Triangle 65,247 RSF 100% Occupancy			

- (1) Image represents 2400 Ellis Road in our Alexandria Center[®] for Life Science – Durham mega campus.
 (2) Image represents 9 Laboratory Drive in our Alexandria Center[®] for AgTech campus.
 (3) Image represents 10 Davis Drive in our Alexandria Center[®] for Advanced Technologies mega campus.

New Class A development and redevelopment properties: recent deliveries (continued)

The following table presents value-creation development and redevelopment of new Class A properties placed into service during the year ended December 31, 2021 (dollars in thousands):

Property/Market/Submarket	4Q21 Delivery Date ⁽¹⁾	Our Ownership Interest	RSF Placed in Service					Total Project			Unlevered Yields			
			Prior to 1/1/21	1Q21	2Q21	3Q21	4Q21	Total	Occupancy Percentage ⁽²⁾	RSF	Investment	Initial Stabilized	Initial Stabilized (Cash Basis)	
Development projects														
201 Haskins Way/San Francisco Bay Area/ South San Francisco	11/1/21	100%	—	—	171,042	55,358	44,479	270,879	100%	323,190	\$ 370,000	6.4%	6.2%	
825 and 835 Industrial Road/San Francisco Bay Area/Greater Stanford	10/22/21	100%	96,463	99,557	114,157	6,369	159,665	476,211	100%	526,129	630,000	6.4	6.1	
1165 Eastlake Avenue East/Seattle/ Lake Union	N/A	100%	—	100,086	—	—	—	100,086	100%	100,086	138,000	6.3 ⁽³⁾	6.4 ⁽³⁾	
9804 Medical Center Drive/Maryland/ Rockville	N/A	100%	—	176,832	—	—	—	176,832	100%	176,832	89,300	8.3	8.0	
5 and 9 Laboratory Drive/Research Triangle/ Research Triangle	11/27/21	100%	—	—	—	25,812	61,297	87,109	100%	340,400	193,000	7.1	7.0	
8 and 10 Davis Drive/Research Triangle/ Research Triangle	10/24/21	100%	—	—	—	20,500	44,747	65,247	100%	250,000	151,000	7.5	7.3	
Redevelopment projects														
The Arsenal on the Charles/Greater Boston/ Cambridge/Inner Suburbs	12/27/21	100%	—	—	—	86,546	50,565	137,111	100%	872,665	772,000	6.2	5.5	
3160 Porter Drive/San Francisco Bay Area/ Greater Stanford	10/15/21	100%	—	—	—	43,578	14,118	57,696	100%	92,300	107,000	5.2	5.0	
30-02 48th Avenue/New York City/ New York City	12/1/21	100%	17,716	—	15,176	—	8,956	41,848	100%	179,100	224,000	5.8	5.8	
5505 Morehouse Drive/San Diego/ Sorrento Mesa	11/19/21	100%	—	—	—	—	28,324	28,324	100%	79,945	67,000	6.9	7.0	
Other/San Diego	N/A	100%	—	—	128,745	—	—	128,745	100%	128,745	47,000	8.0 ⁽⁴⁾	8.0 ⁽⁴⁾	
9601 and 9603 Medical Center Drive/ Maryland/Rockville	12/1/21	100%	—	—	—	—	17,378	17,378	100%	94,256	54,000	8.4	7.1	
700 Quince Orchard Road/Maryland/ Rockville	11/1/21	100%	—	—	—	—	171,239	171,239	100%	171,239	79,000	8.8	7.4	
2400 Ellis Road, 40 Moore Drive, and 14 TW Alexander Drive/Research Triangle/ Research Triangle	N/A	100%	—	—	326,445	—	—	326,445	100%	652,381	245,000	7.5	6.7	
Total	11/5/21		114,179	376,475	755,565	238,163	600,768	2,085,150		3,987,268	\$ 3,166,300	6.6%	6.2%	

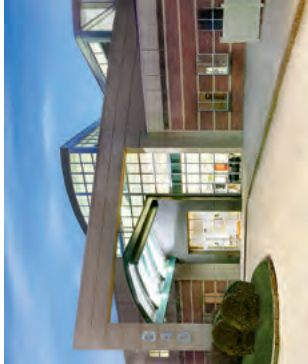
(1) Represents the average delivery date for deliveries that occurred during the three months ended December 31, 2021, weighted by annual rental revenue.

(2) Relates to total operating RSF placed in service as of the most recent delivery.

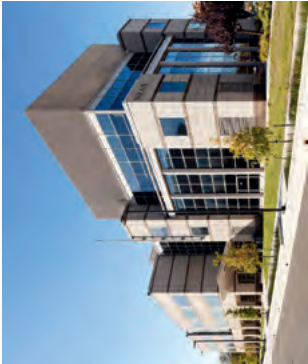
(3) Unlevered yields represent aggregate returns for 1165 Eastlake Avenue East, an amenity-rich research headquarters for Adaptive Biotechnologies Corporation, and 1208 Eastlake Avenue East, an adjacent multi-tenant office/laboratory building.

(4) We achieved yields greater than 8.0%.

New Class A development and redevelopment properties: current projects

325 Binney Street	One Rogers Street	The Arsenal on the Charles	201 Brookline Avenue	40, 50, and 60 Sylvan Road
Greater Boston/ Cambridge/Inner Suburbs 462,100 RSF 100% Leased	Greater Boston/ Cambridge/Inner Suburbs 403,892 RSF 100% Leased	Greater Boston/ Cambridge/Inner Suburbs 250,567 RSF 94% Leased/Negotiating	Greater Boston/Fenway 510,116 RSF 96% Leased/Negotiating	Greater Boston/Route 128 202,428 RSF 61% Leased/Negotiating
				
840 Winter Street	201 Haskins Way	751 Gateway Boulevard	825 and 835 Industrial Road	3160 Porter Drive
Greater Boston/Route 128 130,000 RSF 99% Leased/Negotiating	San Francisco Bay Area/ South San Francisco 52,311 RSF 100% Leased	San Francisco Bay Area/ South San Francisco 230,592 RSF 100% Leased	San Francisco Bay Area/ Greater Stanford 49,918 RSF 100% Leased	San Francisco Bay Area/ Greater Stanford 34,604 RSF 97% Leased/Negotiating
				

New Class A development and redevelopment properties: current projects (continued)

30-02 48th Avenue	3115 Merryfield Row	10055 Barnes Canyon Road	1150 Eastlake Avenue East	9601 and 9603 Medical Center Drive
New York City/New York City 96,003 RSF 69% Leased/Negotiating	San Diego/Torrey Pines 146,456 RSF 100% Leased	San Diego/Sorrento Mesa 195,435 RSF 100% Leased	Seattle/Lake Union 311,631 RSF 62% Leased/Negotiating	Maryland/Rockville 76,878 RSF 100% Leased/Negotiating
				
9950 Medical Center Drive	20400 Century Boulevard	2400 Ellis Road, 40 Moore Drive, and 14 TW Alexander Drive ⁽¹⁾	5 and 9 Laboratory Drive ⁽²⁾	8 and 10 Davis Drive ⁽³⁾
Maryland/Rockville 84,264 RSF 100% Leased	Maryland/Gaithersburg 80,550 RSF 40% Leased/Negotiating	Research Triangle/Research Triangle 325,936 RSF 80% Leased/Negotiating	Research Triangle/Research Triangle 72,891 RSF 95% Leased/Negotiating	Research Triangle/Research Triangle 184,753 RSF 94% Leased/Negotiating
				

(1) Image represents 14 TW Alexander Drive in our Alexandria Center[®] for Life Science – Durham mega campus.

(2) Image represents 9 Laboratory Drive in our Alexandria Center[®] for AgTech campus.

(3) Image represents 10 Davis Drive in our Alexandria Center[®] for Advanced Technologies mega campus.

New Class A development and redevelopment properties: current projects (continued)

The following tables set forth a summary of our new Class A development and redevelopment properties under construction and pre-leased/negotiating near-term projects expected to commence construction in the next six quarters as of December 31, 2021 (dollars in thousands):

Market Property/Submarket	Dev/Redev	Square Footage			Percentage		Occupancy ⁽¹⁾	
		In Service	CIP	Total	Leased	Leased/ Negotiating	Initial	Stabilized
Under construction								
Greater Boston								
325 Binney Street/Cambridge/Inner Suburbs	Dev	—	462,100	462,100	100%	100%	2023	2024
One Rogers Street/Cambridge/Inner Suburbs	Redev	4,367	403,892	408,259	100	100	2023	2023
The Arsenal on the Charles/Cambridge/Inner Suburbs	Redev	622,098	250,567	872,665	83	94	3Q21	2022
201 Brookline Avenue/Fenway	Dev	—	510,116	510,116	88	96	2022	2023
40, 50, and 60 Sylvan Road/Route 128	Redev	312,845	202,428	515,273	61	61	2023	2024
840 Winter Street/Route 128	Redev	30,009	130,000	160,009	18	99	2023	2024
Other	Redev	—	453,869	453,869	—	—	2023	TBD
San Francisco Bay Area								
201 Haskins Way/South San Francisco	Dev	270,879	52,311	323,190	100	100	2Q21	2022
751 Gateway Boulevard/South San Francisco	Dev	—	230,592	230,592	100	100	2023	2023
825 and 835 Industrial Road/Greater Stanford	Dev	476,211	49,918	526,129	100	100	4Q20	2022
3160 Porter Drive/Greater Stanford	Redev	57,696	34,604	92,300	89	97	3Q21	2022
New York City								
30-02 48th Avenue/New York City	Redev	83,097	96,003	179,100	60	69	4Q20	2022
San Diego								
3115 Merryfield Row/Torrey Pines	Dev	—	146,456	146,456	100	100	2022	2022
10055 Barnes Canyon Road/Sorrento Mesa	Dev	—	195,435	195,435	100	100	2022	2022
5505 Morehouse Drive/Sorrento Mesa	Redev	28,324	51,621	79,945	100	100	4Q21	2022
10102 Hoyt Park Drive/Other	Dev	—	144,113	144,113	100	100	2023	2023
10277 Scripps Ranch Boulevard/Other	Redev	—	70,041	70,041	—	—	2023	TBD
Seattle								
1150 Eastlake Avenue East/Lake Union	Dev	—	311,631	311,631	32	62	2023	TBD
3301, 3555, and 3755 Monte Villa Parkway/Bothell	Redev	246,647	213,976	460,623	53	53	2022	2023
Maryland								
9601 and 9603 Medical Center Drive/Rockville	Redev	17,378	76,878	94,256	51	100	4Q21	2023
9950 Medical Center Drive/Rockville	Dev	—	84,264	84,264	100	100	1H22	2022
20400 Century Boulevard/Gaithersburg	Redev	—	80,550	80,550	40	40	2022	2023
Research Triangle								
2400 Ellis Road, 40 Moore Drive, and 14 TW Alexander Drive/Research Triangle	Redev	326,445	325,936	652,381	77	80	2Q21	2022
5 and 9 Laboratory Drive/Research Triangle	Redev/Dev	267,509	72,891	340,400	93	95	3Q21	2022
8 and 10 Davis Drive/Research Triangle	Dev	65,247	184,753	250,000 ⁽²⁾	83 ⁽²⁾	94 ⁽²⁾	3Q21	2022
		2,808,752	4,834,945	7,643,697	75%	82%		

(1) Initial occupancy dates are subject to leasing and/or market conditions. Multi-tenant projects may have occupancy by tenants over a period of time. Stabilized occupancy may vary depending on single tenancy versus multi-tenancy.

(2) Represents 150,000 RSF that is 90% leased/negotiating at 8 Davis Drive and 100,000 RSF that is 100% leased at 10 Davis Drive.

Market Property/Submarket	Dev/Redev	In Service	CIP	Total		
					Leased	Leased/ Negotiating
Pre-leased/negotiating near-term projects expected to commence construction in the next six quarters						
Greater Boston						
99 Coolidge Avenue/Cambridge/Inner Suburbs	Dev	—	275,000	275,000	—%	34%
The Arsenal on the Charles, Phase I/Cambridge/Inner Suburbs	Dev	—	120,454	120,454	84	84
The Arsenal on the Charles, Phase II/Cambridge/Inner Suburbs	Dev	—	100,000	100,000	—	88
15 Necco Street/Seaport Innovation District	Dev	—	350,000	350,000	—	97
San Diego						
11255 and 11355 North Torrey Pines Road/Torrey Pines	Dev	—	309,094	309,094	100	100
10931 and 10933 North Torrey Pines Road/Torrey Pines	Dev	—	299,158	299,158	100	100
Alexandria Point, Phase II/University Town Center	Dev	—	409,000	409,000	—	100
Alexandria Point, Phase I/University Town Center	Dev	—	171,102	171,102	100	100
Maryland						
9820 Darnestown Road/Rockville	Dev	—	250,000	250,000	—	100
9810 Darnestown Road/Rockville	Dev	—	192,000	192,000	100	100
9808 Medical Center Drive/Rockville	Dev	—	90,000	90,000	29	29
		—	2,565,808	2,565,808	43	89
		2,808,752	7,400,753	10,209,505	67%	83%

New Class A development and redevelopment properties: current projects (continued)

Market Property/Submarket	Our Ownership Interest	In Service	CIP	Cost to Complete	Total at Completion	Unlevered Yields	
						Initial Stabilized	Initial Stabilized (Cash Basis)
Under construction							
Greater Boston							
325 Binney Street/Cambridge/Inner Suburbs	100%	\$ —	\$ 240,287	\$ 540,713	\$ 781,000	8.6%	7.2%
One Rogers Street/Cambridge/Inner Suburbs	100%	10,844	847,262	347,894	1,206,000	5.2%	4.2%
The Arsenal on the Charles/Cambridge/Inner Suburbs	100%	500,636	226,128	45,236	772,000	6.2%	5.5%
201 Brookline Avenue/Fenway	98.3%	—	476,012	257,988	734,000	7.2% ⁽¹⁾	6.2% ⁽¹⁾
40, 50, and 60 Sylvan Road/Route 128	100%	173,595	92,461	TBD			
840 Winter Street/Route 128	100%	14,013	66,142	TBD			
Other	100%	—	115,214	TBD			
San Francisco Bay Area							
201 Haskins Way/South San Francisco	100%	304,606	49,710	15,684	370,000	6.4%	6.2%
751 Gateway Boulevard/South San Francisco	49.9%	—	78,007	211,993	290,000	6.5%	6.3%
825 and 835 Industrial Road/Greater Stanford	100%	565,335	46,072	18,593	630,000	6.4%	6.1%
3160 Porter Drive/Greater Stanford	100%	62,893	38,826	5,281	107,000	5.2%	5.0%
New York City							
30-02 48th Avenue/New York City	100%	75,062	108,037	40,901	224,000	5.8%	5.8%
San Diego							
3115 Merryfield Row/Torrey Pines	100%	—	124,372	27,628	152,000	6.2%	6.2%
10055 Barnes Canyon Road/Sorrento Mesa	50.0%	—	88,400	92,600	181,000	7.2%	6.6%
5505 Morehouse Drive/Sorrento Mesa	100%	17,909	37,074	12,017	67,000	6.9%	7.0%
10102 Hoyt Park Drive/Other	100%	—	42,713	71,287	114,000	7.4%	6.5%
10277 Scripps Ranch Boulevard/Other	100%	—	25,966	TBD			
Seattle							
1150 Eastlake Avenue East/Lake Union	100%	—	117,929	287,071	405,000	6.4%	6.2%
3301, 3555, and 3755 Monte Villa Parkway/Bothell	100%	55,198	72,233	TBD			
Maryland							
9601 and 9603 Medical Center Drive/Rockville	100%	6,124	24,179	23,697	54,000	8.4%	7.1%
9950 Medical Center Drive/Rockville	100%	—	42,673	16,927	59,600	8.6%	7.7%
20400 Century Boulevard/Gaithersburg	100%	—	16,217	18,783	35,000	8.5%	8.6%
Research Triangle							
2400 Ellis Road, 40 Moore Drive, and 14 TW Alexander Drive/Research Triangle	100%	92,403	77,021	75,576	245,000	7.5%	6.7%
5 and 9 Laboratory Drive/Research Triangle	100%	148,582	39,347	5,071	193,000	7.1%	7.0%
8 and 10 Davis Drive/Research Triangle	100%	30,252	76,160	44,588	151,000	7.5%	7.3%
		\$ 2,057,452	\$ 3,168,442	\$ 3,070,000 ⁽²⁾⁽³⁾	\$ 8,290,000 ⁽²⁾		

(1) We expect to achieve initial stabilized yields of 7.2% and 6.2% (cash basis), which represent improvements of 40 bps and 20 bps, from the respective initial stabilized yields disclosed on October 25, 2021. The increase is primarily attributable to higher rental rates.

(2) Amounts rounded to the nearest \$10 million.

(3) Based on the expected incremental EBITDA generated upon stabilization of these projects over the period of 2022 to 2024 and our fourth quarter of 2022 annualized target of net debt and preferred stock to adjusted EBITDA of less than or equal to 5.1x, we expect \$1.1 billion of incremental equity funding on a leverage neutral basis to complete our projects under construction aggregating 4.8 million RSF as of December 31, 2021. The balance of the remaining cost to complete is expected to be funded with \$2.0 billion of debt. Refer to the "Capital resources" section under "Item 7. Management's discussion and analysis of financial condition and results of operations" in this annual report on Form 10-K for additional details. Actual debt and equity capital funding until stabilization of these projects may vary from these estimates.

New Class A development and redevelopment properties: summary of pipeline

The following table summarizes the key information for all our development and redevelopment projects in North America and a key pending acquisition as of December 31, 2021 (dollars in thousands):

Property/Submarket	Our Ownership Interest	Book Value	Square Footage				
			Development and Redevelopment			Total ⁽¹⁾	
			Under Construction	Near Term	Intermediate Term		Future
Greater Boston							
Mega Campus: Alexandria Center® at One Kendall Square/Cambridge/ Inner Suburbs	100%	\$ 240,287	462,100	—	—	—	462,100
325 Binney Street							
Mega Campus: Alexandria Center® at Kendall Square/Cambridge/ Inner Suburbs	100%	847,262	403,892	—	—	—	403,892
One Rogers Street							
Mega Campus: The Arsenal on the Charles/Cambridge/Inner Suburbs	100%	267,261	250,567	220,454	—	34,157	505,178
311 Arsenal Street, 300 and 400 North Beacon Street, and 100 and 200 Talcott Avenue							
Mega Campus: Alexandria Center® for Life Science – Fenway/Fenway 201 Brookline Avenue and 421 Park Drive	⁽²⁾	719,937	510,116	—	507,997	—	1,018,113
Reservoir Woods/Route 128	100%	140,723	202,428	312,845	—	440,000	955,273
40, 50, and 60 Sylvan Road							
840 Winter Street/Route 128	100%	66,142	130,000	—	—	—	130,000
99 Coolidge Avenue/Cambridge/Inner Suburbs	75.0%	66,124	—	275,000	—	—	275,000
15 Necco Street/Seaport Innovation District	90.0%	227,051	—	350,000	—	—	350,000
10 Necco Street/Seaport Innovation District	100%	94,490	—	—	175,000	—	175,000
215 Presidential Way/Route 128	100%	6,808	—	—	112,000	—	112,000
Mega Campus: Alexandria Technology Square®/Cambridge/ Inner Suburbs	100%	7,881	—	—	—	100,000	100,000
Mega Campus: 480 Arsenal Way and 500 and 550 Arsenal Street/ Cambridge/Inner Suburbs	100%	55,680	—	—	—	775,000	775,000
Mega Campus: 380 and 420 E Street/Seaport Innovation District	100%	120,865	—	—	—	1,000,000	1,000,000
99 A Street/Seaport Innovation District	100%	47,139	—	—	—	235,000	235,000
Mega Campus: One Upland Road, 100 Tech Drive, and One Investors Way/Route 128	100%	22,861	—	—	—	1,100,000	1,100,000
Other value-creation projects	100%	165,496	453,869	190,992	—	466,504	1,111,365
		\$ 3,096,007	2,412,972	1,349,291	794,997	4,150,661	8,707,921

- (1) Represents total square footage upon completion of development or redevelopment of a new Class A property. Square footage presented includes RSF of buildings currently in operation at properties that also have inherent future development or redevelopment opportunities. Upon expiration of existing in-place leases, we have the intent to demolish or redevelop the existing property and commence future construction. Refer to the definition of "Investments in real estate – value-creation square footage currently in rental properties" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.
- (2) We have a 98.3% ownership interest in 201 Brookline Avenue aggregating 510,116 RSF, which is currently under construction. We have a 100% ownership interest in the intermediate-term development project at 421 Park Drive aggregating 507,997 SF.

New Class A development and redevelopment properties: summary of pipeline (continued)

Property/Submarket	Our Ownership Interest	Book Value	Square Footage			
			Under Construction	Development and Redevelopment		Total ⁽¹⁾
				Near Term	Intermediate Term	
San Francisco Bay Area						
Mega Campus: Alexandria Technology Center® – Gateway/ South San Francisco	49.9%	\$ 100,575	230,592	300,010	—	821,602
651 and 751 Gateway Boulevard						
Alexandria Center® for Life Science – South San Francisco	100%	49,710	52,311	—	—	52,311
201 Haskins Way						
Mega Campus: Alexandria Center® for Life Science – San Carlos/ Greater Stanford	100%	391,038	49,918	—	700,000	1,547,748
825, 835, and 960 Industrial Road, 987 and 1075 Commercial Street, and 888 Bransten Road						
3160 Porter Drive/Greater Stanford	100%	38,826	34,604	—	—	34,604
Mega Campus: Alexandria Center® for Science and Technology – Mission Bay/Mission Bay	100%	53,408	—	191,000	—	191,000
1450 Owens Street						
3825 and 3875 Fabian Way/Greater Stanford	100%	—	—	250,000	—	478,000
901 California Avenue/Greater Stanford	100%	3,797	—	56,924	—	56,924
3450 and 3460 Hillview Avenue/Greater Stanford	100%	—	—	42,340	34,611	76,951
Mega Campus: 88 Bluxome Street/SoMa	100%	323,680	—	1,070,925	—	1,070,925
Mega Campus: 1122 and 1178 El Camino Real/South San Francisco	100%	235,985	—	—	—	1,320,000
Mega Campus: 213, 249, 259, 269, and 279 East Grand Avenue/ South San Francisco	30.0%	6,352	—	—	—	90,000
2475 Hanover Street/Greater Stanford	100%	—	—	—	—	83,980
Other value-creation projects	⁽²⁾	54,275	—	—	—	303,407
		1,257,646	367,425	1,911,199	734,611	6,127,452
New York City						
Alexandria Center® for Life Science – Long Island City/New York City	100%	138,631	96,003	135,938	—	231,941
30-02 48th Avenue and 47-50 30th Street						
Mega Campus: Alexandria Center® for Life Science – New York City/ New York City	100%	79,961	—	—	550,000 ⁽³⁾	550,000
219 East 42nd Street/New York City	100%	—	—	—	—	579,947
		\$ 218,592	96,003	135,938	550,000	1,361,888

- (1) Represents total square footage upon completion of development or redevelopment of a new Class A property. Square footage presented includes RSF of buildings currently in operation at properties that also have inherent future development or redevelopment opportunities. Upon expiration of existing in-place leases, we have the intent to demolish or redevelop the existing property and commence future construction. Refer to the definition of "Investments in real estate – value-creation square footage currently in rental properties" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.
- (2) Includes a future development project aggregating 278,407 RSF at Alexandria Center® for Life Science – Millbrae Station, where we have a 40.3% ownership interest.
- (3) Pursuant to an option agreement, we are currently negotiating a long-term ground lease with the City of New York for the future site of a new building approximating 550,000 RSF.

New Class A development and redevelopment properties: summary of pipeline (continued)

Property/Submarket	Our Ownership Interest	Book Value	Square Footage				
			Development and Redevelopment			Total ⁽¹⁾	
			Under Construction	Near Term	Intermediate Term		Future
San Diego							
Mega Campus: One Alexandria Square/Torrey Pines	100%	\$ 287,221	146,456	608,252	—	125,280	879,988
3115 Merryfield Row, 10931, 10933, 11255, and 11355 North Torrey Pines Road, and 10975 and 10995 Torreyana Road							
Mega Campus: SD Tech by Alexandria/Sorrento Mesa	50.0%	215,498	247,056	190,074	160,000	333,845	930,975
9805 Scranton Road, 5505 Morehouse Drive ⁽²⁾ , and 10055 and 10075 Barnes Canyon Road							
10102 Hoyt Park Drive/Other	100%	42,713	144,113	—	—	—	144,113
10277 Scripps Ranch Boulevard/Other	100%	25,966	70,041	—	—	—	70,041
Mega Campus: Alexandria Point/University Town Center	55.0%	117,757	—	580,102	—	324,445	904,547
10260 Campus Point Drive and 4110, 4150, and 4160 Campus Point Court							
Mega Campus: Sequence District by Alexandria/Sorrento Mesa	100%	40,142	—	200,000	509,000	1,089,915	1,798,915
6260, 6290, 6310, 6340, 6350, and 6450 Sequence Drive							
Mega Campus: University District/University Town Center	100%	68,817	—	—	600,000	—	600,000
9363, 9373, 9393 Towne Centre Drive, and 4555 Executive Drive							
9444 Waples Street/Sorrento Mesa	50.0%	19,062	—	—	149,000	—	149,000
Mega Campus: 5200 Illumina Way/University Town Center	51.0%	13,524	—	—	—	451,832	451,832
4025, 4031, 4045, and 4075 Sorrento Valley Boulevard/Sorrento Valley	100%	14,710	—	—	—	247,000	247,000
Other value-creation projects	100%	14,162	—	54,000	—	114,235	168,235
		859,572	607,666	1,632,428	1,418,000	2,686,552	6,344,646
Seattle							
Mega Campus: The Eastlake Life Science Company by Alexandria/Lake Union	100%	117,929	311,631	—	—	—	311,631
1150 Eastlake Avenue East							
Mega Campus: Alexandria Center [®] for Life Science – South Lake Union/Lake Union	100%	114,210	—	217,000	—	188,400	405,400
601 and 701 Dexter Avenue North							
Alexandria Center [®] for Advanced Technologies – Monte Villa Parkway/Bothell	100%	72,233	213,976	51,255	—	—	265,231
3301, 3555, and 3755 Monte Villa Parkway							
1010 4th Avenue South/SoDo	100%	51,395	—	—	—	544,825	544,825
830 4th Avenue South/SoDo	100%	—	—	—	—	52,488	52,488
Mega Campus: Alexandria Center [®] for Advanced Technologies – Canyon Park/Bothell	100%	12,835	—	—	—	230,000	230,000
21660 20th Avenue Southeast							
Other value-creation projects	100%	77,484	—	—	—	691,000	691,000
		\$ 446,086	525,607	268,255	—	1,706,713	2,500,575

- (1) Represents total square footage upon completion of development or redevelopment of a new Class A property. Square footage presented includes RSF of buildings currently in operation at properties that also have inherent future development or redevelopment opportunities. Upon expiration of existing in-place leases, we have the intent to demolish or redevelop the existing property and commence future construction. Refer to the definition of "Investments in real estate – value-creation square footage currently in rental properties" in the "Non-GAAP measures and definitions" section under Item 7 in this annual report on Form 10-K for additional information.
- (2) We own 100% of this property.

New Class A development and redevelopment properties: summary of pipeline (continued)

Property/Submarket	Our Ownership Interest	Book Value	Square Footage			
			Under Construction	Near Term	Intermediate Term	Future
Maryland						
Mega Campus: Alexandria Center [®] for Life Science – Shady Grove/ Rockville	100%	\$ 135,795	161,142	532,000	258,000	38,000
9601, 9603, and 9950 Medical Center Drive and 9810, 9820, and 9830 Darnestown Road						
20400 Century Boulevard/Gaithersburg	100%	16,217	80,550	—	—	—
		152,012	241,692	532,000	258,000	38,000
80,550						
1,069,692						
Research Triangle						
Mega Campus: Alexandria Center [®] for Life Science – Durham/ Research Triangle	100%	120,888	325,936	100,000	—	885,000
40 and 41 Moore Drive and 14 TW Alexander Drive						
Mega Campus: Alexandria Center [®] for Advanced Technologies/ Research Triangle	100%	121,663	184,753	180,000	—	990,000
4, 8, and 10 Davis Drive						
Alexandria Center [®] for AgTech/Research Triangle	100%	39,347	72,891	—	—	—
9 Laboratory Drive						
Mega Campus: Alexandria Center [®] for NextGen Medicines/ Research Triangle	100%	96,056	—	100,000	100,000	855,000
3029 East Cornwallis Road						
Other value-creation projects	100%	4,185	—	—	—	76,262
		382,139	583,580	380,000	100,000	2,806,262
Other value-creation projects	100%	116,586	—	—	—	2,538,505
Total pipeline as of December 31, 2021		\$ 6,528,640 ⁽²⁾	4,834,945	6,209,111	3,855,608	17,620,857
⁽¹⁾						
Key pending acquisition						
Mega Campus: Alexandria Center [®] for Life Science – South Lake Union/Lake Union			—	800,000	—	—
800 Mercer Street						
			4,834,945	7,009,111	3,855,608	17,620,857
						33,320,521

(1) Total square footage includes 4,385,608 RSF of buildings currently in operation that will be redeveloped or replaced with new development RSF upon commencement of future construction. Refer to the definition of “investments in real estate – value-creation square footage currently in rental properties” in the “Non-GAAP measures and definitions” section under Item 7 in this annual report on Form 10-K for additional information.

(2) Total book value includes \$3.2 billion of projects currently under construction that are 82% leased/negotiating. We also expect to commence construction on pre-leased/negotiating near-term projects aggregating \$570.5 million in the next six quarters that are 89% leased/negotiating.

ITEM 3. LEGAL PROCEEDINGS

To our knowledge, no legal proceedings are pending against us, other than routine actions and administrative proceedings, and other actions not deemed material, substantially all of which are expected to be covered by liability insurance and which, in the aggregate, are not expected to have a material adverse effect on our financial condition, results of operations, or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is traded on the NYSE under the symbol "ARE." On January 14, 2022, the last reported sales price per share of our common stock was \$210.28, and there were 632 holders of record of our common stock (excluding beneficial owners whose shares are held in the name of Cede & Co.).

To maintain our qualification as a REIT, we must make annual distributions to stockholders of at least 90% of our taxable income for the current taxable year, determined without regard to deductions for dividends paid and excluding any net capital gains. Under certain circumstances, we may be required to make distributions in excess of cash flows available for distribution to meet these distribution requirements. In such a case, we may borrow funds or may raise funds through the issuance of additional debt or equity capital. No dividends can be paid on our common stock unless we have paid full cumulative dividends on our preferred stock. From the date of issuance of our preferred stock through December 31, 2021, we have paid full cumulative dividends on our preferred stock. As of December 31, 2021, we had no outstanding shares of preferred stock. Future distributions on our common stock will be determined by, and made at the discretion of, our Board of Directors and will depend on a number of factors, including actual cash available for distribution to our stockholders, our financial condition and capital requirements, the annual distribution requirements under the REIT provisions of the Internal Revenue Code, restrictions under Maryland law, and such other factors as our Board of Directors deems relevant. We cannot assure our stockholders that we will make any future distributions.

Refer to "Item 12. Security ownership of certain beneficial owners and management and related stockholder matters" in this annual report on Form 10-K for information on securities authorized for issuance under equity compensation plans.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with our consolidated financial statements and notes thereto under "Item 15. Exhibits and financial statement schedules" in this annual report on Form 10-K. Forward-looking statements involve inherent risks and uncertainties regarding events, conditions, and financial trends that may affect our future plans of operations, business strategy, results of operations, and financial position. A number of important factors could cause actual results to differ materially from those included within or contemplated by such forward-looking statements, including, but not limited to, those described within this "Item 7. Management's discussion and analysis of financial condition and results of operations" in this annual report on Form 10-K. We do not undertake any responsibility to update any of these factors or to announce publicly any revisions to any of the forward-looking statements contained in this or any other document, whether as a result of new information, future events, or otherwise.

As used in this annual report on Form 10-K, references to the "Company," "Alexandria," "ARE," "we," "us," and "our" refer to Alexandria Real Estate Equities, Inc. and its consolidated subsidiaries.

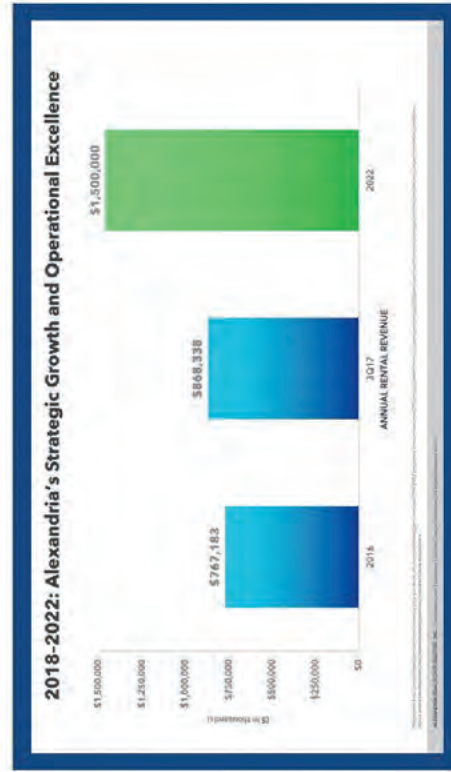


2021 ALEXANDRIA'S ACHIEVEMENT OF HISTORIC MILESTONES

Reflecting our best-in-class team's discipline, ingenuity, and flexibility to execute

DURING THE THIRD QUARTER OF 2021 ALEXANDRIA MET AND SURPASSED OUR GOAL TO DOUBLE ANNUAL RENTAL REVENUE IN 5 YEARS

INVESTOR DAY 2017 5-YEAR GROWTH POTENTIAL



\$1.7B

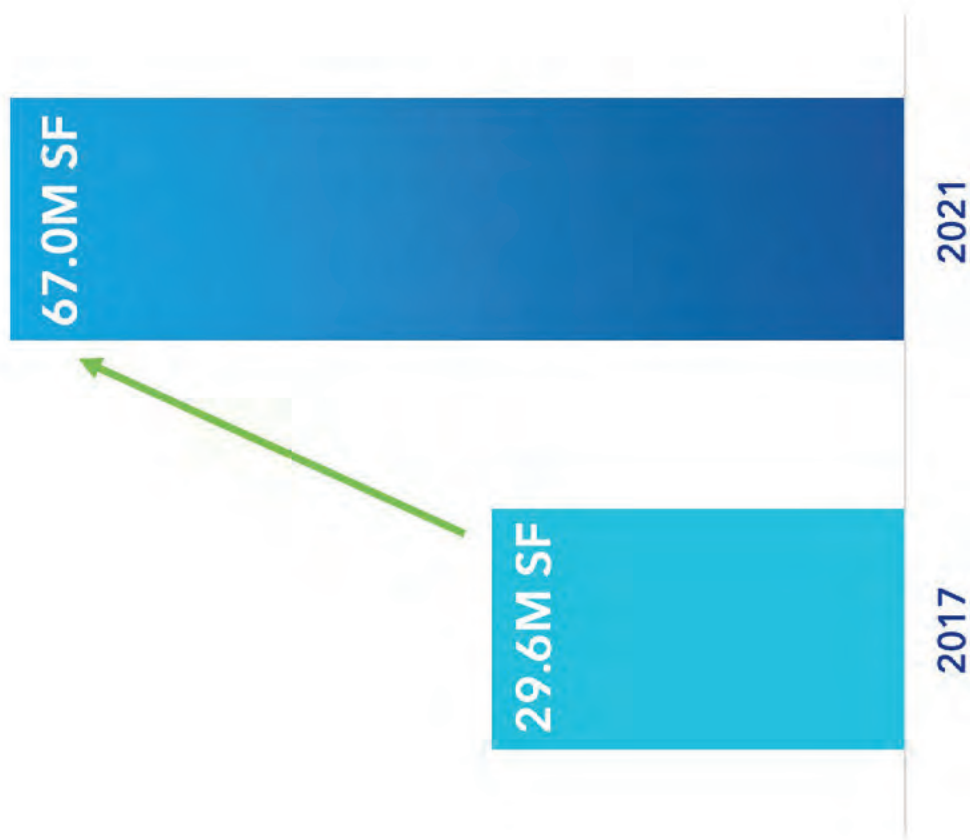
**MET AND
SURPASSED
GOAL**

As of September 30, 2021

Refer to the definition of "Annual rental revenue" in the "Non-GAAP measures and definitions" section within this Item 7 for additional details.

ALEXANDRIA DOUBLED OUR TOTAL ASSET BASE

ALEXANDRIA, THROUGH OUR DISCIPLINED STRATEGY, HAS AMASSED UNMATCHED SCALE





**ALEXANDRIA'S
SCALE
ADVANTAGE**

**TOP 10%
TOTAL EQUITY
CAPITALIZATION
AMONG ALL
PUBLICLY TRADED
U.S. REITS⁽¹⁾**

(1) Represents total equity capitalization for publicly traded U.S. REITs, from Bloomberg Professional Services as of December 31, 2021. Alexandria's total equity capitalization is calculated using shares outstanding and the closing stock price as of December 31, 2021.

**FEBRUARY 2021:
ALEXANDRIA
COMPLETED
SINGLE LARGEST
BOND OFFERING
IN COMPANY
HISTORY**

\$1.8B

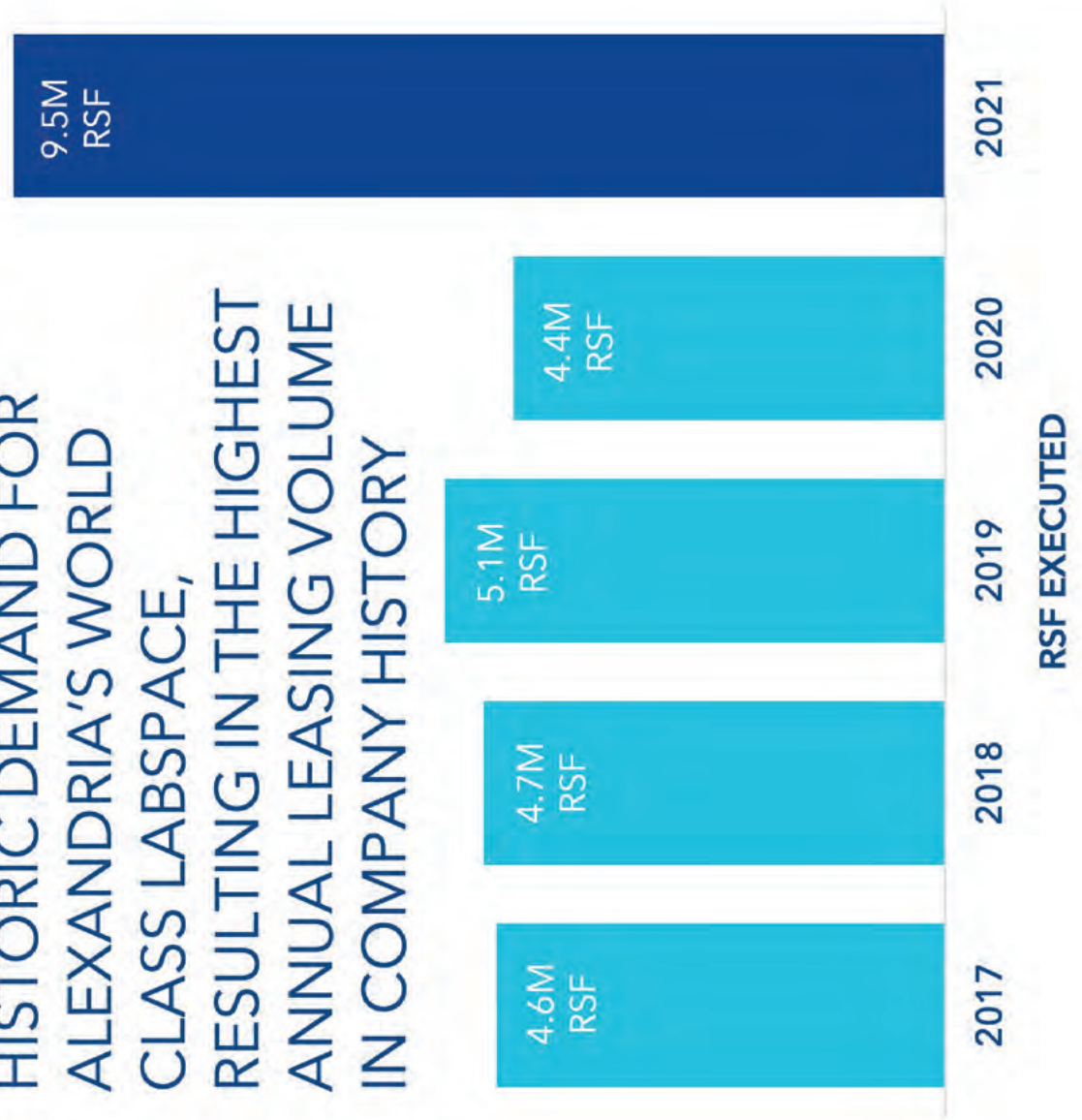
2.51%

BLENDING INTEREST RATE



**ALEXANDRIA MEETING
THE LIFE SCIENCE
INDUSTRY'S HISTORIC
DEMAND FOR IMMEDIATE
SPACE AND PROVIDING A
PATH FOR FUTURE
GROWTH**

**ALEXANDRIA'S STELLAR
2021 LEASING IS DRIVEN BY
HISTORIC DEMAND FOR
ALEXANDRIA'S WORLD
CLASS LABSPACE,
RESULTING IN THE HIGHEST
ANNUAL LEASING VOLUME
IN COMPANY HISTORY**



**9.5M
RSF**

**LEASING RSF IN THE
FOURTH QUARTER OF 2021
SHATTERS PREVIOUS
RECORD OF TOTAL
QUARTERLY LEASING**



Second Quarter of 2021

Fourth Quarter of 2021

RSF EXECUTED

**4.1M
RSF**

1.9M
RSF

4.1M
RSF

JANUARY 2021: ALEXANDRIA COMPLETED LARGEST ACQUISITION IN COMPANY HISTORY

\$1.48B PURCHASE
PRICE



ALEXANDRIA CENTER® FOR LIFE SCIENCE - FENWAY MEGA CAMPUS

Operating: 927K SF | Active Development: 510K SF | Future Development: 508K SF

DURING 2021, ALEXANDRIA LEASED
OVER 1 MILLION RSF TO MODERNA,
INCLUDING THE LARGEST LIFE SCIENCE
LEASE IN COMPANY HISTORY

462K RSF

MODERNA HQ AND R&D CENTER

Designed to Be the Most
Sustainable Laboratory
Building in Cambridge

+

684K RSF

LONG-TERM RENEWALS AT THREE
EXISTING STRATEGIC LOCATIONS

TRUSTED STRATEGIC RELATIONSHIP SINCE 2012



ALEXANDRIA®
Building the Future of Life-Changing Innovation™

moderna®

ALEXANDRIA CENTER* AT ONE KENDALL SQUARE MEGA CAMPUS
325 BINNEY STREET | CAMBRIDGE

HISTORIC HIGH DEMAND TRANSLATES INTO ALEXANDRIA'S HISTORIC HIGH GROWTH

Alexandria's incremental annual rental revenue from highly leased new Class A properties through development and redevelopment

VISIBILITY FOR FUTURE GROWTH IN ANNUAL RENTAL REVENUE

Key Projects Expected to Commence Construction in the Next Six Quarters⁽¹⁾

Projects Under Construction

4.8M
RSF

2.6M
RSF

+

82%
LEASED/NEGOTIATING

89%
LEASED/NEGOTIATING

=

Projected Incremental Annual Rental Revenue

> \$610M

Primarily Commencing From the First Quarter of 2022 Through the Fourth Quarter of 2024

As of December 31, 2021.

(1) We also expect other projects to commence construction in 2022.

Executive summary

Operating results

	Year Ended December 31,	
	2021	2020
Net income attributable to Alexandria's common stockholders – diluted:		
<i>In millions</i>	\$ 563.4	\$ 760.8
<i>Per share</i>	\$ 3.82	\$ 6.01
Funds from operations attributable to Alexandria's common stockholders – diluted, as adjusted:		
<i>In millions</i>	\$ 1,144.9	\$ 923.8
<i>Per share</i>	\$ 7.76	\$ 7.30

The operating results shown above include certain items related to corporate-level investing and financing decisions. For additional information, refer to “Funds from operations and funds from operations, as adjusted, attributable to Alexandria Real Estate Equities, Inc.’s common stockholders” in the “Non-GAAP measures and definitions” section and to the tabular presentation of these items in the “Results of operations” section within this Item 7 in this annual report on Form 10-K.

Historic leasing volume and rental rate growth

- Historic demand for our high-quality office/laboratory space has translated into record leasing volume and rental rate growth in 2021 for our overall portfolio and our value-creation pipeline.

	2021	Previous Annual Record
Total leasing activity – RSF	9,516,301 ⁽¹⁾	5,062,722
Leasing of development and redevelopment space – RSF	3,867,383 ⁽¹⁾	2,258,262
Lease renewals and re-leasing of space:		
RSF (included in total leasing activity above)	4,614,040 ⁽¹⁾	2,562,178
Rental rate increases	37.9% ⁽¹⁾	37.6%
Rental rate increases (cash basis)	22.6% ⁽¹⁾	18.3%

(1) Represents the highest leasing volume and rental rate growth in Company history.

Continued strong net operating income and internal growth

- Total revenues of \$2.1 billion, up 12.1%, for the year ended December 31, 2021, compared to \$1.9 billion for the year ended December 31, 2020.
- Net operating income (cash basis) of \$1.3 billion for the year ended December 31, 2021, increased by \$119.2 million, or 9.9%, compared to the year ended December 31, 2020.
- 95% of our leases contain contractual annual rent escalations approximating 3%.
- Same property net operating income growth of 4.2% and 7.1% (cash basis) for the year ended December 31, 2021, compared to the year ended December 31, 2020.

A REIT industry-leading high-quality tenant roster with high-quality revenues and cash flows, strong margins, and operational excellence; growth of 100 bps in occupancy over December 31, 2020⁽¹⁾

Percentage of total annual rental revenue in effect from investment-grade or publicly traded large cap tenants	51%
Occupancy of operating properties in North America	94%
Occupancy of operating properties in North America (excluding vacancy at recently acquired properties)	98.7% ⁽¹⁾
Operating margin	70% ⁽²⁾
Adjusted EBITDA margin	71% ⁽²⁾
Weighted-average remaining lease term:	
All tenants	7.5 years
Top 20 tenants	10.9 years

(1) Excludes 1.8 million RSF, or 4.7%, of vacancy at recently acquired properties representing lease-up opportunities that are expected to provide incremental annual rental revenues. Excluding recently acquired vacancies, occupancy was 98.7% as of December 31, 2021, up 100 bps from 97.7% as of December 31, 2020. Refer to the “Summary of occupancy percentages in North America” section under Item 2 in this annual report on Form 10-K for additional information regarding vacancy from recently acquired properties.

(2) For the three months ended December 31, 2021.

Historic high demand drives visibility for future growth aggregating \$610 million of incremental annual rental revenue from 7.4 million RSF of value-creation projects that are 83% leased/negotiating

Our highly leased value-creation pipeline of current and near-term projects that are under construction or that will commence construction in the next six quarters is expected to generate greater than \$610 million of incremental annual rental revenues, primarily commencing from the first quarter of 2022 through the fourth quarter of 2024.

- 7.4 million RSF of our value-creation projects are either under construction or expected to commence construction in the next six quarters.
- 83% leased/negotiating.

Continued dividend strategy to share growth in cash flows with stockholders

Common stock dividend declared for the three months ended December 31, 2021 of \$1.15 per common share, aggregating \$4.48 per common share for the year ended December 31, 2021, up 24 cents, or 6%, over the year ended December 31, 2020. Our FFO payout ratio of 60% for the three months ended December 31, 2021 allows us to continue to share growth in cash flows from operating activities with our stockholders while also retaining a significant portion for reinvestment.

Alexandria at the vanguard of innovation for over 850 tenants, with a focus on accommodating current tenant needs and providing a path for their future growth

- During 2021, we completed acquisitions in our key life science cluster submarkets aggregating 18.4 million SF, comprising 15.2 million RSF of value-creation opportunities and 3.2 million RSF of operating space, for an aggregate purchase price of \$5.5 billion, including our previously announced acquisition of One Rogers Street in our Cambridge submarket for a purchase price of \$849.4 million. These acquisitions are primarily focused on future development or redevelopment opportunities to expand our mega campuses and accommodate the future growth of our tenants.

Delivery and commencement of value-creation projects

- Since the beginning of 2021, we placed into service development and redevelopment projects aggregating 2.0 million RSF that are 100% leased across multiple submarkets.
- Annual net operating income (cash basis) is expected to increase by \$39 million upon the burn-off of initial free rent from recently delivered projects.
- We commenced development and redevelopment projects aggregating 3.4 million RSF during the year ended December 31, 2021.
 - During the three months ended December 31, 2021, we commenced construction on four value-creation projects aggregating 1.1 million RSF, including a 403,892 RSF recently acquired redevelopment project at One Rogers Street, which expands our Alexandria Center® at Kendall Square mega campus in Cambridge. We pre-leased the entire building by executing leases aggregating 403,892 RSF prior to the closing of the acquisition in December 2021.
- In January 2022, we completed the acquisition of 202,997 SF additional development entitlements, for an aggregate of 507,997 SF, at our 421 Park Drive future development site in our Alexandria Center® for Life Science – Fenway mega campus in our Fenway submarket.

Alexandria's disciplined management of our value-creation pipeline

Value-creation pipeline of new Class A development and redevelopment projects as a percentage of gross assets

	December 31, 2021
Under construction projects 82% leased/negotiating	9%
Pre-leased/negotiating near-term projects 89% leased/negotiating	2%
Income-producing/potential cash flows/covered land play ⁽¹⁾	6%
Land	2%

- (1) Includes projects that have existing buildings that are generating or can generate operating cash flows. Also includes development rights associated with existing operating campuses.

Execution of capital strategy

2021 capital strategy

During 2021, we continued to execute on many of the long-term components of our capital strategy, as described below.

Maintained access to diverse sources of capital strategically important to our long-term capital structure

- Generated significant cash flows from operating activities
In 2021, we funded approximately \$230 million of our equity capital needs with cash flows from operating activities.
- Continued strategic value harvesting through real estate dispositions and partial interest sales
In 2021, these sales generated a record \$2.6 billion of capital for investment into our highly leased development and redevelopment projects and strategic acquisitions. In relation to these transactions, we recorded gains or consideration in excess of book value aggregating \$1.1 billion.
- Achieved significant growth in Adjusted EBITDA of \$299.6 million, or 23%, during 2021, which allowed us to:
 - Improve our net debt to Adjusted EBITDA (fourth quarter of 2021 annualized) ratio to 5.2x from 5.3x, the lowest in 10 years, and fund \$1.6 billion of growth on a leverage-neutral basis.
 - Take advantage of favorable capital market environment and opportunistically issue on a leverage-neutral basis unsecured senior notes payable aggregating \$1.75 billion with a weighted-average interest rate of 2.49% and a weighted-average maturity of 20.4 years, a portion of the proceeds from which was used to refinance our 4.00% unsecured senior notes payable due in 2024.
- Continued disciplined management of common equity issuances to support growth in FFO per share, as adjusted, and NAV
In 2021, the aforementioned internally generated capital enabled us to meet our capital requirements while prudently limiting the amount of equity issuances to 20.8 million shares of common stock sold under our forward equity sales agreements and ATM common stock offering program for net proceeds of \$3.5 billion.

Maintained a strong and flexible balance sheet with significant liquidity

- \$3.8 billion liquidity as of December 31, 2021.
- Net debt and preferred stock to Adjusted EBITDA of 5.2x and fixed-charge coverage ratio of 5.3x for the three months ended December 31, 2021, annualized, representing the best ratios in the past 10 years.
- Total debt and preferred stock to gross assets of 26% as of December 31, 2021.
- Weighted-average remaining term of debt of 12.1 years as of December 31, 2021, with no debt maturing prior to 2024.
- Total equity capitalization of \$35.2 billion is in the top 10% among all publicly traded U.S. REITs as of December 31, 2021.

Continued to strengthen our credit profile

- In October 2021, S&P Global Ratings upgraded our corporate issuer credit rating outlook to BBB+/Positive from BBB+/Stable.
- As of December 31, 2021, our investment-grade credit ratings ranked in the top 10% among all publicly traded U.S. REITs.

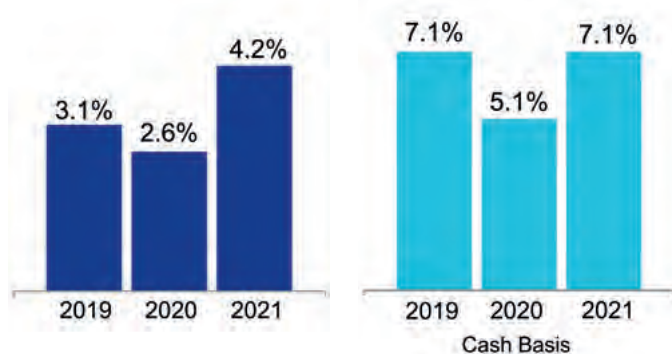
2022 capital strategy

During 2022, we intend to continue to execute our capital strategy to achieve further improvements to our credit profile, which will allow us to further improve our cost of capital and continue our disciplined approach to capital allocation. Consistent with 2021, our capital strategy for 2022 includes the following elements:

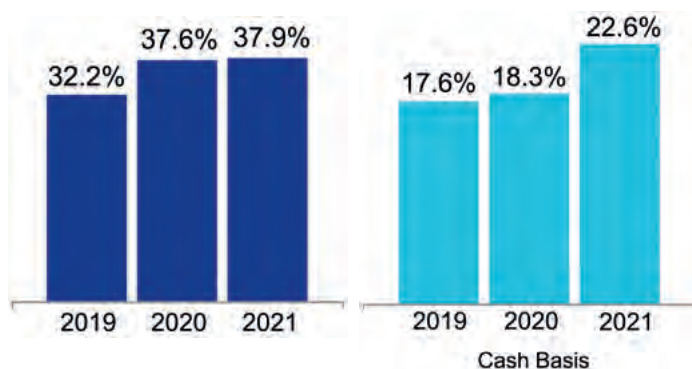
- Allocate capital to Class A properties located in life science, agtech, and tech campuses in AAA urban innovation clusters;
- Maintain prudent access to diverse sources of capital, which include cash flows from operating activities after dividends, incremental leverage-neutral debt supported by growth in EBITDA, strategic value harvesting and asset recycling through real estate disposition and partial interest sales, non-real estate investment sales, sales of equity, and other capital;
- Continue to improve our credit profile;
- Maintain commitment to long-term capital to fund growth;
- Prudently ladder debt maturities and manage short-term variable-rate debt;
- Prudently manage equity investments to support corporate-level investment strategies;
- Maintain a stable and flexible balance sheet with significant liquidity.

The anticipated delivery of significant incremental EBITDA from our development and redevelopment of new Class A properties is expected to enable us to continue to debt fund a significant portion of our development and redevelopment projects on a leverage-neutral basis. We expect to continue to maintain access to diverse sources of capital, including unsecured senior notes payable, and secured construction loans for our development and redevelopment projects from time to time. We expect to continue to maintain a significant proportion of our net operating income on an unencumbered basis to allow for future flexibility for accessing both unsecured and secured debt markets, although we expect traditional secured mortgage notes payable will remain a small component of our capital structure. We intend to supplement our remaining capital needs with net cash flows from operating activities after dividends and proceeds from real estate asset sales, non-real estate investment sales, partial interest sales, and equity capital. For further information, refer to the "Projected results," "Sources of Capital," and "Uses of Capital" sections under this Item 7. Our ability to meet our 2022 capital strategy objectives and expectations will depend in part on capital market conditions, real estate market conditions, and other factors beyond our control. Accordingly, there can be no assurance that we will be able to achieve these objectives and expectations. Refer to our discussion of "Forward-looking statements" in this annual report on Form 10-K.

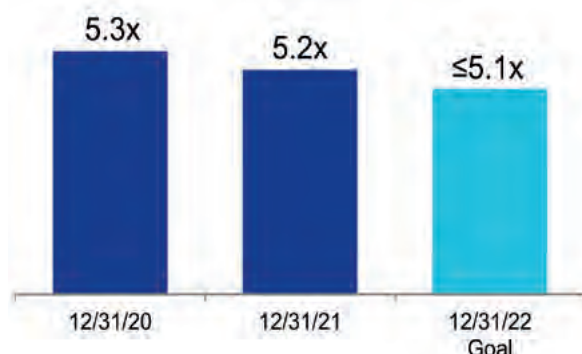
Same Property Net Operating Income Growth



Rental Rate Growth: Renewed/Re-Leased Space



Net Debt and Preferred Stock to Adjusted EBITDA⁽⁴⁾



Favorable Lease Structure⁽¹⁾

Strategic Lease Structure by Owner and Operator of Collaborative Life Science, Agtech, and Technology Campuses

Increasing cash flows

Percentage of leases containing annual rent escalations **95%**

Stable cash flows

Percentage of triple net leases **91%** ⁽²⁾

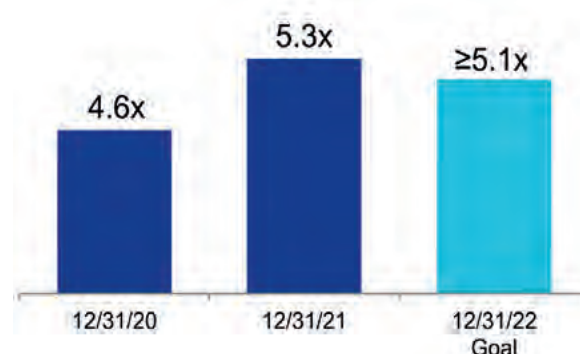
Lower capex burden

Percentage of leases providing for the recapture of capital expenditures **94%**

Margins⁽³⁾

Operating	Adjusted EBITDA
70%	71%

Fixed-Charge Coverage Ratio⁽⁴⁾



(1) Percentages calculated based on RSF as of December 31, 2021.

(2) Decline to 91% from 94% as of December 31, 2020 is primarily related to non-triple net leases in place at operating properties with future development or redevelopment opportunities acquired during the year ended December 31, 2021. We expect to transition these properties to our triple net lease structure in conjunction with our future development or redevelopment activities.

(3) Represents percentages for the three months ended December 31, 2021.

(4) Quarter annualized. Refer to the definitions of "Net debt and preferred stock to Adjusted EBITDA" and "Fixed-charge coverage ratio" in the "Non-GAAP measures and definitions" section within this Item 7 for additional details.

Industry and ESG leadership: catalyzing and leading the way for positive change to benefit human health and society

- In January 2021, Alexandria Venture Investments, our strategic venture capital platform, was recognized for a fourth consecutive year as the most active biopharma corporate investor by new deal volume by Silicon Valley Bank in its “Healthcare Investments and Exits: Annual Report 2021.” In February 2021, Alexandria Venture Investments was also recognized as one of the five most active U.S. investors in agrifoodtech by deal volume in 2020 by AgFunder in its “2021 AgFunder AgriFoodTech Investment Report.”
- In February 2021, Alexandria was ranked as the third most sustainable REIT, as featured in *Barron’s* “The 10 Most Sustainable REITs, According to Calvert.”
- In March 2021, Alexandria LaunchLabs® at the Alexandria Center® at One Kendall Square in our Cambridge submarket was awarded the Fitwel Impact Award for achieving the highest-scoring project of all time. This is the second year in a row that Alexandria has held this distinction, demonstrating our commitment to optimizing projects to advance health and wellness.
- In May 2021, Alexandria was ranked in the top 10 of the world’s largest and most impactful real estate firms on the *Forbes* 2021 Global 2000 list determined based on sales, profits, assets, and market value.
- In June 2021, we released our 2020 Environmental, Social & Governance Report, which showcases our longstanding ESG commitment and leadership. Key highlights in the report include the company’s critical efforts to tackle climate change by pioneering low-carbon and climate-resilient design solutions, mitigating climate-related risk in our asset base, and investing in and providing essential infrastructure for sustainable agrifoodtech companies; continuing strong progress toward our 2025 environmental impact goals, including further reducing carbon emissions; and catalyzing the health, wellness, safety, and productivity of our employees and tenants, local communities, and the world at large through the built environment and our social responsibility initiatives.
- In September 2021, OneFifteen, an innovative, data-driven non-profit evidence-based healthcare ecosystem dedicated to the full and sustained recovery of people living with addiction, received an honorable mention in *Fast Company’s* 2021 Innovation by Design Awards in the Impact category. Alexandria led the design and development of the pioneering campus in Dayton, Ohio, which houses a unique, evidence-based model encompassing a full continuum of care in one location, from intake, medication-assisted treatment, and residential living to family reunification, job training, and community transition.
- In September 2021, the National September 11 Memorial & Museum honored Joel S. Marcus, our executive chairman and founder, for Distinction in Civic Engagement and Renewal, recognizing his meaningful contributions to and unwavering support of the 9/11 Memorial & Museum and its mission. As an active supporter of the Memorial & Museum since it opened in 2014, Mr. Marcus has served as a member of its board of trustees since his appointment in 2018 by former New York City Mayor Michael Bloomberg.
- In September 2021, Alexandria achieved the Fitwel Viral Response Certification With Distinction, the highest certification level within the Fitwel Viral Response module, for the second consecutive year. This evidence-based, third-party certification recognizes the Company’s comprehensive and rigorous approach to protecting the health of its building occupants.
- In October 2021, Alexandria received an ESG Rating of A from MSCI as a result of our continued advancement of green building opportunities, recognition of talent management programs, and below-industry-average turnover rate, among other achievements. Our MSCI ESG Rating of A is in the top 10% among all publicly traded U.S. equity REITs.
- In October 2021, our ESG commitment and leadership was recognized in the 2021 Global Real Estate Sustainability Benchmark (“GRESB”) Real Estate Assessment, including for the following achievements: (i) Global Sector Leader and a 5 Star rating — GRESB’s highest rating — in the Diversified Listed sector for buildings in development, (ii) #2 ranking in the U.S. in the Science & Technology sector for buildings in operation, and (iii) fourth consecutive “A” disclosure score.
- In October 2021, OneFifteen celebrated its second anniversary. Since seeing its first patients in October 2019 at its pioneering campus in Dayton, Ohio, which was designed and developed by Alexandria, OneFifteen has treated over 4,000 patients and conducted over 11,500 telehealth visits as of December 31, 2021.
- In October 2021, STEAM:Coders honored Alexandria with the Corporate Vanguard Award, recognizing our longstanding commitment to the non-profit’s mission to inspire underrepresented and underserved students and their families through science, technology, engineering, art, and math (“STEAM”) education in preparation for academic and career opportunities.
- As a testament to Alexandria’s operational excellence and exceptional team, in November 2021, we were recognized at the 2021 BOMA Boston TOBY (The Outstanding Building of the Year) & Industry Awards for the Laboratory Building of the Year (100 Binney Street) and the Corporate Facility of the Year (200 Technology Square). Five members from our Greater Boston team were also honored for their individual achievements. The TOBY & Industry Awards recognize excellence in property management, building operations, and service in the commercial real estate industry.
- In November 2021, Alexandria’s executive chairman and founder, Joel S. Marcus, joined the National Medal of Honor Museum Foundation at the Dallas Cowboys’ “Salute to Service” game to support the future National Medal of Honor Museum in Arlington, Texas and its mission to inspire visitors with the stories of our country’s Medal of Honor recipients for generations to come. Mr. Marcus has served on the foundation’s board of directors since 2019.
- In December 2021, Alexandria established a new social responsibility pillar to address America’s growing mental health crisis, with a focus on helping children cope with the loss of a parent or family member to suicide. By partnering with Camp Kita, a tuition-free summer camp for 8- to 17-year-olds who are impacted by the loss of a family member to suicide, we have enabled the non-profit to have long-term access to 28 acres in Acton, Maine that will serve as the camp’s future home. The dedicated space will allow Camp Kita to expand its programming, advance its mission, and support the mental health of a community of young survivors.

ALEXANDRIA'S HIGHLY IMPACTFUL SOCIAL RESPONSIBILITY PILLARS

DEVELOPING AND
IMPLEMENTING
DISRUPTIVE SOLUTIONS
TO SOCIETY'S MOST
URGENT CHALLENGES



— Accelerating
Groundbreaking
Medical Research to
Advance Lifesaving
Treatments and Cures



— Harnessing the Agrifood
Ecosystem to Combat
Hunger, Improve
Nutrition, and Support
Human Health at Its Most
Fundamental Level



— Bolstering the
Resilience of Our
Military, Our Veterans,
and Their Families



— Conquering the
Opioid Epidemic and
Revolutionizing
Addiction Treatment



— Educationally Empowering
Underserved Students to
Achieve Long-Term Success
and Reach Their Potential
as Leaders in the
Community



— Building a Model for
a Comprehensive,
Sustainable Solution to
Address Homelessness



— Addressing the Growing
Mental Health Crisis With
a Focus on Helping
Children Cope With the
Loss of a Family Member
to Suicide

Climate Change and Sustainability

We cannot predict the rate at which climate change will progress. However, the physical effects of climate change could have a material adverse effect on our properties, operations, and business. For example, most of our properties are located along the east and west coasts of the U.S. and some of our properties are located in close proximity to shorelines. To the extent that climate change impacts weather patterns, our markets could experience severe weather, including hurricanes, severe winter storms, wild fires, droughts, and coastal flooding due to increases in storm intensity and rising sea levels. Over time, these conditions could result in declining demand for space at our properties, delays in construction and resulting increased construction costs, or in our inability to operate the buildings at all. Climate change and severe weather may also have indirect effects on our business by increasing the cost of, or decreasing the availability of, property insurance on terms we find acceptable, and by increasing the costs of energy, maintenance, repair of water and/or wind damage, and snow removal at our properties. We continue to evaluate our asset base for potential exposure to the following climate-related risks: sea level rise and increases in heavy rain, flood, drought, extreme heat, and wildfire. As a part of Alexandria's risk management program, we purchase property insurance to mitigate the risk of extreme weather events and natural disasters. However, our insurance may not adequately cover all of our potential losses. As a result, there can be no assurance that climate change and severe weather will not have a material adverse effect on our properties, operations, or business.

Board of Directors and Leadership Oversight

The Audit Committee of Alexandria's Board of Directors oversees the management of the company's financial and other systemic risks, including those related to climate. At a management level, Alexandria's Sustainability Committee, which comprises members of the executive team and senior decision makers spanning the company's Real Estate Development, Asset Management, Risk, and Sustainability teams, leads the development and execution of our approach to climate-related risk.

Proactively Managing and Mitigating Climate Risk

The resilience of our properties under a changing climate is paramount both for our business and our tenants' mission-critical research, development, manufacturing, and commercialization efforts. We consider the potential impacts associated with climate change and extreme weather conditions in the acquisition, design, development, and operation of our buildings and campuses. We align our climate change management efforts with the guidelines issued by the Task Force on Climate-related Financial Disclosures ("TCFD"), which we endorsed in 2018. Our industry-leading environmental initiatives, programs, and policies and our proactive approach to the identification and management of evolving physical conditions and transition issues continue to raise the bar in the industry for mitigating greenhouse gas ("GHG") emissions and bolstering climate resilience.

As further detailed in the "Monitoring and Preparing for Transition" subsection below, over the past few years, regulatory bodies in most of our regions have either passed or proposed legislation to limit the carbon footprint of buildings, require procurement of clean power, or eliminate natural gas from new construction projects. Additionally, certain U.S. jurisdictions incorporated guidelines into their building codes to address the up-front impacts of building materials such as concrete. Moreover, our tenant preferences for green, efficient, and healthy buildings continue to rise. As of December 31, 2021, 80% of Alexandria's top 20 tenants (by annual rental revenue) have set net-zero carbon and/or carbon neutrality goals, compared to 50% of our top 20 tenants as of December 31, 2020. As a result of our own sustainability mission compelling us to reduce carbon emissions and mitigate climate risk, as well as the changing regulatory environment and our tenants' expectations, we have implemented a comprehensive approach to assessing and mitigating physical risk to our properties as well as to preparing for the transition, as described below.

Assessing and Mitigating Physical Risk to Our Properties

In accordance with TCFD methodology, we consider a range of scenarios for 2030 and 2050 when evaluating physical risk to our properties: (1) a business-as-usual scenario in which GHG emissions continue to increase with time (Representative Concentration Pathways ("RCP") 8.5); and (2) a mitigation scenario in which GHG emissions level off by 2050 and decline thereafter (RCP 4.5). To ensure a conservative evaluation of potential risk at the asset level, we use the RCP 8.5 scenario, which has greater climate hazard impacts than RCP 4.5. These climate change assessments covering both acute and chronic risks enable us to assess preparedness for climate-related risks across the real estate life cycle.

For our property acquisitions, our risk management and sustainability teams conduct climate change evaluations and advise the transactions and property teams of any need for potential property upgrades, which are evaluated in our financial modeling and transactional decisions.

For our developments and redevelopments of new Class A properties, we evaluate the potential impact of sea level rise, storm surges in coastal or tidal locations, and changing temperatures out to the year 2050. As feasible, we design for the potential need to add cooling infrastructure to meet future building needs while maintaining flexibility and optimizing infrastructure funds for more immediate needs. In water-scarce areas, we aim to plant drought-resistant vegetation and prepare buildings to connect to a municipal recycled-water infrastructure where available and feasible. In areas prone to wildfire, we incorporate brush management practices into landscape design and may also include enhanced air filtration systems to support safe, healthy indoor air under extreme air pollution conditions.

At our buildings in operation, we evaluate to what extent we have mitigations in place and which operational and physical improvements can be made where potential concerns have been identified. For example, resilience measures implemented at some of our properties include the following: in areas prone to floods we position critical building mechanical equipment on the roofs or significantly above the projected potential flood elevations; we purchase temporary flood barriers that we store on-site and can deploy at building entrances prior to a flood event; we elevate property entrances or the first floor above projected present day and future flood elevations; we install backflow preventors on storm/sewer utilities that discharge from the building; and we waterproof the building envelope up to the projected flood elevation. In areas prone to fire, and to the extent feasible, we locate our properties away from large fire hazards, such as large grassy or brush areas; our landscaping vegetation consists of less flammable vegetation species that are positioned in a reasonable distance from a property; our building envelopes are constructed with fire-resistant materials and are sealed; and in the event of fire, our HVAC systems are able to filtrate smoke particulates in the air.

COMPREHENSIVE APPROACH TO ASSESSING & MITIGATING PHYSICAL RISK

Acquisitions
- Conduct climate change assessment. - Incorporate potential mitigation strategies, where applicable, into financial modeling and transactional decisions.
Developments and Redevelopments
- Review climate change assessment. - Assess potential risks and account for 2050 climate projections and an RCP 8.5 scenario. - Consider physical and operational measures in design to increase the property's resilience. - Identify operational mitigation measures and ongoing monitoring opportunities.
Buildings in Operation
- For new and redeveloped assets transitioning into operations: - Consider implementation and prioritization of operational mitigation measures and ongoing monitoring. - For existing assets: - Review climate change assessment. - Where potential risks have been identified, assess to what extent mitigation measures are in place and which operational and physical improvements can be made to increase the property's resilience. - Develop an implementation plan.

Monitoring and Preparing for Transition

Globally, public concern regarding climate change has been growing rapidly. To join efforts and to accelerate action to reduce GHG emissions, on November 13, 2021, nearly 200 countries attended the United Nations' annual climate summit, COP26, and adopted the Glasgow Climate Pact (the "Pact"), which includes terms to strengthen efforts to address climate change by building resilience, reducing GHG emissions, providing additional funding from developed to developing countries, and limiting global temperature increase to 1.5 Celsius above pre-industrial levels. The Pact for the first time includes language that calls upon countries to reduce their reliance on coal power and roll back inefficient fossil fuel subsidies. A number of other notable agreements were made during the COP26 summit, including, among others, an agreement between the U.S. and the EU to spearhead an initiative to reduce methane emissions by 30% by 2030. It is unknown how or if the Pact's measures will be carried out effectively or whether these measures will be sufficient to mitigate the effects of climate change over time.

In August 2021, the United Nations' Intergovernmental Panel on Climate Change issued a detailed report titled "Climate Change 2021: The Physical Science Basis" that provides a comprehensive evidence of the catastrophic impact of GHG emissions on climate change, including increases in severe and dangerous weather conditions. According to the latest data provided by the U.S. Environmental Protection Agency ("U.S. EPA"), the U.S. is responsible for approximately 15% of the global GHG emissions. To combat the cause of global warming domestically, President Biden identified climate change as one of his top priorities and pledged to seek measures that would pave the path for the U.S. to eliminate net GHG pollution by 2050. In April 2021, President Biden announced his plan to reduce the U.S. GHG emissions by at least 50% by 2030. These environmental goals earned a prominent place in President Biden's \$1.2 trillion infrastructure bill, which was signed into law on November 15, 2021. It is not yet known what impact this law may have on our properties, business operations, or our tenants.

Numerous states and municipalities have adopted laws and policies on climate change and emission reduction targets, including, but not limited to, the following:

- In California, State Governor Gavin Newsom signed legislation in September 2021 aimed at achieving net-zero GHG emissions associated with cement used within the state no later than 2045. In November 2020, the San Francisco Board of Supervisors adopted an All-Electric New Construction Ordinance that will require all new buildings (residential and non-residential) with initial building permit applications made on or after June 1, 2021 to have all-electric indoor and outdoor space-conditioning, water heating, cooking, and clothes drying systems. In addition, in September 2020, Mr. Newsom signed an executive order requiring all new passenger cars and trucks sold in the state to be emission free by 2035. Also in September 2018, Senate Bill 100 was signed into law in California, accelerating the state's renewable portfolio standard target dates and setting a policy of meeting 100% of retail electricity sales from eligible renewables and zero-carbon resources by December 31, 2045.
- In Massachusetts, Senate Bill 9 was signed into law in March 2021, updating the state's climate policy to ensure net-zero GHG emissions by 2050 and establishing interim emission reduction targets for several sectors, including commercial and industrial buildings.
- In New York, the Climate Leadership and Community Protection Act was signed into law in July 2019, establishing a statewide framework to reduce net GHG emissions to no less than 85% below 1990 levels by 2050. Also, in May 2019, New York City enacted Local Law 97 as a part of the Climate Mobilization Act aimed at reducing GHG emissions by 80% from commercial and residential buildings by 2050. Starting in 2024, this law will place carbon caps on most buildings larger than 25,000 square feet. In addition, in December 2021, New York City passed Local Law 154 of 2021, which will phase out fossil fuel usage in newly constructed residential and commercial buildings starting in 2024 for lower-rise buildings, and in 2027 for taller buildings. With few exceptions, all buildings constructed in New York City must be fully electric by 2027.
- In Washington, the State Legislature has passed a number of bills since 2019 focused on phasing out fossil fuels, achieving carbon neutrality, reducing GHG emissions, supporting the sale of zero-emissions vehicles, and establishing clean fuel standards. In support of these efforts, in 2020, Washington updated its GHG emission goals to require a reduction of 45% below 1990 levels by 2030, of 70% below 1990 levels by 2040, and net-zero emissions by 2050.
- In North Carolina, State Governor Roy Cooper signed an executive order in January 2022 that updates the state's GHG emission goals to require a reduction of 50% below 2005 levels by 2030, and achievement of net-zero emissions by 2050.

Alexandria has implemented a comprehensive approach to responding to transition risk through the following strategies:

Decarbonizing construction

Alexandria targets LEED Gold or Platinum certification for new ground-up developments. Through our sustainability goals for new developments, we deliver energy- and resource-efficient buildings that meet or exceed tenant, city, and state requirements for energy and water efficiency, material sourcing, biodiversity, and alternative transportation.

We are also revolutionizing the design of our buildings through innovative low-carbon solutions. At 325 Binney Street, on our Alexandria Center at One Kendall Square mega campus in Cambridge, the building design is expected to yield a 95% reduction in fossil fuel consumption. The project is targeting LEED Platinum Core & Shell and LEED Zero Energy certifications. At 685 Gateway Boulevard in South San Francisco, we are targeting Zero Energy Certification through the International Living Future Institute (ILFI) by leveraging design strategies such as building envelope optimization, high-performance features, and on-site energy generation.

With several jurisdictions shifting (or with plans to shift soon) from fossil fuels for heating and requiring all electric buildings as a strategy to reduce carbon emissions associated with building operations, we have proactively incorporated electrification into building designs, with one project completed and two currently in progress.

Embodied carbon in building materials and construction accounts for 11% of annual global GHG emissions and Alexandria is playing a leadership role in the industry's effort to measure and ultimately reduce carbon associated with the construction process. In 2019, Alexandria became a sponsor and the first REIT to use the Carbon Leadership Forum's Embodied Carbon in Construction Calculator (EC3) tool. For new construction projects, Alexandria seeks to procure products with Environmental Product Declarations (EPDs), which provide information on product composition and environmental impact. Using such EPDs, Alexandria aims to reduce embodied carbon by 10% for new ground-up development projects. As of December 31, 2021, Alexandria has completed three embodied carbon assessments and others are in progress for 15 development projects.

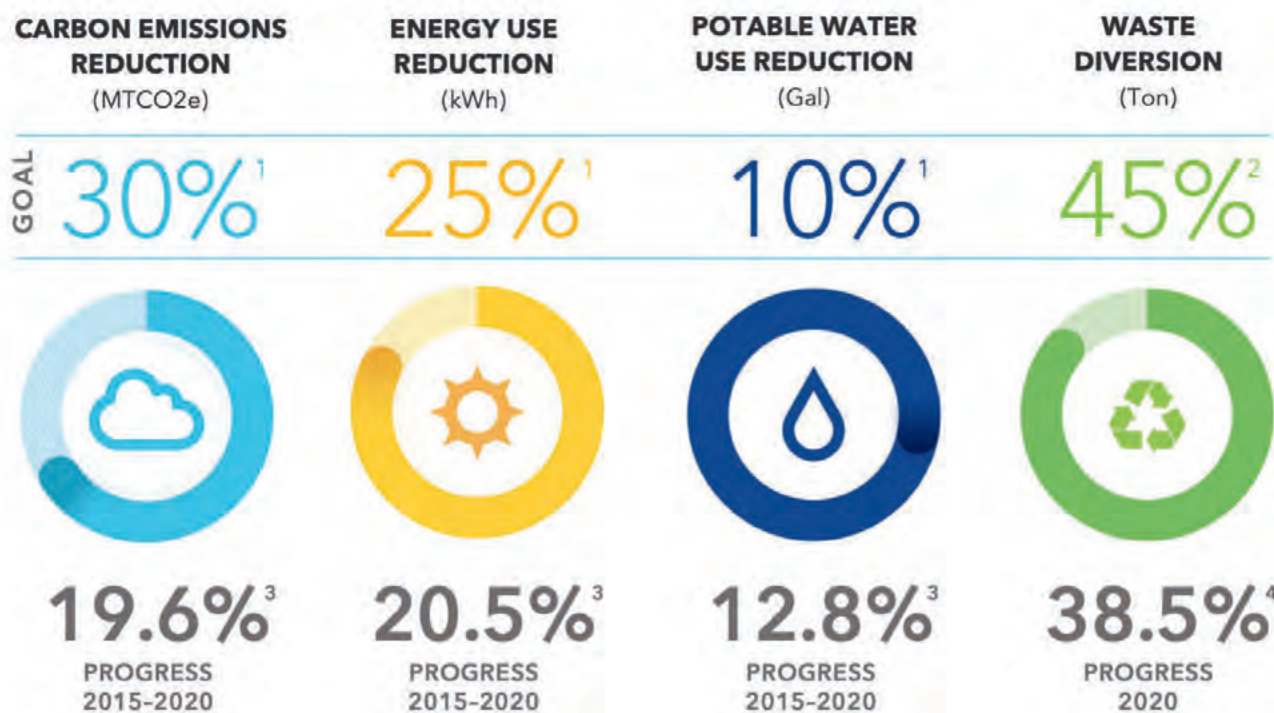
Leveraging renewable energy

We are pursuing opportunities to power our buildings with renewable energy as another means to reduce our carbon footprint. Properties such as 3215 Merryfield Row in San Diego are generating solar energy, and our development pipeline will scale our ability to source additional clean energy on-site. We also procure renewable energy generated off-site from local utilities and from power service providers for some of our operating assets.

Reducing the environmental footprint of buildings in operation

Our sustainability mission compels us toward industry-leading sustainability practices and performance that can help reduce operating expenses and result in higher occupancy levels, longer lease terms, higher rental income, higher returns, and greater long-term asset value, and thus enable us to capture climate-related opportunities. Our ongoing efforts to reduce consumption are driven by our commitment to operational excellence in sustainability, building efficiency, and service to our tenants. Alexandria's 2025 sustainability goals for buildings in operation and new ground-up construction projects provide the framework, metrics, and targets that guide the Company's focus on continuous, long-term improvement. For buildings in operation, we set goals to reduce carbon emissions, energy consumption, and potable water consumption and increase waste diversion by 2025. From 2019 to 2020, we reduced energy use by 1.7%, carbon emissions by 1.7%, and water use by 6.9% and achieved a 38.5% waste diversion rate in 2020 alone.

2025 ENVIRONMENTAL GOALS & PROGRESS FOR BUILDINGS IN OPERATION



(1) Relative to a 2015 baseline for buildings in operation that Alexandria directly manages.

(2) For buildings in operation that Alexandria indirectly and directly manages.

(3) Reflects sum of annual like-for-like progress from 2015 to 2020.

(4) Reflects progress for all buildings in operation in 2020 that Alexandria indirectly and directly manages.

As we look to the future, we are creating our long-term strategy and plan for the net zero-carbon transition. We are developing an approach to set industry-leading science-based targets that will provide a pathway to reduce scope 1, 2, and 3 GHG emissions and continue our leadership in sustainability.

Refer to "Item 1A. Risk factors" of this annual report on Form 10-K for discussion of the risks posed by climate change.

ALEXANDRIA'S GROUNDBREAKING 325 BINNEY STREET DEVELOPMENT

In the largest life science lease in Alexandria's history, Moderna extends its longstanding partnership with the company to create its new leading-edge HQ and core R&D facility

MODERNA ADVANCING THE mRNA REVOLUTION

Moderna, longtime Alexandria tenant and venture investment, selects 325 Binney Street, a new 462,100 RSF development project in the heart of Kendall Square for its HQ and core R&D operations. The high-performance building will incorporate ultra-efficient mechanical and envelope systems, geothermal energy, and resilience measures to proactively mitigate climate risk.



SUSTAINABILITY TARGETS:

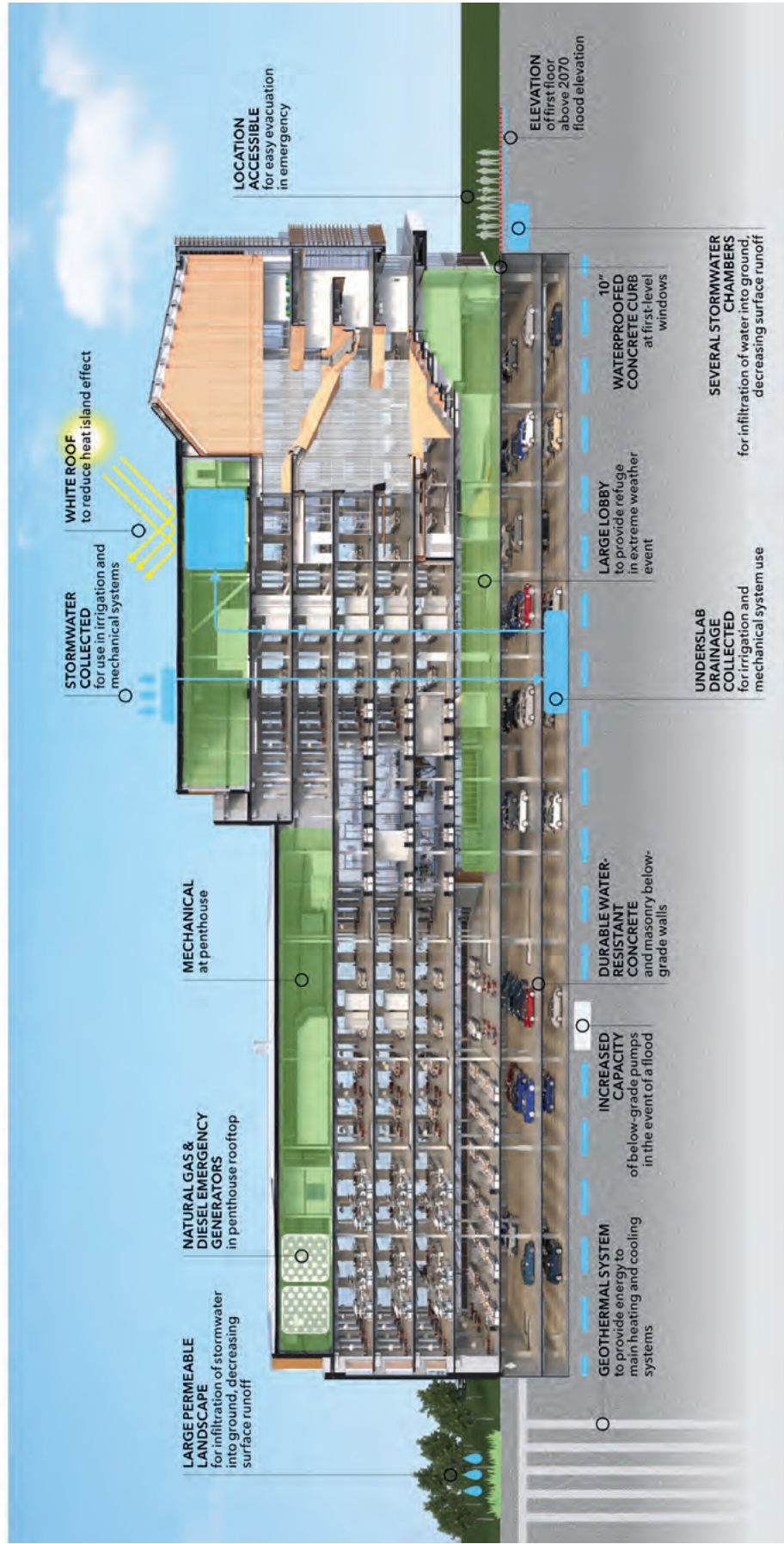
95% reduction
in fossil fuel use
for building heating

100% renewable energy
(on- and off-site)

**LEED Zero Energy and
LEED Platinum Core
& Shell certifications**

10% reduction
in embodied carbon

PROACTIVELY MITIGATING CLIMATE RISK THROUGH RESILIENT BUILDING DESIGN



PROJECT HIGHLIGHTS

325 BINNEY STREET'S RESILIENT DESIGN accounts for a high-emissions climate scenario (RCP 8.5). The highly sustainable building will incorporate several innovative measures to counter the potential risks associated with flood precipitation.

Finished first floor elevated above predicted 2070 flood elevation published by the City of Cambridge

Large areas of permeable landscaping and stormwater infiltration systems to decrease surface water runoff

Critical mechanical equipment and emergency generators located well above flood elevation

ALEXANDRIA'S MISSION-DRIVEN AND INDUSTRY-LEADING ESG PROGRAM



GRESB
REAL ESTATE
sector leader 2021

#1

**BUILDINGS IN
DEVELOPMENT**
Diversified List

#2

**BUILDINGS
IN OPERATION**
Science & Technology

A

**GRESB
DISCLOSURE SCORE**
2018-2021



FITWEL IMPACT AWARD
Highest-Scoring Project of All Time
2020 | 2021



Fitwel®
Viral Response
Certified
2020 | 2021



MSCI
"A" RATING

#3

MOST SUSTAINABLE
U.S. REIT⁽¹⁾



SUSTAINALYTICS
LOW RISK

FAST COMPANY
INNOVATION BY
DESIGN 2021
IMPACT
HONOREE

9/11
**MEMORIAL &
MUSEUM**
2021 BENEFIT
HONOREE

STEAMCODE:RS
**CORPORATE
VANGUARD**
AWARD

(1) Source: Barron's, "The 10 Most Sustainable REITs, According to Calvert," February 19, 2021.

Results of operations

We present a tabular comparison of items, whether gain or loss, that may facilitate a high-level understanding of our results and provide context for the disclosures included in this annual report on Form 10-K. We believe such tabular presentation promotes a better understanding for investors of the corporate-level decisions made and activities performed that significantly affect comparison of our operating results from period to period. We also believe this tabular presentation will supplement for investors an understanding of our disclosures and real estate operating results. Gains or losses on sales of real estate and impairments of held for sale assets are related to corporate-level decisions to dispose of real estate. Gains or losses on early extinguishment of debt, gains or losses on early termination of interest rate hedge agreements, and preferred stock redemption charges are related to corporate-level financing decisions focused on our capital structure strategy. Significant realized and unrealized gains or losses on non-real estate investments, impairments of real estate and non-real estate investments, and significant termination fees are not related to the operating performance of our real estate assets as they result from strategic corporate-level decisions and external market conditions. Impairments of non-real estate investments are not related to the operating performance of our real estate as they represent the write-down of non-real estate investments when their fair values decline below their respective carrying values due to changes in general market or other conditions outside of our control. Significant items included in the tabular disclosure for current periods are described in further detail under this Item 7 in this annual report on Form 10-K. Items included in net income attributable to Alexandria's common stockholders were as follows:

	Year Ended December 31,			
	2021	2020	2021	2020
	Amount		Per Share – Diluted	
<i>(In millions, except per share amounts)</i>				
Unrealized gains on non-real estate investments	\$ 43.6	\$ 374.0	\$ 0.30	\$ 2.96
Significant realized gains on non-real estate investments	110.1	—	0.75	—
Gain on sales of real estate ⁽¹⁾	126.6	154.1	0.86	1.22
Impairment of real estate	(52.7)	(55.7)	(0.35)	(0.44)
Impairment of non-real estate investments	—	(24.5)	—	(0.19)
Loss on early extinguishment of debt	(67.3)	(60.7)	(0.46)	(0.48)
Termination fee	—	86.2	—	0.68
Acceleration of stock compensation expense due to executive officer resignation	—	(4.5)	—	(0.04)
Total	\$ 160.3	\$ 468.9	\$ 1.10	\$ 3.71

(1) Refer to "Funds from operations and funds from operations, as adjusted, attributable to Alexandria Real Estate Equities, Inc.'s common stockholders" in the "Non-GAAP measures and definitions" section within this Item 7 for additional information.

Same properties

We supplement an evaluation of our results of operations with an evaluation of operating performance of certain of our properties, referred to as “Same Properties.” For additional information on the determination of our Same Properties portfolio, refer to the definition of “Same property comparisons” in the “Non-GAAP measures and definitions” section under this Item 7 in this annual report on Form 10-K. The following table presents information regarding our Same Properties as of December 31, 2021 and 2020:

	December 31,	
	2021	2020
Percentage change in net operating income over comparable period from prior year	4.2%	2.6%
Percentage change in net operating income (cash basis) over comparable period from prior year	7.1%	5.1%
Operating margin	72%	73%
Number of Same Properties	247	209
RSF	23,490,412	20,707,818
Occupancy – current-period average	96.6%	96.6 %
Occupancy – same-period prior-year average	96.3%	96.7 %

The following table reconciles the number of Same Properties to total properties for the year ended December 31, 2021:

Development – under construction	Properties	Acquisitions after January 1, 2020	Properties
9950 Medical Center Drive	1	3181 Porter Drive	1
825 and 835 Industrial Road	2	275 Grove Street	1
3115 Merryfield Row	1	601, 611, and 651 Gateway Boulevard	3
201 Haskins Way	1	3330, 3412, 3420, 3440, 3450, and 3460 Hillview Avenue	6
5 and 9 Laboratory Drive	2	9605, 9609, 9613, and 9615 Medical Center Drive	4
8 and 10 Davis Drive	2	9808 and 9868 Scranton Road	2
201 Brookline Avenue	1	Alexandria Center® for Life Science – Durham	13
10055 Barnes Canyon Road	1	One Upland Road	1
751 Gateway Boulevard	1	830 4th Avenue South	1
325 Binney Street	1	11255 and 11355 North Torrey Pines Road	2
1150 Eastlake Avenue East	1	Sequence District by Alexandria	7
10102 Hoyt Park Drive	1	380 and 420 E Street	2
	15	Alexandria Center® for Life Science – Fenway	1
Development – placed into service after January 1, 2020	Properties	550 Arsenal Street	1
9804 Medical Center Drive	1	1501-1599 Industrial Road	6
1165 Eastlake Avenue East	1	One Investors Way	2
	2	2475 Hanover Street	1
Redevelopment – under construction	Properties	10975 and 10995 Torreyana Road	2
5505 Morehouse Drive	1	Pacific Technology Park	6
30-02 48th Avenue	1	1122 El Camino Real	1
3160 Porter Drive	1	12 Davis Drive	1
The Arsenal on the Charles	11	7360 Carroll Road	1
2400 Ellis Road, 40 Moore Drive, and 14 TW Alexander Drive	3	3303, 3305, and 3307 Monte Villa Parkway	3
840 Winter Street	1	Other	44
20400 Century Boulevard	1		112
10277 Scripps Ranch Boulevard	1	Unconsolidated real estate JVs	4
9601 and 9603 Medical Center Drive	2	Properties held for sale	—
One Rogers Street	1	Total properties excluded from Same Properties	167
40, 50, and 60 Sylvan Road	3	Same Properties	247
3301, 3555, and 3755 Monte Villa Parkway	3	Total properties in North America as of December 31, 2021	414
Other	2		
	31		
Redevelopment – placed into service after January 1, 2020	Properties		
9877 Waples Street	1		
700 Quince Orchard Road	1		
Other	1		
	3		

Comparison of results for the year ended December 31, 2021 to the year ended December 31, 2020

The following table presents a comparison of the components of net operating income for our Same Properties and Non-Same Properties for the year ended December 31, 2021, compared to the year ended December 31, 2020. Refer to the “Non-GAAP measures and definitions” section under this Item 7 in this annual report on Form 10-K for definitions of “Tenant recoveries” and “Net operating income” and their reconciliations from the most directly comparable financial measures presented in accordance with GAAP, income from rentals and net income, respectively. We provide a comparison of the results for the year ended December 31, 2020 to the year ended December 31, 2019, including a comparison of the components of net operating income for our Same Properties and Non-Same Properties for the year ended December 31, 2020, compared to the year ended December 31, 2019, within the “Results of operations” section in Item 7 of our annual report on Form 10-K for the year ended December 31, 2020.

(Dollars in thousands)	Year Ended December 31,			
	2021	2020	\$ Change	% Change
Income from rentals:				
Same Properties	\$ 1,220,160	\$ 1,171,595	\$ 48,565	4.1 %
Non-Same Properties	398,432	300,245	98,187	32.7
Rental revenues	1,618,592	1,471,840	146,752	10.0
Same Properties	406,162	370,895	35,267	9.5
Non-Same Properties	83,495	35,473	48,022	135.4
Tenant recoveries	489,657	406,368	83,289	20.5
Income from rentals	2,108,249	1,878,208	230,041	12.2
Same Properties	475	366	109	29.8
Non-Same Properties	5,426	7,063	(1,637)	(23.2)
Other income	5,901	7,429	(1,528)	(20.6)
Same Properties	1,626,797	1,542,856	83,941	5.4
Non-Same Properties	487,353	342,781	144,572	42.2
Total revenues	2,114,150	1,885,637	228,513	12.1
Same Properties	456,705	420,264	36,441	8.7
Non-Same Properties	166,850	109,960	56,890	51.7
Rental operations	623,555	530,224	93,331	17.6
Same Properties	1,170,092	1,122,592	47,500	4.2
Non-Same Properties	320,503	232,821	87,682	37.7
Net operating income	\$ 1,490,595	\$ 1,355,413	\$ 135,182	10.0 %
Net operating income – Same Properties	\$ 1,170,092	\$ 1,122,592	\$ 47,500	4.2 %
Straight-line rent revenue	(60,157)	(82,681)	22,524	(27.2)
Amortization of acquired below-market leases	(12,357)	(15,348)	2,991	(19.5)
Net operating income – Same Properties (cash basis)	\$ 1,097,578	\$ 1,024,563	\$ 73,015	7.1 %

Income from rentals

Total income from rentals for the year ended December 31, 2021 increased by \$230.0 million, or 12.2%, to \$2.1 billion, compared to \$1.9 billion for the year ended December 31, 2020 as a result of increases in rental revenues and tenant recoveries, as discussed below.

Rental revenues

Total rental revenues for the year ended December 31, 2021, increased by \$146.8 million, or 10.0%, to \$1.6 billion, compared to \$1.5 billion for the year ended December 31, 2020. Excluding a termination fee of \$89.5 million recognized during the year ended December 31, 2020, our total rental revenues increased by \$236.3 million, or 17.1%, which was primarily due to an increase in rental revenues from our Non-Same Properties related to 2.1 million RSF of development and redevelopment projects placed into service subsequent to January 1, 2020, and 112 operating properties aggregating 11.2 million RSF acquired subsequent to January 1, 2020.

Rental revenues from our Same Properties for the year ended December 31, 2021 increased by \$48.6 million, or 4.1%, to \$1.2 billion, compared to \$1.2 billion for the year ended December 31, 2020. The increase was primarily due to rental rate increases on lease renewals and re-leasing of space since January 1, 2020. Refer to the “Leasing activity” section of “Item 2. Properties” within Part I of this annual report on Form 10-K for additional details.

For further details, refer to the “Lease accounting” section in Note 2 – “Summary of significant accounting policies.”

Tenant recoveries

Tenant recoveries for the year ended December 31, 2021 increased by \$83.3 million, or 20.5%, to \$489.7 million, compared to \$406.4 million for the year ended December 31, 2020. This increase was primarily from our Non-Same Properties related to our development and redevelopment projects placed into service and properties acquired subsequent to January 1, 2020, as discussed under “Rental revenues” above.

Same Properties’ tenant recoveries for the year ended December 31, 2021 increased by \$35.3 million, or 9.5%, primarily due to higher property insurance, contract services, and utilities expenses, and an increase in property tax expenses resulting from higher assessed values of our properties during the year ended December 31, 2021, as discussed under “Rental operations” below. As of December 31, 2021, 91% of our leases (on an RSF basis) were triple net leases, which require tenants to pay substantially all real estate taxes, insurance, utilities, repairs and maintenance, common area expenses, and other operating expenses (including increases thereto) in addition to base rent.

Other income

Other income for the years ended December 31, 2021 and 2020 was \$5.9 million and \$7.4 million, respectively, which primarily consisted of construction management fees and interest income earned during each respective period.

Rental operations

Total rental operating expenses for the year ended December 31, 2021 increased by \$93.3 million, or 17.6%, to \$623.6 million, compared to \$530.2 million for the year ended December 31, 2020. The increase was primarily due to incremental expenses related to our Non-Same Properties, which consisted of development and redevelopment projects placed into service and acquired properties, as discussed under “Income from rentals” above.

Same Properties’ rental operating expenses increased by \$36.4 million, or 8.7%, to \$456.7 million during the year ended December 31, 2021, compared to \$420.3 million for the year ended December 31, 2020. The increase was primarily the result of higher property insurance, contract services, and utilities expenses, and increased recoverable property tax expenses driven by higher assessed values of our properties.

General and administrative expenses

General and administrative expenses for the year ended December 31, 2021 increased by \$18.1 million, or 13.6%, to \$151.5 million, compared to \$133.3 million for the year ended December 31, 2020. The increase was primarily due to the continued growth in the depth and breadth of our operations in multiple markets, including development and redevelopment projects placed into service and properties acquired, as discussed under “Income from rentals” above. As a percentage of net operating income, our general and administrative expenses for the years ended December 31, 2021 and 2020 were 10.2% and 9.8%, respectively.

Interest expense

Interest expense for the years ended December 31, 2021 and 2020 consisted of the following (dollars in thousands):

Component	Year Ended December 31,		Change
	2021	2020	
Interest incurred	\$ 312,806	\$ 297,227	\$ 15,579
Capitalized interest	(170,641)	(125,618)	(45,023)
Interest expense	<u>\$ 142,165</u>	<u>\$ 171,609</u>	<u>\$ (29,444)</u>
Average debt balance outstanding ⁽¹⁾	\$ 9,071,513	\$ 7,762,498	\$ 1,309,015
Weighted-average annual interest rate ⁽²⁾	3.4 %	3.8 %	(0.4)%

(1) Represents the average debt balance outstanding during the respective periods.

(2) Represents total interest incurred divided by the average debt balance outstanding in the respective periods.

The net change in interest expense during the year ended December 31, 2021, compared to the year ended December 31, 2020, resulted from the following (dollars in thousands):

Component	Interest Rate ⁽¹⁾	Effective Date	Change
Increases in interest incurred due to:			
Issuances of debt:			
\$700 million unsecured senior notes payable	5.05%	March 2020	\$ 8,110
\$1.0 billion unsecured senior notes payable	1.97%	August 2020	11,231
\$900 million unsecured senior notes payable – green bond	2.12%	February 2021	15,848
\$850 million unsecured senior notes payable	3.08%	February 2021	22,239
Other increase in interest			630
Total increases			58,058
Decreases in interest incurred due to:			
Repayments of debt:			
Secured notes payable	Various	December 2020	(3,740)
\$500 million unsecured senior notes payable	4.04%	September 2020	(12,489)
\$650 million unsecured senior notes payable – green bond	4.03%	March 2021	(22,217)
Fluctuations in interest rate and average balance:			
Unsecured senior line of credit			(1,581)
\$1.5 billion commercial paper program			(2,452)
Total decreases			(42,479)
Change in gross interest			15,579
Increase in capitalized interest			(45,023)
Total change in interest expense			<u>\$ (29,444)</u>

(1) Represents the weighted-average interest rate as of the end of the applicable period, including amortization of loan fees, amortization of debt premiums (discounts), and other bank fees.

Depreciation and amortization

Depreciation and amortization expense for the year ended December 31, 2021 increased by \$123.0 million, or 17.6%, to \$821.1 million, compared to \$698.1 million for the year ended December 31, 2020. The increase was primarily due to additional depreciation from 2.1 million RSF of development and redevelopment projects placed into service subsequent to January 1, 2020, and 112 operating properties aggregating 11.2 million RSF acquired subsequent to January 1, 2020.

Impairment of real estate

During the year ended December 31, 2021, we recognized real estate asset impairments of office-related properties aggregating \$52.7 million, primarily consisting of the following:

- Impairment charge of \$22.5 million during the three months ended September 30, 2021, upon classification as held for sale of an option to purchase a land parcel in our SoMa submarket for the development of an office property, to reduce the option's carrying amount to its estimated fair value less costs to sell. We completed the sales of the option during the three months ended December 31, 2021, at no gain or loss.
- Impairment charge of \$18.6 million during the three months ended September 30, 2021, to reduce the carrying amount of a property located in a non-core submarket to its estimated fair value less costs to sell, upon our review of the current local market conditions.
- Impairment charges aggregating \$6.9 million during the six months ended June 30, 2021, to further reduce the carrying amounts of three office properties located in our San Francisco Bay Area and Seattle markets to their estimated fair values less costs to sell, based on the sales price negotiated for each property during this period. We completed the sales of these properties during the three months ended September 30, 2021. These properties met the held-for-sale classification during 2020, as discussed below.

During the year ended December 31, 2020, we recognized real estate asset impairments of office-related properties aggregating \$48.1 million, primarily consisting of the following:

- Impairment charges aggregating \$25.2 million during the three months ended December 31, 2020 to reduce the carrying amounts of three office properties located in our San Francisco Bay Area and Seattle markets to their estimated fair values less costs to sell, upon classification of these properties as held for sale. As discussed above, we completed the sales of these properties during the three months ended September 30, 2021.
- Impairment charge of \$6.8 million recognized during the three months ended September 30, 2020, upon classification of our real estate asset located at 945 Market Street in our SoMa submarket as held for sale. We completed the sale of this real estate asset in September 2020.
- Impairment charges aggregating \$15.2 million, which mainly consisted of a \$10 million write-off of the pre-acquisition deposit for a previously pending acquisition of an operating tech office property for which our revised economic projections declined from our initial underwriting. We recognized this impairment charge in April 2020 concurrently with the submission of our notice to terminate the transaction.

Loss on early extinguishment of debt

During the year ended December 31, 2021, we recognized a loss on early extinguishment of debt of \$67.3 million, including the write-off of unamortized loan fees primarily related to the refinancing of our 4.00% unsecured senior notes payable aggregating \$650.0 million due in 2024 pursuant to a partial cash tender offer completed on February 10, 2021, and a subsequent call for redemption for the remaining outstanding amounts completed on March 12, 2021.

During the year ended December 31, 2020, we refinanced our 3.90% unsecured senior notes payable due in 2023 aggregating \$500.0 million and recognized a loss on early extinguishment of debt of \$50.8 million, including the write-off of unamortized loan fees. Additionally, we recognized a loss on early extinguishment of debt of \$1.9 million due to the termination of our \$750.0 million unsecured senior line of credit.

Equity in earnings of unconsolidated real estate joint ventures

During the year ended December 31, 2021, we recognized equity in earnings of unconsolidated real estate joint ventures of \$12.3 million.

During the year ended December 31, 2020, we recognized equity in earnings of unconsolidated real estate joint ventures aggregating \$8.1 million. This balance consisted of earnings from our unconsolidated real estate joint ventures of approximately \$15.8 million, partially offset by an impairment charge on one of our unconsolidated real estate joint ventures. In March 2020, the impact of COVID-19 pandemic led to the temporary closure of a retail center owned by our 1401/1413 Research Boulevard unconsolidated real estate joint venture. We evaluated the recoverability of our investment in this joint venture and recognized a \$7.6 million impairment charge to lower the carrying amount of our investment balance, which primarily consisted of real estate, to zero.

Refer to Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional information.

Investment income

During the year ended December 31, 2021, we recognized investment income aggregating \$259.5 million, which consisted of \$215.8 million of realized gains and \$43.6 million of unrealized gains. Realized gains of \$215.8 million primarily consisted of sales of investments and distributions received. Unrealized gains of \$43.6 million during the year ended December 31, 2021, primarily consisted of increases in fair values of our investments in privately held entities that report NAV.

During the year ended December 31, 2020, we recognized investment income aggregating \$421.3 million, which consisted of \$47.3 million of realized gains and \$374.0 million of unrealized gains.

For more information about our investments, refer to Note 7 – “Investments” to our consolidated financial statements under Item 15 in this annual report on Form 10-K. For our impairments accounting policy, refer to the “Investments” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements under Item 15 in this annual report on Form 10-K.

Gain on sales of real estate

During the year ended December 31, 2021, we recognized gain on sales of real estate aggregating \$126.6 million, which included a \$101.1 million gain recognized in connection with the sale of our entire 49.0% interest in the unconsolidated real estate joint venture at Menlo Gateway and a \$23.2 million gain recognized in connection with the sale of our 2301 5th Avenue property aggregating 197,135 RSF located in our Lake Union submarket of Seattle. The gains were classified in gain on sales of real estate within our consolidated statements of operations for the year ended December 31, 2021.

During the year ended December 31, 2020, we recognized gain on sales of real estate aggregating \$154.1 million, which included \$151.9 million of gains recognized in connection with the sale of two tech office properties at 510 Townsend Street and 505 Brannan Street in our SoMa submarket and \$1.6 million of gains recognized in connection with the sale of 30 Bearfoot Road in our Route 495 submarket.

Other comprehensive income

Total other comprehensive income for the year ended December 31, 2021, decreased by \$3.8 million to aggregate net unrealized losses of \$0.7 million, compared to net unrealized gains of \$3.1 million for the year ended December 31, 2020, primarily due to the unrealized gains (losses) on foreign currency translation related to our operations in Canada and China.

Summary of capital expenditures

Our construction spending for the year ended December 31, 2021 consisted of the following (in thousands):

Construction Spending	Year Ended December 31, 2021
Additions to real estate – consolidated projects	\$ 2,089,849
Investments in unconsolidated real estate joint ventures	13,666
Contributions from noncontrolling interests	(94,285)
Construction spending (cash basis)	2,009,230
Change in accrued construction	149,939
Construction spending	<u>\$ 2,159,169</u>

The following table summarizes the total projected construction spending for the year ending December 31, 2022, which includes interest, property taxes, insurance, payroll, and other indirect project costs (in thousands):

Projected Construction Spending	Year Ending December 31, 2022
Development, redevelopment, and pre-construction projects	\$ 2,990,000
Contributions from noncontrolling interests (consolidated real estate joint ventures)	(220,000)
Revenue-enhancing and repositioning capital expenditures	98,000
Non-revenue-enhancing capital expenditures	82,000
Guidance midpoint	<u>\$ 2,950,000</u>

Projected results

Based on our current view of existing market conditions and certain current assumptions, we present guidance for EPS attributable to Alexandria's common stockholders – diluted and funds from operations per share attributable to Alexandria's common stockholders – diluted for the year ending December 31, 2022, as set forth in the table below. The tables below also provide a reconciliation of EPS attributable to Alexandria's common stockholders – diluted, the most directly comparable financial measure presented in accordance with GAAP, to funds from operations per share, a non-GAAP measure, and other key assumptions included in our updated guidance for the year ending December 31, 2022. There can be no assurance that actual amounts will not be materially higher or lower than these expectations. Refer to our discussion of "Forward-looking statements" in this annual report on Form 10-K.

Projected 2022 Earnings per Share and Funds From Operations per Share Attributable to Alexandria's Common Stockholders – Diluted

Earnings per share ⁽¹⁾	\$2.65 to \$2.85
Depreciation and amortization of real estate assets	5.65
Allocation of unvested restricted stock awards	(0.04)
Funds from operations per share ⁽²⁾	\$8.26 to \$8.46
Midpoint	\$8.36

(1) Excludes unrealized gains or losses after December 31, 2021 that are required to be recognized in earnings and are excluded from funds from operations per share, as adjusted.

(2) Calculated in accordance with standards established by the Advisory Board of Governors of Nareit (the "Nareit Board of Governors"). Refer to the definition of "Funds from operations and funds from operations, as adjusted, attributable to Alexandria Real Estate Equities, Inc.'s common stockholders" in the "Non-GAAP measures and definitions" section under this Item 7 in this annual report on Form 10-K for additional information.

Key Assumptions⁽¹⁾ (Dollars in millions)

	2022 Guidance	
	Low	High
Occupancy percentage for operating properties in North America as of December 31, 2022	95.2%	95.8%
Lease renewals and re-leasing of space:		
Rental rate increases	30.0%	35.0%
Rental rate increases (cash basis)	18.0%	23.0%
Same property performance:		
Net operating income increase	5.5%	7.5%
Net operating income increase (cash basis)	6.5%	8.5%
Straight-line rent revenue	\$ 150	\$ 160
General and administrative expenses	\$ 168	\$ 176
Capitalization of interest	\$ 269	\$ 279
Interest expense	\$ 90	\$ 100

(1) Our assumptions presented in the table above are subject to a number of variables and uncertainties, including those discussed as "Forward-looking statements" under Part I, "Item 1A. Risk factors"; and Item 7. Management's discussion and analysis of financial condition and results of operations in this annual report on Form 10-K. To the extent our full-year earnings guidance is updated during the year, we will provide additional disclosure supporting reasons for any significant changes to such guidance.

Key Credit Metrics

	2022 Guidance
Net debt and preferred stock to Adjusted EBITDA – fourth quarter of 2022, annualized	Less than or equal to 5.1x
Fixed-charge coverage ratio – fourth quarter of 2022, annualized	Greater than or equal to 5.1x

Consolidated and unconsolidated real estate joint ventures

We present components of balance sheet and operating results information for the noncontrolling interest share of our consolidated real estate joint ventures and for our share of investments in unconsolidated real estate joint ventures to help investors estimate balance sheet and operating results information related to our partially owned entities. These amounts are estimated by computing, for each joint venture that we consolidate in our financial statements, the noncontrolling interest percentage of each financial item to arrive at the cumulative noncontrolling interest share of each component presented. In addition, for our real estate joint ventures that we do not control and do not consolidate, we apply our economic ownership percentage to the unconsolidated real estate joint ventures to arrive at our proportionate share of each component presented. Refer to Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for further discussion.

Consolidated Real Estate Joint Ventures

Property/Market/Submarket	Noncontrolling ⁽¹⁾ Interest Share	Operating RSF at 100%
50 and 60 Binney Street/Greater Boston/Cambridge/Inner Suburbs	66.0% ⁽²⁾	532,395
75/125 Binney Street/Greater Boston/Cambridge/Inner Suburbs	60.0%	388,270
225 Binney Street/Greater Boston/Cambridge/Inner Suburbs	70.0%	305,212
99 Coolidge Avenue/Greater Boston/Cambridge/Inner Suburbs	25.0%	— ⁽³⁾
409 and 499 Illinois Street/San Francisco Bay Area/Mission Bay	75.0% ⁽²⁾	455,069
1500 Owens Street/San Francisco Bay Area/Mission Bay	75.0% ⁽²⁾	158,267
1700 Owens Street/San Francisco Bay Area/Mission Bay	75.0% ⁽²⁾	164,513
455 Mission Bay Boulevard South/San Francisco Bay Area/Mission Bay	75.0% ⁽²⁾	228,140
Alexandria Technology Center® – Gateway/San Francisco Bay Area/South San Francisco ⁽⁴⁾	50.1%	1,089,852
213 East Grand Avenue/San Francisco Bay Area/South San Francisco	70.0% ⁽²⁾	300,930
500 Forbes Boulevard/San Francisco Bay Area/South San Francisco	90.0%	155,685
Alexandria Center® for Life Science – Millbrae Station/San Francisco Bay Area/South San Francisco	59.7%	—
Alexandria Point/San Diego/University Town Center ⁽⁵⁾	45.0%	1,337,916
5200 Illumina Way/San Diego/University Town Center	49.0%	792,687
9625 Towne Centre Drive/San Diego/University Town Center	49.9%	163,648
SD Tech by Alexandria/San Diego/Sorrento Mesa ⁽⁶⁾	50.0%	679,801
Pacific Technology Park/San Diego/Sorrento Mesa	50.0% ⁽²⁾	632,732
1201 and 1208 Eastlake Avenue East and 199 East Blaine Street /Seattle/Lake Union	70.0%	321,218
400 Dexter Avenue North/Seattle/Lake Union	70.0% ⁽²⁾	290,111

Unconsolidated Real Estate Joint Ventures

Property/Market/Submarket	Our Ownership Share ⁽⁷⁾	Operating RSF at 100%
1655 and 1725 Third Street/San Francisco Bay Area/Mission Bay	10.0%	586,208
1401/1413 Research Boulevard/Maryland/Rockville	65.0% ⁽⁸⁾	⁽⁹⁾
1450 Research Boulevard/Maryland/Rockville	73.2% ⁽¹⁰⁾	42,679
101 West Dickman Street/Maryland/Beltsville	57.9% ⁽¹⁰⁾	135,423

(1) In addition to the consolidated real estate joint ventures listed, various partners hold insignificant noncontrolling interests in three other real estate joint ventures in North America.

(2) Refer to “Formation of consolidated real estate joint ventures and sales of partial interest” subsection in Note 4 – “Consolidated and unconsolidated real estate joint ventures” under Item 15 in this annual report on Form 10-K for additional information.

(3) We expect to commence vertical construction of 275,000 RSF during 2022.

(4) Includes 601, 611, 651, 681, 685, 701, and 751 Gateway Boulevard in our South San Francisco submarket. Noncontrolling interest share is anticipated to be 49% as we make further contributions into the joint venture over time.

(5) Includes 10210, 10260, 10290, and 10300 Campus Point Drive and 4161, 4224, and 4242 Campus Point Court in our University Town Center submarket.

(6) Includes 9605, 9645, 9675, 9685, 9725, 9735, 9808, 9855, and 9868 Scranton Road and 10055 and 10065 Barnes Canyon Road in our Sorrento Mesa submarket.

(7) In addition to the unconsolidated real estate joint ventures listed, we hold an interest in one other insignificant unconsolidated real estate joint venture in North America.

(8) Represents our ownership interest; our voting interest is limited to 50%.

(9) Represents a joint venture with a distinguished retail real estate developer for an approximate 90,000 RSF retail shopping center.

(10) Represent joint ventures with local real estate operators. Each of these joint ventures operates one office property which are expected to be redeveloped into office/lab. Our investments into 101 West Dickman Street and 1450 Research Boulevard joint ventures were \$8.3 million and \$4.0 million, respectively. The joint ventures each have a construction loan in place which is expected to fund future redevelopment cost; therefore, we expect minimal equity contributions to be required in the future. Our partners manage the day-to-day activities that most significantly affect the economic performance of each joint venture; therefore, we account for these investments under the equity method of accounting.

The following table presents key terms related to our unconsolidated real estate joint ventures' secured loans as of December 31, 2021 (dollars in thousands):

Unconsolidated Joint Venture	Our Share	Maturity Date	Stated Rate	Interest Rate ⁽¹⁾	Aggregate Commitment at 100%	Debt Balance at 100% ⁽²⁾
1401/1413 Research Boulevard	65.0%	12/23/24	2.70%	3.14%	\$ 28,500	\$ 28,124
1655 and 1725 Third Street	10.0%	3/10/25	4.50%	4.57%	600,000	598,657
101 West Dickman Street	57.9%	11/10/26	SOFR + 1.95% ⁽³⁾	2.81%	26,750	9,947
1450 Research Boulevard	73.2%	12/10/26	SOFR + 1.95% ⁽³⁾	N/A	13,000	—
					<u>\$ 668,250</u>	<u>\$ 636,728</u>

(1) Includes interest expense and amortization of loan fees.

(2) Represents outstanding principal, net of unamortized deferred financing costs, as of December 31, 2021.

(3) This loan is subject to a fixed SOFR floor rate of 0.75%.

The following tables present information related to the operating results and financial positions of our consolidated and unconsolidated real estate joint ventures (in thousands):

	Noncontrolling Interest Share of Consolidated Real Estate Joint Ventures		Our Share of Unconsolidated Real Estate Joint Ventures	
	December 31, 2021		December 31, 2021	
	Three Months Ended	Year Ended	Three Months Ended	Year Ended
Total revenues	\$ 64,273	\$ 211,807	\$ 9,962	\$ 43,557
Rental operations	(18,278)	(58,123)	(1,469)	(7,079)
	45,995	153,684	8,493	36,478
General and administrative	(36)	(635)	(113)	(298)
Interest	—	—	(2,304)	(10,191)
Depreciation and amortization	(21,265)	(70,880)	(3,058)	(13,734)
Fixed returns allocated to redeemable noncontrolling interests ⁽¹⁾	207	866	—	—
	<u>\$ 24,901</u>	<u>\$ 83,035</u>	<u>\$ 3,018</u>	<u>\$ 12,255</u>
Straight-line rent and below-market lease revenue	\$ 1,859	\$ 5,318	\$ 170	\$ 3,094
Funds from operations ⁽²⁾	\$ 46,166	\$ 153,915	\$ 6,076	\$ 25,989

(1) Represents an allocation of joint venture earnings to redeemable noncontrolling interests primarily in one property in our South San Francisco submarket. These redeemable noncontrolling interests earn a fixed return on their investment rather than participate in the operating results of the property.

(2) Refer to the definition of "Funds from operations and funds from operations, as adjusted, attributable to Alexandria Real Estate Equities, Inc.'s common stockholders" in the "Non-GAAP measures and definitions" section under this Item 7 in this annual report on Form 10-K for the definition and the reconciliation from the most directly comparable financial measure presented in accordance with GAAP.

	As of December 31, 2021	
	Noncontrolling Interest Share of Consolidated Real Estate Joint Ventures	Our Share of Unconsolidated Real Estate Joint Ventures
Investments in real estate	\$ 2,580,819	\$ 110,432
Cash, cash equivalents, and restricted cash	92,703	4,993
Other assets	290,389	10,168
Secured notes payable	(1,998)	(83,910)
Other liabilities	(118,205)	(3,200)
Redeemable noncontrolling interests	(9,612)	—
	<u>\$ 2,834,096</u>	<u>\$ 38,483</u>

During the years ended December 31, 2021 and 2020, our consolidated real estate joint ventures distributed an aggregate of \$112.4 million and \$87.3 million, respectively, to our joint venture partners. Refer to our consolidated statements of cash flows and Note 4 – "Consolidated and unconsolidated real estate joint ventures" to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional information.

Investments

We hold investments in publicly traded companies and privately held entities primarily involved in the life science, agtech, and technology industries. The tables below summarize components of our non-real estate investments and investment income. Refer to Note 7 – “Investments” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional information.

	December 31, 2021	
(In thousands)	Three Months Ended	Year Ended December 31, 2020
Realized gains	\$ 26,832	\$ 215,845 ⁽¹⁾
Unrealized (losses) gains	(139,716)	43,632
Investment (loss) income	\$ (112,884)	\$ 259,477
		\$ 421,321

Investments (In thousands)	Cost	Unrealized Gains	Carrying Amount
Publicly traded companies	\$ 203,290	\$ 280,527 ⁽³⁾	\$ 483,817
Entities that report NAV	385,692	444,172	829,864
Entities that do not report NAV:			
Entities with observable price changes	56,257	72,974	129,231
Entities without observable price changes	362,064	—	362,064
Investments accounted for under the equity method of accounting	N/A	N/A	71,588
December 31, 2021	<u>\$1,007,303 ⁽⁴⁾</u>	<u>\$ 797,673</u>	<u>\$1,876,564</u>
December 31, 2020	<u>\$ 835,438</u>	<u>\$ 775,676</u>	<u>\$1,611,114</u>

- (1) Includes six separate significant realized gains aggregating \$110.1 million related to the following transactions:
- (i) the sales of investments in three publicly traded biotechnology companies, (ii) a distribution received from a limited partnership investment, and (iii) the acquisition of two of our privately held non-real estate investments in a biopharmaceutical company and biotechnology company.
 - (2) Includes impairments of \$24.5 million related to investments in privately held entities that do not report NAV.
 - (3) Includes gross unrealized gains and losses of \$310.0 million and \$29.5 million, respectively, as of December 31, 2021.
 - (4) Represents 3.0% of gross assets as of December 31, 2021.

Public/Private Mix (Cost)



Tenant/Non-Tenant Mix (Cost)



Liquidity

Liquidity

\$5.4B

(In millions)

Availability under our unsecured senior line of credit, net of amounts outstanding under our commercial paper program	\$ 2,730
Remaining construction loan commitments	185
Cash, cash equivalents, and restricted cash	415
Investments in publicly traded companies	484
Liquidity as of December 31, 2021	3,814
Outstanding forward equity sales agreements ⁽¹⁾	1,621
Total	<u>\$ 5,435</u>

(1) Represents expected net proceeds from the future settlement of 8.1 million shares of forward equity sales agreements entered into in January 2022.

We expect to meet certain long-term liquidity requirements, such as requirements for development, redevelopment, other construction projects, capital improvements, tenant improvements, property acquisitions, leasing costs, non-revenue-enhancing capital expenditures, scheduled debt maturities, distributions to noncontrolling interests, and payment of dividends through net cash provided by operating activities, periodic asset sales, strategic real estate joint venture capital, long-term secured and unsecured indebtedness, borrowings under our unsecured senior line of credit, issuances under our commercial paper program, and issuances of additional debt and/or equity securities.

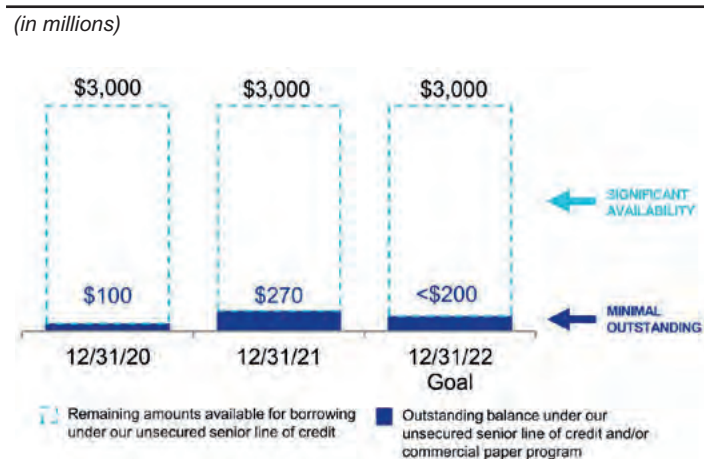
We also expect to continue meeting our short-term liquidity and capital requirements, as further detailed in this section, generally through our working capital and net cash provided by operating activities. We believe that the net cash provided by operating activities will continue to be sufficient to enable us to make the distributions necessary to continue qualifying as a REIT.

For additional information on our liquidity requirements related to our contractual obligations and commitments, refer to Note 5 – “Leases” and Note 10 – “Secured and unsecured senior debt” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional information.

Over the next several years, our balance sheet, capital structure, and liquidity objectives are as follows:

- Retain positive cash flows from operating activities after payment of dividends and distributions to noncontrolling interests for investment in development and redevelopment projects and/or acquisitions;
- Improve credit profile and relative long-term cost of capital;
- Maintain diverse sources of capital, including sources from net cash provided by operating activities, unsecured debt, secured debt, selective real estate asset sales, partial interest sales, non-real estate investment sales, and common stock;
- Maintain commitment to long-term capital to fund growth;
- Maintain prudent laddering of debt maturities;
- Maintain solid credit metrics;
- Maintain significant balance sheet liquidity;
- Prudently manage variable-rate debt exposure through the reduction of short-term and medium-term variable-rate debt;
- Maintain a large unencumbered asset pool to provide financial flexibility;
- Fund common stock dividends and distributions to noncontrolling interests from net cash provided by operating activities;
- Manage a disciplined level of value-creation projects as a percentage of our gross real estate assets; and
- Maintain high levels of pre-leasing and percentage leased in value-creation projects.

Minimal Outstanding Borrowings and Significant Availability on Unsecured Senior Line of Credit



The following table presents the availability under our unsecured senior line of credit, net of amounts outstanding under our commercial paper program; availability under our secured construction loan; outstanding forward equity sales agreements; cash, cash equivalents, and restricted cash; and investments in publicly traded companies as of December 31, 2021 (dollars in thousands):

Description	Stated Rate	Aggregate Commitments	Outstanding Balance ⁽¹⁾	Remaining Commitments/ Liquidity
Availability under our unsecured senior line of credit, net of amounts outstanding under our commercial paper program	L+0.815%	\$ 3,000,000	\$ 269,990	\$ 2,730,000
Remaining construction loan commitments	SOFR + 2.70%	\$ 195,300	\$ 7,991	185,298
Cash, cash equivalents, and restricted cash				415,227
Investments in publicly traded companies				483,817
Liquidity as of December 31, 2021				3,814,342
Outstanding forward equity sales agreements ⁽²⁾				1,621,180
Total				<u>\$ 5,435,522</u>

(1) Represents outstanding principal, net of unamortized deferred financing costs, as of December 31, 2021.

(2) Represents expected net proceeds from the future settlement of 8.1 million shares of forward equity sales agreements entered into in January 2022.

Cash, cash equivalents, and restricted cash

As of December 31, 2021 and 2020, we had \$415.2 million and \$597.7 million, respectively, of cash, cash equivalents, and restricted cash. We expect existing cash, cash equivalents, and restricted cash, net cash from operating activities, proceeds from real estate asset sales and partial interest sales, non-real estate investment sales, borrowings under our unsecured senior line of credit, issuances under our commercial paper program, issuances of unsecured notes payable, borrowings under secured construction loans, and issuances of common stock to continue to be sufficient to fund our operating activities and cash commitments for investing and financing activities, such as regular quarterly dividends, distributions to noncontrolling interests, scheduled debt repayments, acquisitions, and certain capital expenditures, including expenditures related to construction activities.

Cash flows

We report and analyze our cash flows based on operating activities, investing activities, and financing activities. The following table summarizes changes in our cash flows for the years ended December 31, 2021 and 2020 (in thousands):

	Year Ended December 31,		Change
	2021	2020	
Net cash provided by operating activities	\$ 1,010,197	\$ 882,510	\$ 127,687
Net cash used in investing activities	\$ (7,107,324)	\$ (3,278,161)	\$ (3,829,163)
Net cash provided by financing activities	\$ 5,916,361	\$ 2,750,356	\$ 3,166,005

Operating activities

Cash flows provided by operating activities are primarily dependent upon the occupancy level of our asset base, the rental rates of our leases, the collectibility of rent and recovery of operating expenses from our tenants, the timing of completion of development and redevelopment projects, and the timing of acquisitions and dispositions of operating properties. Net cash provided by operating activities for the year ended December 31, 2021 increased by \$127.7 million to \$1.0 billion, compared to \$882.5 million for the year ended December 31, 2020. This increase was primarily attributable to (i) cash flows generated from our highly leased development and redevelopment projects recently placed into service, (ii) income-producing acquisitions since January 1, 2020, and (iii) increases in rental rates on lease renewals and re-leasing of space since January 1, 2020.

Investing activities

Cash used in investing activities for the years ended December 31, 2021 and 2020 consisted of the following (in thousands):

	Year Ended December 31,		
	2021	2020	Increase (Decrease)
Sources of cash from investing activities:			
Sales of and distributions from non-real estate investments	\$ 424,623	\$ 141,149	\$ 283,474
Proceeds from sales of real estate	190,576	747,020	(556,444)
Return of capital from unconsolidated real estate joint ventures	—	20,225	(20,225)
Sale of interests in unconsolidated real estate joint ventures	394,952	—	394,952
Change in escrow deposits	—	7,408	(7,408)
	1,010,151	915,802	94,349
Uses of cash for investing activities:			
Purchases of real estate	5,434,652	2,570,693	2,863,959
Additions to real estate	2,089,849	1,445,171	644,678
Acquisition of interest in unconsolidated real estate joint venture	9,048	—	9,048
Investments in unconsolidated real estate joint ventures	13,666	3,444	10,222
Additions to non-real estate investments	408,564	174,655	233,909
Change in escrow deposits	161,696	—	161,696
	8,117,475	4,193,963	3,923,512
Net cash used in investing activities	\$ 7,107,324	\$ 3,278,161	\$ 3,829,163

The increase in net cash used in investing activities for the year ended December 31, 2021 was primarily due to an increased use of cash for property acquisitions, additions to real estate, and additions to non-real estate investments. Refer to Note 3 – “Investments in real estate” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for further information.

Financing activities

Cash flows provided by financing activities for the years ended December 31, 2021 and 2020 consisted of the following (in thousands):

	Year Ended December 31,		Change
	2021	2020	
Borrowings from secured notes payable	\$ 10,005	\$ —	\$ 10,005
Repayments of borrowings from secured notes payable	(17,979)	(84,104)	66,125
Payment for the defeasance of secured note payable	—	(32,865)	32,865
Proceeds from issuance of unsecured senior notes payable	1,743,716	1,697,651	46,065
Repayments of unsecured senior notes payable	(650,000)	(500,000)	(150,000)
Premium paid for early extinguishment of debt	(66,829)	(54,385)	(12,444)
Borrowings from unsecured senior line of credit	3,521,000	2,700,000	821,000
Repayments of borrowings from unsecured senior line of credit	(3,521,000)	(3,084,000)	(437,000)
Proceeds from issuance under commercial paper program	30,951,300	23,539,400	7,411,900
Repayments of borrowings from commercial paper program	(30,781,300)	(23,439,400)	(7,341,900)
Payments of loan fees	(18,938)	(32,309)	13,371
Changes related to debt	1,169,975	709,988	459,987
Contributions from and sales of noncontrolling interests	2,026,486	367,613	1,658,873
Distributions to and purchases of noncontrolling interests	(118,891)	(88,805)	(30,086)
Proceeds from the issuance of common stock	3,529,097	2,315,862	1,213,235
Dividend payments	(655,968)	(532,980)	(122,988)
Taxes paid related to net settlement of equity awards	(34,338)	(21,322)	(13,016)
Net cash provided by financing activities	<u>\$ 5,916,361</u>	<u>\$ 2,750,356</u>	<u>\$ 3,166,005</u>

Capital resources

We expect that our principal liquidity needs for the year ending December 31, 2022, will be satisfied by the following multiple sources of capital, as shown in the table below. There can be no assurance that our sources and uses of capital will not be materially higher or lower than these expectations.

Key Sources and Uses of Capital (In millions)	2022 Guidance			Certain Completed Items
	Range		Midpoint	
Sources of capital:				
Net cash provided by operating activities after dividends	\$ 275	\$ 325	\$ 300	
Incremental debt	1,375	1,025	1,200	
Real estate dispositions and partial interest sales	1,300	2,100	1,700	
Common equity	2,250	3,250	2,750	\$ 1,691
Total sources of capital	<u>\$ 5,200</u>	<u>\$ 6,700</u>	<u>\$ 5,950</u>	
Uses of capital:				
Construction	\$ 2,700	\$ 3,200	\$ 2,950	
Acquisitions	2,500	3,500	3,000	\$ 1,220
Total uses of capital	<u>\$ 5,200</u>	<u>\$ 6,700</u>	<u>\$ 5,950</u>	
Incremental debt (included above):				
Issuance of unsecured senior notes payable	\$ 1,200	\$ 1,700	\$ 1,450	
Unsecured senior line of credit, commercial paper program, and other	175	(675)	(250)	
Incremental debt	<u>\$ 1,375</u>	<u>\$ 1,025</u>	<u>\$ 1,200</u>	

The key assumptions behind the sources and uses of capital in the table above include a favorable capital market environment, performance of our core operating properties, lease-up and delivery of current and future development and redevelopment projects, and leasing activity. Our expected sources and uses of capital are subject to a number of variables and uncertainties, including those discussed as “Forward-looking statements” under Part I; “Item 1A. Risk factors”; and “Item 7. Management’s discussion and analysis of financial condition and results of operations” in this annual report on Form 10-K. We expect to update our forecast of sources and uses of capital on a quarterly basis.

Sources of capital

Net cash provided by operating activities after dividends

We expect to retain \$275.0 million to \$325.0 million of net cash flows from operating activities after payment of common stock dividends, and distributions to noncontrolling interests for the year ending December 31, 2022. For purposes of this calculation, changes in operating assets and liabilities are excluded as they represent timing differences. For the year ending December 31, 2022, we expect our recently delivered projects, our highly pre-leased value-creation projects expected to be completed, and contributions from Same Properties and recently acquired properties to contribute significant increases in income from rentals, net operating income, and cash flows. We anticipate significant contractual near-term growth in annual cash rents of \$39 million related to the commencement of contractual rents on the projects recently placed into service that are near the end of their initial free rent period. Refer to the “Cash flows” section within this Item 7 in this annual report on Form 10-K for a discussion of cash flows provided by operating activities for the year ended December 31, 2021.

Debt

We expect to fund a portion of our capital needs in 2022 from the real estate dispositions and partial interest sales, settlement of our outstanding forward equity sales agreements, sales of our common stock under our ATM program, issuances under our commercial paper program discussed below, borrowings under our unsecured senior line of credit, and issuances of unsecured senior notes payable.

As of December 31, 2021, we have no outstanding balance on our unsecured senior line of credit. Our unsecured senior line of credit has an aggregate commitment of \$3.0 billion and bears an interest rate of LIBOR plus 0.825% with a 0% LIBOR floor and is subject to certain annual sustainability measures entitling us to a temporary reduction in the interest rate margin of one basis point, but not below zero percent per year. During the year ended December 31, 2020, we achieved certain sustainability measures, as described in our unsecured senior line of credit agreement, which reduced our borrowing rate to LIBOR plus 0.815% for a one-year period. In addition to the cost of borrowing, the unsecured senior line of credit is subject to an annual facility fee of 0.15% based on the aggregate commitments outstanding.

We use our unsecured senior line of credit to fund working capital, construction activities, and, from time to time, acquisition of properties. Borrowings under the unsecured senior line of credit bear interest at a “Eurocurrency Rate,” a “LIBOR Floating Rate,” or a “Base Rate” specified in the unsecured senior line of credit agreement plus, in any case, the Applicable Margin. The Eurocurrency Rate specified in the unsecured senior line of credit agreement is, as applicable, the rate per annum equal to either (i) the LIBOR or a successor rate thereto as agreed to by the administrative agent and the Company for loans denominated in a LIBOR quoted currency (i.e., U.S. dollars, euro, sterling, or yen), (ii) the average annual yield rates applicable to Canadian dollar bankers’ acceptances for loans denominated in Canadian dollars, (iii) the Bank Bill Swap Reference Bid rate for loans denominated in Australian dollars, or (iv) the rate designated with respect to the applicable alternative currency for loans denominated in a non-LIBOR quoted currency (other than Canadian or Australian dollars). The LIBOR Floating Rate means, for any day, one-month LIBOR, or a successor rate thereto as agreed to by the administrative agent and the Company for loans denominated in U.S. dollars. The Base Rate means, for any day, a fluctuating rate per annum equal to the highest of (i) the federal funds rate plus 1/2 of 1.00%, (ii) the rate of interest in effect for such day as publicly announced from time to time by the Administrative Agent as its “prime rate,” and (iii) the Eurocurrency Rate plus 1.00%. Our unsecured senior line of credit contains a feature that allows lenders to competitively bid on the interest rate for borrowings under the facility. This may result in an interest rate that is below the stated rate.

We established a commercial paper program that provides us with the ability to issue up to \$1.5 billion of commercial paper notes with a maturity of generally 30 days or less and with a maximum maturity of 397 days from the date of issuance. Our commercial paper program is backed by our unsecured senior line of credit, and at all times we expect to retain a minimum undrawn amount of borrowing capacity under our unsecured senior line of credit equal to any outstanding balance on our commercial paper program. We use borrowings under the program to fund short-term capital needs. The notes issued under our commercial paper program are sold under customary terms in the commercial paper market. They are typically issued at a discount to par, representing a yield to maturity dictated by market conditions at the time of issuance. In the event we are unable to issue commercial paper notes or refinance outstanding commercial paper notes under terms equal to or more favorable than those under the unsecured senior line of credit, we expect to borrow under the unsecured senior line of credit at LIBOR plus 0.815%. The commercial paper notes sold during the three months ended December 31, 2021 were issued at a weighted-average yield to maturity of 0.24%. As of December 31, 2021, we had an aggregate of \$270.0 million of notes outstanding under our commercial paper program.

In February 2021, we opportunistically issued \$1.75 billion of unsecured senior notes payable with a weighted-average interest rate of 2.49% and a weighted-average maturity of 20.4 years. The unsecured senior notes consisted of \$900.0 million of 2.00% unsecured senior notes due 2032 (“2.00% Unsecured Senior Notes”) and \$850.0 million of 3.00% unsecured senior notes due 2051. The proceeds from our 2.00% Unsecured Senior Notes are expected to be allocated to eligible green projects and were initially used to refinance \$650.0 million of our 4.00% unsecured senior notes payable due in 2024, pursuant to a partial cash tender offer completed on February 10, 2021, and a subsequent call for redemption for the remaining outstanding amounts that settled on March 12, 2021.

Proactive management of transition away from LIBOR

LIBOR has been used extensively in the U.S. and globally as a reference rate for various commercial and financial contracts, including variable-rate debt and interest rate swap contracts. However, based on an announcement made by the Financial Conduct Authority (“FCA”) on March 5, 2021, one-week and two-month LIBOR rates ceased to be published after December 31, 2021, and all other LIBOR settings will effectively cease after June 30, 2023, and it is expected that LIBOR will no longer be used after this date. In addition, it is expected that LIBOR will no longer be used in new contracts entered into after December 31, 2021. To address the impending discontinuation of LIBOR, in the U.S. the Alternative Reference Rates Committee (“ARRC”) was established to help ensure the successful transition from LIBOR. In June 2017, the ARRC selected SOFR, a new index calculated by reference to short-term repurchase agreements backed by U.S. Treasury securities, as its preferred replacement for U.S. dollar LIBOR. We have been closely monitoring developments related to the transition away from LIBOR and have implemented numerous proactive measures to minimize the potential impact of the transition to the Company, specifically:

- We have proactively eliminated outstanding LIBOR-based borrowings under our unsecured senior bank term loans and secured construction loans through repayments. From January 2017 through December 2021, we retired approximately \$1.5 billion of all such debt.
- During 2020, we increased the aggregate amount of our commercial paper program to \$1.5 billion from \$750.0 million. This program provides us with ability to issue commercial paper notes bearing interest at short-term fixed rates, with a maturity of generally 30 days or less and with a maximum maturity of 397 days from the date of issuance. Our commercial paper program is not subject to LIBOR and is used for funding short-term working capital needs. As of December 31, 2021, we had an aggregate of \$270.0 million of notes outstanding under our commercial paper program.
- We continue to prudently manage outstanding borrowings under our unsecured senior line of credit. As of December 31, 2021, we had no borrowings outstanding under our unsecured senior line of credit. Additionally, new loans that we’ve entered into recently are SOFR-based rather than LIBOR-based. Our consolidated real estate joint venture at 99 Coolidge Avenue holds a SOFR-based construction loan with an outstanding balance of \$8.0 million. In addition, two of our unconsolidated real estate joint ventures at 1450 Research Boulevard and 101 West Dickman Street each hold a SOFR-based construction loan. As of December 31, 2021, 1450 Research Boulevard had no outstanding balance on its construction loan and 101 West Dickman Street had an outstanding balance of \$9.9 million.
- Our unsecured senior line of credit contains fallback language generally consistent with the ARRC’s Amendment Approach, which provides a streamlined amendment approach for negotiating a benchmark replacement.
- We continue to monitor developments by the FCA, the ARRC, and other governing bodies involved in LIBOR transition.

Refer to Note 10 – “Secured and unsecured senior debt” and Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements under Item 15 and “Item 1A. Risk factors” in this annual report on Form 10-K for additional information about our management of risks related to the transition away from LIBOR.

Real estate dispositions and partial interest sales

We expect to continue the disciplined execution of select sales of operating assets. Future sales will provide an important source of capital to fund a portion of pending and recently completed opportunistic acquisitions and our highly leased value-creation development and redevelopment projects, and also provide significant capital for growth. We may also consider additional sales of partial interests in core Class A properties and/or development projects. For 2022, we expect real estate dispositions and partial interest sales ranging from \$1.3 billion to \$2.1 billion. The amount of asset sales necessary to meet our forecasted sources of capital will vary depending upon the amount of EBITDA associated with the assets sold.

During the year ended December 31, 2021, we completed dispositions for an aggregate sales price \$2.6 billion. Refer to the “Dispositions and sales of partial interests” section of “Investments in real estate” under Item 7 for additional information on these transactions.

As a REIT, we are generally subject to a 100% tax on the net income from real estate asset sales that the IRS characterizes as “prohibited transactions.” We do not expect our sales will be categorized as prohibited transactions. However, unless we meet certain “safe harbor” requirements, whether a real estate asset sale is a prohibited transaction will be based on the facts and circumstances of the sale. Our real estate asset sales may not always meet such safe harbor requirements. Refer to “Item 1A. Risk factors” in this annual report on Form 10-K for additional information about the “prohibited transaction” tax.

Common equity transactions

During the year ended December 31, 2021, we completed issuances and executed forward equity sales agreements for an aggregate 20.8 million shares of common stock, including the exercise of underwriters' option, for an aggregate net proceeds of approximately \$3.5 billion, as follows:

- In January 2021 and June 2021, we entered into forward equity sales agreements aggregating \$1.1 billion and \$1.5 billion, respectively, to sell an aggregate of 6.9 million and 8.1 million of our common stock, respectively, including the exercise of underwriters' options, at public offering price of \$164.00 and \$184.00, respectively, before underwriting discounts and commissions. During 2021, we issued all 15.0 million shares under these forward equity sales agreements and received net proceeds of \$2.5 billion.
- In March 2021, we issued the remaining 362 thousand shares of common stock to settle our forward equity sales agreements that were outstanding as of December 31, 2020, and received net proceeds of \$56.2 million.
- In February 2021, we entered into a new ATM common stock offering program, which allowed us to sell up to an aggregate of \$1.0 billion of our common stock.
 - We issued 5.5 million shares under our ATM program and received net proceeds of \$984.6 million.
 - As of December 31, 2021, we have no amounts remaining under this ATM program.
- In December 2021, we entered into a new ATM common stock offering program, which allows us to sell up to an aggregate of \$1.0 billion of our common stock. As of December 31, 2021, the full amount remains available for future sales of our common stock.

In January 2022, we entered into forward equity sales agreements to sell 8.1 million shares of our common stock (including the exercise of underwriters' option) aggregating \$1.7 billion at a public offering price of \$210.00 per share, before underwriting discounts and commissions.

Other sources

Under our current shelf registration statement filed with the SEC, we may offer common stock, preferred stock, debt, and other securities. These securities may be issued, from time to time, at our discretion based on our needs and market conditions, including, as necessary, to balance our use of incremental debt capital.

Additionally, we hold interests, together with joint venture partners, in real estate joint ventures that we consolidate in our financial statements. These joint venture partners may contribute equity into these entities primarily related to their share of funds for construction and financing-related activities. During the year ended December 31, 2021, we received \$2.0 billion of contributions from and sales of noncontrolling interests.

Uses of capital

Summary of capital expenditures

One of our primary uses of capital relates to the development, redevelopment, pre-construction, and construction of properties. We currently have projects in our growth pipeline aggregating 4.8 million RSF of Class A office/laboratory, agtech, and technology office space undergoing construction, 8.7 million RSF of near-term and intermediate-term development and redevelopment projects, and 14.7 million SF of future development projects in North America. We incur capitalized construction costs related to development, redevelopment, pre-construction, and other construction activities. We also incur additional capitalized project costs, including interest, property taxes, insurance, and other costs directly related and essential to the development, redevelopment, pre-construction, or construction of a project, during periods when activities necessary to prepare an asset for its intended use are in progress. Refer to the “New Class A development and redevelopment properties: current projects” and “Summary of capital expenditures” subsections of the “Investments in real estate” section under Item 2 in this annual report on Form 10-K for more information on our capital expenditures.

We capitalize interest cost as a cost of the project only during the period in which activities necessary to prepare an asset for its intended use are ongoing, provided that expenditures for the asset have been made and interest cost has been incurred. Capitalized interest for the years ended December 31, 2021 and 2020 of \$170.6 million and \$125.6 million, respectively, was classified in investments in real estate.

Property taxes, insurance on real estate, and indirect project costs, such as construction administration, legal fees, and office costs that clearly relate to projects under development or construction, are capitalized as incurred during the period an asset is undergoing activities to prepare it for its intended use. We capitalized payroll and other indirect costs related to development, redevelopment, pre-construction, and construction projects, aggregating \$69.8 million and \$61.0 million, and property taxes, insurance on real estate and other operating costs aggregating \$73.8 million and \$52.6 million during the years ended December 31, 2021 and 2020, respectively.

The increase in capitalized costs for the year ended December 31, 2021, compared to the same period in 2020 was primarily due to an increase in our value-creation pipeline projects undergoing construction and pre-construction activities in 2021 over 2020. Pre-construction activities include entitlements, permitting, design, site work, and other activities preceding commencement of construction of aboveground building improvements. The advancement of pre-construction efforts is focused on reducing the time required to deliver projects to prospective tenants. These critical activities add significant value for future ground-up development and are required for the vertical construction of buildings. Should we cease activities necessary to prepare an asset for its intended use, the interest, taxes, insurance, and certain other direct and indirect project costs related to the asset would be expensed as incurred. Expenditures for repairs and maintenance are expensed as incurred.

Fluctuations in our development, redevelopment, and construction activities could result in significant changes to total expenses and net income. For example, had we experienced a 10% reduction in development, redevelopment, and construction activities without a corresponding decrease in indirect project costs, including interest and payroll, total expenses would have increased by approximately \$24.0 million for the year ended December 31, 2021.

We use third-party brokers to assist in our leasing activity, who are paid on a contingent basis upon successful leasing. We are required to capitalize initial direct costs related to successful leasing transactions that result directly from and are essential to the lease transaction and would not have been incurred had that lease transaction not been successfully executed. During the year ended December 31, 2021, we capitalized total initial direct leasing costs of \$189.3 million. Costs that we incur to negotiate or arrange a lease regardless of its outcome, such as fixed employee compensation, tax, or legal advice to negotiate lease terms, and other costs, are expensed as incurred.

Acquisitions

Refer to the “Acquisitions” section in Note 3 – “Investments in real estate” and to Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements under Item 15 in this annual report on Form 10-K, and the “Acquisitions” subsection of the “Investments in real estate” section in “Item 2. Properties” in this annual report on Form 10-K for information on our acquisitions.

Dividends

During the years ended December 31, 2021 and 2020, we paid common stock dividends of \$656.0 million and \$533.0 million, respectively. The increase of \$123.0 million in dividends paid on our common stock during the year ended December 31, 2021, compared to the year ended December 31, 2020, was primarily due to an increase in number of common shares outstanding subsequent to January 1, 2020 as a result of issuances of common stock under our ATM program and settlement of forward equity sales agreements, and partially due to the increase in the related dividends to \$4.42 per common share paid during the year ended December 31, 2021 from \$4.18 per common share paid during the year ended December 31, 2020.

Secured notes payable

Secured notes payable as of December 31, 2021 consisted of four notes secured by eight properties. Our secured notes payable typically require monthly payments of principal and interest and had a weighted-average interest rate of approximately 3.40%. As of December 31, 2021, the total book value of our investments in real estate securing debt was approximately \$936.0 million. As of December 31, 2021, our secured notes payable, including unamortized discounts and deferred financing costs, comprised approximately \$195.2 million and \$10.0 million of fixed-rate debt and unhedged variable-debt, respectively.

Unsecured senior notes payable and unsecured senior line of credit

The requirements of, and our actual performance with respect to, the key financial covenants under our unsecured senior notes payable as of December 31, 2021 were as follows:

Covenant Ratios ⁽¹⁾	Requirement	December 31, 2021
Total Debt to Total Assets	Less than or equal to 60%	28%
Secured Debt to Total Assets	Less than or equal to 40%	1%
Consolidated EBITDA ⁽²⁾ to Interest Expense	Greater than or equal to 1.5x	11.4x
Unencumbered Total Asset Value to Unsecured Debt	Greater than or equal to 150%	343%

(1) All covenant ratio titles utilize terms as defined in the respective debt agreements.

(2) The calculation of consolidated EBITDA is based on the definitions contained in our loan agreements and is not directly comparable to the computation of EBITDA as described in Exchange Act Release No. 47226.

In addition, the terms of the indentures, among other things, limit the ability of the Company, Alexandria Real Estate Equities, L.P., and the Company's subsidiaries to (i) consummate a merger, or consolidate or sell all or substantially all of the Company's assets, and (ii) incur certain secured or unsecured indebtedness.

The requirements of, and our actual performance with respect to, the key financial covenants under our unsecured senior line of credit as of December 31, 2021 were as follows:

Covenant Ratios ⁽¹⁾	Requirement	December 31, 2021
Leverage Ratio	Less than or equal to 60.0%	26.7%
Secured Debt Ratio	Less than or equal to 45.0%	0.6%
Fixed-Charge Coverage Ratio	Greater than or equal to 1.50x	4.51x
Unsecured Interest Coverage Ratio	Greater than or equal to 1.75x	9.16x

(1) All covenant ratio titles utilize terms as defined in the credit agreement.

Estimated interest payments

Estimated interest payments on our fixed-rate debt were calculated based upon contractual interest rates, including interest payment dates and scheduled maturity dates. As of December 31, 2021, 97% of our debt was fixed-rate debt. For additional information regarding our debt, refer to Note 10 – "Secured and unsecured senior debt" to our consolidated financial statements under Item 15 in this annual report on Form 10-K.

Ground lease obligations

Operating lease agreements

Ground lease obligations as of December 31, 2021, included leases for 39 of our properties, which accounted for approximately 9% of our total number of properties. Excluding one ground lease that expires in 2036 related to one operating property with a net book value of \$6.9 million as of December 31, 2021, our ground lease obligations have remaining lease terms ranging from approximately 32 to 93 years, including available extension options that we are reasonably certain to exercise.

As of December 31, 2021, the remaining contractual payments under ground and office lease agreements in which we are the lessee aggregated \$927.9 million and \$25.4 million, respectively. We are required to recognize a right-of-use asset and a related liability to account for our future obligations under operating lease arrangements in which we are the lessee. The operating lease liability is measured based on the present value of the remaining lease payments, including payments during the term under our extension options that we are reasonably certain to exercise. The right-of-use asset is equal to the corresponding operating lease liability, adjusted for the initial direct leasing cost and any other consideration exchanged with the landlord prior to the commencement of the lease, as well as adjustments to reflect favorable or unfavorable terms of an acquired lease when compared with market terms at the time of acquisition. As of December 31, 2021, the present value of the remaining contractual payments, aggregating \$953.3 million, under our operating lease agreements, including our extension options that we are reasonably certain to exercise, was \$434.7 million, which was classified in accounts payable, accrued expenses, and other liabilities in our consolidated balance sheets. As of December 31, 2021, the weighted-average remaining lease term of operating leases in which we are the lessee was approximately 42 years, and the weighted-average discount rate was 4.57%. Our corresponding operating lease right-of-use assets, adjusted for initial direct leasing costs and other consideration exchanged with the landlord prior to the commencement of the lease, aggregated \$474.3 million. We classify the right-of-use asset in other assets in our consolidated balance sheets. Refer to the "Lease accounting" section in Note 2 – "Summary of significant accounting policies" to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional information.

Commitments

As of December 31, 2021, remaining aggregate costs under contract for the construction of properties undergoing development, redevelopment, and improvements under the terms of leases approximated \$2.8 billion. We expect payments for these obligations to occur over one to three years, subject to capital planning adjustments from time to time. We may have the ability to cease the construction of certain properties, which would result in the reduction of our commitments. In addition, we have letters of credit and performance obligations aggregating \$106.8 million primarily related to deposits for acquisitions in our Greater Boston and San Francisco Bay Area markets, including one \$77.5 million letter of credit we issued during the three months ended June 30, 2021. The \$77.5 million letter of credit served to secure our performance under the purchase and sale agreement of our acquisition of One Rogers Street in our Cambridge/Inner Suburbs submarket for a purchase price of \$849.4 million. We completed this acquisition in December 2021 and terminated the letter of credit in January 2022.

We are committed to funding approximately \$391.0 million related to our non-real estate investments. These funding commitments are primarily associated with our investments in privately held entities that report NAV, which expire at various dates over the next 11 years, with a weighted-average expiration of 9.0 years as of December 31, 2021.

Exposure to environmental liabilities

In connection with the acquisition of all of our properties, we have obtained Phase I environmental assessments to ascertain the existence of any environmental liabilities or other issues. The Phase I environmental assessments of our properties have not revealed any environmental liabilities that we believe would have a material adverse effect on our financial condition or results of operations taken as a whole, nor are we aware of any material environmental liabilities that have occurred since the Phase I environmental assessments were completed. In addition, we carry a policy of pollution legal liability insurance covering exposure to certain environmental losses at substantially all of our properties.

Foreign currency translation gains and losses

The following table presents the change in accumulated other comprehensive loss attributable to Alexandria Real Estate Equities, Inc.'s stockholders during the year ended December 31, 2021, due to the changes in the foreign exchange rates for our real estate investments in Canada and Asia. We reclassify unrealized foreign currency translation gains and losses into net income (loss) as we dispose of these holdings.

<i>(In thousands)</i>	Total
Balance as of December 31, 2020	\$ (6,625)
Other comprehensive loss before reclassifications	(669)
Net other comprehensive loss	(669)
Balance as of December 31, 2021	\$ (7,294)

Issuer and guarantor subsidiary summarized financial information

Alexandria Real Estate Equities, Inc. (the “Issuer”) has sold certain debt securities registered under the Securities Act of 1933, as amended, that are fully and unconditionally guaranteed by Alexandria Real Estate Equities, L.P. (the “LP” or the “Guarantor Subsidiary”), an indirectly 100% owned subsidiary of the Issuer. The Issuer’s other subsidiaries, including, but not limited to, the subsidiaries that own substantially all of its real estate (collectively, the “Combined Non-Guarantor Subsidiaries”), will not provide a guarantee of such securities, including the subsidiaries that are partially or 100% owned by the LP. The following summarized financial information presents on a combined basis for the Issuer and the Guarantor Subsidiary balance sheet financial information as of December 31, 2021 and 2020, and results of operations and comprehensive income for the years ended December 31, 2021 and 2020. The information presented below excludes eliminations necessary to arrive at the information on a consolidated basis. In presenting the summarized financial statements, the equity method of accounting has been applied to (i) the Issuer’s interests in the Guarantor Subsidiary, (ii) the Guarantor Subsidiary’s interests in the Combined Non-Guarantor Subsidiaries, and (iii) the Combined Non-Guarantor Subsidiaries’ interests in the Guarantor Subsidiary, where applicable, even though all such subsidiaries meet the requirements to be consolidated under GAAP. All assets and liabilities have been allocated to the Issuer and the Guarantor Subsidiary generally based on legal entity ownership.

The following tables present combined summarized financial information as of December 31, 2021 and 2020, and for the years ended December 31, 2021 and 2020, for the Issuer and Guarantor Subsidiary. Amounts provided do not represent our total consolidated amounts (in thousands):

	December 31,	
	2021	2020
Assets:		
Cash, cash equivalents, and restricted cash	\$ 78,856	\$ 404,802
Other assets	101,956	100,689
Total assets	\$ 180,812	\$ 505,491
Liabilities:		
Unsecured senior notes payable	\$ 8,316,678	\$ 7,232,370
Unsecured senior line of credit and commercial paper	269,990	99,991
Other liabilities	401,721	341,621
Total liabilities	\$ 8,988,389	\$ 7,673,982
	Year Ended December 31,	
	2021	2020
Total revenues	\$ 26,798	\$ 22,946
Total expenses	(363,525)	(355,370)
Net loss	(336,727)	(332,424)
Net income attributable to unvested restricted stock awards	(7,848)	(10,168)
Net loss attributable to Alexandria Real Estate Equities, Inc.’s common stockholders	\$ (344,575)	\$ (342,592)

As of December 31, 2021, 401 of our 414 properties were held indirectly by the REIT’s wholly owned consolidated subsidiary, Alexandria Real Estate Equities, LP.

Critical accounting estimates

Our consolidated financial statements have been prepared in accordance with GAAP. The preparation of these financial statements in conformity with GAAP requires us to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. We base these estimates, judgments, and assumptions on historical experience, current trends, and various other factors that we believe to be reasonable under the circumstances.

We continually evaluate the estimates, judgments, and assumptions we use to prepare our consolidated financial statements. Changes in estimates, judgments, or assumptions could affect our financial position and our results of operations, which are used by our stockholders, potential investors, industry analysts, and lenders in their evaluation of our performance.

Our critical accounting estimates are defined as accounting estimates or assumptions made in accordance with GAAP, which involve a significant level of estimation uncertainty or subjectivity and have had or are reasonably likely to have a material impact on our financial condition or results of operations. Our significant accounting policies, which utilize these critical accounting estimates, are described in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements under Item 15 in this annual report on Form 10-K. Our critical accounting estimates are described below.

Recognition of real estate acquired

Generally, our acquisitions of real estate or in-substance real estate are accounted for as asset acquisitions and not business combinations because substantially all of the fair value is concentrated in a single identifiable asset or group of similar identifiable assets (i.e., land, buildings, and related intangible assets). The accounting model for asset acquisitions requires that the acquisition consideration (including acquisition costs) be allocated to the individual assets acquired and liabilities assumed on a relative fair value basis. Any excess (deficit) of the consideration transferred relative to the sum of the fair value of the assets acquired and liabilities assumed is allocated to the individual assets and liabilities based on their relative fair values.

We assess the relative fair values of tangible and intangible assets and liabilities based on:

- (i) Available comparable market information,
- (ii) Estimated replacement costs, or
- (iii) Discounted cash flow analysis/estimated net operating income and capitalization rates.

In certain instances, we may use multiple valuation techniques and estimate fair value based on an average of multiple valuation results. We exercise judgement to determine key assumptions used in each valuation technique. For example, to estimate future cash flows in the discounted cash flow analysis, we are required to use judgment and make a number of assumptions, including those related to projected growth in rental rates and operating expenses, and anticipated trends and market/economic conditions. The use of different assumptions in the discounted cash flow analysis can affect the amount of consideration allocated to the acquired depreciable/amortizable asset, which in turn can impact our net income due to the recognition of the related depreciation/amortization expense in our consolidated statements of operations.

We completed acquisitions of 87 properties for a total purchase price of \$5.5 billion during the year ended December 31, 2021. These transactions were accounted for as asset acquisitions, and the purchase price of each was allocated based on the relative fair value of the asset acquired and liabilities assumed. Refer to the “Investments in real estate” section of Note 2 – “Summary of significant accounting policies” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional information.

Impairment of long-lived assets

Impairment of real estate assets classified as held for sale

A property is classified as held for sale when all of the accounting criteria for a plan of sale have been met. These criteria are described in the “Investments in real estate” section of Note 2 – “Summary of significant accounting policies” to our consolidated financial statements under Item 15 in this annual report on Form 10-K. Upon classification as held for sale, we recognize an impairment charge, if necessary, to lower the carrying amount of the real estate asset to its estimated fair value less cost to sell. The determination of fair value can involve significant judgments and assumptions. We develop key assumptions based on the following available factors: (i) contractual sales price, (ii) preliminary non-binding letters of intent, or (iii) other available comparable market information. If this information is not available, we use estimated replacement costs or estimated cash flow projections that utilize estimated discount and capitalization rates. These estimates are subject to uncertainty and therefore require significant judgment by us. We review all assets held for sale each reporting period to determine whether the existing carrying amounts are fully recoverable in comparison to their estimated fair values less costs to sell. Subsequently, as a result of our quarterly assessment, we may recognize an incremental impairment charge for any decrease in the asset's fair value less cost to sell. Conversely, we may recognize a gain for a subsequent increase in fair value less cost to sell, limited to the cumulative net loss previously recognized.

Impairment of other long-lived assets

For each reporting period, we review current activities and changes in the business conditions of all of our long-lived assets, including our rental properties, CIP, land held for development, right-of-use assets related to operating leases in which we are the lessee, and intangibles, to determine the existence of any triggering events or impairment indicators requiring an impairment analysis. If triggering events or impairment indicators are identified, we review an estimate of the future undiscounted cash flows, including, if necessary, a probability-weighted approach if multiple outcomes are under consideration.

Long-lived assets to be held and used, are individually evaluated for impairment when conditions exist that may indicate that the carrying amount of a long-lived asset may not be recoverable. The carrying amount of a long-lived asset to be held and used is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Triggering events or impairment indicators for long-lived assets to be held and used, including our rental properties, CIP, land held for development, and intangibles, are assessed by project and include significant fluctuations in estimated net operating income, occupancy changes, significant near-term lease expirations, current and historical operating and/or cash flow losses, construction costs, estimated completion dates, rental rates, and other market factors. We assess the expected undiscounted cash flows based upon numerous factors, including, but not limited to, construction costs, available market information, current and historical operating results, known trends, current market/economic conditions that may affect the property, and our assumptions about the use of the asset, including, if necessary, a probability-weighted approach if multiple outcomes are under consideration.

Upon determination that an impairment has occurred, a write-down is recognized to reduce the carrying amount to its estimated fair value. If an impairment loss is not required to be recognized, the recognition of depreciation or amortization is adjusted prospectively, as necessary, to reduce the carrying amount of the real estate to its estimated disposition value over the remaining period that the asset is expected to be held and used. We may also adjust depreciation of properties that are expected to be disposed of or redeveloped prior to the end of their useful lives.

The evaluation for impairment and calculation of the carrying amount of a long-lived asset to be held and used involves consideration of factors and calculations that are different than the estimate of fair value of assets classified as held for sale. Because of these two different models, it is possible for a long-lived asset previously classified as held and used to require the recognition of an impairment charge upon classification as held for sale.

Impairment of real estate joint ventures accounted for under the equity method of accounting

We generally account for our investments in real estate joint ventures that do not meet the consolidation criteria under the equity method. Under the equity method of accounting, we initially recognize our investment at cost and subsequently adjust the carrying amount of the investment for our share of the investee's earnings or losses, distributions received, and other-than-temporary impairments.

Our unconsolidated real estate joint ventures are individually evaluated for impairment when conditions exist that may indicate that the decrease in the carrying amount of our investment has occurred and is other than temporary. Triggering events or impairment indicators for an unconsolidated joint venture include its recurring operating losses, and other events such as occupancy changes, significant near-term lease expirations, significant changes in construction costs, estimated completion dates, rental rates, and other factors related to the properties owned by the real estate joint venture, or a decision by investors to cease providing support or reduce their financial commitment to the joint venture.

Upon determination that an other-than-temporary impairment has occurred, a write-down is recognized to reduce the carrying amount of investment to its estimated fair value. As of December 31, 2021, the carrying amounts of our investments in unconsolidated real estate joint ventures aggregated \$38.5 million, or approximately 0.1% of our total assets. During the year ended December 31, 2021, no other-than-temporary impairments related to our unconsolidated real estate joint ventures were identified. Refer to the "Unconsolidated real estate joint ventures" section within Note 4 – "Consolidated and unconsolidated real estate joint ventures" to our consolidated financial statements under Item 15 in this annual report on Form 10-K for the information regarding the impairment recognized during the year ended December 31, 2020, in connection with the retail shopping center located in our Rockville submarket of Maryland owned by our 1401/1413 Research Boulevard unconsolidated real estate joint venture.

Impairment of non-real estate investments

We hold investments in publicly traded companies and privately held entities primarily involved in the life science, agtech, and technology industries. As a REIT, we generally limit our ownership percentage in the voting stock of each individual entity to less than 10%.

Our investments in privately held entities that do not report NAV per share require our evaluation for impairment when changes in these entities' conditions may indicate that an impairment exists. We closely monitor these investments throughout the year for new developments, including operating results, prospects and results of clinical trials, new product initiatives, new collaborative agreements, capital-raising events, and merger and acquisition activities. We evaluate these investees on the basis of a qualitative assessment for

indicators of impairment by monitoring the presence of the following triggering events or impairment indicators: (i) a significant deterioration in the earnings performance, asset quality, or business prospects of the investee; (ii) a significant adverse change in the regulatory, economic, or technological environment of the investee, (iii) a significant adverse change in the general market condition, including the research and development of technology and products that the investee is bringing or attempting to bring to the market, or (iv) significant concerns about the investee's ability to continue as a going concern. If such indicators are present, we are required to estimate the investment's fair value and immediately recognize an impairment loss in an amount equal to the investment's carrying value in excess of its estimated fair value. As of each December 31, 2021, 2020, and 2019, the carrying amounts of our investments in privately held entities that do not report NAV per share accounted for approximately 2% of our total assets and aggregated \$491.3 million, \$389.2 million, and \$388.1 million, respectively. During the years ended December 31, 2021, 2020, and 2019, we recognized impairment charges aggregating 0%, 6%, and 4% of the carrying amounts of our investments in privately held entities that do not report NAV, respectively.

Monitoring of tenant credit quality

We monitor, on an ongoing basis, the credit quality and any related material changes of our tenants by (i) monitoring the credit rating of tenants that are rated by a nationally recognized credit rating agency, (ii) reviewing financial statements of the tenants that are publicly available or that are required to be delivered to us pursuant to the applicable lease, (iii) monitoring news reports regarding our tenants and their respective businesses and industries in which they conduct business, and (iv) monitoring the timeliness of lease payments.

We have a team of employees who, among them, have an extensive educational background or experience in biology, chemistry, industrial biotechnology, agtech, and the life science industry, as well as knowledge in finance. This team is responsible for timely assessment, monitoring, and communication of our tenants' credit quality and any material changes therein. During the fiscal years ended 2021, 2020, and 2019, specific write-offs and a general allowance related to deferred rent balances of tenants recognized in our consolidated statements of operations have not exceeded 0.3% of our income from rentals for each respective year. Our general allowance was \$6.8 million as of December 31, 2021.

Allowance for credit losses

For the financial assets in scope of the accounting standard on credit losses, we are required to estimate and recognize lifetime expected losses, rather than incurred losses, which results in the earlier recognition of credit losses even if the expected risk of credit loss is remote.

As of December 31, 2021, all of our 414 properties were subject to the operating lease agreements, which are excluded from the scope of the standard on credit losses. As of December 31, 2021, we had one direct financing lease agreement for a parking structure and two sales-type ground leases subject to this standard, with an aggregate net investment balance of \$70.7 million, which represented approximately 0.2% of our total assets. At each reporting date, we estimate the current credit loss related to these assets by assessing the probability of default on these leases based on the lessees' financial condition, credit rating, business prospects, remaining lease term, and, in the case of the direct financing lease, the expected value of the underlying collateral upon its repossession, and, if necessary, we recognize a credit loss adjustment. Since the adoption of this standard on January 1, 2020, and as of each December 31, 2021 and 2020, our allowance for credit losses has not exceeded \$2.8 million, or 0.01% of our total assets. For further details, refer to the "Allowance for credit losses" section in Note 2 – "Summary of significant accounting policies" and to Note 5 – "Leases" to our consolidated financial statements.

Non-GAAP measures and definitions

This section contains additional information of certain non-GAAP financial measures and the reasons why we use these supplemental measures of performance and believe they provide useful information to investors, as well as the definitions of other terms used in this annual report on Form 10-K.

Funds from operations and funds from operations, as adjusted, attributable to Alexandria Real Estate Equities, Inc.'s common stockholders

GAAP-basis accounting for real estate assets utilizes historical cost accounting and assumes that real estate values diminish over time. In an effort to overcome the difference between real estate values and historical cost accounting for real estate assets, the Nareit Board of Governors established funds from operations as an improved measurement tool. Since its introduction, funds from operations has become a widely used non-GAAP financial measure among equity REITs. We believe that funds from operations is helpful to investors as an additional measure of the performance of an equity REIT. Moreover, we believe that funds from operations, as adjusted, allows investors to compare our performance to the performance of other real estate companies on a consistent basis, without having to account for differences recognized because of real estate acquisition and disposition decisions, financing decisions, capital structure, capital market transactions, variances resulting from the volatility of market conditions outside of our control, or other corporate activities that may not be representative of the operating performance of our properties.

The 2018 White Paper published by the Nareit Board of Governors (the "Nareit White Paper") defines funds from operations as net income (computed in accordance with GAAP), excluding gains or losses on sales of real estate, and impairments of real estate, plus depreciation and amortization of operating real estate assets, and after adjustments for our share of consolidated and unconsolidated partnerships and real estate joint ventures. Impairments represent the write-down of assets when fair value over the recoverability period is less than the carrying value due to changes in general market conditions and do not necessarily reflect the operating performance of the properties during the corresponding period.

We compute funds from operations, as adjusted, as funds from operations calculated in accordance with the Nareit White Paper, excluding significant gains, losses, and impairments realized on non-real estate investments, unrealized gains or losses on non-real estate investments, gains or losses on early extinguishment of debt, significant termination fees, acceleration of stock compensation expense due to the resignation of an executive officer, deal costs, the income tax effect related to such items, and the amount of such items that is allocable to our unvested restricted stock awards. Neither funds from operations nor funds from operations, as adjusted, should be considered as alternatives to net income (determined in accordance with GAAP) as indications of financial performance, or to cash flows from operating activities (determined in accordance with GAAP) as measures of liquidity, nor are they indicative of the availability of funds for our cash needs, including our ability to make distributions.

The following table reconciles net income to funds from operations for the share of consolidated real estate joint ventures attributable to noncontrolling interests and our share of unconsolidated real estate joint ventures for the three and twelve months ended December 31, 2021 (in thousands):

	Noncontrolling Interest Share of Consolidated Real Estate Joint Ventures		Our Share of Unconsolidated Real Estate Joint Ventures	
	December 31, 2021		December 31, 2021	
	Three Months Ended	Year Ended	Three Months Ended	Year Ended
Net income	\$ 24,901	\$ 83,035	\$ 3,018	\$ 12,255
Depreciation and amortization	21,265	70,880	3,058	13,734
Funds from operations	<u>\$ 46,166</u>	<u>\$ 153,915</u>	<u>\$ 6,076</u>	<u>\$ 25,989</u>

The following tables present a reconciliation of net income attributable to Alexandria Real Estate Equities, Inc.'s common stockholders, the most directly comparable financial measure presented in accordance with GAAP, including our share of amounts from consolidated and unconsolidated real estate joint ventures, to funds from operations attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – diluted, and funds from operations attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – diluted, as adjusted, and the related per share amounts for the years ended December 31, 2021, 2020, and 2019. Per share amounts may not add due to rounding.

(In thousands)	Year Ended December 31,		
	2021	2020	2019
Net income attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – basic and diluted	\$ 563,399	\$ 760,791	\$ 350,995
Depreciation and amortization of real estate assets	804,633	684,682	541,855
Noncontrolling share of depreciation and amortization from consolidated real estate JVs	(70,880)	(61,933)	(30,960)
Our share of depreciation and amortization from unconsolidated real estate JVs	13,734	11,413	6,366
Gain on sales of real estate	(126,570) ⁽¹⁾	(154,089)	(474)
Impairment of real estate – rental properties	25,485	40,501	12,334
Assumed conversion of 7.00% Series D cumulative convertible preferred stock	—	—	3,204
Allocation to unvested restricted stock awards	(6,315)	(7,018)	(5,904)
Funds from operations attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – diluted ⁽²⁾	1,203,486	1,274,347	877,416
Unrealized gains on non-real estate investments	(43,632)	(374,033)	(161,489)
Significant realized gains on non-real estate investments	(110,119)	—	—
Impairment of real estate	27,190	15,221	—
Impairment of non-real estate investments	—	24,482	17,124
Loss on early extinguishment of debt	67,253	60,668	47,570
Loss on early termination of interest rate hedge agreements	—	—	1,702
Termination fee	—	(86,179)	—
Acceleration of stock compensation expense due to executive officer resignation	—	4,499	—
Preferred stock redemption charge	—	—	2,580
Removal of assumed conversion of 7.00% Series D cumulative convertible preferred stock	—	—	(3,204)
Allocation to unvested restricted stock awards	710	4,790	1,307
Funds from operations attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – diluted, as adjusted	<u>\$ 1,144,888</u>	<u>\$ 923,795</u>	<u>\$ 783,006</u>

(1) Includes \$101.1 million related to the sale of our entire 49.0% interest in the unconsolidated real estate joint venture at Menlo Gateway.

(2) Calculated in accordance with standards established by the Nareit Board of Governors.

(Per share)	Year Ended December 31,		
	2021	2020	2019
Net income per share attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – diluted	\$ 3.82	\$ 6.01	\$ 3.12
Depreciation and amortization of real estate assets	5.07	5.01	4.60
Gain on sales of real estate	(0.86)	(1.22)	—
Impairment of real estate – rental properties	0.17	0.32	0.11
Allocation to unvested restricted stock awards	(0.04)	(0.05)	(0.06)
Funds from operations per share attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – diluted	8.16	10.07	7.77
Unrealized gains on non-real estate investments	(0.30)	(2.96)	(1.44)
Significant realized gains on non-real estate investments	(0.75)	—	—
Impairment of real estate	0.18	0.12	—
Impairment of non-real estate investments	—	0.19	0.15
Loss on early extinguishment of debt	0.46	0.48	0.42
Loss on early termination of interest rate hedge agreements	—	—	0.02
Termination fee	—	(0.68)	—
Acceleration of stock compensation expense due to executive officer resignation	—	0.04	—
Preferred stock redemption charge	—	—	0.02
Allocation to unvested restricted stock awards	0.01	0.04	0.02
Funds from operations per share attributable to Alexandria Real Estate Equities, Inc.'s common stockholders – diluted, as adjusted	<u>\$ 7.76</u>	<u>\$ 7.30</u>	<u>\$ 6.96</u>

Weighted-average shares of common stock outstanding⁽¹⁾ for calculations of:

EPS – diluted	147,460	126,490	112,524
Funds from operations – diluted, per share	147,460	126,490	112,966
Funds from operations – diluted, as adjusted, per share	147,460	126,490	112,524

(1) Refer to the definition of "Weighted-average shares of common stock outstanding – diluted" within this section of this Item 7 in this annual report on Form 10-K for additional information.

Adjusted EBITDA and Adjusted EBITDA margin

We use Adjusted EBITDA as a supplemental performance measure of our operations, for financial and operational decision-making, and as a supplemental means of evaluating period-to-period comparisons on a consistent basis. Adjusted EBITDA is calculated as earnings before interest, taxes, depreciation, and amortization ("EBITDA"), excluding stock compensation expense, gains or losses on early extinguishment of debt, gains or losses on sales of real estate, impairments of real estate, and significant termination fees. Adjusted EBITDA also excludes unrealized gains or losses and significant realized gains or losses and impairments that result from our non-real estate investments. These non-real estate investment amounts are classified in our consolidated statements of operations outside of total revenues.

We believe Adjusted EBITDA provides investors with relevant and useful information as it allows investors to evaluate the operating performance of our business activities without having to account for differences recognized because of investing and financing decisions related to our real estate and non-real estate investments, our capital structure, capital market transactions, and variances resulting from the volatility of market conditions outside of our control. For example, we exclude gains or losses on the early extinguishment of debt to allow investors to measure our performance independent of our indebtedness and capital structure. We believe that adjusting for the effects of impairments and gains or losses on sales of real estate, significant impairments and realized gains or losses on non-real estate investments, and significant termination fees allows investors to evaluate performance from period to period on a consistent basis without having to account for differences recognized because of investing and financing decisions related to our real estate and non-real estate investments or other corporate activities that may not be representative of the operating performance of our properties.

In addition, we believe that excluding charges related to stock compensation and unrealized gains or losses facilitates for investors a comparison of our business activities across periods without the volatility resulting from market forces outside of our control. Adjusted EBITDA has limitations as a measure of our performance. Adjusted EBITDA does not reflect our historical expenditures or future requirements for capital expenditures or contractual commitments. While Adjusted EBITDA is a relevant measure of performance, it does not represent net income (loss) or cash flows from operations calculated and presented in accordance with GAAP, and it should not be considered as an alternative to those indicators in evaluating performance or liquidity.

In order to calculate the Adjusted EBITDA margin, we divide Adjusted EBITDA by total revenue as presented in our consolidated statements of operations. We believe this supplemental performance measure provides investors with additional useful information regarding the profitability of our operating activities.

The following table reconciles net income (loss) and revenues, the most directly comparable financial measures calculated and presented in accordance with GAAP, to Adjusted EBITDA and calculates the Adjusted EBITDA margin for the three months and years ended December 31, 2021 and 2020 (dollars in thousands):

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Net income	\$ 99,796	\$ 457,133	\$ 654,282	\$ 827,171
Interest expense	34,862	37,538	142,165	171,609
Income taxes	4,156	2,053	12,054	7,230
Depreciation and amortization	239,254	177,750	821,061	698,104
Stock compensation expense	14,253	11,394	48,669	43,502
Loss on early extinguishment of debt	—	7,898	67,253	60,668
Gain on sales of real estate	(124,226) ⁽¹⁾	(152,503)	(126,570)	(154,089)
Significant realized gains on non-real estate investments	—	—	(110,119) ⁽²⁾	—
Unrealized losses (gains) on non-real estate investments	139,716	(233,538)	(43,632)	(374,033)
Impairment of real estate	—	25,177	52,675	55,722
Impairment of non-real estate investments	—	—	—	24,482
Termination fee	—	—	—	(86,179)
Adjusted EBITDA	<u>\$ 407,811</u>	<u>\$ 332,902</u>	<u>\$ 1,517,838</u>	<u>\$ 1,274,187</u>
Total revenues	\$ 576,923	\$ 463,720	\$ 2,114,150	\$ 1,885,637
Adjusted EBITDA margin	71%	72%	72%	68%

(1) Includes \$101.1 million related to the sale of our entire 49.0% interest in the unconsolidated real estate joint venture at Menlo Gateway.

(2) Refer to the "Investments" section within this Item 7 in this annual report on Form 10-K for additional information.

Annual rental revenue

Annual rental revenue represents the annualized fixed base rental obligations, calculated in accordance with GAAP, for leases in effect as of the end of the period, related to our operating RSF. Annual rental revenue is presented using 100% of the annual rental revenue of our consolidated properties and our share of annual rental revenue for our unconsolidated real estate joint ventures. Annual rental revenue per RSF is computed by dividing annual rental revenue by the sum of 100% of the RSF of our consolidated properties and our share of the RSF of properties held in unconsolidated real estate joint ventures. As of December 31, 2021, approximately 91% of our leases (on an RSF basis) were triple net leases, which require tenants to pay substantially all real estate taxes, insurance, utilities, repairs and maintenance, common area expenses, and other operating expenses (including increases thereto) in addition to base rent. Annual rental revenue excludes these operating expenses recovered from our tenants. Amounts recovered from our tenants related to these operating expenses, along with base rent, are classified in income from rentals in our consolidated statements of operations.

Capitalization rates

Capitalization rates are calculated based upon net operating income and net operating income (cash basis) annualized for the quarter preceding the date on which the property is sold, or near term prospective net operating income.

Cash interest

Cash interest is equal to interest expense calculated in accordance with GAAP plus capitalized interest, less amortization of loan fees and debt premiums (discounts). Refer to the definition of "Fixed-charge coverage ratio" in this section under this Item 7 in this annual report on 10-K for a reconciliation of interest expense, the most directly comparable financial measure calculated and presented in accordance with GAAP, to cash interest.

Class A properties and AAA locations

Class A properties are properties clustered in AAA locations that provide innovative tenants with highly dynamic and collaborative environments that enhance their ability to successfully recruit and retain world-class talent and inspire productivity, efficiency, creativity, and success. Class A properties generally command higher annual rental rates than other classes of similar properties.

AAA locations are in close proximity to concentrations of specialized skills, knowledge, institutions, and related businesses. Such locations are generally characterized by high barriers to entry for new landlords, high barriers to exit for tenants, and a limited supply of available space.

Development, redevelopment, and pre-construction

A key component of our business model is our disciplined allocation of capital to the development and redevelopment of new Class A properties, and property enhancements identified during the underwriting of certain acquired properties, located in collaborative life science, agtech, and technology campuses in AAA innovation clusters. These projects are generally focused on providing high-quality, generic, and reusable spaces that meet the real estate requirements of, and are reusable by, a wide range of tenants. Upon completion, each value-creation project is expected to generate a significant increase in rental income, net operating income, and cash flows. Our development and redevelopment projects are generally in locations that are highly desirable to high-quality entities, which we believe results in higher occupancy levels, longer lease terms, higher rental income, higher returns, and greater long-term asset value.

Development projects generally consist of the ground-up development of generic and reusable facilities. Redevelopment projects consist of the permanent change in use of office, warehouse, and shell space into office/laboratory, agtech, or tech office space. We generally will not commence new development projects for aboveground construction of new Class A office/laboratory, agtech, and tech office space without first securing significant pre-leasing for such space, except when there is solid market demand for high-quality Class A properties.

Pre-construction activities include entitlements, permitting, design, site work, and other activities preceding commencement of construction of aboveground building improvements. The advancement of pre-construction efforts is focused on reducing the time required to deliver projects to prospective tenants. These critical activities add significant value for future ground-up development and are required for the vertical construction of buildings. Ultimately, these projects will provide high-quality facilities and are expected to generate significant revenue and cash flows.

Development, redevelopment, and pre-construction spending also includes the following costs: (i) certain tenant improvements and renovations that will be reimbursed, (ii) amounts to bring certain acquired properties up to market standard and/or other costs identified during the acquisition process (generally within two years of acquisition), and (iii) permanent conversion of space for highly flexible, move-in-ready office/laboratory space to foster the growth of promising early- and growth-stage life science companies.

Revenue-enhancing and repositioning capital expenditures represent spending to reposition or significantly change the use of a property, including through improvement in the asset quality from Class B to Class A.

Non-revenue-enhancing capital expenditures represent costs required to maintain the current revenues of a stabilized property, including the associated costs for renewed and re-leased space.

Fixed-charge coverage ratio

Fixed-charge coverage ratio is a non-GAAP financial measure representing the ratio of Adjusted EBITDA to fixed charges. We believe this ratio is useful to investors as a supplemental measure of our ability to satisfy fixed financing obligations and preferred stock dividends. Cash interest is equal to interest expense calculated in accordance with GAAP plus capitalized interest, less amortization of loan fees and debt premiums (discounts).

The following table reconciles interest expense, the most directly comparable financial measure calculated and presented in accordance with GAAP, to cash interest and fixed charges for the three months and years ended December 31, 2021 and 2020 (dollars in thousands):

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Adjusted EBITDA	\$ 407,811	\$ 332,902	\$ 1,517,838	\$ 1,274,187
Interest expense	\$ 34,862	\$ 37,538	\$ 142,165	\$ 171,609
Capitalized interest	44,078	37,589	170,641	125,618
Amortization of loan fees	(2,911)	(2,905)	(11,441)	(10,494)
Amortization of debt premiums	502	869	2,041	3,555
Cash interest and fixed charges	\$ 76,531	\$ 73,091	\$ 303,406	\$ 290,288

Fixed-charge coverage ratio:				
– period annualized	5.3x	4.6x	5.0x	4.4x
– trailing 12 months	5.0x	4.4x	5.0x	4.4x

Gross assets

Gross assets is calculated as total assets plus accumulated depreciation (in thousands):

	December 31,	
	2021	2020
Total assets	\$ 30,219,373	\$ 22,827,878
Accumulated depreciation	3,771,241	3,182,438
Gross assets	\$ 33,990,614	\$ 26,010,316

Initial stabilized yield (unlevered)

Initial stabilized yield is calculated as the estimated amounts of net operating income at stabilization divided by our investment in the property. Our initial stabilized yield excludes the benefit of leverage. Our cash rents related to our value-creation projects are generally expected to increase over time due to contractual annual rent escalations. Our estimates for initial stabilized yields, initial stabilized yields (cash basis), and total costs at completion represent our initial estimates at the commencement of the project. We expect to update this information upon completion of the project, or sooner if there are significant changes to the expected project yields or costs.

- Initial stabilized yield reflects rental income, including contractual rent escalations and any rent concessions over the term(s) of the lease(s), calculated on a straight-line basis.
- Initial stabilized yield (cash basis) reflects cash rents at the stabilization date after initial rental concessions, if any, have elapsed and our total cash investment in the property.

Investment-grade or publicly traded large cap tenants

Investment-grade or publicly traded large cap tenants represent tenants that are investment-grade rated or publicly traded companies with an average daily market capitalization greater than \$10 billion for the twelve months ended December 31, 2021, as reported by Bloomberg Professional Services. Credit ratings from Moody's Investors Service and S&P Global Ratings reflect credit ratings of the tenant's parent entity, and there can be no assurance that a tenant's parent entity will satisfy the tenant's lease obligation upon such tenant's default. We monitor the credit quality and related material changes of our tenants. Material changes that cause a tenant's market capitalization to decrease below \$10 billion, which are not immediately reflected in the twelve-month average, may result in their exclusion from this measure.

Investments in real estate – value-creation square footage currently in rental properties

The square footage presented in the table below includes RSF of buildings in operation as of December 31, 2021, primarily representing lease expirations at recently acquired properties that also have inherent future development or redevelopment opportunities, for which we have the intent to demolish or redevelop the existing property upon expiration of the existing in-place leases and commencement of future construction:

Property/Submarket	Dev/Redev	RSF of lease expirations going into development and redevelopment			
		2022	2023	Thereafter	Total
Near-term projects:					
40 Sylvan Road/Route 128	Redev	—	312,845	—	312,845
651 Gateway Boulevard/South San Francisco	Redev	197,787	—	102,223 ⁽¹⁾	300,010
3825 Fabian Way/Greater Stanford	Redev	250,000	—	—	250,000
3450 Hillview Avenue/Greater Stanford	Redev	42,340	—	—	42,340
11255 and 11355 North Torrey Pines Road/Torrey Pines	Dev	139,135	—	—	139,135
10931 and 10933 North Torrey Pines Road/Torrey Pines	Dev	92,450	—	—	92,450
3301 Monte Villa Parkway	Redev	51,255	—	—	51,255
41 Moore Drive/Research Triangle	Redev	62,490	—	—	62,490
		835,457	312,845	102,223	1,250,525
Intermediate-term projects:					
3460 Hillview Avenue/Greater Stanford	Redev	—	—	34,611	34,611
9444 Waples Street/Sorrento Mesa	Dev	30,855	—	57,525 ⁽¹⁾	88,380
		30,855	—	92,136	122,991
Future projects:					
550 Arsenal Street/Cambridge/Inner Suburbs	Dev	—	—	260,867	260,867
380 and 420 E Street/Seaport Innovation District	Dev	—	—	195,506	195,506
Other/Greater Boston	Redev	—	—	167,549 ⁽¹⁾	167,549
1122 El Camino Real/South San Francisco	Dev	—	—	223,232	223,232
3875 Fabian Way/Greater Stanford	Redev	—	—	228,000	228,000
960 Industrial Road/Greater Stanford	Dev	—	—	110,000	110,000
2475 Hanover Street/Greater Stanford	Redev	—	—	83,980	83,980
219 East 42nd Street/New York City	Dev	—	—	349,947	349,947
10975 and 10995 Torreyana Road/Torrey Pines	Dev	—	—	84,829	84,829
4161 Campus Point Court/University Town Center	Dev	—	159,884	—	159,884
10260 Campus Point Drive/University Town Center	Dev	—	109,164	—	109,164
Sequence District by Alexandria/Sorrento Mesa	Dev/Redev	—	—	689,938	689,938
4025, 4031, and 4045 Sorrento Valley Boulevard/Sorrento Valley	Dev	42,594	—	—	42,594
601 Dexter Avenue North/Lake Union	Dev	—	—	18,680	18,680
830 4th Avenue South/SoDo	Dev	—	—	42,380	42,380
Other/Seattle	Dev	—	84,782	17,655 ⁽¹⁾	102,437
Other	TBD	70,700	—	72,405 ⁽¹⁾	143,105
		113,294	353,830	2,544,968	3,012,092
		979,606	666,675	2,739,327	4,385,608

(1) Includes vacant square footage as of December 31, 2021.

Joint venture financial information

We present components of balance sheet and operating results information related to our real estate joint ventures, which are not presented, or intended to be presented, in accordance with GAAP. We present the proportionate share of certain financial line items as follows: (i) for each real estate joint venture that we consolidate in our financial statements, which are controlled by us through contractual rights or majority voting rights, but of which we own less than 100%, we apply the noncontrolling interest economic ownership percentage to each financial item to arrive at the amount of such cumulative noncontrolling interest share of each component presented; and (ii) for each real estate joint venture that we do not control and do not consolidate, and are instead controlled jointly or by our joint venture partners through contractual rights or majority voting rights, we apply our economic ownership percentage to each financial item to arrive at our proportionate share of each component presented.

The components of balance sheet and operating results information related to our real estate joint ventures do not represent our legal claim to those items. For each entity that we do not wholly own, the joint venture agreement generally determines what equity holders can receive upon capital events, such as sales or refinancing, or in the event of a liquidation. Equity holders are normally entitled to their respective legal ownership of any residual cash from a joint venture only after all liabilities, priority distributions, and claims have been repaid or satisfied.

We believe this information can help investors estimate the balance sheet and operating results information related to our partially owned entities. Presenting this information provides a perspective not immediately available from consolidated financial statements and one that can supplement an understanding of the joint venture assets, liabilities, revenues, and expenses included in our consolidated results.

The components of balance sheet and operating results information related to our real estate joint ventures are limited as an analytical tool as the overall economic ownership interest does not represent our legal claim to each of our joint ventures' assets, liabilities, or results of operations. In addition, joint venture financial information may include financial information related to the unconsolidated real estate joint ventures that we do not control. We believe that in order to facilitate for investors a clear understanding of our operating results and our total assets and liabilities, joint venture financial information should be examined in conjunction with our consolidated statements of operations and balance sheets. Joint venture financial information should not be considered an alternative to our consolidated financial statements, which are presented and prepared in accordance with GAAP.

Mega campus

Mega campuses are cluster campuses that consist of approximately 1 million or more RSF, including operating, active development/redevelopment, and land RSF less operating RSF expected to be demolished. The following table reconciles our operating RSF as of December 31, 2021:

	Operating RSF
Mega campus	24,599,149
Non-mega campus	14,236,643
Total	38,835,792

Mega campus RSF as a percentage of total operating property RSF	63 %
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Net cash provided by operating activities after dividends

Net cash provided by operating activities after dividends includes the deduction for distributions to noncontrolling interests. For purposes of this calculation, changes in operating assets and liabilities are excluded as they represent timing differences.

Net debt and preferred stock to Adjusted EBITDA

Net debt and preferred stock to Adjusted EBITDA is a non-GAAP financial measure that we believe is useful to investors as a supplemental measure of evaluating our balance sheet leverage. Net debt and preferred stock is equal to the sum of total consolidated debt less cash, cash equivalents, and restricted cash, plus preferred stock outstanding as of the end of the period. Refer to the definition of "Adjusted EBITDA and Adjusted EBITDA margin" under Item 7 in this annual report on Form 10-K for further information on the calculation of Adjusted EBITDA.

The following table reconciles debt to net debt and preferred stock and computes the ratio to Adjusted EBITDA as of December 31, 2021 and 2020 (dollars in thousands):

	December 31,	
	2021	2020
Secured notes payable	\$ 205,198	\$ 230,925
Unsecured senior notes payable	8,316,678	7,232,370
Unsecured senior line of credit and commercial paper	269,990	99,991
Unamortized deferred financing costs	65,476	56,312
Cash and cash equivalents	(361,348)	(568,532)
Restricted cash	(53,879)	(29,173)
Preferred stock	—	—
Net debt and preferred stock	<u>\$ 8,442,115</u>	<u>\$ 7,021,893</u>
Adjusted EBITDA:		
– quarter annualized	\$ 1,631,244	\$ 1,331,608
– trailing 12 months	\$ 1,517,838	\$ 1,274,187
Net debt and preferred stock to Adjusted EBITDA:		
– quarter annualized	5.2x	5.3x
– trailing 12 months	5.6x	5.5x

Net operating income, net operating income (cash basis), and operating margin

The following table reconciles net income to net operating income, and to net operating income (cash basis) for the years ended December 31, 2021, 2020, and 2019 (dollars in thousands):

	Year Ended December 31,		
	2021	2020	2019
Net income	\$ 654,282	\$ 827,171	\$ 404,047
Equity in earnings of unconsolidated real estate joint ventures	(12,255)	(8,148)	(10,136)
General and administrative expenses	151,461	133,341	108,823
Interest expense	142,165	171,609	173,675
Depreciation and amortization	821,061	698,104	544,612
Impairment of real estate	52,675	48,078	12,334
Loss on early extinguishment of debt	67,253	60,668	47,570
Gain on sales of real estate	(126,570)	(154,089)	(474)
Investment income	(259,477)	(421,321)	(194,647)
Net operating income	<u>1,490,595</u>	<u>1,355,413</u>	<u>1,085,804</u>
Straight-line rent revenue	(115,145)	(96,676)	(104,235)
Amortization of acquired below-market leases	(54,780)	(57,244)	(29,813)
Net operating income (cash basis)	<u>\$ 1,320,670</u>	<u>\$ 1,201,493</u>	<u>\$ 951,756</u>
Net operating income (from above)	\$ 1,490,595	\$ 1,355,413	\$ 1,085,804
Total revenues	\$ 2,114,150	\$ 1,885,637	\$ 1,531,296
Operating margin	<u>71%</u>	<u>72%</u>	<u>71%</u>

Net operating income is a non-GAAP financial measure calculated as net income, the most directly comparable financial measure calculated and presented in accordance with GAAP, excluding equity in the earnings of our unconsolidated real estate joint ventures, general and administrative expenses, interest expense, depreciation and amortization, impairments of real estate, gains or losses on early extinguishment of debt, gains or losses on sales of real estate, and investment income or loss. We believe net operating income provides useful information to investors regarding our financial condition and results of operations because it primarily reflects those income and expense items that are incurred at the property level. Therefore, we believe net operating income is a useful measure for investors to evaluate the operating performance of our consolidated real estate assets. Net operating income on a cash basis is net operating income adjusted to exclude the effect of straight-line rent and amortization of acquired above- and below-market lease revenue adjustments required by GAAP. We believe that net operating income on a cash basis is helpful to investors as an additional measure of operating performance because it eliminates straight-line rent revenue and the amortization of acquired above- and below-market leases.

Furthermore, we believe net operating income is useful to investors as a performance measure of our consolidated properties because, when compared across periods, net operating income reflects trends in occupancy rates, rental rates, and operating costs, which provide a perspective not immediately apparent from net income or loss. Net operating income can be used to measure the initial stabilized yields of our properties by calculating net operating income generated by a property divided by our investment in the property. Net operating income excludes certain components from net income in order to provide results that are more closely related to the results of operations of our properties. For example, interest expense is not necessarily linked to the operating performance of a real estate asset and is often incurred at the corporate level rather than at the property level. In addition, depreciation and amortization, because of historical cost accounting and useful life estimates, may distort comparability of operating performance at the property level. Impairments of real estate have been excluded in deriving net operating income because we do not consider impairments of real estate to be property-level operating expenses. Impairments of real estate relate to changes in the values of our assets and do not reflect the current operating performance with respect to related revenues or expenses. Our impairments of real estate represent the write-down in the value of the assets to the estimated fair value less cost to sell. These impairments result from investing decisions or a deterioration in market conditions. We also exclude realized and unrealized investment gain or loss, which results from investment decisions that occur at the corporate level related to non-real estate investments in publicly traded companies and certain privately held entities. Therefore, we do not consider these activities to be an indication of operating performance of our real estate assets at the property level. Our calculation of net operating income also excludes charges incurred from changes in certain financing decisions, such as losses on early extinguishment of debt, as these charges often relate to corporate strategy. Property operating expenses included in determining net operating income primarily consist of costs that are related to our operating properties, such as utilities, repairs, and maintenance; rental expense related to ground leases; contracted services, such as janitorial, engineering, and landscaping; property taxes and insurance; and property-level salaries. General and administrative expenses consist primarily of accounting and corporate compensation, corporate insurance, professional fees, office rent, and office supplies that are incurred as part of corporate office management. We calculate operating margin as net operating income divided by total revenues.

We believe that in order to facilitate for investors a clear understanding of our operating results, net operating income should be examined in conjunction with net income or loss as presented in our consolidated statements of operations. Net operating income should not be considered as an alternative to net income or loss as an indication of our performance, nor as an alternative to cash flows as a measure of our liquidity or our ability to make distributions.

Operating statistics

We present certain operating statistics related to our properties, including number of properties, RSF, occupancy percentage, leasing activity, and contractual lease expirations as of the end of the period. We believe these measures are useful to investors because they facilitate an understanding of certain trends for our properties. We compute the number of properties, RSF, occupancy percentage, leasing activity, and contractual lease expirations at 100% for all properties in which we have an investment, including properties owned by our consolidated and unconsolidated real estate joint ventures. For operating metrics based on annual rental revenue, refer to the definition of "Annual rental revenue" in this "Non-GAAP measures and definitions" section.

Same property comparisons

As a result of changes within our total property portfolio during the comparative periods presented, including changes from assets acquired or sold, properties placed into development or redevelopment, and development or redevelopment properties recently placed into service, the consolidated total income from rentals, as well as rental operating expenses in our operating results, can show significant changes from period to period. In order to supplement an evaluation of our results of operations over a given quarterly or annual period, we analyze the operating performance for all consolidated properties that were fully operating for the entirety of the comparative periods presented, referred to as same properties. We separately present quarterly and year-to-date same property results to align with the interim financial information required by the SEC in our management's discussion and analysis of our financial condition and results of operations. These same properties are analyzed separately from properties acquired subsequent to the first day in the earliest comparable quarterly or year-to-date period presented, properties that underwent development or redevelopment at any time during the comparative periods, unconsolidated real estate joint ventures, properties classified as held for sale, and corporate entities (legal entities performing general and administrative functions), which are excluded from same property results. Additionally, termination fees, if any, are excluded from the results of same properties. Refer to the "Same properties" subsection in the "Results of operations" section within this Item 7 in this annual report on Form 10-K for additional information.

Stabilized occupancy date

The stabilized occupancy date represents the estimated date on which the project is expected to reach occupancy of 95% or greater.

Tenant recoveries

Tenant recoveries represent revenues comprising reimbursement of real estate taxes, insurance, utilities, repairs and maintenance, common area expenses, and other operating expenses and earned in the period during which the applicable expenses are incurred and the tenant's obligation to reimburse us arises.

We classify rental revenues and tenant recoveries generated through the leasing of real estate assets within revenue in income from rentals in our consolidated statements of operations. We provide investors with a separate presentation of rental revenues and tenant recoveries in the "Comparison of results for the year ended December 31, 2021 to the year ended December 31, 2020" subsection of the "Results of operations" section within this Item 7 because we believe it promotes investors' understanding of our operating results. We believe that the presentation of tenant recoveries is useful to investors as a supplemental measure of our ability to recover operating expenses under our triple net leases, including recoveries of utilities, repairs and maintenance, insurance, property taxes, common area expenses, and other operating expenses, and of our ability to mitigate the effect to net income for any significant variability to components of our operating expenses.

The following table reconciles income from rentals to tenant recoveries for the years ended December 31, 2021, 2020, and 2019 (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Income from rentals	\$ 2,108,249	\$ 1,878,208	\$ 1,516,864
Rental revenues	(1,618,592)	(1,471,840)	(1,165,788)
Tenant recoveries	\$ 489,657	\$ 406,368	\$ 351,076

Total market capitalization

Total market capitalization is equal to the outstanding shares of common stock at the end of the period multiplied by the closing price on the last trading day of the period (i.e., total equity capitalization), plus total debt outstanding at period-end.

Unencumbered net operating income as a percentage of total net operating income

Unencumbered net operating income as a percentage of total net operating income is a non-GAAP financial measure that we believe is useful to investors as a performance measure of the results of operations of our unencumbered real estate assets as it reflects those income and expense items that are incurred at the unencumbered property level. Unencumbered net operating income is derived from assets classified in continuing operations, which are not subject to any mortgage, deed of trust, lien, or other security interest, as of the period for which income is presented.

The following table summarizes unencumbered net operating income as a percentage of total net operating income for the years ended December 31, 2021, 2020, and 2019 (dollars in thousands):

	Year Ended December 31,		
	2021	2020	2019
Unencumbered net operating income	\$ 1,444,307	\$ 1,295,520	\$ 1,024,619
Encumbered net operating income	46,288	59,893	61,185
Total net operating income	<u>\$ 1,490,595</u>	<u>\$ 1,355,413</u>	<u>\$ 1,085,804</u>
Unencumbered net operating income as a percentage of total net operating income	97%	96%	94%

Weighted-average shares of common stock outstanding – diluted

From time to time, we enter into capital market transactions, including forward equity sales agreements (“Forward Agreements”), to fund acquisitions, to fund construction of our highly leased development and redevelopment projects, and for general working capital purposes. We are required to consider the potential dilutive effect of our forward equity sales agreements under the treasury stock method while the forward equity sales agreements are outstanding. As of December 31, 2021, we had no Forward Agreements outstanding. Refer to Note 15 – “Stockholders’ equity” to our consolidated financial statements under Item 15 in this annual report on Form 10-K for additional information.

The weighted-average shares of common stock outstanding used in calculating EPS – diluted, funds from operations per share – diluted, and funds from operations per share – diluted, as adjusted, for the years ended December 31, 2021, 2020, and 2019, are calculated as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Weighted-average shares of common stock outstanding:			
Basic shares for EPS	146,921	126,106	112,204
Outstanding forward equity sales agreements	539	384	320
Series D Convertible Preferred Stock	—	—	—
Diluted shares for EPS	<u>147,460</u>	<u>126,490</u>	<u>112,524</u>
Basic shares for EPS	146,921	126,106	112,204
Outstanding forward equity sales agreements	539	384	320
Series D Convertible Preferred Stock	—	—	442
Diluted shares for FFO	<u>147,460</u>	<u>126,490</u>	<u>112,966</u>
Basic shares for EPS	146,921	126,106	112,204
Outstanding forward equity sales agreements	539	384	320
Series D Convertible Preferred Stock	—	—	—
Diluted shares for FFO, as adjusted	<u>147,460</u>	<u>126,490</u>	<u>112,524</u>

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest rate risk

The primary market risk to which we believe we may be exposed is interest rate risk, which may result from many factors, including government monetary and tax policies, domestic and international economic and political considerations, and other factors that are beyond our control.

In order to modify and manage the interest rate characteristics of our outstanding debt and to limit the effects of interest rate risks on our operations, we may utilize a variety of financial instruments, including interest rate hedge agreements, caps, floors, and other interest rate exchange contracts. The use of these types of instruments to hedge a portion of our exposure to changes in interest rates may carry additional risks, such as counterparty credit risk and the legal enforceability of hedge agreements. As of December 31, 2021, we did not have any outstanding interest rate hedge agreements.

Our future earnings and fair values relating to our outstanding debt are primarily dependent upon prevalent market rates of interest. The following table illustrates the effect of a 1% change in interest rates, assuming an interest rate floor of 0%, on our fixed- and variable-rate debt as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Annualized effect on future earnings due to variable-rate debt:		
Rate increase of 1%	\$ (527)	\$ (407)
Rate decrease of 1%	\$ 106	\$ 89
Effect on fair value of total consolidated debt:		
Rate increase of 1%	\$ (811,028)	\$ (700,861)
Rate decrease of 1%	\$ 944,392	\$ 795,966

These amounts are determined by considering the effect of the hypothetical interest rates on our borrowings as of December 31, 2021 and 2020, respectively. These analyses do not consider the effects of the reduced level of overall economic activity that could exist in such an environment. Furthermore, in the event of a change of such magnitude, we would consider taking actions to further mitigate our exposure to the change. Because of the uncertainty of the specific actions that would be taken and their possible effects, the sensitivity analyses assume no changes in our capital structure.

Equity price risk

We have exposure to equity price market risk because of our equity investments in publicly traded companies and privately held entities. All of our investments in actively traded public companies are reflected in the consolidated balance sheets at fair value. Our investments in privately held entities that report NAV per share are measured at fair value using NAV as a practical expedient to fair value. Our equity investments in privately held entities that do not report NAV per share are measured at cost less impairments, adjusted for observable price changes during the period. Changes in fair value of public investments, changes in NAV per share reported by privately held entities, and observable price changes of privately held entities that do not report NAV per share are classified as investment income in our consolidated statements of operations. There is no assurance that future declines in value will not have a material adverse effect on our future results of operations. The following table illustrates the effect that a 10% change in the value of our equity investments would have on earnings as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Equity price risk:		
Fair value increase of 10%	\$ 187,656	\$ 161,111
Fair value decrease of 10%	\$ (187,656)	\$ (161,111)

Foreign currency exchange rate risk

We have exposure to foreign currency exchange rate risk related to our subsidiaries operating in Canada and Asia. The functional currencies of our foreign subsidiaries are the local currencies in each respective country. Gains or losses resulting from the translation of our foreign subsidiaries' balance sheets and statements of operations are classified in accumulated other comprehensive income (loss) as a separate component of total equity and are excluded from net income (loss). Gains or losses will be reflected in our consolidated statements of operations when there is a sale or partial sale of our investment in these operations or upon a complete or substantially complete liquidation of the investment. The following table illustrates the effect that a 10% change in foreign currency rates relative to the U.S. dollar would have on our potential future earnings and on the fair value of our net investment in foreign subsidiaries based on our current operating assets outside the U.S. as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Effect on potential future earnings due to foreign currency exchange rate:		
Rate increase of 10%	\$ 120	\$ 118
Rate decrease of 10%	\$ (120)	\$ (118)
Effect on the fair value of net investment in foreign subsidiaries due to foreign currency exchange rate:		
Rate increase of 10%	\$ 18,790	\$ 9,740
Rate decrease of 10%	\$ (18,790)	\$ (9,740)

This sensitivity analysis assumes a parallel shift of all foreign currency exchange rates with respect to the U.S. dollar; however, foreign currency exchange rates do not typically move in such a manner, and actual results may differ materially.

Our exposure to market risk elements for the year ended December 31, 2021 was consistent with the risk elements presented above, including the effects of changes in interest rates, equity prices, and foreign currency exchange rates.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item is included as a separate section in this annual report on Form 10-K. Refer to “Item 15. Exhibits and financial statement schedules.”

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

As of December 31, 2021, we had performed an evaluation, under the supervision of our Co-Chief Executive Officers (“Co-CEOs”) and our Chief Financial Officer (“CFO”), of the effectiveness of the design and operation of our disclosure controls and procedures. These controls and procedures have been designed to ensure that information required for disclosure is recorded, processed, summarized, and reported within the requisite time periods. Based on our evaluation, the Co-CEOs and the CFO concluded that our disclosure controls and procedures were effective as of December 31, 2021.

Changes in internal control over financial reporting

There has not been any change in our internal control over financial reporting during the three months ended December 31, 2021, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management’s annual report on internal control over financial reporting

The management of Alexandria Real Estate Equities, Inc. and its subsidiaries (the “Company”) is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended, and is a process designed by, or under the supervision of, the Co-CEOs and the CFO and effected by the Company’s Board of Directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with GAAP. The Company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures are being made only in accordance with the authorizations of the Company’s management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has assessed the effectiveness of the Company’s internal control over financial reporting as of December 31, 2021 and 2020. In making its assessment, management has utilized the criteria set forth by the Committee of Sponsoring Organizations (“COSO 2013”) of the Treadway Commission in *Internal Control – Integrated Framework* (2013 framework). Management concluded that based on its assessment, the Company’s internal control over financial reporting was effective as of December 31, 2021. The effectiveness of our internal control over financial reporting as of December 31, 2021, has been audited by Ernst & Young LLP, an independent registered accounting firm, as stated in its report, which is included herein.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Alexandria Real Estate Equities, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Alexandria Real Estate Equities, Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Alexandria Real Estate Equities, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income, changes in stockholders' equity and noncontrolling interests and cash flows for each of the three years in the period ended December 31, 2021 and the related notes and financial statement schedule, and our report dated January 31, 2022, expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying management's annual report on internal control over financial reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Los Angeles, California
January 31, 2022

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE**

The information required by this Item is incorporated herein by reference from our definitive proxy statement for our 2022 annual meeting of stockholders to be filed pursuant to Regulation 14A within 120 days after the end of our fiscal year (the "2022 Proxy Statement") under the captions "Board of Directors and Executive Officers" and "Corporate Governance Guidelines and Code of Ethics."

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated herein by reference from our 2022 Proxy Statement under the caption "Executive Compensation."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth information on the Company's equity compensation plan as of December 31, 2021:

Equity Compensation Plan Information

	Number of securities to be issued upon exercise of outstanding options, warrants, and rights	Weighted-average exercise price of outstanding options, warrants, and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity Compensation Plan Approved by Stockholders — Amended and Restated 1997 Stock Award and Incentive Plan	—	—	2,556,301

The other information required by this Item is incorporated herein by reference from our 2022 Proxy Statement under the caption "Security Ownership of Certain Beneficial Owners and Management."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated herein by reference from our 2022 Proxy Statement under the captions "Certain Relationships and Related Transactions," "Policies and Procedures with Respect to Related-Person Transactions," and "Director Independence."

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated herein by reference from our 2022 Proxy Statement under the caption "Fees Billed by Independent Registered Public Accountants."

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) and (2) Financial Statements and Financial Statement Schedule

The financial statements and financial statement schedule required by this Item are included as a separate section in this annual report on Form 10-K beginning on page F-1.

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID: 00042)	1
Audited Consolidated Financial Statements of Alexandria Real Estate Equities, Inc.:	
Consolidated Balance Sheets as of December 31, 2021 and 2020	3
Consolidated Financial Statements for the Years Ended December 31, 2021, 2020, and 2019:	
Consolidated Statements of Operations	4
Consolidated Statements of Comprehensive Income	5
Consolidated Statements of Changes in Stockholders' Equity and Noncontrolling Interests	6
Consolidated Statements of Cash Flows	8
Notes to Consolidated Financial Statements	10
Schedule III – Consolidated Financial Statement Schedule of Real Estate and Accumulated Depreciation	52

(a)(3) Exhibits

Exhibit Number	Exhibit Title	Incorporated by Reference to:	Date Filed
3.1*	Articles of Amendment and Restatement of the Company	Form 10-Q	August 14, 1997
3.2*	Certificate of Correction of the Company	Form 10-Q	August 14, 1997
3.3*	Articles of Amendment of the Company, dated May 10, 2017	Form 8-K	May 12, 2017
3.4*	Articles Supplementary, dated June 9, 1999, relating to the 9.50% Series A Cumulative Redeemable Preferred Stock	Form 10-Q	August 13, 1999
3.5*	Articles Supplementary, dated February 10, 2000, relating to the election to be subject to Subtitle 8 of Title 3 of the Maryland General Corporation Law	Form 8-K	February 10, 2000
3.6*	Articles Supplementary, dated February 10, 2000, relating to the Series A Junior Participating Preferred Stock	Form 8-K	February 10, 2000
3.7*	Articles Supplementary, dated January 18, 2002, relating to the 9.10% Series B Cumulative Redeemable Preferred Stock	Form 8-A	January 18, 2002
3.8*	Articles Supplementary, dated June 22, 2004, relating to the 8.375% Series C Cumulative Redeemable Preferred Stock	Form 8-A	June 28, 2004
3.9*	Articles Supplementary, dated March 25, 2008, relating to the 7.00% Series D Cumulative Convertible Preferred Stock	Form 8-K	March 25, 2008
3.10*	Articles Supplementary, dated March 12, 2012, relating to the 6.45% Series E Cumulative Redeemable Preferred Stock	Form 8-K	March 14, 2012
3.11*	Articles Supplementary, dated May 10, 2017, relating to Reclassified Preferred Stock	Form 8-K	May 12, 2017
3.12*	Amended and Restated Bylaws of the Company (Amended July 27, 2018)	Form 8-K	August 2, 2018
4.1*	Specimen certificate representing shares of common stock	Form 10-Q	May 5, 2011
4.2*	Indenture, dated as of February 29, 2012, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and the Bank of New York Mellon Trust Company, N.A., as Trustee	Form 8-K	February 29, 2012
4.3*	Supplemental Indenture No. 4, dated as of July 18, 2014, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and the Bank of New York Mellon Trust Company, N.A., as Trustee	Form 8-K	July 18, 2014

Exhibit Number	Exhibit Title	Incorporated by Reference to:	Date Filed
4.4*	Form of 4.500% Senior Note due 2029 (included in Exhibit 4.3 above)	Form 8-K	July 18, 2014
4.5*	Indenture, dated as of November 17, 2015, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Wilmington Trust, National Association, as Trustee	Form 8-K	November 17, 2015
4.6*	Supplemental Indenture No. 1, dated as of November 17, 2015, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Wilmington Trust, National Association, as Trustee	Form 8-K	November 17, 2015
4.7*	Form of 4.30% Senior Note due 2026 (included in Exhibit 4.6 above)	Form 8-K	November 17, 2015
4.8*	Supplemental Indenture No. 2, dated as of June 10, 2016, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Wilmington Trust, National Association, as Trustee	Form 8-K	June 10, 2016
4.9*	Form of 3.95% Senior Note due 2027 (included in Exhibit 4.8 above)	Form 8-K	June 10, 2016
4.10*	Indenture, dated as of March 3, 2017, among the Company, as Issuer Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	March 3, 2017
4.11*	Supplemental Indenture No. 1, dated as of March 3, 2017, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	March 3, 2017
4.12*	Form of 3.95% Senior Note due 2028 (included in Exhibit 4.11 above)	Form 8-K	March 3, 2017
4.13*	Supplemental Indenture No. 2, dated as of November 20, 2017, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	November 20, 2017
4.14*	Form of 3.45% Senior Note due 2025 (included in Exhibit 4.13 above)	Form 8-K	November 20, 2017
4.15*	Supplemental Indenture No. 3, dated as of June 21, 2018, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	June 21, 2018
4.16*	Supplemental Indenture No. 4, dated as of June 21, 2018, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	June 21, 2018
4.17*	Form of 4.700% Senior Note Due 2030 (included in Exhibit 4.16 above)	Form 8-K	June 21, 2018
4.18*	Supplemental Indenture No. 5, dated as of March 21, 2019, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	March 21, 2019
4.19*	Form of 3.800% Senior Note Due 2026 (included in Exhibit 4.18 above)	Form 8-K	March 21, 2019
4.20*	Supplemental Indenture No. 6, dated as of March 21, 2019, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	March 21, 2019
4.21*	Form of 4.850% Senior Note Due 2049 (included in Exhibit 4.20 above)	Form 8-K	March 21, 2019
4.22*	Supplemental Indenture No. 8, dated as of July 15, 2019, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	July 15, 2019
4.23*	Form of 3.375% Senior Note Due 2031 (included in Exhibit 4.22 above)	Form 8-K	July 15, 2019
4.24*	Supplemental Indenture No. 9, dated as of July 15, 2019, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	July 15, 2019
4.25*	Supplemental Indenture No. 11 dated as of September 12, 2019, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	September 12, 2019
4.26*	Form of 4.000% Senior Note Due 2050 (included in Exhibit 4.25 above)	Form 8-K	July 15, 2019
4.27*	Supplemental Indenture No. 10, dated as of September 12, 2019, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	September 12, 2019
4.28*	Form of 2.750% Senior Note Due 2029 (included in Exhibit 4.27 above)	Form 8-K	September 12, 2019

Exhibit Number	Exhibit Title	Incorporated by Reference to:	Date Filed
4.29*	Supplemental Indenture No. 12, dated as of March 26, 2020, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Branch Banking and Trust Company, as Trustee	Form 8-K	March 26, 2020
4.30*	Form of 4.900% Senior Note due 2030 (included in Exhibit 4.29 above)	Form 8-K	March 26, 2020
4.31*	Supplemental Indenture No. 13, dated August 5, 2020, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Trust Bank, as Trustee	Form 8-K	August 5, 2020
4.32*	Form of 1.875% Senior Notes due 2033 (included in Exhibit 4.31 above)	Form 8-K	August 5, 2020
4.33*	Supplemental Indenture No. 14, dated February 18, 2021, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Trust Bank, as Trustee	Form 8-K	February 18, 2021
4.34*	Form of 2.000 % Senior Notes due 2032 (included in Exhibit 4.33 above)	Form 8-K	February 18, 2021
4.35*	Supplemental Indenture No. 15, dated February 18, 2021, among the Company, as Issuer, Alexandria Real Estate Equities, L.P., as Guarantor, and Trust Bank, as Trustee	Form 8-K	February 18, 2021
4.36*	Form of 3.000 % Senior Notes due 2051 (included in Exhibit 4.35 above)	Form 8-K	February 18, 2021
4.37*	Description of Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	Form 10-K	February 4, 2020
10.1*	Credit Agreement, effective as of October 6, 2020, among the Company, as the Borrower, Alexandria Real Estate Equities, L.P., as a Guarantor, Citibank, N.A., as Administrative Agent, and the Other Lenders Party thereto, Citibank, N.A., BofA Securities, Inc., JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, RBC Capital Markets, Bank of Nova Scotia, Mizuho Bank, Ltd., Sumitomo Mitsui Banking Corporation, and U.S. Bank National Association, as Joint Lead Arrangers, Citibank, N.A., BofA Securities, Inc., JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, and RBC Capital Markets, as Joint Bookrunners, Bank of America, N.A., JPMorgan Chase Bank, N.A., Goldman Sachs Bank USA, and Royal Bank of Canada, as Co-Syndication Agents, and Bank of Nova Scotia, Mizuho Bank, Ltd., Sumitomo Mitsui Banking Corporation, U.S. Bank National Association, Bank of the West, Barclays Bank PLC, Capital One, N.A., BBVA USA f/k/a Compass Bank, Fifth Third Bank, PNC Bank, National Association, Regions Bank, TD Bank, N.A., and Truist Bank, as Co-Documentation Agents	Form 10-K	February 1, 2021
10.2*	⁽¹⁾ Amended and Restated 1997 Stock Award and Incentive Plan of the Company	Form 8-K	June 9, 2020
10.3*	⁽¹⁾ Form of Non-Employee Director Stock Option Agreement for use in connection with options issued pursuant to the Amended and Restated 1997 Stock Award and Incentive Plan	Form S-11	May 5, 1997
10.4*	⁽¹⁾ Form of Incentive Stock Option Agreement for use in connection with options issued pursuant to the Amended and Restated 1997 Stock Award and Incentive Plan	Form S-11	May 5, 1997
10.5*	⁽¹⁾ Form of Nonqualified Stock Option Agreement for use in connection with options issued pursuant to the Amended and Restated 1997 Stock Award and Incentive Plan	Form S-11	May 5, 1997
10.6*	⁽¹⁾ Form of Employee Restricted Stock Agreement for use in connection with shares of restricted stock issued to employees pursuant to the Amended and Restated 1997 Stock Award and Incentive Plan	Form 10-K	January 30, 2018
10.7*	⁽¹⁾ Form of Employee Restricted Stock Agreement (U.S. Affiliate) for use in connection with shares of restricted stock issued to employees pursuant to the Amended and Restated 1997 Stock Award and Incentive Plan	Form 10-K	January 30, 2018
10.8*	⁽¹⁾ Form of Independent Director Restricted Stock Agreement for use in connection with shares of restricted stock issued to directors pursuant to the Amended and Restated 1997 Stock Award and Incentive Plan	Form 10-K	January 30, 2018
10.9*	⁽¹⁾ Form of Independent Contractor Restricted Stock Agreement for use in connection with shares of restricted stock issued to independent contractors pursuant to the Amended and Restated 1997 Stock Award and Incentive Plan	Form 10-K	January 30, 2018

Exhibit Number	Exhibit Title	Incorporated by Reference to:	Date Filed
10.10*	(1) The Company's 2000 Deferred Compensation Plan, amended and restated effective as of January 1, 2010	Form 10-K	March 1, 2011
10.11*	(1) The Company's 2000 Deferred Compensation Plan for Directors, amended and restated effective as of January 1, 2010	Form 10-K	March 1, 2011
10.12*	(1) Amended and Restated Executive Employment Agreement, effective as of January 1, 2015, by and between the Company and Joel S. Marcus	Form 8-K	April 7, 2015
10.13*	(1) Letter Amendment to Amended and Restated Executive Employment Agreement, dated July 3, 2017, by and between the Company and Joel S. Marcus	Form 8-K	July 3, 2017
10.14*	(1) Letter Amendment to Amended and Restated Executive Employment Agreement, entered into on March 20, 2018, by and between the Company and Joel S. Marcus	Form 10-Q	May 1, 2018
10.15*	(1) Letter Amendment to Amended and Restated Executive Employment Agreement, dated January 15, 2019, by and between the Company and Joel S. Marcus	Form 8-K	January 18, 2019
10.16*	(1) Letter Amendment to Amended and Restated Executive Employment Agreement, dated June 8, 2020, by and between the Company and Joel S. Marcus	Form 10-Q	July 27, 2020
10.17*	(1) Fifth Amended and Restated Executive Employment Agreement between the Company and Stephen A. Richardson, entered into on March 20, 2018 and effective as of April 23, 2018	Form 10-Q	May 1, 2018
10.18*	(1) Third Amended and Restated Executive Employment Agreement between the Company and Peter M. Moglia, entered into on May 22, 2018 and effective as of May 22, 2018	Form 10-Q	July 31, 2018
10.19*	(1) Fourth Amended and Restated Executive Employment Agreement between the Company and Dean A. Shigenaga, entered into on March 20, 2018 and effective as of April 23, 2018	Form 10-Q	May 1, 2018
10.20*	(1) Executive Employment Agreement between the Company and Daniel J. Ryan, entered into on May 22, 2018 and effective as of May 22, 2018	Form 10-Q	July 31, 2018
10.21*	(1) Second Amended and Restated Executive Employment Agreement between the Company and John H. Cunningham, entered into on July 5, 2017 and effective as of July 5, 2017	Form 10-K	February 1, 2021
10.22*	(1) Second Amended and Restated Executive Employment Agreement between the Company and Vincent R. Ciruzzi, Jr., entered into on October 1, 2015 and effective as of October 1, 2015	Form 10-K	February 1, 2021
10.23	(1) Executive Employment Agreement between the Company and Hunter Kass, entered into on January 1, 2021 and effective as of January 1, 2021	N/A	Filed herewith
10.24*	(1) Amended and Restated Consulting Agreement, dated as of September 30, 2011, between the Company and James H. Richardson	Form 10-Q	November 9, 2011
10.25	(1) Summary of Director Compensation Arrangements	N/A	Filed herewith
10.26*	(1) Anniversary Bonus Plan of the Company	Form 8-K	June 17, 2010
10.27*	(1) Form of Indemnification Agreement between the Company and each of its directors and officers	Form 10-K	March 1, 2011
14.1	The Company's Business Integrity Policy and Procedures for Reporting Non-Compliance (code of ethics pursuant to Item 406 of Regulation S-K)	N/A	Filed herewith
21.1	List of Subsidiaries of the Company	N/A	Filed herewith
22.1	List of Guarantor Subsidiaries of Alexandria Real Estate Equities, Inc.	N/A	Filed herewith
23.1	Consent of Ernst & Young LLP	N/A	Filed herewith
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	N/A	Filed herewith
31.2	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	N/A	Filed herewith
31.3	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	N/A	Filed herewith

Exhibit Number	Exhibit Title	Incorporated by Reference to:	Date Filed
31.4	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	N/A	Filed herewith
32.0	Certification of Principal Executive Officers and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	N/A	Filed herewith
101.1	The following materials from the Company's annual report on Form 10-K for the year ended December 31, 2021, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2021 and 2020, (ii) Consolidated Statements of Operations for the years ended December 31, 2021, 2020, and 2019, (iii) Consolidated Statements of Comprehensive Income for the years ended December 31, 2021, 2020, and 2019, (iv) Consolidated Statements of Changes in Stockholders' Equity and Noncontrolling Interests for the years ended December 31, 2021, 2020, and 2019, (v) Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020, and 2019, (vi) Notes to Consolidated Financial Statements, and (vii) Schedule III - Consolidated Financial Statement Schedule of Real Estate and Accumulated Depreciation of the Company.	N/A	Filed herewith
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)	N/A	Filed herewith

(*) Incorporated by reference.

(1) Management contract or compensatory arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this annual report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

ALEXANDRIA REAL ESTATE EQUITIES, INC.

Dated: January 31, 2022

By: /s/ Joel S. Marcus

Joel S. Marcus
Executive Chairman
(Principal Executive Officer)

/s/ Stephen A. Richardson

Stephen A. Richardson
Co-Chief Executive Officer
(Principal Executive Officer)

/s/ Peter M. Moglia

Peter M. Moglia
Co-Chief Executive Officer and Co-Chief Investment Officer
(Principal Executive Officer)

KNOW ALL THOSE BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Joel S. Marcus, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments to this annual report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, if any, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent of their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Joel S. Marcus</u> Joel S. Marcus	Executive Chairman (Principal Executive Officer)	January 31, 2022
<u>/s/ Stephen A. Richardson</u> Stephen A. Richardson	Co-Chief Executive Officer (Principal Executive Officer)	January 31, 2022
<u>/s/ Peter M. Moglia</u> Peter M. Moglia	Co-Chief Executive Officer and Co-Chief Investment Officer (Principal Executive Officer)	January 31, 2022
<u>/s/ Dean A. Shigenaga</u> Dean A. Shigenaga	President and Chief Financial Officer (Principal Financial Officer)	January 31, 2022
<u>/s/ Andres R. Gavinet</u> Andres R. Gavinet	Chief Accounting Officer (Principal Accounting Officer)	January 31, 2022
<u>/s/ Steven R. Hash</u> Steven R. Hash	Lead Director	January 31, 2022
<u>/s/ James P. Cain</u> James P. Cain	Director	January 31, 2022
<u>/s/ Maria C. Freire</u> Maria C. Freire	Director	January 31, 2022
<u>/s/ Jennifer Friel Goldstein</u> Jennifer Friel Goldstein	Director	January 31, 2022
<u>/s/ Richard H. Klein</u> Richard H. Klein	Director	January 31, 2022
<u>/s/ Michael A. Woronoff</u> Michael A. Woronoff	Director	January 31, 2022

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Alexandria Real Estate Equities, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Alexandria Real Estate Equities, Inc. (the Company), as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income, changes in stockholders' equity and noncontrolling interests and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and financial statement schedule listed in the Index at Item 15 (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated January 31, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Recognition of acquired real estate – Purchase price accounting

Description of the Matter As more fully disclosed in Notes 2 and 3 to the consolidated financial statements, during 2021, the Company completed the acquisition of 87 properties for a total purchase price of \$5.5 billion. The transactions were accounted for as asset acquisitions, and the purchase prices were allocated based on the relative fair values of the assets acquired (including land, buildings and improvements, right-of-use assets, and the intangible value of acquired above-market leases, acquired in-place leases, tenant relationships and other intangible assets) and liabilities assumed (including the intangible value of acquired below-market leases and other intangible liabilities). The fair value of tangible and intangible assets and liabilities is based on available comparable market information, including estimated replacement costs, rental rates, recent market transactions, and estimated cash flow projections that utilize appropriate discount and capitalization rates. Estimates of future cash flows are based on a number of factors, including the historical operating results, known and anticipated trends, and market or economic conditions, that may affect the property.

Auditing the Company's estimate of the fair value of the acquired tangible and intangible assets and liabilities involves significant estimation uncertainty due to the judgment used by management in selecting key assumptions based on recent comparable transactions or market data, which are primarily unobservable inputs, and the sensitivity of the estimates to changes in assumptions. The allocation of purchase price to the components of properties acquired could have an effect on the Company's net income due to the useful depreciable and amortizable lives applicable to each component and the recognition and classification of the related depreciation or amortization expense in the Company's consolidated statements of operations.

How we Addressed the Matter in Our Audit Our audit procedures related to the key assumptions utilized in the Company's purchase price accounting for acquired real estate included the following procedures, among others:

We tested the design and operating effectiveness of controls over the Company's process for determining and reviewing the key inputs and assumptions used in estimating the fair value of acquired assets and liabilities and allocating purchase price to the various components.

We evaluated the incorporation of the key assumptions in the purchase price accounting model and recalculated the model's results. To test the fair values of acquired tangible and intangible assets and liabilities used in the purchase price allocation, we performed procedures to evaluate the valuation methods and significant assumptions used by management. We evaluated the completeness and accuracy of the underlying data supporting the determination of the various inputs. Our internal valuation specialists assisted us in evaluating the methodology used by the Company and considered the consistency of the land and building values, estimated replacement costs, market rental rates, ground lease rates and discount rates with external data sources.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1994.

Los Angeles, California
January 31, 2022

Alexandria Real Estate Equities, Inc.
Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	December 31,	
	2021	2020
Assets		
Investments in real estate	\$ 24,980,669	\$ 18,092,372
Investments in unconsolidated real estate joint ventures	38,483	332,349
Cash and cash equivalents	361,348	568,532
Restricted cash	53,879	29,173
Tenant receivables	7,379	7,333
Deferred rent	839,335	722,751
Deferred leasing costs	402,898	272,673
Investments	1,876,564	1,611,114
Other assets	1,658,818	1,191,581
Total assets	\$ 30,219,373	\$ 22,827,878
Liabilities, Noncontrolling Interests, and Equity		
Secured notes payable	\$ 205,198	\$ 230,925
Unsecured senior notes payable	8,316,678	7,232,370
Unsecured senior line of credit and commercial paper	269,990	99,991
Accounts payable, accrued expenses, and other liabilities	2,210,410	1,669,832
Dividends payable	183,847	150,982
Total liabilities	11,186,123	9,384,100
Commitments and contingencies		
Redeemable noncontrolling interests	9,612	11,342
Alexandria Real Estate Equities, Inc.'s stockholders' equity:		
Common stock, \$0.01 par value per share, 200,000,000 shares authorized as of December 31, 2021 and 2020; 158,043,880 and 136,690,329 shares issued and outstanding as of December 31, 2021 and 2020, respectively	1,580	1,367
Additional paid-in capital	16,195,256	11,730,970
Accumulated other comprehensive loss	(7,294)	(6,625)
Alexandria Real Estate Equities, Inc.'s stockholders' equity	16,189,542	11,725,712
Noncontrolling interests	2,834,096	1,706,724
Total equity	19,023,638	13,432,436
Total liabilities, noncontrolling interests, and equity	\$ 30,219,373	\$ 22,827,878

The accompanying notes are an integral part of these consolidated financial statements.

Alexandria Real Estate Equities, Inc.
Consolidated Statements of Operations
(In thousands, except per share amounts)

	Year Ended December 31,		
	2021	2020	2019
Revenues:			
Income from rentals	\$ 2,108,249	\$ 1,878,208	\$ 1,516,864
Other income	5,901	7,429	14,432
Total revenues	2,114,150	1,885,637	1,531,296
Expenses:			
Rental operations	623,555	530,224	445,492
General and administrative	151,461	133,341	108,823
Interest	142,165	171,609	173,675
Depreciation and amortization	821,061	698,104	544,612
Impairment of real estate	52,675	48,078	12,334
Loss on early extinguishment of debt	67,253	60,668	47,570
Total expenses	1,858,170	1,642,024	1,332,506
Equity in earnings of unconsolidated real estate joint ventures	12,255	8,148	10,136
Investment income	259,477	421,321	194,647
Gain on sales of real estate	126,570	154,089	474
Net income	654,282	827,171	404,047
Net income attributable to noncontrolling interests	(83,035)	(56,212)	(40,882)
Net income attributable to Alexandria Real Estate Equities, Inc.'s stockholders	571,247	770,959	363,165
Dividends on preferred stock	—	—	(3,204)
Preferred stock redemption charge	—	—	(2,580)
Net income attributable to unvested restricted stock awards	(7,848)	(10,168)	(6,386)
Net income attributable to Alexandria Real Estate Equities, Inc.'s common stockholders	<u>\$ 563,399</u>	<u>\$ 760,791</u>	<u>\$ 350,995</u>
Net income per share attributable to Alexandria Real Estate Equities, Inc.'s common stockholders:			
Basic	\$ 3.83	\$ 6.03	\$ 3.13
Diluted	\$ 3.82	\$ 6.01	\$ 3.12

The accompanying notes are an integral part of these consolidated financial statements.

Alexandria Real Estate Equities, Inc.
Consolidated Statements of Comprehensive Income
(In thousands)

	Year Ended December 31,		
	2021	2020	2019
Net income	\$ 654,282	\$ 827,171	\$ 404,047
Other comprehensive (loss) income			
Unrealized losses on interest rate hedge agreements:			
Unrealized interest rate hedge losses during the period	—	—	(1,763)
Reclassification of amortization to interest expense included in net income	—	—	(1,777)
Reclassification of losses related to terminated interest rate hedge instruments to interest expense included in net income	—	—	1,702
Unrealized losses on interest rate hedge agreements, net	—	—	(1,838)
Unrealized (losses) gains on foreign currency translation:			
Unrealized foreign currency translation (losses) gains arising during the period	(669)	3,124	2,524
Unrealized (losses) gains on foreign currency translation, net	(669)	3,124	2,524
Total other comprehensive (loss) income	(669)	3,124	686
Comprehensive income	653,613	830,295	404,733
Less: comprehensive income attributable to noncontrolling interests	(83,035)	(56,212)	(40,882)
Comprehensive income attributable to Alexandria Real Estate Equities, Inc.'s stockholders	<u>\$ 570,578</u>	<u>\$ 774,083</u>	<u>\$ 363,851</u>

The accompanying notes are an integral part of these consolidated financial statements.

Alexandria Real Estate Equities, Inc.
Consolidated Statements of Changes in Stockholders' Equity and Noncontrolling Interests
(Dollars in thousands)

Alexandria Real Estate Equities, Inc.'s Stockholders' Equity										
	7.00% Series D Cumulative Convertible Preferred Stock	Number of Common Shares	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Comprehensive Other Income	Noncontrolling Interests	Total Equity	Redeemable Noncontrolling Interests	
Balance as of December 31, 2018	\$ 64,336	111,011,816	\$ 1,110	\$ 7,286,954	\$ —	\$ (10,435)	\$ 541,963	\$ 7,883,928	\$ 10,786	
Net income	—	—	—	—	363,165	—	40,007	403,172	875	
Total other comprehensive income	—	—	—	—	—	686	—	686	—	
Contributions from and sales of noncontrolling interests	—	—	—	381,162	—	—	753,777	1,134,939	1,469	
Distributions to noncontrolling interests	—	—	—	—	—	—	(47,395)	(47,395)	(830)	
Issuance of common stock	—	8,723,076	87	1,216,358	—	—	—	1,216,445	—	
Issuance pursuant to stock plan	—	666,836	7	67,906	—	—	—	67,913	—	
Taxes related to net settlement of equity awards	—	(179,008)	(2)	(25,475)	—	—	—	(25,477)	—	
Repurchases of 7.00% Series D preferred stock	(6,875)	—	—	215	(2,580)	—	—	(9,240)	—	
Conversion of 7.00% Series D preferred stock	(57,461)	577,595	6	57,355	—	—	—	(100)	—	
Dividends declared on common stock (\$4.00 per share)	—	—	—	—	(463,964)	—	—	(463,964)	—	
Dividends declared on preferred stock (\$1.3125 per share)	—	—	—	—	(3,204)	—	—	(3,204)	—	
Cumulative effect of adjustment upon adoption of lease ASUs on January 1, 2019	—	—	—	—	(3,525)	—	—	(3,525)	—	
Reclassification of distributions in excess of earnings	—	—	—	(110,108)	110,108	—	—	—	—	
Balance as of December 31, 2019	—	120,800,315	1,208	8,874,367	—	(9,749)	1,288,352	10,154,178	12,300	
Net income	—	—	—	—	770,959	—	55,309	826,268	903	
Total other comprehensive income	—	—	—	—	—	3,124	—	3,124	—	
Contributions from and sales of noncontrolling interests	—	—	—	267,432	—	—	449,726	717,158	281	
Distributions to and redemption of noncontrolling interests	—	—	—	—	—	—	(86,663)	(86,663)	(2,142)	
Issuance of common stock	—	15,337,916	153	2,315,709	—	—	—	2,315,862	—	
Issuance pursuant to stock plan	—	688,599	7	83,992	—	—	—	83,999	—	
Taxes related to net settlement of equity awards	—	(136,501)	(1)	(21,321)	—	—	—	(21,322)	—	
Dividends declared on common stock (\$4.24 per share)	—	—	—	—	(557,684)	—	—	(557,684)	—	
Cumulative effect of adjustment upon adoption of credit loss ASU on January 1, 2020	—	—	—	—	(2,484)	—	—	(2,484)	—	
Reclassification of earnings in excess of distributions	—	—	—	210,791	(210,791)	—	—	—	—	
Balance as of December 31, 2020	\$ —	136,690,329	\$ 1,367	\$ 11,730,970	\$ —	\$ (6,625)	\$ 1,706,724	\$ 13,432,436	\$ 11,342	

Alexandria Real Estate Equities, Inc.
Consolidated Statements of Changes in Stockholders' Equity and Noncontrolling Interests (continued)
(Dollars in thousands)

	Alexandria Real Estate Equities, Inc.'s Stockholders' Equity						
	Number of Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income	Noncontrolling Interests	Total Equity
Balance as of December 31, 2020	136,690,329	\$ 1,367	\$11,730,970	\$ —	\$ (6,625)	\$ 1,706,724	\$13,432,436
Net income	—	—	—	571,247	—	82,169	653,416
Total other comprehensive loss	—	—	—	—	(669)	—	(669)
Contributions from and sales of noncontrolling interests	—	—	989,393	—	—	1,157,668	2,147,061
Distributions to and redemption of noncontrolling interests	—	—	—	—	—	(112,465)	(112,465)
Issuance of common stock	20,827,052	208	3,528,889	—	—	—	3,529,097
Issuance pursuant to stock plan	709,737	7	97,926	—	—	—	97,933
Taxes related to net settlement of equity awards	(183,238)	(2)	(34,336)	—	—	—	(34,338)
Dividends declared on common stock (\$4.48 per share)	—	—	—	(688,833)	—	—	(688,833)
Reclassification of distributions in excess of earnings	—	—	(117,586)	117,586	—	—	—
Balance as of December 31, 2021	158,043,880	\$ 1,580	\$16,195,256	\$ —	\$ (7,294)	\$ 2,834,096	\$19,023,638
							\$ 9,612

The accompanying notes are an integral part of these consolidated financial statements.

Alexandria Real Estate Equities, Inc.
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2021	2020	2019
Operating Activities			
Net income	\$ 654,282	\$ 827,171	\$ 404,047
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	821,061	698,104	544,612
Impairment of real estate	52,675	48,078	12,334
Gain on sales of real estate	(126,570)	(154,089)	(474)
Loss on early extinguishment of debt	67,253	60,668	47,570
Equity in earnings of unconsolidated real estate joint ventures	(12,255)	(8,148)	(10,136)
Distributions of earnings from unconsolidated real estate joint ventures	20,350	5,908	2,796
Amortization of loan fees	11,441	10,494	9,105
Amortization of debt premiums	(2,041)	(3,555)	(3,777)
Amortization of acquired above- and below-market leases	(54,780)	(57,244)	(29,813)
Deferred rent	(115,145)	(96,676)	(104,235)
Stock compensation expense	48,669	43,502	43,640
Investment income	(259,477)	(421,321)	(194,647)
Changes in operating assets and liabilities:			
Tenant receivables	(44)	2,804	(897)
Deferred leasing costs	(131,560)	(61,067)	(54,455)
Other assets	(24,591)	(10,997)	(20,825)
Accounts payable, accrued expenses, and other liabilities	60,929	(1,122)	39,012
Net cash provided by operating activities	1,010,197	882,510	683,857
Investing Activities			
Proceeds from sales of real estate	190,576	747,020	6,619
Additions to real estate	(2,089,849)	(1,445,171)	(1,224,541)
Purchases of real estate	(5,434,652)	(2,570,693)	(2,259,778)
Change in escrow deposits	(161,696)	7,408	(18,107)
Sales of interest in unconsolidated real estate joint ventures	394,952	—	—
Acquisitions of interest in unconsolidated real estate joint venture	(9,048)	—	—
Investments in unconsolidated real estate joint ventures	(13,666)	(3,444)	(102,081)
Return of capital from unconsolidated real estate joint ventures	—	20,225	14
Additions to non-real estate investments	(408,564)	(174,655)	(190,778)
Sales of and distributions from non-real estate investments	424,623	141,149	147,332
Net cash used in investing activities	\$ (7,107,324)	\$ (3,278,161)	\$ (3,641,320)

Alexandria Real Estate Equities, Inc.
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2021	2020	2019
Financing Activities			
Borrowings from secured notes payable	\$ 10,005	\$ —	\$ —
Repayments of borrowings from secured notes payable	(17,979)	(84,104)	(306,199)
Payment for the defeasance of secured note payable	—	(32,865)	—
Proceeds from issuance of unsecured senior notes payable	1,743,716	1,697,651	2,721,169
Repayments of unsecured senior notes payable	(650,000)	(500,000)	(950,000)
Borrowings from unsecured senior line of credit	3,521,000	2,700,000	5,056,000
Repayments of borrowings from unsecured senior line of credit	(3,521,000)	(3,084,000)	(4,880,000)
Proceeds from issuance under commercial paper program	30,951,300	23,539,400	2,233,000
Repayments of borrowings from commercial paper program	(30,781,300)	(23,439,400)	(2,233,000)
Repayments of borrowings from unsecured senior bank term loan	—	—	(350,000)
Premium paid for early extinguishment of debt	(66,829)	(54,385)	(41,351)
Payments of loan fees	(18,938)	(32,309)	(27,182)
Taxes paid related to net settlement of equity awards	(34,338)	(21,322)	(25,477)
Repurchase of 7.00% Series D cumulative convertible preferred stock	—	—	(9,240)
Proceeds from issuance of common stock	3,529,097	2,315,862	1,216,445
Dividends on common stock	(655,968)	(532,980)	(447,029)
Dividends on preferred stock	—	—	(4,141)
Contributions from and sales of noncontrolling interests	2,026,486	367,613	1,022,712
Distributions to and purchases of noncontrolling interests	(118,891)	(88,805)	(48,225)
Net cash provided by financing activities	5,916,361	2,750,356	2,927,482
Effect of foreign exchange rate changes on cash, cash equivalents, and restricted cash	(1,712)	311	540
Net (decrease) increase in cash, cash equivalents, and restricted cash	(182,478)	355,016	(29,441)
Cash, cash equivalents, and restricted cash as of the beginning of period	597,705	242,689	272,130
Cash, cash equivalents, and restricted cash as of the end of period	\$ 415,227	\$ 597,705	\$ 242,689
Supplemental Disclosure and Non-Cash Investing and Financing Activities:			
Cash paid during the period for interest, net of interest capitalized	\$ 139,471	\$ 161,351	\$ 146,165
Accrued construction for current-period additions to real estate	\$ 474,751	\$ 275,454	\$ 220,773
Assumption of secured notes payable in connection with purchase of properties	\$ —	\$ —	\$ (28,200)
Right-of-use asset	\$ 103,860	\$ 87,554	\$ 269,189
Lease liability	\$ (103,860)	\$ (87,554)	\$ (275,175)
Consolidation of real estate assets in connection with our acquisition of partner's interest in unconsolidated real estate joint venture	\$ 19,613	\$ —	\$ —
Assumption of secured note payable in connection with acquisition of partner's interest in unconsolidated real estate joint venture	\$ (14,558)	\$ —	\$ —
Deferred purchase price in connection with acquisitions of real estate	\$ (81,119)	\$ —	\$ —
Assignment of secured notes payable in connection with sale of real estate	\$ 28,200	\$ —	\$ —
Contribution of assets from real estate joint venture partner	\$ 118,750	\$ 350,000	\$ 115,167
Issuance of noncontrolling interest to joint venture partner	\$ (118,750)	\$ (292,930)	\$ —
Issuance of common stock for conversion of 7.00% Series D preferred stock	\$ —	\$ —	\$ 57,461

The accompanying notes are an integral part of these consolidated financial statements.

Alexandria Real Estate Equities, Inc.
Notes to Consolidated Financial Statements

1. ORGANIZATION AND BASIS OF PRESENTATION

Alexandria Real Estate Equities, Inc. (NYSE:ARE), an S&P 500® urban office REIT, is the first, longest-tenured, and pioneering owner, operator, and developer uniquely focused on collaborative life science, agtech, and technology campuses in AAA innovation cluster locations, with a total market capitalization of \$44.0 billion as of December 31, 2021, and an asset base in North America of 67.0 million SF. As used in this annual report on Form 10-K, references to the “Company,” “Alexandria,” “ARE,” “we,” “us,” and “our” refer to Alexandria Real Estate Equities, Inc. and its consolidated subsidiaries. The accompanying consolidated financial statements include the accounts of Alexandria Real Estate Equities, Inc. and its consolidated subsidiaries. All significant intercompany balances and transactions have been eliminated.

Any references to our market capitalization, number or quality of buildings or tenants, quality of location, square footage, number of leases, or occupancy percentage, and any amounts derived from these values in these notes to consolidated financial statements are unaudited.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Consolidation

On an ongoing basis, as circumstances indicate the need for reconsideration, we evaluate each legal entity that is not wholly owned by us in accordance with the consolidation guidance. Our evaluation considers all of our variable interests, including equity ownership, as well as fees paid to us for our involvement in the management of each partially owned entity. To fall within the scope of the consolidation guidance, an entity must meet both of the following criteria:

- The entity has a legal structure that has been established to conduct business activities and to hold assets; such entity can be in the form of a partnership, limited liability company, or corporation, among others; and
- We have a variable interest in the legal entity – i.e., variable interests that are contractual, such as equity ownership, or other financial interests that change with changes in the fair value of the entity's net assets.

If an entity does not meet both criteria above, we apply other accounting literature, such as the cost or equity method of accounting. If an entity does meet both criteria above, we evaluate such entity for consolidation under either the variable interest model if the legal entity meets any of the following characteristics to qualify as a VIE, or under the voting model for all other legal entities that are not VIEs.

A legal entity is determined to be a VIE if it has any of the following three characteristics:

- 1) The entity does not have sufficient equity to finance its activities without additional subordinated financial support;
- 2) The entity is established with non-substantive voting rights (i.e., the entity deprives the majority economic interest holder(s) of voting rights); or
- 3) The equity holders, as a group, lack the characteristics of a controlling financial interest. Equity holders meet this criterion if they lack any of the following:
 - The power, through voting rights or similar rights, to direct the activities of the entity that most significantly influence the entity's economic performance, as evidenced by:
 - Substantive participating rights in day-to-day management of the entity's activities; or
 - Substantive kick-out rights over the party responsible for significant decisions;
 - The obligation to absorb the entity's expected losses; or
 - The right to receive the entity's expected residual returns.

Our real estate joint ventures consist of limited partnerships or limited liability companies. For an entity structured as a limited partnership or a limited liability company, our evaluation of whether the equity holders (equity partners other than the general partner or the managing member of a joint venture) lack the characteristics of a controlling financial interest includes the evaluation of whether the limited partners or non-managing members (the noncontrolling equity holders) lack both substantive participating rights and substantive kick-out rights, defined as follows:

- Participating rights provide the noncontrolling equity holders the ability to direct significant financial and operating decisions made in the ordinary course of business that most significantly influence the entity's economic performance.
- Kick-out rights allow the noncontrolling equity holders to remove the general partner or managing member without cause.

If we conclude that any of the three characteristics of a VIE are met, including that the equity holders lack the characteristics of a controlling financial interest because they lack both substantive participating rights and substantive kick-out rights, we conclude that the entity is a VIE and evaluate it for consolidation under the variable interest model.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Variable interest model

If an entity is determined to be a VIE, we evaluate whether we are the primary beneficiary. The primary beneficiary analysis is a qualitative analysis based on power and benefits. We consolidate a VIE if we have both power and benefits — that is, (i) we have the power to direct the activities of a VIE that most significantly influence the VIE's economic performance (power), and (ii) we have the obligation to absorb losses of or the right to receive benefits from the VIE that could potentially be significant to the VIE (benefits). We consolidate VIEs whenever we determine that we are the primary beneficiary. Refer to Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements for information on specific joint ventures that qualify as VIEs. If we have a variable interest in a VIE but are not the primary beneficiary, we account for our investment using the equity method of accounting.

Voting model

If a legal entity fails to meet any of the three characteristics of a VIE (i.e., insufficiency of equity, existence of non-substantive voting rights, or lack of a controlling financial interest), we then evaluate such entity under the voting model. Under the voting model, we consolidate the entity if we determine that we, directly or indirectly, have greater than 50% of the voting shares and that other equity holders do not have substantive participating rights. Refer to Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements for further information on our unconsolidated real estate joint ventures that qualify for evaluation under the voting model.

Use of estimates

The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, and equity; the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements; and the amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates.

Reportable segment

We are engaged in the business of providing space for lease to life science, agtech, and technology tenants. Our properties are similar in that they provide space for lease to the aforementioned industries, consist of improvements that are generic and reusable, are primarily located in AAA urban innovation cluster locations, and have similar economic characteristics. Our chief operating decision makers review financial information for our entire consolidated operations when making decisions related to assessing our operating performance, and review financial information for our individual properties when determining how to allocate resources related to capital expenditures. We have aggregated the properties into one reportable segment as the properties share similar long-term economic characteristics and have other similarities, including the fact that they are operated using consistent business strategies, are typically located in major metropolitan areas, and have similar tenant mixes. The financial information disclosed herein represents all of the financial information related to our one reportable segment.

Investments in real estate

Evaluation of business combination or asset acquisition

We evaluate each acquisition of real estate or in-substance real estate (including equity interests in entities that predominantly hold real estate assets) to determine whether the integrated set of assets and activities acquired meets the definition of a business and needs to be accounted for as a business combination. An acquisition of an integrated set of assets and activities that does not meet the definition of a business is accounted for as an asset acquisition. If either of the following criteria is met, the integrated set of assets and activities acquired would not qualify as a business:

- Substantially all of the fair value of the gross assets acquired is concentrated in either a single identifiable asset or a group of similar identifiable assets; or
- The integrated set of assets and activities is lacking, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs (i.e., revenue generated before and after the transaction).

An acquired process is considered substantive if:

- The process includes an organized workforce (or includes an acquired contract that provides access to an organized workforce) that is skilled, knowledgeable, and experienced in performing the process;
- The process cannot be replaced without significant cost, effort, or delay; or
- The process is considered unique or scarce.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Generally, our acquisitions of real estate or in-substance real estate do not meet the definition of a business because substantially all of the fair value is concentrated in a single identifiable asset or group of similar identifiable assets (i.e., land, buildings, and related intangible assets) or because the acquisition does not include a substantive process in the form of an acquired workforce or an acquired contract that cannot be replaced without significant cost, effort, or delay. When evaluating acquired service or management contracts, we consider the nature of the services performed, the terms of the contract relative to similar arm's-length contracts, and the availability of comparable vendors in evaluating whether the acquired contract constitutes a substantive process.

Recognition of real estate acquired

We evaluate each acquisition of real estate or in-substance real estate (including equity interests in entities that predominantly hold real estate assets) to determine whether the integrated set of assets and activities acquired meets the definition of a business and needs to be accounted for as a business combination. An acquisition of an integrated set of assets and activities that does not meet the definition of a business is accounted for as an asset acquisition.

For acquisitions of real estate or in-substance real estate that are accounted for as business combinations, we allocate the acquisition consideration (excluding acquisition costs) to the assets acquired, liabilities assumed, noncontrolling interests, and previously existing ownership interests at fair value as of the acquisition date. Assets include intangible assets such as tenant relationships, acquired in-place leases, and favorable intangibles associated with in-place leases in which we are the lessor. Liabilities include unfavorable intangibles associated with in-place leases in which we are the lessor. In addition, for acquired in-place finance or operating leases in which we are the lessee, acquisition consideration is allocated to lease liabilities and related right-of-use assets, adjusted to reflect favorable or unfavorable terms of the lease when compared with market terms. Any excess (deficit) of the consideration transferred relative to the fair value of the net assets acquired is accounted for as goodwill (bargain purchase gain). Acquisition costs related to business combinations are expensed as incurred.

Generally, we expect that acquisitions of real estate or in-substance real estate will not meet the definition of a business because substantially all of the fair value is concentrated in a single identifiable asset or group of similar identifiable assets (i.e., land, buildings, and related intangible assets). The accounting model for asset acquisitions is similar to the accounting model for business combinations, except that the acquisition consideration (including acquisition costs) is allocated to the individual assets acquired and liabilities assumed on a relative fair value basis. Any excess (deficit) of the consideration transferred relative to the sum of the fair value of the assets acquired and liabilities assumed is allocated to the individual assets and liabilities based on their relative fair values. As a result, asset acquisitions do not result in the recognition of goodwill or a bargain purchase gain. Incremental and external direct acquisition costs (such as legal and other third-party services) are capitalized.

We exercise judgment to determine the key assumptions used to allocate the purchase price of real estate acquired among its components. The allocation of the consideration to the various components of properties acquired during the year can have an effect on our net income due to the useful depreciable and amortizable lives applicable to each component and the recognition of the related depreciation and amortization expense in our consolidated statements of operations. We apply judgment in utilizing available comparable market information to assess relative fair value. We assess the relative fair values of tangible and intangible assets and liabilities based on available comparable market information, including estimated replacement costs, rental rates, and recent market transactions. In addition, we may use estimated cash flow projections that utilize appropriate discount and capitalization rates. Estimates of future cash flows are based on a number of factors, including the historical operating results, known and anticipated trends, and market/economic conditions that may affect the property.

The value of tangible assets acquired is based upon our estimation of fair value on an "as if vacant" basis. The value of acquired in-place leases includes the estimated costs during the hypothetical lease-up period and other costs that would have been incurred in the execution of similar leases under the market conditions at the acquisition date of the acquired in-place lease. If there is a bargain fixed-rate renewal option for the period beyond the noncancelable lease term of an in-place lease, we evaluate intangible factors such as the business conditions in the industry in which the lessee operates, the economic conditions in the area in which the property is located, and the ability of the lessee to sublease the property during the renewal term, in order to determine the likelihood that the lessee will renew. When we determine there is reasonable assurance that such bargain purchase option will be exercised, we consider the option in determining the intangible value of such lease and its related amortization period. We also recognize the relative fair values of assets acquired, the liabilities assumed, and any noncontrolling interest in acquisitions of less than a 100% interest when the acquisition constitutes a change in control of the acquired entity.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The values allocated to buildings and building improvements, land improvements, tenant improvements, and equipment are depreciated on a straight-line basis using the shorter of the respective ground lease term, estimated useful life, or up to 40 years, for buildings and building improvements; estimated life, or up to 20 years, for land improvements; the respective lease term or estimated useful life for tenant improvements; and the shorter of the lease term or estimated useful life for equipment. The values of the right-of-use assets are amortized on a straight-line basis over the remaining lease term. The values of acquired in-place leases and associated favorable intangibles (i.e., acquired above-market leases) are classified in other assets in our consolidated balance sheets and are amortized over the remaining terms of the related leases as a reduction of income from rentals in our consolidated statements of operations. The values of unfavorable intangibles (i.e., acquired below-market leases) associated with acquired in-place leases are classified in accounts payable, accrued expenses, and other liabilities in our consolidated balance sheets and are amortized over the remaining terms of the related leases as an increase in income from rentals in our statements of operations.

Capitalized project costs

We capitalize project costs, including pre-construction costs, interest, property taxes, insurance, and other costs directly related and essential to the development, redevelopment, pre-construction, or construction of a project. Capitalization of development, redevelopment, pre-construction, and construction costs is required while activities are ongoing to prepare an asset for its intended use. Fluctuations in our development, redevelopment, pre-construction, and construction activities could result in significant changes to total expenses and net income. Costs incurred after a project is substantially complete and ready for its intended use are expensed as incurred. Should development, redevelopment, pre-construction, or construction activity cease, interest, property taxes, insurance, and certain other costs would no longer be eligible for capitalization and would be expensed as incurred. Expenditures for repairs and maintenance are expensed as incurred.

Real estate sales

A property is classified as held for sale when all of the following criteria for a plan of sale have been met: (i) management, having the authority to approve the action, commits to a plan to sell the property; (ii) the property is available for immediate sale in its present condition, subject only to terms that are usual and customary; (iii) an active program to locate a buyer and other actions required to complete the plan to sell have been initiated; (iv) the sale of the property is probable and is expected to be completed within one year; (v) the property is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and (vi) actions necessary to complete the plan of sale indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn. Depreciation of assets ceases upon designation of a property as held for sale.

If the disposal of a property represents a strategic shift that has (or will have) a major effect on our operations or financial results, such as (i) a major line of business, (ii) a major geographic area, (iii) a major equity method investment, or (iv) other major parts of an entity, then the operations of the property, including any interest expense directly attributable to it, are classified as discontinued operations in our consolidated statements of operations, and amounts for all prior periods presented are reclassified from continuing operations to discontinued operations. The disposal of an individual property generally will not represent a strategic shift and therefore will typically not meet the criteria for classification as a discontinued operation.

We recognize gains or losses on real estate sales in accordance with the accounting standard on the derecognition of nonfinancial assets arising from contracts with noncustomers. Our ordinary output activities consist of the leasing of space to our tenants in our operating properties, not the sales of real estate. Therefore, sales of real estate (in which we are the seller) qualify as contracts with noncustomers. In our transactions with noncustomers, we apply certain recognition and measurement principles consistent with our method of recognizing revenue arising from contracts with customers. Derecognition of the asset is based on the transfer of control. If a real estate sales contract includes our ongoing involvement with the property, then we evaluate each promised good or service under the contract to determine whether it represents a separate performance obligation, constitutes a guarantee, or prevents the transfer of control. If a good or service is considered a separate performance obligation, an allocated portion of the transaction price is recognized as revenue as we transfer the related good or service to the buyer.

The recognition of gain or loss on the sale of a partial interest also depends on whether we retain a controlling or noncontrolling interest in the property. If we retain a controlling interest in the property upon completion of the sale, we continue to reflect the asset at its book value, record a noncontrolling interest for the book value of the partial interest sold, and recognize additional paid-in capital for the difference between the consideration received and the partial interest at book value. Conversely, if we retain a noncontrolling interest upon completion of the sale of a partial interest of real estate, we would recognize a gain or loss as if 100% of the real estate were sold.

Impairment of long-lived assets

Prior to and subsequent to the end of each quarter, we review current activities and changes in the business conditions of all of our long-lived assets to determine the existence of any triggering events or impairment indicators requiring an impairment analysis. If triggering events or impairment indicators are identified, we review an estimate of the future undiscounted cash flows, including, if necessary, a probability-weighted approach if multiple outcomes are under consideration.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Long-lived assets to be held and used, including our rental properties, CIP, land held for development, right-of-use assets related to operating leases in which we are the lessee, and intangibles, are individually evaluated for impairment when conditions exist that may indicate that the carrying amount of a long-lived asset may not be recoverable. The carrying amount of a long-lived asset to be held and used is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Triggering events or impairment indicators for long-lived assets to be held and used are assessed by project and include significant fluctuations in estimated net operating income, occupancy changes, significant near-term lease expirations, current and historical operating and/or cash flow losses, construction costs, estimated completion dates, rental rates, and other market factors. We assess the expected undiscounted cash flows based upon numerous factors, including, but not limited to, construction costs, available market information, current and historical operating results, known trends, current market/economic conditions that may affect the asset, and our assumptions about the use of the asset, including, if necessary, a probability-weighted approach if multiple outcomes are under consideration.

Upon determination that an impairment has occurred, a write-down is recognized to reduce the carrying amount of the asset to its estimated fair value. If an impairment charge is not required to be recognized, the recognition of depreciation or amortization is adjusted prospectively, as necessary, to reduce the carrying amount of the asset to its estimated disposition value over the remaining period that the asset is expected to be held and used. We may adjust depreciation of properties that are expected to be disposed of or redeveloped prior to the end of their useful lives.

We use the held for sale impairment model for our properties classified as held for sale, which is different from the held and used impairment model. Under the held for sale impairment model, an impairment charge is recognized if the carrying amount of the long-lived asset classified as held for sale exceeds its fair value less cost to sell. Because of these two different models, it is possible for a long-lived asset previously classified as held and used to require the recognition of an impairment charge upon classification as held for sale.

International operations

In addition to operating properties in the U.S., we have six operating properties in Canada and one operating property in China. The functional currency for our subsidiaries operating in the U.S. is the U.S. dollar. The functional currencies for our foreign subsidiaries are the local currencies in each respective country. The assets and liabilities of our foreign subsidiaries are translated into U.S. dollars at the exchange rate in effect as of the financial statement date. Revenue and expense accounts of our foreign subsidiaries are translated using the weighted-average exchange rate for the periods presented. Gains or losses resulting from the translation are classified in accumulated other comprehensive income (loss) as a separate component of total equity and are excluded from net income.

Whenever a foreign investment meets the criteria for classification as held for sale, we evaluate the recoverability of the investment under the held for sale impairment model. We may recognize an impairment charge if the carrying amount of the investment exceeds its fair value less cost to sell. In determining an investment's carrying amount, we consider its net book value and any cumulative unrealized foreign currency translation adjustment related to the investment.

The appropriate amounts of foreign exchange rate gains or losses classified in accumulated other comprehensive income (loss) are reclassified to net income when realized upon the sale of our investment or upon the complete or substantially complete liquidation of our investment.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Investments

We hold investments in publicly traded companies and privately held entities primarily involved in the life science, agtech, and technology industries. As a REIT, we generally limit our ownership of each individual entity's voting stock to less than 10%. We account for our investments as follows:

Investments in publicly traded companies

Our investments in publicly traded companies are classified as investments with readily determinable fair values and are presented at fair value in our consolidated balance sheets, with changes in fair value recognized in net income. The fair values for our investments in publicly traded companies are determined based on sales prices or quotes available on securities exchanges.

Investments in privately held companies

Our investments in privately held entities without readily determinable fair values consist of (i) investments in privately held entities that report NAV per share, and (ii) investments in privately held entities that do not report NAV per share. These investments are accounted for as follows:

Investments in privately held entities that report NAV per share

Investments in privately held entities that report NAV per share, such as our privately held investments in limited partnerships, are presented at fair value using NAV as a practical expedient, with changes in fair value recognized in net income. We use NAV per share reported by limited partnerships generally without adjustment, unless we are aware of information indicating that the NAV reported by a limited partnership does not accurately reflect the fair value of the investment at our reporting date. We disclose the timing of liquidation of an investee's assets and the date when redemption restrictions will lapse (or indicate if this timing is unknown) if the investee has communicated this information to us or has announced it publicly.

Investments in privately held entities that do not report NAV per share

Investments in privately held entities that do not report NAV per share are accounted for using a measurement alternative, under which these investments are measured at cost, adjusted for observable price changes and impairments, with changes recognized in net income.

An observable price arises from an orderly transaction for an identical or similar investment of the same issuer, which is observed by an investor without expending undue cost and effort. Observable price changes result from, among other things, equity transactions of the same issuer executed during the reporting period, including subsequent equity offerings or other reported equity transactions related to the same issuer. To determine whether these transactions are indicative of an observable price change, we evaluate, among other factors, whether these transactions have similar rights and obligations, including voting rights, distribution preferences, and conversion rights to the investments we hold.

Investments accounted for under the equity method

We account for investments under the equity method whenever we are deemed to have significant influence over the investee's operating and financial policies. To evaluate whether we exert significant influence over an entity, we consider the following criteria, among others: the extent of our ownership and voting rights, whether we have a board seat, and whether we participate in the policy-making process. Under the equity method of accounting, we initially recognize our investment at cost and subsequently adjust the carrying amount of the investment for our share of earnings or losses reported by the investee, distributions received, and other-than-temporary impairments. For more information about our investments accounted for under the equity method, refer to Note 7 – "Investments" to our consolidated financial statements.

Investments in privately held entities that do not report NAV per share and equity method investments

We monitor investments in privately held entities that do not report NAV per share and equity method investments throughout the year for new developments, including operating results, prospects and results of clinical trials, new product initiatives, new collaborative agreements, capital-raising events, and merger and acquisition activities. These investments are evaluated on the basis of a qualitative assessment for indicators of impairment by monitoring the presence of the following triggering events or impairment indicators: (i) a significant deterioration in the earnings performance, asset quality, or business prospects of the investee; (ii) a significant adverse change in the regulatory, economic, or technological environment of the investee, (iii) a significant adverse change in the general market condition, including the research and development of technology and products that the investee is bringing or attempting to bring to the market, (iv) significant concerns about the investee's ability to continue as a going concern, or (v) a decision by investors to cease providing support or reduce their financial commitment to the investee. If such indicators are present, we estimate the investment's fair value and recognize an impairment charge in an amount equal to the investment's carrying value in excess of its estimated fair value.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Investment income/loss recognition and classification

We recognize both realized and unrealized gains and losses in our consolidated statements of operations, classified within investment income. Unrealized gains and losses represent:

- (1) changes in fair value for investments in publicly traded companies;
- (2) changes in NAV as a practical expedient to estimate fair value for investments in privately held entities that report NAV per share;
- (3) observable price changes for investments in privately held entities that do not report NAV per share; and
- (4) our share of unrealized gains or losses reported by our equity method investees.

Realized gains and losses on our investments represent the difference between proceeds received upon disposition of investments and their historical or adjusted cost. For our equity method investments, realized gains and losses represent our share of realized gains or losses reported by the investee. Impairments are realized losses, which result in an adjusted cost, and represent charges to reduce the carrying values of investments in privately held entities that do not report NAV per share and equity method investments, if impairments are deemed other than temporary, to their estimated fair value.

Revenues

The table below provides details of our consolidated total revenues for the years ended December 31, 2021 and 2020 (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Income from rentals:			
Revenues subject to the lease accounting standard:			
Operating leases	\$ 2,081,362	\$ 1,854,427	\$ 1,465,692
Direct financing and sales-type leases	3,489	2,469	2,421
Revenues subject to the lease accounting standard	2,084,851	1,856,896	1,468,113
Revenues subject to the revenue recognition accounting standard	23,398	21,312	48,751
Income from rentals	2,108,249	1,878,208	1,516,864
Other income	5,901	7,429	14,432
Total revenues	\$ 2,114,150	\$ 1,885,637	\$ 1,531,296

During the year ended December 31, 2021, revenues that were subject to the lease accounting standard aggregated \$2.1 billion and represented 98.6% of our total revenues. During the year ended December 31, 2021, our total revenues also included \$29.3 million, or 1.4%, subject to other accounting guidance. Our other income consisted primarily of construction management fees and interest income earned during the year ended December 31, 2021. For a detailed discussion related to our revenue streams, refer to the "Lease accounting" and "Recognition of revenue arising from contracts with customers" sections within this Note 2 to our consolidated financial statements.

Lease accounting

Definition and classification of a lease

When we enter into a contract or amend an existing contract, we evaluate whether the contract meets the definition of a lease. To meet the definition of a lease, the contract must meet all three criteria:

- (i) One party (lessor) must hold an identified asset;
- (ii) The counterparty (lessee) must have the right to obtain substantially all of the economic benefits from the use of the asset throughout the period of the contract; and
- (iii) The counterparty (lessee) must have the right to direct the use of the identified asset throughout the period of the contract.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

We classify our leases as either finance leases or operating leases if we are the lessee, or sales-type, direct financing, or operating leases if we are the lessor. We use the following criteria to determine if a lease is a finance lease (as a lessee) or sales-type or direct financing lease (as a lessor):

- (i) Ownership is transferred from lessor to lessee by the end of the lease term;
- (ii) An option to purchase is reasonably certain to be exercised;
- (iii) The lease term is for the major part of the underlying asset's remaining economic life;
- (iv) The present value of lease payments equals or exceeds substantially all of the fair value of the underlying asset; or
- (v) The underlying asset is specialized and is expected to have no alternative use at the end of the lease term.

If we meet any of the above criteria, we account for the lease as a finance, a sales-type, or a direct financing lease. If we do not meet any of the criteria, we account for the lease as an operating lease.

A lease is accounted for as a sales-type lease if it is considered to transfer control of the underlying asset to the lessee. A lease is accounted for as a direct financing lease if risks and rewards are conveyed without the transfer of control, which is normally indicated by the existence of a residual value guarantee from an unrelated third party other than the lessee.

This classification will determine the method of recognition of the lease:

- For an operating lease, we recognize income from rentals if we are the lessor, or rental operations expense if we are the lessee, over the term of the lease on a straight-line basis.
- For a sales-type or direct financing lease, we recognize the income from rentals, or for a finance lease, we recognize rental operations expense, over the term of the lease using the effective interest method.
- For a sales-type lease, if we determine the fair value of the leased property differs from its carrying amount, a gain or loss may be recognized at inception of the lease.

Lessor accounting

Costs to execute leases

We capitalize initial direct costs, which represent only incremental costs of a lease that would not have been incurred if the lease had not been obtained. Costs that we incur to negotiate or arrange a lease, regardless of its outcome, such as for fixed employee compensation, tax, or legal advice to negotiate lease terms, and other costs, are expensed as incurred.

Operating leases

We account for the revenue from our lease contracts by utilizing the single component accounting policy. This policy requires us to account for, by class of underlying asset, the lease component and nonlease component(s) associated with each lease as a single component if two criteria are met:

- (i) The timing and pattern of transfer of the lease component and the nonlease component(s) are the same; and
- (ii) The lease component would be classified as an operating lease if it were accounted for separately.

Lease components consist primarily of fixed rental payments, which represent scheduled rental amounts due under our leases, and contingent rental payments. Nonlease components consist primarily of tenant recoveries representing reimbursements of rental operating expenses under our triple net lease structure, including recoveries for utilities, repairs and maintenance, and common area expenses.

If the lease component is the predominant component, we account for all revenues under such lease as a single component in accordance with the lease accounting standard. Conversely, if the nonlease component is the predominant component, all revenues under such lease are accounted for in accordance with the revenue recognition accounting standard. Our operating leases qualify for the single component accounting, and the lease component in each of our leases is predominant. Therefore, we account for all revenues from our operating leases under the lease accounting standard and classify these revenues as income from rentals in our consolidated statements of operations.

We commence recognition of income from rentals related to the operating leases at the date the property is ready for its intended use by the tenant and the tenant takes possession or controls the physical use of the leased asset. Income from rentals related to fixed rental payments under operating leases is recognized on a straight-line basis over the respective operating lease terms. We classify amounts expected to be received in later periods as deferred rent in our consolidated balance sheets. Amounts received currently but recognized as revenue in future periods are classified in accounts payable, accrued expenses, and other liabilities in our consolidated balance sheets.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Income from rentals related to variable payments includes tenant recoveries and contingent rental payments. Tenant recoveries, including reimbursements of utilities, repairs and maintenance, common area expenses, real estate taxes and insurance, and other operating expenses, are recognized as revenue in the period during which the applicable expenses are incurred and the tenant's obligation to reimburse us arises. Income from rentals related to other variable payments is recognized when associated contingencies are removed.

We assess collectibility from our tenants of future lease payments for each of our operating leases. If we determine that collectibility is probable, we recognize income from rentals based on the methodology described above. If we determine that collectibility is not probable, we recognize an adjustment to lower our income from rentals. Furthermore, we may recognize a general allowance at a portfolio level (not the individual level) if we do not expect to collect future lease payments in full.

During the year ended December 31, 2021, we recognized an adjustment aggregating \$4.9 million to lower our income from rentals related to certain leases where we determined that the collection of future lease payments was not probable. For these leases, we ceased the recognition of income from rentals on a straight-line basis and began the recognition of income from rentals on a cash basis as lease payments are collected. We will not resume straight-line recognition of income from rentals for these leases until we determine that collectibility of future payments related to these leases is probable.

During the year ended December 31, 2021, we also recorded a general allowance of \$3.0 million associated with the increase in our annual rental revenue during 2021 as a result of the continued growth of our operations in multiple markets. This general allowance relates to the deferred rent balances that at the portfolio level (not the individual level) are not expected to be collected in full through the lease term. As of December 31, 2021, our general allowance balance aggregated \$6.8 million.

Direct financing and sales-type leases

Income from rentals related to our direct financing and sales-type leases is recognized over the lease term using the effective interest rate method. At lease commencement, we record an asset within other assets in our consolidated balance sheets, which represents our net investment in the lease. This initial net investment is determined by aggregating the present values of the total future lease payments attributable to the lease and the estimated residual value of the property, less any unearned income related to our direct financing lease. Over the lease term, the investment in the lease accretes in value, producing a constant periodic rate of return on the net investment in the lease. Income from these leases is classified in income from rentals in our consolidated statements of operations. Our net investment is reduced over time as lease payments are received.

We evaluate our net investment in the direct financing and sales-type leases for impairment under the current expected credit loss standard that we adopted on January 1, 2020. For more information, refer to the "Allowance for credit losses" section within this Note 2 to our consolidated financial statements.

In July 2021, the FASB issued an ASU that will require a lessor to classify a lease with variable lease payments that do not depend on an index or a rate as an operating lease on the commencement date of the lease if both of the following criteria are met:

- (i) The lease would have been classified as a sales-type lease or direct financing lease under the current lease standard; and
- (ii) The sales-type lease or direct financing lease classification would have resulted in a selling loss at lease commencement.

Under the new lease ASU, the lessor will not derecognize the underlying asset and will not recognize a loss upon lease commencement but will continue to depreciate the underlying asset over its useful life. Upon adoption of this ASU, lessors are expected to classify more of their leases as operating leases as opposed to sales-type leases or direct financing leases.

The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2021, with early adoption permitted. The ASU can be applied either (i) retrospectively to leases that commenced or were modified on or after the adoption of the lease accounting standard on January 1, 2019 or (ii) prospectively to leases that commence or are modified on or after the date this ASU is adopted. We adopted this ASU prospectively on January 1, 2022. Historically, substantially all our leases in which we are the lessor have been operating leases; therefore, the adoption of this ASU is not expected to have a material effect on our consolidated financial statements.

Lessee accounting

We have operating lease agreements in which we are the lessee consisting of ground and office leases. At the lease commencement date (or at the acquisition date if the lease is acquired as part of a real estate acquisition), we are required to recognize a liability to account for our future obligations under these operating leases, and a corresponding right-of-use asset.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The lease liability is measured based on the present value of the future lease payments, including payments during the term under our extension options that we are reasonably certain to exercise. The present value of the future lease payments is calculated for each operating lease using each respective remaining lease term and a corresponding estimated incremental borrowing rate, which is the interest rate that we estimate we would have to pay to borrow on a collateralized basis over a similar term for an amount equal to the lease payments. Subsequently, the lease liability is accreted by applying a discount rate established at the lease commencement date to the lease liability balance as of the beginning of the period and is reduced by the payments made during the period. We classify the operating lease liability in accounts payable, accrued expenses, and other liabilities in our consolidated balance sheets.

The right-of-use asset is measured based on the corresponding lease liability, adjusted for initial direct leasing costs and any other consideration exchanged with the landlord prior to the commencement of the lease, as well as adjustments to reflect favorable or unfavorable terms of an acquired lease when compared with market terms at the time of acquisition. Subsequently, the right-of-use asset is amortized on a straight-line basis over the lease term. We classify the right-of-use asset in other assets in our consolidated balance sheets.

Recognition of revenue arising from contracts with customers

We recognize revenues associated with transactions arising from contracts with customers, excluding revenues subject to the lease accounting standard discussed in the “Lease accounting” section above, in accordance with the revenue recognition accounting standard. A customer is distinguished from a noncustomer by the nature of the goods or services that are transferred. Customers are provided with goods or services that are generated by a company’s ordinary output activities, whereas noncustomers are provided with nonfinancial assets that are outside of a company’s ordinary output activities.

We generally recognize revenue representing the transfer of goods and services to customers in an amount that reflects the consideration to which we expect to be entitled in the exchange. In order to determine the recognition of revenue from customer contracts, we use a five-step model to (i) identify the contract with the customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, including variable consideration to the extent that it is probable that a significant future reversal will not occur, (iv) allocate the transaction price to the performance obligations in the contract, and (v) recognize revenue when (or as) we satisfy the performance obligation.

We identify contractual performance obligations and determine whether revenue should be recognized at a point in time or over time, based on when control of goods and services transfers to a customer. We consider whether we control the goods or services prior to the transfer to the customer in order to determine whether we should account for the arrangement as a principal or agent. If we determine that we control the goods or services provided to the customer, then we are the principal to the transaction, and we recognize the gross amount of consideration expected in the exchange. If we simply arrange but do not control the goods or services being transferred to the customer, then we are considered to be an agent to the transaction, and we recognize the net amount of consideration we are entitled to retain in the exchange.

Total revenues subject to the revenue recognition accounting standard and classified within income from rentals in our consolidated statements of operations for the year ended December 31, 2021 and 2020, included \$23.4 million and \$21.3 million, respectively, primarily related to short-term parking revenues associated with long-term lease agreements. Short-term parking revenues do not qualify for the single component accounting policy, discussed in the “Lessor accounting” subsection of the “Lease accounting” section within this Note 2, due to the difference in the timing and pattern of transfer of our parking service obligations and associated lease components within the same lease agreement. We recognize short-term parking revenues in accordance with the revenue recognition accounting standard when the service is provided and the performance obligation is satisfied, which normally occurs at a point in time.

Monitoring of tenant credit quality

During the term of each lease, we monitor the credit quality and any related material changes of our tenants by (i) monitoring the credit rating of tenants that are rated by a nationally recognized credit rating agency, (ii) reviewing financial statements of the tenants that are publicly available or that are required to be delivered to us pursuant to the applicable lease, (iii) monitoring news reports regarding our tenants and their respective businesses, and (iv) monitoring the timeliness of lease payments.

Allowance for credit losses

On January 1, 2020, we adopted an accounting standard (further clarified in subsequently issued updates) that requires companies to estimate and recognize lifetime expected losses, rather than incurred losses, which results in the earlier recognition of credit losses even if the expected risk of credit loss is remote. The accounting standard applies to most financial assets measured at amortized cost and certain other instruments, including trade and other receivables, loans, held-to-maturity debt securities, net investments in leases arising from sales-type and direct financing leases, and off-balance-sheet credit exposures (e.g., loan commitments). The standard does not apply to the receivables arising from operating leases. An assessment of the collectibility of operating lease payments and the recognition of an adjustment to lease income based on this assessment is governed by the lease accounting standard discussed in the “Lease accounting” section earlier within this Note 2 to our consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

At each reporting date, we reassess our credit loss allowances on the aggregate net investment of our direct financing and sales-type leases and recognize a credit loss adjustment, if necessary, for our current estimate of expected credit losses, which is classified within rental operations in our consolidated statements of operations. For further details, refer to Note 5 – “Leases” to our consolidated financial statements.

Upon adoption of the accounting standard, we had one lease subject to this standard classified as a direct financing lease. In this direct financing lease, the payment obligation of the lessee is collateralized by real estate property. Historically, we have had no collection issues related to this direct financing lease; therefore, we assessed the probability of default on this lease based on the lessee's financial condition, credit rating, business prospects, remaining lease term, and, in case of the direct financing lease, the expected value of the underlying collateral upon its repossession, and, if necessary, we recognize a credit loss adjustment. Based on the aforementioned considerations, we estimated a credit loss adjustment related to this direct financing lease aggregating \$2.2 million, which was recognized as a cumulative adjustment to retained earnings and as a reduction of the investment in the direct financing lease balance in our consolidated balance sheets on January 1, 2020.

In addition to our direct financing and sales-type leases, the accounting standard on credit losses applies to our receivables that result from revenue transactions within the scope of the revenue recognition accounting standard discussed in the “Recognition of revenue arising from contracts with customers” section earlier within this Note 2. Upon adoption of the standard on January 1, 2020, our receivables resulting from revenue transactions within the scope of revenue recognition accounting standard aggregated \$16.1 million. Among other factors, we considered the short-term nature of these receivables, our positive assessment of the financial condition and business prospects of the payors, and minimal historical collectibility issues. Based on the aforementioned considerations, we estimated the credit loss related to our trade receivables to approximate \$259 thousand, which was recognized as a cumulative adjustment to retained earnings and as a reduction of the trade receivables balance in our consolidated balance sheets on January 1, 2020.

Income taxes

We are organized and operate as a REIT pursuant to the Internal Revenue Code of 1986, as amended (the “Code”). We believe we have qualified and continue to qualify as a REIT. Qualification as a REIT involves the application of highly technical and complex provisions of the Code to our operations and financial results, and the determination of various factual matters and circumstances not entirely within our control. We believe that our current organization and method of operation comply with the rules and regulations promulgated under the Code to enable us to qualify, and continue to qualify, as a REIT. However, it is possible that we have been organized or have operated in a manner that would not allow us to qualify as a REIT, or that our future operations could cause us to fail to qualify.

If we fail to qualify as a REIT in any taxable year, then we will be required to pay federal and state income taxes on our taxable income at regular corporate rates. If we lose our REIT status, then our net earnings available for investment or distribution to our stockholders will be significantly reduced for each of the years involved and we will no longer be required to make distributions to our stockholders.

Under the Code, a REIT that distributes at least 90% of its REIT taxable income to its stockholders annually (excluding net capital gains) and meets certain other conditions is not subject to federal income tax on its distributed taxable income, but could be subject to certain federal, foreign, state, and local taxes. We distribute 100% of our taxable income annually; therefore, a provision for federal income taxes is not required. In addition to our REIT returns, we file federal, foreign, state, and local tax returns for our subsidiaries. We file with jurisdictions located in the U.S., Canada, China, and other international locations. Our tax returns are subject to routine examination in various jurisdictions for the 2015 through 2020 calendar years.

Employee and non-employee share-based payments

We have implemented an entity-wide accounting policy to account for forfeitures of share-based awards granted to employees and non-employees when they occur. As a result of this policy, we recognize expense on share-based awards with time-based vesting conditions without reductions for an estimate of forfeitures. This accounting policy only applies to service condition awards. For performance condition awards, we continue to assess the probability that such conditions will be achieved. Expenses related to forfeited awards are reversed as forfeitures occur. In addition, all nonforfeitable dividends paid on share-based payment awards are initially classified in retained earnings and reclassified to compensation cost only if forfeitures of the underlying awards occur. Our employee and non-employee share-based awards are measured at their fair value on the grant date and recognized over the recipient's required service period.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Forward equity sales agreements

We account for our forward equity sales agreements in accordance with the accounting guidance governing financial instruments and derivatives. None of our forward equity sales agreements were deemed to be liabilities as they did not embody obligations to repurchase our shares, nor did they embody obligations to issue a variable number of shares for which the monetary value was predominantly fixed, varied with something other than the fair value of our shares, or varied inversely in relation to our shares. We also evaluated if the agreements met the derivatives and hedging guidance scope exception to be accounted for as equity instruments and concluded that the agreements can be classified as equity contracts based on the following assessment: (i) none of the agreements' exercise contingencies were based on observable markets or indices besides those related to the market for our own stock price and operations; and (ii) none of the settlement provisions precluded the agreements from being indexed to our own stock.

Issuer and guarantor subsidiaries of guaranteed securities

In March 2020, the SEC issued an amendment to existing guidance to reduce and simplify financial disclosure requirements for issuers and guarantors of registered debt offerings. The guidance became effective for filings on or after January 4, 2021, with early adoption permitted. Upon evaluation of the guidance, we elected to early adopt the amendment during the three months ended March 31, 2020.

Generally, a parent entity must provide separate subsidiary issuer or guarantor financial statements, unless it qualifies for disclosure exceptions provided in the amendment. Under the previous guidance, a parent entity was required to fully own the subsidiary issuer or guarantor and guarantee its registered security fully and unconditionally to qualify for disclosure exceptions. Pursuant to the amendment, a parent entity may be eligible for disclosure exceptions if it meets the following criteria:

- The subsidiary issuer or guarantor is a consolidated subsidiary of the parent company, and
- The subsidiary issues a registered security that is:
 - Issued jointly and severally with the parent company, or
 - Fully and unconditionally guaranteed by the parent company.

A parent entity that meets the above criteria may instead present summarized financial information ("alternative disclosures"). We evaluated the criteria and determined that we are eligible for the disclosure exceptions, which allow us to provide alternative disclosures.

The amendment also allows for further simplification of disclosure requirements for entities that qualify for the alternative disclosures. A parent entity was previously required to provide disclosures within the footnotes to the consolidated financial statements. However, the amendment allows for such disclosures to be provided outside of the consolidated financial statements, including within the "Management's discussion and analysis of financial condition and results of operations" section under Item 7 in this annual report on Form 10-K. As such, since our adoption of the amendment during the three months ended March 31, 2020, our disclosures are no longer presented in our consolidated financial statements and have been relocated to the "Management's discussion and analysis of financial condition and results of operations" section in Item 7 in this annual report on Form 10-K.

Loan fees

Fees incurred in obtaining long-term financing are capitalized and classified with the corresponding debt instrument appearing on our consolidated balance sheet. Loan fees related to our unsecured senior line of credit are classified within other assets. Capitalized amounts are amortized over the term of the related loan, and the amortization is classified in interest expense in our consolidated statements of operations.

Distributions from equity method investments

We use the "nature of the distribution" approach to determine the classification within our consolidated statements of cash flows of cash distributions received from equity method investments, including our unconsolidated real estate joint ventures and equity method non-real estate investments. Under this approach, distributions are classified based on the nature of the underlying activity that generated the cash distributions. If we lack the information necessary to apply this approach in the future, we will be required to apply the "cumulative earnings" approach as an accounting change on a retrospective basis. Under the cumulative earnings approach, distributions up to the amount of cumulative equity in earnings recognized are classified as cash inflows from operating activities, and those in excess of that amount are classified as cash inflows from investing activities.

Restricted cash

We present cash and cash equivalents separately from restricted cash within our consolidated balance sheets. We include restricted cash with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown in the consolidated statements of cash flows. We provide a reconciliation between the balance sheets and statements of cash flows, as required when the balance includes more than one line item for cash, cash equivalents, and restricted cash. We also provide a disclosure of the nature of the restrictions related to material restricted cash balances.

3. INVESTMENTS IN REAL ESTATE

Our consolidated investments in real estate, including real estate assets held for sale as described in Note 18 – “Assets classified as held for sale” to our consolidated financial statements, consisted of the following as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Rental properties:		
Land (related to rental properties)	\$ 3,782,182	\$ 2,550,571
Buildings and building improvements	16,312,402	13,364,561
Other improvements	2,109,884	1,508,776
Rental properties	22,204,468	17,423,908
Development and redevelopment of new Class A properties:		
Development and redevelopment projects	5,054,632	3,075,453
Future development projects	1,474,008	738,994
Gross investments in real estate	28,733,108	21,238,355
Less: accumulated depreciation	(3,766,758)	(3,178,024)
Net investments in real estate – North America	24,966,350	18,060,331
Net investments in real estate – Asia	14,319	32,041
Investments in real estate	\$ 24,980,669	\$ 18,092,372

Acquisitions

Our real estate asset acquisitions during the year ended December 31, 2021 consisted of the following (dollars in thousands):

Market	Number of Properties	Square Footage				Purchase Price
		Future Development	Active Development/ Redevelopment	Operating With Future Development/ Redevelopment	Operating	
Greater Boston	10	1,870,992	1,497,877	745,209	936,455	\$ 2,817,748
San Francisco Bay Area	10	1,530,830	—	595,503	—	709,050
San Diego	19	951,235	—	927,334	413,909	519,710
Maryland	5	258,000	94,256	—	595,381	80,382
Research Triangle	—	1,055,000	—	—	—	91,000
Other	43	4,999,768	390,675	1,229,735	1,286,123	1,251,264
Year ended December 31, 2021	87	10,665,825	1,982,808	3,497,781	3,231,868	\$ 5,469,154 ⁽¹⁾

(1) Represents the aggregate contractual purchase price of our acquisitions, which differ from purchases of real estate in our consolidated statements of cash flows due to the timing of payment, closing costs, and other acquisition adjustments such as prorations of rents and expenses.

Based upon our evaluation of each acquisition, we determined that substantially all of the fair value related to each acquisition is concentrated in a single identifiable asset or a group of similar identifiable assets, or is associated with a land parcel with no operations. Accordingly, each transaction did not meet the definition of a business and therefore was accounted for as an asset acquisition. In each of these transactions, we allocated the total consideration for each acquisition to the individual tangible and intangible assets and liabilities acquired on a relative fair value basis.

During the year ended December 31, 2021, we acquired 87 properties for an aggregate purchase price of \$5.5 billion. In connection with our acquisitions, we recorded in-place lease assets aggregating \$306.9 million and below-market lease liabilities in which we are the lessor aggregating \$120.2 million. As of December 31, 2021, the weighted-average amortization period remaining on our in-place leases and below-market leases acquired during the year ended December 31, 2021 was 8.8 years and 9.7 years, respectively, and 9.1 years in aggregate.

3. INVESTMENTS IN REAL ESTATE (continued)

In January 2022, we completed acquisitions in our key life science cluster submarkets aggregating 4.5 million SF, comprising 4.1 million RSF of future development and redevelopment opportunities and 381,760 RSF of operating space, for an aggregate purchase price of \$1.2 billion.

For the discussion of the formation of our consolidated real estate joint venture, refer to the “Formation of consolidated real estate joint ventures and sales of partial interest” section in Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements.

Purchase of partner’s interest in an unconsolidated real estate joint venture in March 2021

As of December 31, 2020, we had a 56.8% interest in an unconsolidated real estate joint venture that owned an operating property aggregating 80,032 RSF located at 704 Quince Orchard Road in our Gaithersburg submarket of Maryland. We accounted for this joint venture under the equity method of accounting. On March 25, 2021, we acquired the remaining 43.2% interest in this real estate joint venture for \$9.4 million and fully repaid the outstanding secured loan with principal and accrued interest aggregating \$14.6 million as of March 25, 2021.

As a result of this acquisition, we now own 100% of this property and consolidate its results in our consolidated financial statements. The acquired property did not meet the definition of a business and the transaction was accounted for as an asset acquisition. Under our existing accounting policy election, we follow the asset acquisition cost accumulation and allocation model. Accordingly, we did not remeasure our previously held equity interest at fair value and did not recognize a gain or loss in our consolidated statements of operations. The acquisition consideration and the carrying amount of our existing equity interest were allocated to the individual assets acquired and liabilities assumed on a relative fair value basis.

Refer to Note 2 – “Summary of significant accounting policies” to our consolidated financial statements for more information about our evaluation of applicability of accounting guidance on asset acquisitions or business combinations.

Acquired below-market leases

The balances of acquired below-market tenant leases existing as of December 31, 2021 and 2020, and related accumulated amortization, classified in accounts payable, accrued expenses, and other liabilities in our consolidated balance sheets as of December 31, 2021 and 2020 were as follows (in thousands):

	December 31,	
	2021	2020
Acquired below-market leases	\$ 579,267	\$ 477,377
Accumulated amortization	(237,682)	(189,302)
	<u>\$ 341,585</u>	<u>\$ 288,075</u>

For the years ended December 31, 2021, 2020, and 2019, we recognized in rental revenues approximately \$57.7 million, \$57.8 million, and \$30.3 million, respectively, related to the amortization of acquired below-market leases existing as of the end of each respective year.

The weighted-average amortization period of the value of acquired below-market leases existing as of December 31, 2021 was approximately 5.4 years, and the estimated annual amortization of the value of acquired below-market leases as of December 31, 2021 is as follows (in thousands):

Year	Amount
2022	\$ 55,813
2023	47,836
2024	37,663
2025	31,532
2026	27,761
Thereafter	140,980
Total	<u>\$ 341,585</u>

3. INVESTMENTS IN REAL ESTATE (continued)

Acquired in-place leases

The balances of acquired in-place leases, and related accumulated amortization, classified in other assets in our consolidated balance sheets as of December 31, 2021 and 2020 were as follows (in thousands):

	December 31,	
	2021	2020
Acquired in-place leases	\$ 987,213	\$ 712,380
Accumulated amortization	(377,341)	(250,056)
	<u>\$ 609,872</u>	<u>\$ 462,324</u>

Amortization for these intangible assets, classified in depreciation and amortization expense in our consolidated statements of operations, was approximately \$146.6 million, \$105.4 million, and \$49.1 million for the years ended December 31, 2021, 2020, and 2019, respectively. The weighted-average amortization period of the value of acquired in-place leases was approximately 8.3 years, and the estimated annual amortization of the value of acquired in-place leases as of December 31, 2021 is as follows (in thousands):

Year	Amount
2022	\$ 137,100
2023	97,299
2024	70,442
2025	56,701
2026	46,568
Thereafter	201,762
Total	<u>\$ 609,872</u>

Sales of real estate assets and impairment charges

Sales of real estate and related gains/losses

During the three months ended September 30, 2021, we completed the sales of three office properties located in our San Francisco Bay Area and Seattle markets for an aggregate purchase price of \$73.1 million and recognized a loss on sales of real estate aggregating \$435 thousand.

In December 2021, we completed the sale of our 2301 5th Avenue property aggregating 197,135 RSF, located in our Lake Union submarket of Seattle, for a sales price of \$118.7 million, or \$602 per RSF, and recognized a gain on sale of real estate of \$23.2 million.

In December 2021, we completed the sale of our entire 49.0% interest in the Menlo Gateway unconsolidated real estate joint venture, located in our Greater Stanford submarket of San Francisco Bay Area. We sold our interest for a contractual price of \$397.9 million which consisted of sales price of \$541.5 million less our share of debt held by the unconsolidated real estate joint venture assumed by the buyer, aggregating \$143.6 million. In connection with the sale, we recognized a gain of \$101.1 million, which is classified within gain on sales of real estate within our consolidated statements of operations for the year ended December 31, 2021.

The aforementioned gains and losses were classified in gain on sales of real estate within our consolidated statements of operations for the year ended December 31, 2021. For the discussion of our sales of partial interests completed during the year ended December 31, 2021, refer to the "Formation of consolidated real estate joint ventures and sales of partial interest" and "Unconsolidated real estate joint ventures" sections within Note 4 – "Consolidated and unconsolidated real estate joint ventures" to our consolidated financial statements.

3. INVESTMENTS IN REAL ESTATE (continued)

Impairment charges

During the year ended December 31, 2021, we recognized real estate asset impairments of office-related properties aggregating \$52.7 million, primarily consisting of the following:

- Impairment charge of \$22.5 million during the three months ended September 30, 2021, upon classification as held for sale of an option to purchase a land parcel in our SoMa submarket for the development of an office property, to reduce the option's carrying amount to its estimated fair value less costs to sell. We completed the sale of the option during the three months ended December 31, 2021, at no gain or loss.
- Impairment charge of \$18.6 million during the three months ended September 30, 2021, to reduce the carrying amount of a property located in a non-core submarket to its estimated fair value less costs to sell, upon our review of the current local market conditions.
- Impairment charges aggregating \$6.9 million during the six months ended June 30, 2021, to reduce the carrying amounts of three office properties located in our San Francisco Bay Area and Seattle markets to their estimated fair values less costs to sell, based on the sales price negotiated for each property during this period. We completed the sales of these properties during the three months ended September 30, 2021.

Refer to the "Impairment of long-lived assets" section within Note 2 – "Summary of significant accounting policies" to our consolidated financial statements for additional information.

4. CONSOLIDATED AND UNCONSOLIDATED REAL ESTATE JOINT VENTURES

From time to time, we enter into joint venture agreements through which we own a partial interest in real estate entities that own, develop, and operate real estate properties. As of December 31, 2021, our real estate joint ventures held the following properties:

Property	Market	Submarket	Our Ownership Interest ⁽¹⁾
<i>Consolidated joint ventures⁽²⁾:</i>			
50 and 60 Binney	Greater Boston	Cambridge/Inner Suburbs	34.0% ⁽³⁾
75/125 Binney Street	Greater Boston	Cambridge/Inner Suburbs	40.0%
225 Binney Street	Greater Boston	Cambridge/Inner Suburbs	30.0% ⁽⁴⁾
99 Coolidge Avenue	Greater Boston	Cambridge/Inner Suburbs	75.0%
409 and 499 Illinois Street	San Francisco Bay Area	Mission Bay	25.0% ⁽³⁾
1500 Owens Street	San Francisco Bay Area	Mission Bay	25.0% ⁽³⁾
1700 Owens Street	San Francisco Bay Area	Mission Bay	25.0% ⁽³⁾
455 Mission Bay Boulevard South	San Francisco Bay Area	Mission Bay	25.0% ⁽³⁾
Alexandria Technology Center® – Gateway ⁽⁵⁾	San Francisco Bay Area	South San Francisco	49.9%
213 East Grand Avenue	San Francisco Bay Area	South San Francisco	30.0% ⁽³⁾
500 Forbes Boulevard	San Francisco Bay Area	South San Francisco	10.0%
Alexandria Center® for Life Science – Millbrae Station	San Francisco Bay Area	South San Francisco	40.3%
Alexandria Point ⁽⁶⁾	San Diego	University Town Center	55.0%
5200 Illumina Way	San Diego	University Town Center	51.0%
9625 Towne Centre Drive	San Diego	University Town Center	50.1%
SD Tech by Alexandria ⁽⁷⁾	San Diego	Sorrento Mesa	50.0%
Pacific Technology Park	San Diego	Sorrento Mesa	50.0% ⁽³⁾
1201 and 1208 Eastlake Avenue East and 199 East Blaine Street	Seattle	Lake Union	30.0%
400 Dexter Avenue North	Seattle	Lake Union	30.0% ⁽³⁾
<i>Unconsolidated joint ventures⁽²⁾:</i>			
1655 and 1725 Third Street	San Francisco Bay Area	Mission Bay	10.0%
1401/1413 Research Boulevard	Maryland	Rockville	65.0% ⁽⁸⁾
1450 Research Boulevard	Maryland	Rockville	73.2% ⁽⁹⁾
101 West Dickman Street	Maryland	Beltsville	57.9% ⁽⁹⁾

(1) Refer to the table on the next page that shows the categorization of our joint ventures under the consolidation framework.

(2) In addition to the real estate joint ventures listed, various partners hold insignificant noncontrolling interests in three other consolidated joint ventures in North America and we hold an interest in one other insignificant unconsolidated real estate joint venture in North America.

(3) Refer to the “Formation of consolidated real estate joint ventures and sales of partial interest” section within this Note 4 for additional information.

(4) 225 Binney Street is owned through a tenancy in common arrangement. We directly own 26.316% of the tenancy in common and a real estate joint venture owns the remaining 73.684% of the tenancy in common. We own 5% of this real estate joint venture, resulting in an aggregate ownership of 30% of this property. We determined that we are the primary beneficiary of the real estate joint venture and we consolidate this joint venture under the variable interest model.

(5) Includes 601, 611, 651, 681, 685, 701, and 751 Gateway Boulevard in our South San Francisco submarket.

(6) Includes 10210, 10260, 10290, and 10300 Campus Point Drive and 4161, 4224, and 4242 Campus Point Court in our University Town Center submarket.

(7) Includes 9605, 9645, 9675, 9685, 9725, 9735, 9808, 9855, and 9868 Scranton Road and 10055 and 10065 Barnes Canyon Road in our Sorrento Mesa submarket.

(8) Represents our ownership interest; our voting interest is limited to 50%.

(9) Represent joint ventures with local real estate operators. Each of these joint ventures operates one office property which are expected to be redeveloped into office/lab. Our investments into 101 West Dickman Street and 1450 Research Boulevard joint ventures were \$8.3 million and \$4.0 million, respectively. The joint ventures each have a construction loan in place which is expected to fund future redevelopment cost; therefore, we expect minimal equity contributions to be required in the future. Our partners manage the day-to-day activities that most significantly affect the economic performance of each joint venture; therefore, we account for these investments under the equity method of accounting.

Our consolidation policy is described under the “Consolidation” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements. Consolidation accounting is highly technical, but its framework is primarily based on the controlling financial interests and benefits of the joint ventures.

We generally consolidate a joint venture that is a legal entity that we control (i.e., we have the power to direct the activities of the joint venture that most significantly affect its economic performance) through contractual rights, regardless of our ownership interest, and where we determine that we have benefits through the allocation of earnings or losses and fees paid to us that could be significant to the joint venture (the “VIE model”).

4. CONSOLIDATED AND UNCONSOLIDATED REAL ESTATE JOINT VENTURES (continued)

We also generally consolidate joint ventures when we have a controlling financial interest through voting rights and where our voting interest is greater than 50% (the “voting model”). Voting interest differs from ownership interest for some joint ventures.

We account for joint ventures that do not meet the consolidation criteria under the equity method of accounting by recognizing our share of income and losses.

The table below shows the categorization of our joint ventures under the consolidation framework:

Property ⁽¹⁾	Consolidation Model	Voting Interest	Consolidation Analysis	Conclusion
50 and 60 Binney Street 75/125 Binney Street 225 Binney Street 99 Coolidge Avenue 409 and 499 Illinois Street 1500 Owens Street 1700 Owens Street 455 Mission Bay Boulevard South Alexandria Technology Center® – Gateway 213 East Grand Avenue 500 Forbes Boulevard Alexandria Center® for Life Science – Millbrae Station Alexandria Point 5200 Illumina Way 9625 Towne Centre Drive SD Tech by Alexandria Pacific Technology Park 1201 and 1208 Eastlake Avenue East and 199 East Blaine Street 400 Dexter Avenue North 1450 Research Boulevard 101 West Dickman Street 1401/1413 Research Boulevard 1655 and 1725 Third Street	VIE model	Not applicable under VIE model	We have: (i) The power to direct the activities of the joint venture that most significantly affect its economic performance; and (ii) Benefits that can be significant to the joint venture. Therefore, we are the primary beneficiary of each VIE	Consolidated
			We do not control the joint venture and are therefore not the primary beneficiary	Equity method of accounting
	Voting model	Does not exceed 50%	Our voting interest is 50% or less	

(1) In addition to the real estate joint ventures listed, various partners hold insignificant noncontrolling interests in three other consolidated joint ventures in North America and we hold an interest in one other insignificant unconsolidated real estate joint venture in North America.

Formation of consolidated real estate joint ventures and sales of partial interest

In each of the joint ventures described below, we are contractually responsible for activities that most significantly impact the economic performance of the joint venture. In addition, our joint venture partner(s) in each of the following joint ventures lacks kick-out rights over our role as property manager. Therefore, we determined that our joint venture partner does not have a controlling financial interest and consequently each joint venture should be accounted for as a VIE. We also determined that we are the primary beneficiary of each joint venture because we are responsible for activities that most significantly impact their economic performance, and also have the obligation to absorb losses of, or the right to receive benefits from, each joint venture that could potentially be significant to the joint venture. Accordingly, we consolidate each joint venture under the variable interest model.

Refer to the “Consolidation” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements for additional information.

4. CONSOLIDATED AND UNCONSOLIDATED REAL ESTATE JOINT VENTURES (continued)

213 East Grand Avenue

In April 2021, we sold a 70% interest in our 213 East Grand Avenue property located in our South San Francisco submarket for a sales price of \$301.0 million, or \$1,429 per RSF. We control the newly formed real estate joint venture and therefore continue to consolidate this property. Accordingly, we accounted for the \$103.7 million difference between the consideration received and the book value of the 70% interest sold as an equity transaction, with no gain or loss recognized in earnings.

400 Dexter Avenue North

In July 2021, we sold a 70% interest in our 400 Dexter Avenue North property located in our Lake Union submarket for a sales price of \$254.8 million, or \$1,255 per RSF. We control the newly formed real estate joint venture and therefore continue to consolidate this property. Accordingly, we accounted for the \$95.5 million difference between the consideration received and the book value of the 70% interest sold as an equity transaction, with no gain or loss recognized in earnings.

9444 Waples Street and Pacific Technology Park

In August 2021, we formed a real estate joint venture in our Sorrento Mesa submarket to own and operate our recently acquired 9444 Waples Street property and a collection of five adjacent properties owned by the joint venture partner also located on Waples Street. We own a 50% interest in this joint venture and our partner owns the remaining 50% interest. Concurrently with the formation of the joint venture, we:

- (i) sold to our partner a 50% interest in our recently acquired 9444 Waples Street property, aggregating 88,380 RSF, for a sales price of \$11.5 million, or \$260 per RSF; and
- (ii) acquired from our partner a 50% interest in Pacific Technology Park, aggregating 544,352 RSF, located at 9389, 9393, 9401, 9455, and 9477 Waples Street, for a purchase price of \$85.8 million.

We control the newly formed real estate joint venture and therefore continue to consolidate 9444 Waples Street and have begun consolidating the Pacific Technology Park properties owned by the joint venture. The sales price we received for our sale of the 50% interest in 9444 Waples Street approximated 50% of the value paid for the property when initially acquired during the three months ended June 30, 2021. Therefore, there was no difference between the consideration received and the book value of the 50% interest sold.

409 and 499 Illinois Street

In October 2021, an investor acquired a 75% interest in our consolidated joint venture at 409 and 499 Illinois Street located in our Mission Bay submarket, which consisted of a 35% partial interest sold by us and a 40% interest held by our previous joint venture partner, for an aggregate sales price of \$495.6 million. Our portion of the sales price was \$231.0 million, representing \$92.4 million of consideration in excess of the book value of our 35% interest sold. Upon completion of the sale, our ownership interest in the joint venture is 25%. We control the newly formed real estate joint venture and therefore continue to consolidate these properties. Accordingly, we accounted for the difference between the consideration received and the book value of our interest sold as an equity transaction, with no gain or loss recognized in earnings.

1500 Owens Street

In October 2021, an investor acquired a 75% interest in our consolidated joint venture at 1500 Owens Street located in our Mission Bay submarket, which consisted of a 25.1% partial interest sold by us and a 49.9% interest held by our previous joint venture partner, for an aggregate sales price of \$130.5 million. Our portion of the sales price was \$43.7 million, representing \$21.3 million of consideration in excess of the book value of our 25.1% interest sold. Upon completion of the sale, our ownership interest in the joint venture is 25%. We control the newly formed real estate joint venture and therefore continue to consolidate this property. Accordingly, we accounted for the difference between the consideration received and the book value of our interest sold as an equity transaction, with no gain or loss recognized in earnings.

50 and 60 Binney Street

In December 2021, we formed a real estate joint venture in our Cambridge submarket and sold to our joint venture partner a 66.0% interest in our 50 and 60 Binney Street properties for a sales price of \$782.3 million, or \$2,226 per RSF. We control the newly formed real estate joint venture and therefore continue to consolidate these properties. Accordingly, we accounted for the \$457.5 million difference between the consideration received and the book value of the 66.0% interest sold as an equity transaction, with no gain or loss recognized in earnings.

4. CONSOLIDATED AND UNCONSOLIDATED REAL ESTATE JOINT VENTURES (continued)

1700 Owens Street and 455 Mission Bay Boulevard South

In December 2021, we formed two real estate joint ventures in our Mission Bay submarket and sold to our partner in both joint ventures a 75.0% interest in our properties at 1700 Owens Street and 455 Mission Bay Boulevard South in our Mission Bay submarket for an aggregate sales price of \$381.4 million, or \$1,295 per RSF. We control the newly formed real estate joint ventures and therefore continue to consolidate the properties owned by these joint ventures. Accordingly, we accounted for the \$221.9 million difference between the consideration received and the aggregate book value of the 75.0% interests sold as an equity transaction, with no gain or loss recognized in earnings.

Consolidated VIEs' balance sheet information

The table below aggregates the balance sheet information of our consolidated VIEs as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Investments in real estate	\$ 5,014,842	\$ 3,196,215
Cash and cash equivalents	181,074	95,565
Other assets	509,281	341,524
Total assets	<u>\$ 5,705,197</u>	<u>\$ 3,633,304</u>
Secured notes payable	\$ 7,991	\$ —
Other liabilities	269,605	183,237
Total liabilities	277,596	183,237
Redeemable noncontrolling interests	—	1,731
Alexandria Real Estate Equities, Inc.'s share of equity	2,593,505	1,742,039
Noncontrolling interests' share of equity	2,834,096	1,706,297
Total liabilities and equity	<u>\$ 5,705,197</u>	<u>\$ 3,633,304</u>

In determining whether to aggregate the balance sheet information of consolidated VIEs, we considered the similarity of each VIE, including the primary purpose of these entities to own, manage, operate, and lease real estate properties owned by the VIEs, and the similar nature of our involvement in each VIE as a managing member. Due to the similarity of the characteristics, we present the balance sheet information of these entities on an aggregated basis. None of our consolidated VIEs' assets have restrictions that limit their use to settle specific obligations of the VIE. There are no creditors or other partners of our consolidated VIEs that have recourse to our general credit, and our maximum exposure to our consolidated VIEs is limited to our variable interests in each VIE, except for our 99 Coolidge Avenue joint venture in which the VIE's construction loan is guaranteed by us. For additional information, refer to Note 10 – "Secured and unsecured senior debt" to our consolidated financial statements.

4. CONSOLIDATED AND UNCONSOLIDATED REAL ESTATE JOINT VENTURES (continued)

Unconsolidated real estate joint ventures

Our maximum exposure to our unconsolidated VIEs is limited to our investment in each VIE. Our investments in unconsolidated real estate joint ventures, accounted for under the equity method of accounting as presented in our consolidated balance sheets of December 31, 2021 and 2020, consisted of the following (in thousands):

Property	December 31,	
	2021	2020
Menlo Gateway ⁽¹⁾	\$ —	\$ 300,622
1655 and 1725 Third Street	14,034	14,939
1450 Research Boulevard	4,455	—
101 West Dickman Street	8,481	—
704 Quince Orchard Road	—	4,961
Other	11,513	11,827
	<u>\$ 38,483</u>	<u>\$ 332,349</u>

(1) During the three months ended December 31, 2021, we sold our entire 49.0% equity interest in this unconsolidated real estate joint venture.

704 Quince Orchard Road

During the year ended December 31, 2021, we acquired our partner's ownership interest in our unconsolidated real estate joint venture that holds our property located at 704 Quince Orchard Road. For additional information, refer to the "Purchase of partner's interest in an unconsolidated real estate joint venture in March 2021" subsection of the "Acquisitions" section in Note 3 – "Investments in real estate" to our consolidated financial statements.

Menlo Gateway

In December 2021, we sold our entire 49.0% equity interest in our unconsolidated real estate joint venture at Menlo Gateway, aggregating 772,983 RSF of tech office space located in our Greater Stanford submarket of the San Francisco Bay Area for a sales price of \$541.5 million, or \$1,430 per RSF. We received \$397.9 million in proceeds, which consisted of a sales price of \$541.5 million less our share of debt held by the unconsolidated real estate joint venture assumed by the buyer, aggregating \$143.6 million. In connection with the sale, we recognized a gain of \$101.1 million, which is classified within gain on sales of real estate within our consolidated statements of operations for the year ended December 31, 2021.

1401/1413 Research Boulevard

In January 2015, we formed a joint venture with a local retail developer and operator by contributing a land parcel located in our Rockville submarket of Maryland. The joint venture developed a retail shopping center aggregating approximately 90,000 RSF, which was primarily funded by a construction loan that is non-recourse to us. Since its formation, we accounted for this investment under the equity method of accounting as we do not have a controlling interest.

In March 2020, as a result of the impact of the COVID-19 pandemic, we evaluated the recoverability of our investment and recognized a \$7.6 million impairment charge to lower the carrying amount of our investment balance to zero and eliminated this investment from our consolidated balance sheet. We continue to hold our economic interest in this joint venture. However, as the investment balance was carried at zero dollars, we discontinued applying the equity method recognition of losses in excess of our capital commitments to the joint venture.

The equity method of accounting continues to remain suspended until a point where either (i) the joint venture accumulates operating profits in excess of losses accumulated or (ii) additional financial support is contributed by us to the joint venture.

In June 2021, as a result of improving economic conditions for this retail center, we contributed capital aggregating \$578 thousand to the joint venture to become current with required capital contributions and maintain our 65.0% equity interest in this joint venture. This contribution increased our investment in the joint venture, but this was offset by the recognition of our share of operating losses of the joint venture that occurred while our equity method accounting was suspended. In June 2021, concurrently with the additional financial support contributed to the joint venture, we recognized equity in losses of unconsolidated real estate joint ventures equal to the \$578 thousand, resulting in a carrying amount of our investment in the joint venture of zero dollars as of June 30, 2021.

4. CONSOLIDATED AND UNCONSOLIDATED REAL ESTATE JOINT VENTURES (continued)

101 West Dickman Street and 1450 Research Boulevard

In October 2021, we formed a real estate joint venture with two partners holding a 135,423 RSF property located at 101 West Dickman Street in our Maryland market, in which we acquired a 57.9% ownership interest for \$8.3 million. In addition, in December 2021, we formed a real estate joint venture with a partner holding a 42,679 RSF property located at 1450 Research Boulevard in our Maryland market, in which we acquired a 73.2% ownership interest for \$4.0 million.

Each of these joint ventures operates one office property which are expected to be redeveloped into office/lab. The joint ventures have construction loans in place which are expected to fund future redevelopment costs and therefore we expect minimal additional future equity contributions from us to be required.

Our joint venture partners manage the day-to-day activities that most significantly affect the economic performance of each joint venture. Therefore, we account for our investments under the equity method of accounting.

The following table presents key terms related to our unconsolidated real estate joint ventures' secured loans as of December 31, 2021 (dollars in thousands):

Unconsolidated Joint Venture	Our Share	Maturity Date	Stated Rate	Interest Rate ⁽¹⁾	Aggregate Commitment at 100%	Debt Balance at 100% ⁽²⁾
1401/1413 Research Boulevard	65.0%	12/23/24	2.70%	3.14%	\$ 28,500	\$ 28,124
1655 and 1725 Third Street	10.0%	3/10/25	4.50%	4.57%	600,000	598,657
101 West Dickman Street	57.9%	11/10/26	SOFR + 1.95% ⁽³⁾	2.81%	26,750	9,947
1450 Research Boulevard	73.2%	12/10/26	SOFR + 1.95% ⁽³⁾	N/A	13,000	—
					<u>\$ 668,250</u>	<u>\$ 636,728</u>

(1) Includes interest expense and amortization of loan fees.

(2) Represents outstanding principal, net of unamortized deferred financing costs, as of December 31, 2021.

(3) This loan is subject to a fixed SOFR floor rate of 0.75%.

5. LEASES

We are subject to the lease accounting standard that sets principles for the recognition, measurement, presentation, and disclosure of leases for both parties to a lease agreement (i.e., lessees and lessors).

As a lessor, we are required to disclose, among other things, the following:

- A description of the nature of leases, including terms for any variable payments, options to extend or terminate, and options to purchase the underlying asset;
- Tabular presentation of undiscounted cash flows to be received over the next five years and thereafter separately for operating leases and direct financing leases;
- The amount of lease income and its location on the statements of operations;
- Income classified separately for operating leases and direct financing leases; and
- Our risk management strategy to mitigate declines in residual value of the leased assets.

As a lessee, we are required to disclose, among other things, the following:

- A description of the nature of leases, including terms for any variable payments, options to extend or terminate, and options to purchase the underlying asset;
- The amounts of lease liabilities and corresponding right-of-use assets and their respective locations in the balance sheet;
- The weighted-average remaining lease term and weighted-average discount rate of leases;
- Tabular presentation of undiscounted cash flows of our remaining lease payment obligations over the next five years and thereafter; and
- Total lease costs, including cash paid, amounts expensed, and amounts capitalized.

Refer to the “Lease accounting” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements for additional information.

Leases in which we are the lessor

As of December 31, 2021, we had 414 properties aggregating 38.8 million operating RSF located in key locations, including Greater Boston, the San Francisco Bay Area, New York City, San Diego, Seattle, Maryland, and Research Triangle. We focus on developing Class A properties in AAA innovation cluster locations, which we consider to be highly desirable for tenancy by life science, agtech, and technology entities. Such locations are generally characterized by high barriers to entry for new landlords, high barriers to exit for tenants, and a limited supply of available space. As of December 31, 2021, all leases in which we are the lessor were classified as operating leases with the exception of one direct financing lease and two sales-type leases. Our operating, direct financing, and sales-type leases are described below.

Operating leases

As of December 31, 2021, our 414 properties were subject to operating lease agreements. Two of these properties, representing two land parcels, are subject to lease agreements that each contain an option for the lessee to purchase the underlying asset from us at fair market value during each of the 30-day periods commencing on the dates that are 15 years, 30 years, and 74.5 years after the rent commencement date of October 1, 2017. The remaining lease term related to each of the two land parcels is 70.9 years. Our leases generally contain options to extend lease terms at prevailing market rates at the time of expiration. Certain operating leases contain early termination options that require advance notification and payment of a penalty, which in most cases is substantial enough to be deemed economically disadvantageous by a tenant to exercise. Future lease payments to be received under the terms of our operating lease agreements, excluding expense reimbursements, in effect as of December 31, 2021 are outlined in the table below (in thousands):

Year	Amount
2022	\$ 1,539,355
2023	1,623,950
2024	1,600,255
2025	1,530,227
2026	1,464,150
Thereafter	10,131,628
Total	<u>\$ 17,889,565</u>

Refer to Note 3 – “Investments in real estate” to our consolidated financial statements for additional information about our owned real estate assets, which are the underlying assets under our operating leases.

5. LEASES (continued)

Direct financing and sales-type leases

As of December 31, 2021, we had one direct financing lease agreement, with a net investment balance of \$38.6 million, for a parking structure with a remaining lease term of 70.9 years. The lessee has an option to purchase the underlying asset at fair market value during each of the 30-day periods commencing on the dates that are 15 years, 30 years, and 74.5 years after the rent commencement date of October 1, 2017.

During the year ended December 31, 2021, we acquired two sales-type ground lease agreements. As of December 31, 2021, these leases had a net investment balance of \$32.1 million and a weighted-average remaining lease term of 87.9 years. Upon recognition of the two sales-type ground leases during the year ended December 31, 2021, the present value of future lease payments approximated our carrying value of the leased assets; therefore, no profit or loss was recognized in connection with these leases.

The components of our aggregate net investment in our direct financing and sales-type leases as of December 31, 2021 and 2020, are summarized in the table below (in thousands):

	December 31,	
	2021	2020
Gross investment in direct financing and sales-type leases	\$ 403,388	\$ 258,751
Add: estimated unguaranteed residual value of the underlying assets	31,839	—
Less: unearned income on direct financing lease	(215,557)	(218,072)
Less: effect of discounting on sales-type leases	(146,175)	—
Less: allowance for credit losses	(2,839)	(2,839)
Net investment in direct financing and sales-type leases	<u>\$ 70,656</u>	<u>\$ 37,840</u>

As of December 31, 2021, our estimated credit loss related to our direct financing lease was \$2.8 million. No adjustment to the estimated credit loss balance was required during the year ended December 31, 2021.

We determined our two sales-type leases were not financial assets purchased with credit deterioration, and as such did not recognize an initial credit loss reserve, based on our experience with leases that included similar collateral and tenant creditworthiness. At December 31, 2021, we reassessed the collectability of these leases and determined that no credit loss adjustment was necessary. For further details, refer to the "Allowance for credit losses" section in Note 2 – "Summary of significant accounting policies" to our consolidated financial statements.

5. LEASES (continued)

Future lease payments to be received under the terms of our direct financing and sales-type leases as of December 31, 2021 are outlined in the table below, in aggregate (in thousands):

Year	Total
2022	\$ 3,066
2023	3,120
2024	3,176
2025	3,371
2026	3,459
Thereafter	387,196
Total	<u>\$ 403,388</u>

Income from rentals

Our total income from rentals includes revenue related to agreements for the rental of our real estate, which primarily includes revenues subject to the lease accounting standard and the revenue recognition accounting standard as shown below (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Income from rentals:			
Revenues subject to the lease accounting standard:			
Operating leases	\$ 2,081,362	\$ 1,854,427	\$ 1,465,692
Direct financing and sales-type leases	3,489	2,469	2,421
Revenues subject to the lease accounting standard	2,084,851	1,856,896	1,468,113
Revenues subject to the revenue recognition accounting standard	23,398	21,312	48,751
Income from rentals	<u>\$ 2,108,249</u>	<u>\$ 1,878,208</u>	<u>\$ 1,516,864</u>

Our revenues that are subject to the revenue recognition accounting standard and are classified in income from rentals consist primarily of short-term parking revenues that are not considered lease revenues under the lease accounting standard. Refer to the "Revenues" and "Recognition of revenue arising from contracts with customers" sections in Note 2 – "Summary of significant accounting policies" to our consolidated financial statements for additional information.

Deferred leasing costs

The following table summarizes our deferred leasing costs as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Deferred leasing costs	\$ 857,414	\$ 679,300
Accumulated amortization	(454,516)	(406,627)
Deferred leasing costs, net	<u>\$ 402,898</u>	<u>\$ 272,673</u>

Residual value risk management strategy

Our leases do not have guarantees of residual value on the underlying assets. We manage risk associated with the residual value of our leased assets by (i) evaluating each potential acquisition of real estate to determine whether it meets our business objective to invest primarily in high-demand markets with limited supply of available space, (ii) directly managing our leased properties, conducting frequent property inspections, proactively addressing potential maintenance issues before they arise, and timely resolving any occurring issues, (iii) carefully selecting our tenants and monitoring their credit quality throughout their respective lease terms, and (iv) focusing on making continuous improvements to our sustainability efforts and achievement of our sustainability goals for ground-up development of new buildings, which are targeting Gold or Platinum LEED® certification. Our environmentally focused design decisions, careful selection of construction materials, and continuous monitoring of our properties throughout their lives are expected to promote the durability of building infrastructure and enhance residual value of our properties.

5. LEASES (continued)

Leases in which we are the lessee

Operating lease agreements

We have operating lease agreements in which we are the lessee consisting of ground and office leases. Certain of these leases have options to extend or terminate the contract terms upon meeting certain criteria. There are no notable restrictions or covenants imposed by the leases, nor guarantees of residual value.

We recognize a right-of-use asset, which is classified within other assets in our consolidated balance sheets, and a related liability, which is classified within accounts payable, accrued expenses, and other liabilities in our consolidated balance sheets, to account for our future obligations under ground and office lease arrangements in which we are the lessee. Refer to the "Lessee accounting" subsection of the "Lease accounting" section in Note 2 – "Summary of significant accounting policies" to our consolidated financial statements.

As of December 31, 2021, the present value of the remaining contractual payments aggregating \$953.3 million under our operating lease agreements, including our extension options that we are reasonably certain to exercise, was \$434.7 million. Our corresponding operating lease right-of-use assets, adjusted for initial direct leasing costs and other consideration exchanged with the landlord prior to the commencement of the lease, aggregated \$474.3 million. As of December 31, 2021, the weighted-average remaining lease term of operating leases in which we are the lessee was approximately 42 years, and the weighted-average discount rate was 4.57%. The weighted-average discount rate is based on the incremental borrowing rate estimated for each lease, which is the interest rate that we estimate we would have to pay to borrow on a collateralized basis over a similar term for an amount equal to the lease payments.

Ground lease obligations as of December 31, 2021, included leases for 39 of our properties, which accounted for approximately 9% of our total number of properties. Excluding one ground lease that expires in 2036 related to one operating property with a net book value of \$6.9 million as of December 31, 2021, our ground lease obligations have remaining lease terms ranging from approximately 32 years to 93 years, including extension options which we are reasonably certain to exercise.

The reconciliation of future lease payments, under noncancelable operating ground and office leases in which we are the lessee, to the operating lease liability reflected in our consolidated balance sheet as of December 31, 2021 is presented in the table below (in thousands):

	Year	Total
	2022	\$ 48,499
	2023	22,245
	2024	22,478
	2025	22,500
	2026	22,501
	Thereafter	815,064
Total future payments under our operating leases in which we are the lessee		953,287
Effect of discounting		(518,542)
Operating lease liability		<u>\$ 434,745</u>

Lessee operating costs

Operating lease costs relate to our ground and office leases in which we are the lessee. Ground leases generally require fixed annual rent payments and may also include escalation clauses and renewal options. Our operating lease obligations related to our office leases have remaining terms of up to 14 years, exclusive of extension options. For the years ended December 31, 2021, 2020, and 2019, our costs for operating leases in which we are the lessee were as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Gross operating lease costs	\$ 28,598	\$ 23,518	\$ 19,740
Capitalized lease costs	(3,167)	(3,529)	(1,452)
Expenses for operating leases in which we are the lessee	<u>\$ 25,431</u>	<u>\$ 19,989</u>	<u>\$ 18,288</u>

For the years ended December 31, 2021, 2020, and 2019, amounts paid and classified as operating activities in our consolidated statements of cash flows for leases in which we are the lessee, were \$24.7 million, \$20.8 million, and \$17.7 million, respectively.

6. CASH, CASH EQUIVALENTS, AND RESTRICTED CASH

Cash, cash equivalents, and restricted cash consisted of the following as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Cash and cash equivalents	\$ 361,348	\$ 568,532
Restricted cash:		
Funds held in trust under the terms of certain secured notes payable	17,264	17,256
Funds held in escrow related to construction projects and investing activities	30,000	4,580
Other	6,615	7,337
	53,879	29,173
Total	\$ 415,227	\$ 597,705

7. INVESTMENTS

We hold investments in publicly traded companies and privately held entities primarily involved in the life science, agtech, and technology industries. Our accounting for non-real estate investments is summarized below. Refer to the “Investments” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements for additional information.

Investments in publicly traded companies

Our investments in publicly traded companies are classified as investments with readily determinable fair values and are presented at fair value in our consolidated balance sheets, with changes in fair value classified in investment income in our consolidated statements of operations.

Investments in privately held companies

Our investments in privately held entities consist of (i) investments in privately held entities that report NAV, and (ii) investments in privately held entities that do not report NAV. These investments are accounted for as follows:

Investments in privately held entities that report NAV

Investments in entities that report NAV, such as our privately held investments in limited partnerships, are presented at fair value using NAV as a practical expedient, with changes in fair value recognized in net income. We use NAV reported by limited partnerships generally without adjustment, unless we are aware of information indicating that the NAV reported by a limited partnership does not accurately reflect the fair value of the investment at our reporting date.

Investments in privately held entities that do not report NAV

Investments in privately held entities that do not report NAV are carried at cost, adjusted for observable price changes and impairments, with changes recognized in net income. An observable price arises from an orderly transaction for an identical or similar investment of the same issuer. Observable price changes result from, among other things, equity transactions of the same issuer executed during the reporting period, including subsequent equity offerings or other reported equity transactions related to the same issuer. To determine whether these transactions are indicative of an observable price change, we evaluate, among other factors, whether these transactions have similar rights and obligations, including voting rights, distribution preferences, and conversion rights to the investments we hold.

These investments continue to be evaluated on the basis of a qualitative assessment for indicators of impairment by utilizing the monitoring criteria described in the “Investments” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements, and by monitoring the presence of the following impairment indicators:

- (i) a significant deterioration in the earnings performance, credit rating, asset quality, or business prospects of the investee;
- (ii) a significant adverse change in the regulatory, economic, or technological environment of the investee;
- (iii) a significant adverse change in the general market condition, including the research and development of technology and products that the investee is bringing or attempting to bring to the market;
- (iv) significant concerns about the investee's ability to continue as a going concern; and/or
- (v) a decision by investors to cease providing support or reduce their financial commitment to the investee.

If such indicators are present, we are required to estimate the investment's fair value and immediately recognize an impairment charge in an amount equal to the investment's carrying value in excess of its estimated fair value.

Investments accounted for under the equity method

We account for our investments under the equity method whenever we are deemed to have significant influence over the investee's operating and financial policies. Under the equity method of accounting, we initially recognize our investment at cost and subsequently adjust the carrying amount of the investment for our share of the investee's earnings or losses, distributions received, and other-than-temporary impairments. Refer to the “Investments” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements for additional information on the criteria used to determine whether an investment should be accounted for under the equity method, and for our impairment assessment of our equity method investments.

As of December 31, 2021, we had six investments in privately held entities aggregating \$71.6 million accounted for under the equity method. Our ownership interest in each of our investments accounted for under the equity method of accounting is less than 20%. Our equity in earnings or losses of our equity method investees is recognized in each period for which these earnings or losses are reported by the investee, and is classified within investment income in our consolidated statements of operations.

7. INVESTMENTS (continued)

Investment income/loss recognition and classification

We classify unrealized and realized gains and losses on our investments within investment income in our consolidated statements of operations. Unrealized gains and losses represent:

- (i) changes in fair value for investments in publicly traded companies;
- (ii) changes in NAV as a practical expedient to estimate fair value for investments in privately held entities that report NAV per share;
- (iii) observable price changes for investments in privately held entities that do not report NAV per share; and
- (iv) our share of unrealized gains or losses reported by our equity method investees.

Realized gains and losses on our investments represent the difference between proceeds received upon disposition of investments and their historical or adjusted cost. For our equity method investments, realized gains and losses represent our share of realized gains or losses reported by the investee. Impairments are realized losses, which result in an adjusted cost, and represent charges to reduce the carrying values of investments in privately held entities that do not report NAV per share and equity method investments, if impairments are deemed other than temporary to their estimated fair value.

The following tables summarize our investments as of December 31, 2021 and 2020 (in thousands):

	December 31, 2021		
	Cost	Unrealized Gains (Losses)	Carrying Amount
Publicly traded companies	\$ 203,290	\$ 280,527	\$ 483,817
Entities that report NAV	385,692	444,172	829,864
Entities that do not report NAV:			
Entities with observable price changes	56,257	72,974	129,231
Entities without observable price changes	362,064	—	362,064
Investments accounted for under the equity method	N/A	N/A	71,588
Total investments	\$ 1,007,303	\$ 797,673	\$ 1,876,564

	December 31, 2020		
	Cost	Unrealized Gains (Losses)	Carrying Amount
Publicly traded companies	\$ 208,754	\$ 351,076	\$ 559,830
Entities that report NAV	334,341	327,741	662,082
Entities that do not report NAV:			
Entities with observable price changes	47,545	96,859	144,404
Entities without observable price changes	244,798	—	244,798
Total investments	\$ 835,438	\$ 775,676	\$ 1,611,114

Cumulative gains and losses (realized and unrealized) on investments in privately held entities that do not report NAV still held as of December 31, 2021 aggregated to a gain of \$31.2 million, which consisted of upward adjustments of \$74.3 million, downward adjustments of \$1.3 million, and impairments of \$41.8 million.

Our investment income for the years ended December 31, 2021, 2020, and 2019 consisted of the following (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Realized gains	\$ 215,845	\$ 47,288	\$ 33,158
Unrealized gains	43,632	374,033	161,489
Investment income	\$ 259,477	\$ 421,321	\$ 194,647

During the year ended December 31, 2021, gains and losses on investments in privately held entities that do not report NAV still held at December 31, 2021 aggregated to a loss of \$33.3 million, which consisted of upward adjustments of \$32.7 million and downward adjustments primarily related to observable prices changes aggregating \$66.0 million.

7. INVESTMENTS (continued)

During the year ended December 31, 2020, gains and losses on investments in privately held entities that do not report NAV still held at December 31, 2020 aggregated to a gain of \$3.1 million, which consisted of upward adjustments of \$36.7 million and downward adjustments and impairments of \$33.6 million.

During the year ended December 31, 2019, gains and losses on investments in privately held entities that do not report NAV still held at December 31, 2019 aggregated to a loss of \$12.7 million, which consisted of upward adjustments of \$5.2 million and downward adjustments and impairments of \$18.0 million.

Unrealized gains related to investments still held (excluding investments accounted for under the equity method of accounting) at December 31, 2021, 2020, and 2019 aggregated \$109.4 million, \$392.7 million, and \$184.6 million during the years ended December 31, 2021, 2020, and 2019, respectively.

Our investment income for the year ended December 31, 2021 also included \$19.7 million of equity in earnings of our equity method investments.

Commitments on investments in privately held entities that report NAV

We are committed to funding approximately \$358.0 million for all investments in privately held entities that report NAV. Our funding commitments expire at various dates over the next 11 years, with a weighted-average expiration of 9.0 years as of December 31, 2021. These investments are not redeemable by us, but we may receive distributions from these investments throughout their terms. Our investments in privately held entities that report NAV generally have expected initial terms in excess of 10 years. The weighted-average remaining term during which these investments are expected to be liquidated was 5.2 years as of December 31, 2021.

8. OTHER ASSETS

The following table summarizes the components of other assets as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Acquired in-place leases	\$ 609,872	\$ 462,324
Deferred compensation plan	38,937	31,057
Deferred financing costs – unsecured senior line of credit	19,294	24,124
Deposits	176,077	13,861
Furniture, fixtures, and equipment	26,429	31,130
Net investment in direct financing and sales-type leases	70,656	37,840
Notes receivable	13,088	3,424
Operating lease right-of-use asset	474,299	335,920
Other assets	53,985	30,620
Prepaid expenses	24,806	67,667
Property, plant, and equipment	151,375	153,614
Total	<u>\$ 1,658,818</u>	<u>\$ 1,191,581</u>

9. FAIR VALUE MEASUREMENTS

We provide fair value information about all financial instruments for which it is practicable to estimate fair value. We measure and disclose the estimated fair value of financial assets and liabilities by utilizing a fair value hierarchy that distinguishes between data obtained from sources independent of the reporting entity and the reporting entity's own assumptions about market participant assumptions. This hierarchy consists of three broad levels, as follows: (i) quoted prices in active markets for identical assets or liabilities (Level 1), (ii) significant other observable inputs (Level 2), and (iii) significant unobservable inputs (Level 3). Significant other observable inputs can include quoted prices for similar assets or liabilities in active markets, as well as inputs that are observable for the asset or liability, such as interest rates, foreign exchange rates, and yield curves. Significant unobservable inputs are typically based on an entity's own assumptions, since there is little, if any, related market activity. In instances in which the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level of input that is significant to the fair value measurement in its entirety. Our assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

Assets and liabilities measured at fair value on a recurring basis

The following table sets forth the assets that we measure at fair value on a recurring basis by level in the fair value hierarchy (in thousands). There were no liabilities measured at fair value on a recurring basis as of December 31, 2021 and 2020. In addition, there were no transfers of assets measured at fair value on a recurring basis to or from Level 3 in the fair value hierarchy during the year ended December 31, 2021.

Description	Total	Fair Value Measurement Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments in publicly traded companies:				
As of December 31, 2021	\$ 483,817	\$ 483,817	\$ —	\$ —
As of December 31, 2020	\$ 559,830	\$ 559,830	\$ —	\$ —

Our investments in publicly traded companies represent investments with readily determinable fair values, and are carried at fair value, with changes in fair value classified in net income. We also hold investments in privately held entities, which consist of (i) investments that report NAV, and (ii) investments that do not report NAV, as further described below.

Our investments in privately held entities that report NAV, such as our privately held investments in limited partnerships, are carried at fair value using NAV as a practical expedient, with changes in fair value classified in net income. As of December 31, 2021 and 2020, the carrying values of investments in privately held entities that report NAV aggregated \$829.9 million and \$662.1 million, respectively. These investments are excluded from the fair value hierarchy above as required by the fair value accounting standards. We estimate the fair value of each of our investments in limited partnerships based on the most recent NAV reported by each limited partnership. As a result, the determination of fair values of our investments in privately held entities that report NAV generally does not involve significant estimates, assumptions, or judgments.

9. FAIR VALUE MEASUREMENTS (continued)

Assets and liabilities measured at fair value on a nonrecurring basis

The following table sets forth the assets measured at fair value on a nonrecurring basis by level within the fair value hierarchy as of December 31, 2021 and 2020 (in thousands). These investments were measured at various times during the period from January 1, 2018 to December 31, 2021.

Description	Total	Fair Value Measurement Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments in privately held entities that do not report NAV				
As of December 31, 2021	\$ 138,011	\$ —	\$ 129,231 ⁽¹⁾	\$ 8,780 ⁽²⁾
As of December 31, 2020	\$ 157,871	\$ —	\$ 144,404	\$ 13,467

- (1) This balance represents the total carrying amount of our equity investments in privately held entities with observable price changes, included in our total investments balance of \$1.9 billion in our consolidated balance sheets as of December 31, 2021. For more information, refer to Note 7 – “Investments” to our consolidated financial statements.
- (2) This amount is included in the \$362.1 million balance of investments in privately held entities without observable price changes disclosed in Note 7 – “Investments” to our consolidated financial statements and represents the carrying amount of investments in privately held entities that do not report NAV for which impairments have been recognized in accordance with the measurement alternative guidance described within the “Investments” section in Note 2 – “Summary of significant accounting policies” to our consolidated financial statements.

Our investments in privately held entities that do not report NAV are measured at cost, adjusted for observable price changes and impairments, with changes recognized in net income. These investments are adjusted based on the observable price changes in orderly transactions for the identical or similar investment of the same issuer. Further adjustments are not made until another observable transaction occurs. Therefore, the determination of fair values of our investments in privately held entities that do not report NAV does not involve significant estimates and assumptions or subjective and complex judgments.

We also subject our investments in privately held entities that do not report NAV to a qualitative assessment for indicators of impairment. If indicators of impairment are present, we are required to estimate the investment’s fair value and immediately recognize an impairment charge in an amount equal to the investment’s carrying value in excess of its estimated fair value.

The estimates of fair value typically incorporate valuation techniques that include an income approach reflecting a discounted cash flow analysis, and a market approach that includes a comparative analysis of acquisition multiples and pricing multiples generated by market participants. In certain instances, we may use multiple valuation techniques for a particular investment and estimate its fair value based on an average of multiple valuation results.

Our real estate assets classified as held for sale are measured at fair value less cost to sell, with changes recognized in net income. We evaluate these assets utilizing an agreed-upon contractual sales price and available comparable market information. If this information is not available, we use estimated replacement costs or estimated cash flow projections that utilize appropriate discount and capitalization rates.

Refer to Note 4 – “Consolidated and unconsolidated real estate joint ventures,” Note 7 – “Investments,” and Note 18 – “Assets classified as held for sale” to our consolidated financial statements for additional information.

The carrying values of cash and cash equivalents, restricted cash, tenant receivables, deposits, notes receivable, accounts payable, accrued expenses, and other short-term liabilities approximate their fair value.

The fair values of our secured notes payable, unsecured senior notes payable, and the amounts outstanding on our unsecured senior line of credit, and commercial paper program were estimated using widely accepted valuation techniques, including discounted cash flow analyses using significant other observable inputs such as available market information on discount and borrowing rates with similar terms, maturities, and credit ratings. Because the valuations of our financial instruments are based on these types of estimates, the actual fair value of our financial instruments may differ materially if our estimates do not prove to be accurate. Additionally, the use of different market assumptions or estimation methods may have a material effect on the estimated fair value amounts.

9. FAIR VALUE MEASUREMENTS (continued)

As of December 31, 2021 and 2020, the book and estimated fair values of our secured notes payable, unsecured senior notes payable, and amounts outstanding under our unsecured senior line of credit and commercial paper program, including the level within the fair value hierarchy for which the estimates were derived, were as follows (in thousands):

		December 31, 2021				
		Fair Value Hierarchy				
	Book Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Estimated Fair Value	
Liabilities:						
Secured notes payable	\$ 205,198	\$ —	\$ 214,097	\$ —	\$ 214,097	
Unsecured senior notes payable	\$ 8,316,678	\$ —	\$ 8,995,913	\$ —	\$ 8,995,913	
Unsecured senior line of credit	\$ —	\$ —	\$ —	\$ —	\$ —	
Commercial paper program	\$ 269,990	\$ —	\$ 269,994	\$ —	\$ 269,994	
		December 31, 2020				
		Fair Value Hierarchy				
	Book Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Estimated Fair Value	
Liabilities:						
Secured notes payable	\$ 230,925	\$ —	\$ 249,782	\$ —	\$ 249,782	
Unsecured senior notes payable	\$ 7,232,370	\$ —	\$ 8,447,845	\$ —	\$ 8,447,845	
Unsecured senior line of credit	\$ —	\$ —	\$ —	\$ —	\$ —	
Commercial paper program	\$ 99,991	\$ —	\$ 99,998	\$ —	\$ 99,998	

10. SECURED AND UNSECURED SENIOR DEBT

The following table summarizes our outstanding indebtedness and respective principal payments as of December 31, 2021 (dollars in thousands):

Debt	Stated Rate	Interest Rate ⁽¹⁾	Maturity Date ⁽²⁾	Principal Payments Remaining for the Periods Ending December 31,						Principal	Unamortized (Deferred Financing Cost), (Discount) Premium	Total
				2022	2023	2024	2025	2026	Thereafter			
Secured notes payable												
Greater Boston	4.82%	3.40 %	2/6/24	\$ 3,564	\$ 3,742	\$ 183,527	\$ —	\$ —	\$ —	\$ 190,833	5,696	\$ 196,529
Greater Boston ⁽³⁾	SOFR + 2.70%	3.10	11/19/26	—	—	—	—	10,002	—	10,002	(2,011)	7,991
San Francisco Bay Area	6.50%	6.50	7/1/36	28	30	32	34	36	518	678	—	678
Secured debt weighted average interest rate/subtotal	4.74%	3.40		3,592	3,772	183,559	34	10,038	518	201,513	3,685	205,198
Commercial paper program ⁽⁴⁾												
Unsecured senior line of credit	0.29% ⁽⁴⁾	0.29 ⁽⁴⁾	⁽⁴⁾	—	—	—	—	270,000 ⁽⁴⁾	—	270,000	(10)	269,990
Unsecured senior notes payable	L+0.815% ⁽⁵⁾	N/A	1/6/26	—	—	—	—	—	—	—	—	—
Unsecured senior notes payable	3.45%	3.62	4/30/25	—	—	—	600,000	—	—	600,000	(2,934)	597,066
Unsecured senior notes payable	4.30%	4.50	1/15/26	—	—	—	—	300,000	—	300,000	(1,987)	298,013
Unsecured senior notes payable – green bond	3.80%	3.96	4/15/26	—	—	—	—	350,000	—	350,000	(2,116)	347,884
Unsecured senior notes payable	3.95%	4.13	1/15/27	—	—	—	—	—	350,000	350,000	(2,570)	347,430
Unsecured senior notes payable	3.95%	4.07	1/15/28	—	—	—	—	—	425,000	425,000	(2,569)	422,431
Unsecured senior notes payable	4.50%	4.60	7/30/29	—	—	—	—	—	300,000	300,000	(1,689)	298,311
Unsecured senior notes payable	2.75%	2.87	12/15/29	—	—	—	—	—	400,000	400,000	(3,284)	396,716
Unsecured senior notes payable	4.70%	4.81	7/1/30	—	—	—	—	—	450,000	450,000	(3,167)	446,833
Unsecured senior notes payable	4.90%	5.05	12/15/30	—	—	—	—	—	700,000	700,000	(7,067)	692,933
Unsecured senior notes payable	3.375%	3.48	8/15/31	—	—	—	—	—	750,000	750,000	(6,264)	743,736
Unsecured senior notes payable – green bond	2.00%	2.12	5/18/32	—	—	—	—	—	900,000	900,000	(9,712)	890,288
Unsecured senior notes payable	1.875%	1.97	2/1/33	—	—	—	—	—	1,000,000	1,000,000	(9,701)	990,299
Unsecured senior notes payable	4.85%	4.93	4/15/49	—	—	—	—	—	300,000	300,000	(3,217)	296,783
Unsecured senior notes payable	4.00%	3.91	2/1/50	—	—	—	—	—	700,000	700,000	10,320	710,320
Unsecured senior notes payable	3.00%	3.08	5/18/51	—	—	—	—	—	850,000	850,000	(12,365)	837,635
Unsecured debt weighted average interest rate/subtotal		3.44		—	—	—	600,000	920,000	7,125,000	8,645,000	(58,332)	8,586,668
Weighted-average interest rate/total		3.44%		\$ 3,592	\$ 3,772	\$ 183,559	\$ 600,034	\$ 930,038	\$ 7,125,518	\$ 8,846,513	\$ (54,647)	\$ 8,791,866

(1) Represents the weighted-average interest rate as of the end of the applicable period, including amortization of loan fees, amortization of debt premiums (discounts), and other bank fees.

(2) Reflects any extension options that we control.

(3) Relates to our real estate joint venture at 99 Coolidge Avenue, of which we own 75.0%. As of December 31, 2021, this joint venture has a \$185.3 million availability under the existing lender commitments. The interest rate shall be reduced from SOFR+2.70% to SOFR+2.10% over time upon the completion of certain leasing, construction, and financial covenant milestones.

(4) Refer to footnote 2 on the next page.

(5) During the year ended December 31, 2020, we achieved certain sustainability measures, as described in our unsecured senior line of credit agreement, which reduced the borrowing rate by one basis point for a one-year period.

10. SECURED AND UNSECURED SENIOR DEBT (continued)

The following table summarizes our secured and unsecured senior debt and amounts outstanding under our commercial paper program as of December 31, 2021 (dollars in thousands):

	Fixed-Rate Debt	Variable-Rate Debt	Total	Percentage	Weighted-Average	
					Interest Rate ⁽¹⁾	Remaining Term (in years)
Secured notes payable	\$ 195,196	\$ 10,002	\$ 205,198	2.3%	3.40%	2.2
Unsecured senior notes payable	8,316,678	—	8,316,678	94.6	3.54	12.6
Unsecured senior line of credit	—	—	—	—	N/A	4.0
Commercial paper program	—	269,990	269,990	3.1	0.29	(2)
Total/weighted average	<u>\$ 8,511,874</u>	<u>\$ 279,992</u>	<u>\$ 8,791,866</u>	<u>100.0%</u>	<u>3.44%</u>	<u>12.1</u> (2)
Percentage of total debt	97%	3%	100%			

(1) Represents the weighted-average interest rate as of the end of the applicable period, including expense/income related to the amortization of loan fees, amortization of debt premiums (discounts), and other bank fees.

(2) The commercial paper notes bear interest at short-term fixed rates and can generally be issued with a maturity of 30 days or less and with a maximum maturity of 397 days from the date of issuance. Borrowings under the program are used to fund short-term capital needs and are backed by our unsecured senior line of credit. The commercial paper outstanding as of December 31, 2021 matured on January 18, 2022. In the event we are unable to issue commercial paper notes or refinance outstanding borrowings under terms equal to or more favorable than those under our unsecured senior line of credit, we expect to borrow under the unsecured senior line of credit at L+0.815%. As such, we calculate the weighted-average remaining term of our commercial paper by using the maturity date of our unsecured senior line of credit. Using the maturity date of our outstanding commercial paper, the consolidated weighted-average maturity of our debt is 11.9 years as of December 31, 2021. The commercial paper notes sold during the three months ended December 31, 2021 were issued at a weighted-average yield to maturity of 0.24% and had a weighted-average maturity term of 12 days.

Unsecured senior notes payable

In February 2021, we opportunistically issued \$1.75 billion of unsecured senior notes payable with a weighted-average interest rate of 2.49% and a weighted-average maturity of 20.4 years. The unsecured senior notes consisted of \$900.0 million of 2.00% unsecured senior notes due 2032 ("2.00% Unsecured Senior Notes") and \$850.0 million of 3.00% unsecured senior notes due 2051 ("3.00% Unsecured Senior Notes"). The proceeds from our 2.00% Unsecured Senior Notes are expected to be allocated to eligible green projects and were initially used to refinance \$650.0 million of our 4.00% unsecured senior notes payable due in 2024 pursuant to a partial cash tender offer completed on February 10, 2021, and a subsequent call for redemption for the remaining outstanding amounts that settled on March 12, 2021. As a result of this refinancing, we recognized a loss on early extinguishment of debt of \$67.2 million, including the write-off of unamortized loan fees and premiums.

\$1.5 billion commercial paper program

Our commercial paper program provides us with the ability to issue up to \$1.5 billion of commercial paper with a maturity of generally 30 days or less and with a maximum maturity of 397 days from the date of issuance. Our commercial paper program is backed by our unsecured senior line of credit, and at all times we expect to retain a minimum undrawn amount of borrowing capacity under our unsecured senior line of credit equal to any outstanding notes issued under our commercial paper program. We use the net proceeds from the issuances of the notes for general working capital and other general corporate purposes. General corporate purposes may include, but are not limited to, the repayment of other debt and selective development, redevelopment, or acquisition of properties. As of December 31, 2021, we had \$270.0 million of notes outstanding under our commercial paper program.

Interest expense

The following table summarizes interest expense for the years ended December 31, 2021, 2020, and 2019 (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Interest incurred	\$ 312,806	\$ 297,227	\$ 262,238
Capitalized interest	(170,641)	(125,618)	(88,563)
Interest expense	<u>\$ 142,165</u>	<u>\$ 171,609</u>	<u>\$ 173,675</u>

11. ACCOUNTS PAYABLE, ACCRUED EXPENSES, AND OTHER LIABILITIES

The following table summarizes the components of accounts payable, accrued expenses, and other liabilities as of December 31, 2021 and 2020 (in thousands):

	December 31,	
	2021	2020
Accounts payable and accrued expenses	\$ 513,416	\$ 285,021
Accrued construction	438,866	333,271
Acquired below-market leases	341,585	288,075
Conditional asset retirement obligations	59,797	47,070
Deferred rent liabilities	12,384	4,495
Operating lease liability	434,745	345,750
Unearned rent and tenant security deposits	326,924	276,751
Other liabilities	82,693	89,399
Total	\$ 2,210,410	\$ 1,669,832

As of December 31, 2021 and 2020, our conditional asset retirement obligations liability primarily consisted of the soil and groundwater remediation liabilities associated with certain of our properties. Some of our properties may contain asbestos or may be subjected to other hazardous or toxic substances, which, under certain conditions, requires remediation. We engage independent environmental consultants to conduct Phase I or similar environmental assessments at our properties. This type of assessment generally includes a site inspection, interviews, and a public records review, asbestos, lead-based paint and mold surveys, subsurface sampling, and other testing. We recognize a liability for the fair value of a conditional asset retirement obligation (including asbestos) when the fair value of the liability can be reasonably estimated. In addition, environmental laws and regulations subject our tenants, and potentially us, to liability that may result from our tenants' routine handling of hazardous substances and wastes as part of their operations at our properties. These assessments and investigations of our properties have not to date revealed any additional environmental liability we believe would have a material adverse effect on our business and financial statements or that would require additional disclosures or recognition in our consolidated financial statements.

12. EARNINGS PER SHARE

From time to time, we enter into forward equity sales agreements, which are discussed in Note 15 – “Stockholders’ equity” to our consolidated financial statements. We consider the potential dilution resulting from the forward equity sales agreements on the EPS calculations. At inception, the agreements do not have an effect on the computation of basic EPS as no shares are delivered until settlement. The common shares issued upon the settlement of the forward equity sales agreements, weighted for the period these common shares were outstanding, are included in the denominator of basic EPS. To determine the dilution resulting from the forward equity sales agreements during the period of time prior to settlement, we calculate the number of weighted-average shares outstanding – diluted using the treasury stock method.

We account for unvested restricted stock awards that contain nonforfeitable rights to dividends as participating securities and include these securities in the computation of EPS using the two-class method. Our forward equity sales agreements are not participating securities and are therefore not included in the computation of EPS using the two-class method. Under the two-class method, we allocate net income (after amounts attributable to noncontrolling interests) to common stockholders and unvested restricted stock awards by using the weighted-average shares of each class outstanding for quarter-to-date and year-to-date periods independently, based on their respective participation rights to dividends declared (or accumulated) and undistributed earnings.

The table reconciles the numerators and denominators of the basic and diluted EPS computations for the years ended December 31, 2021, 2020, and 2019 (in thousands, except per share amounts):

	Year Ended December 31,		
	2021	2020	2019
Net income	\$ 654,282	\$ 827,171	\$ 404,047
Net income attributable to noncontrolling interests	(83,035)	(56,212)	(40,882)
Dividends on preferred stock	—	—	(3,204)
Preferred stock redemption charge	—	—	(2,580)
Net income attributable to unvested restricted stock awards	(7,848)	(10,168)	(6,386)
Numerator for basic and diluted EPS – net income attributable to Alexandria Real Estate Equities, Inc.’s common stockholders	<u>\$ 563,399</u>	<u>\$ 760,791</u>	<u>\$ 350,995</u>
Denominator for basic EPS – weighted-average shares of common stock outstanding	146,921	126,106	112,204
Dilutive effect of forward equity sales agreements	539	384	320
Denominator for diluted EPS – weighted-average shares of common stock outstanding	<u>147,460</u>	<u>126,490</u>	<u>112,524</u>
Net income per share attributable to Alexandria Real Estate Equities, Inc.’s common stockholders:			
Basic	\$ 3.83	\$ 6.03	\$ 3.13
Diluted	\$ 3.82	\$ 6.01	\$ 3.12

13. INCOME TAXES

We have elected to be taxed as a REIT, under the Internal Revenue Code of 1986, as amended, (the “Code”). We believe we have qualified and continue to qualify as a REIT. Under the Code, a REIT that distributes at least 90% of its REIT taxable income to its shareholders annually and meets certain other conditions is not subject to federal income taxes, but could be subject to certain state, local, and foreign taxes. We distribute 100% of our taxable income annually; therefore, a provision for federal income taxes is not required.

We distributed all of our REIT taxable income in 2020 and 2019 and, as a result, did not incur federal income tax in those years on such income. For the year ended December 31, 2021, we expect to distribute all of our REIT taxable income and, as a result, do not expect to incur federal income tax. We expect to finalize our 2021 REIT taxable income when we file our 2021 federal income tax return in 2022.

The income tax treatment of distributions and dividends declared on our common stock and our Series D Convertible Preferred Stock for the years ended December 31, 2021, 2020, and 2019 was as follows (unaudited):

	Common Stock			Series D Convertible Preferred Stock ⁽¹⁾
	Year Ended December 31,			
	2021	2020	2019	2019
Ordinary income	46.3 %	65.7 %	62.4 %	64.4 %
Return of capital	—	13.2	3.2	—
Capital gains at 25%	3.8	—	2.2	2.2
Capital gains at 20%	49.9	21.1	32.2	33.4
Total	100.0 %	100.0 %	100.0 %	100.0 %
Dividends declared	\$ 4.48	\$ 4.24	\$ 4.00	\$ 1.3125

(1) Refer to Note 15 – “Stockholders’ equity” to our consolidated financial statements for information regarding the conversion of our Series D Convertible Preferred Stock.

Beginning in 2018, the Tax Cuts and Jobs Act of 2017 added Section 199A to allow for a new tax deduction based on certain qualified business income. Section 199A provides eligible individual taxpayers a deduction of up to 20% of their qualified REIT dividends.

Our dividends declared in a given quarter are generally paid during the subsequent quarter. The taxability information presented above for our dividends paid in 2021 is based upon management’s estimate. Our federal tax return for 2021 is due on or before October 15, 2022, assuming we file for an extension of the due date. Our federal tax returns for previous tax years have not been examined by the IRS. Consequently, the taxability of distributions and dividends is subject to change.

In addition to our REIT tax returns, we file federal, state, and local tax returns for our subsidiaries. We file with jurisdictions located in the U.S., Canada, China, and other international locations and may be subject to audits, assessments, or other actions by local taxing authorities. We recognize tax benefits of uncertain tax positions only if it is more likely than not that the tax position will be sustained, based solely on its technical merits, with the taxing authority having full knowledge of all relevant information. The measurement of a tax benefit for an uncertain tax position that meets the “more likely than not” threshold is based on a cumulative probability model under which the largest amount of tax benefit recognized is the amount with a greater than 50% likelihood of being realized upon ultimate settlement with the taxing authority that has full knowledge of all relevant information.

As of December 31, 2021, there were no material unrecognized tax benefits. We do not anticipate a significant change to the total amount of unrecognized tax benefits within the next 12 months.

Interest expense and penalties, if any, are recognized in the first period during which the interest or penalties begin accruing, according to the provisions of the relevant tax law at the applicable statutory rate of interest. We did not incur any significant tax-related interest expense or penalties for the years ended December 31, 2021, 2020, and 2019.

13. INCOME TAXES (continued)

The following reconciles net income (determined in accordance with GAAP) to taxable income as filed with the IRS for the years ended December 31, 2020 and 2019 (in thousands and unaudited):

	Year Ended December 31,	
	2020	2019
Net income	\$ 827,171	\$ 404,047
Net income attributable to noncontrolling interests	(56,212)	(40,882)
Book/tax differences:		
Rental revenue recognition	(165,091)	(132,979)
Depreciation and amortization	220,046	177,627
Share-based compensation	30,695	30,756
Interest expense	(21,174)	(13,687)
Sales of property	(69,048)	66,717
Impairments	40,398	12,334
Non-real estate investment income	(377,820)	(96,353)
Other	22,315	7,565
Taxable income before dividend deduction	451,280	415,145
Dividend deduction necessary to eliminate taxable income ⁽¹⁾	(451,280)	(415,145)
Estimated income subject to federal income tax	\$ —	\$ —

(1) Total common stock and preferred stock dividend distributions paid were approximately \$533.0 million and \$451.2 million during the years ended December 31, 2020 and 2019, respectively.

14. COMMITMENTS AND CONTINGENCIES

Employee retirement savings plan

We have a retirement savings plan pursuant to Section 401(k) of the Code whereby our employees may contribute a portion of their compensation to their respective retirement accounts in an amount not to exceed the maximum allowed under the Code. In addition to employee contributions, we have elected to provide company discretionary profit-sharing contributions (subject to statutory limitations), which amounted to approximately \$5.0 million, \$6.2 million, and \$4.9 million for the years ended December 31, 2021, 2020, and 2019, respectively. Employees who participate in the plan are immediately vested in their contributions and in the contributions made on their behalf by the Company.

Concentration of credit risk

We maintain our cash and cash equivalents at insured financial institutions. The combined account balances at each institution periodically exceed the FDIC insurance coverage of \$250,000, and, as a result, there is a concentration of credit risk related to amounts in excess of FDIC insurance coverage. We have not experienced any losses to date on our invested cash.

Our rental revenue is generated by a diverse array of many tenants. As of December 31, 2021, we had 1,201 leases with a total of 893 tenants. The inability of any single tenant to make its lease payments is unlikely to have a severe or financially disruptive effect on our operations. As of December 31, 2021, our three largest tenants accounted for 3.0%, 3.0%, and 2.3% of our aggregate annual rental revenue individually, or 8.3% in the aggregate.

Commitments

As of December 31, 2021, remaining aggregate costs under contract for the construction of properties undergoing development, redevelopment, and improvements under the terms of leases approximated \$2.8 billion. We expect payments for these obligations to occur over one to three years, subject to capital planning adjustments from time to time. We may have the ability to cease the construction of certain properties, which would result in the reduction of our commitments. In addition, we have letters of credit and performance obligations aggregating \$106.8 million primarily related to deposits for acquisitions in our Greater Boston and San Francisco Bay Area markets. We are committed to funding approximately \$391.0 million related to our non-real estate investments. These funding commitments are primarily associated with our investments in privately held entities that report NAV, which expire at various dates over the next 11 years, with a weighted-average expiration of 9.0 years as of December 31, 2021.

15. STOCKHOLDERS' EQUITY

Common equity transactions

During the year ended December 31, 2021, we completed issuances and executed forward equity sales agreements for an aggregate 20.8 million shares of common stock, including the exercise of underwriters' option, for an aggregate net proceeds of approximately \$3.5 billion, as follows:

- In January 2021 and June 2021, we entered into forward equity sales agreements aggregating \$1.1 billion and \$1.5 billion, respectively, to sell an aggregate of 6.9 million and 8.1 million of our common stock, respectively, including the exercise of underwriters' options, at public offering price of \$164.00 and \$184.00, respectively, before underwriting discounts and commissions. During 2021, we issued all 15.0 million shares under these forward equity sales agreements and received net proceeds of \$2.5 billion.
- In March 2021, we issued the remaining 362 thousand shares of common stock to settle our forward equity sales agreements that were outstanding as of December 31, 2020 and received net proceeds of \$56.2 million.
- In February 2021, we entered into a new ATM common stock offering program, which allowed us to sell up to an aggregate of \$1.0 billion of our common stock.
 - We issued 5.5 million shares under our ATM program and received net proceeds of \$984.6 million.
 - As of December 31, 2021, we have no amounts remaining under this ATM program.
- In December 2021, we entered into a new ATM common stock offering program, which allows us to sell up to an aggregate of \$1.0 billion of our common stock. As of December 31, 2021, the full amount remains available for future sales of our common stock.

In January 2022, we entered into forward equity sales agreements to sell 8.1 million shares of our common stock (including the exercise of underwriters' option) aggregating \$1.7 billion at a public offering price of \$210.00 per share, before underwriting discounts and commissions.

7.00% Series D cumulative convertible preferred stock repurchases and conversion

As of December 31, 2021, 2020, and 2019, we had no outstanding shares of our Series D Convertible Preferred Stock. During the year ended December 31, 2019, we repurchased, in privately negotiated transactions, 275,000 outstanding shares of our Series D Convertible Preferred Stock at an aggregate price of \$9.2 million, or \$33.60 per share. We recognized a preferred stock redemption charge of \$2.6 million during the year ended December 31, 2019, including the write-off of original issuance costs of approximately \$215 thousand. In September 2019, we had elected to convert the remaining 2.3 million outstanding shares of our Series D Convertible Preferred Stock into shares of our common stock. The Series D Convertible Preferred Stock became eligible for mandatory conversion at our discretion, at a set conversion rate of 0.2513 shares of common stock to one share of preferred stock, upon our common stock price's exceeding \$149.46 per share for the specified period of time required to cause the mandatory conversion. In October 2019, we converted the Series D Convertible Preferred Stock into 578 thousand shares of common stock. This conversion was accounted for as an equity transaction, and we did not recognize a gain or loss.

Accumulated other comprehensive loss

The change in accumulated other comprehensive loss attributable to Alexandria Real Estate Equities, Inc.'s stockholders during the year ended December 31, 2021, was entirely due to net unrealized losses of \$669 thousand on foreign currency translation related to our operations in Canada and China.

Common stock, preferred stock, and excess stock authorizations

Our charter authorizes the issuance of 200.0 million shares of common stock, of which 158.0 million shares were issued and outstanding as of December 31, 2021. Our charter also authorizes the issuance of up to 100.0 million shares of preferred stock, none of which were issued and outstanding as of December 31, 2021. In addition, 200.0 million shares of "excess stock" (as defined in our charter) are authorized, none of which were issued and outstanding as of December 31, 2021.

16. SHARE-BASED COMPENSATION

Stock plan

For the purpose of attracting and retaining the highest-quality personnel, providing for additional incentives, and promoting the success of our Company, we have historically issued two forms of share-based compensation under our equity incentive plan: (i) options to purchase common stock and (ii) restricted stock. We have not granted any options since 2002. Each restricted share issued reduced our share reserve by three shares (3:1 ratio) prior to March 23, 2018, and by one share (1:1 ratio) on and after March 23, 2018. As of December 31, 2021, there were 2,556,301 shares reserved for the granting of future options and stock awards under the equity incentive plan.

In addition, our stock plan permits us to issue share awards to our employees, non-employees, and non-employee directors. A share award is an award of common stock that (i) may be fully vested upon issuance or (ii) may be subject to the risk of forfeiture under Section 83 of the Code. Shares issued generally vest over a four-year period from the date of issuance, and the sale of the shares is restricted prior to the date of vesting. Certain time-based restricted share awards are also subject to an additional one-year holding period after vesting. The unearned portion of time-based share awards is amortized as stock compensation expense on a straight-line basis over the vesting period. Certain restricted share awards are subject to vesting based upon the satisfaction of levels of performance and market conditions. Failure to satisfy the threshold performance conditions will result in the forfeiture of shares. Forfeiture of share awards with time-based or performance-based restrictions results in a reversal of previously recognized share-based compensation expense. Forfeiture of share awards with market-based restrictions does not result in a reversal of previously recognized share-based compensation expense.

The following is a summary of the stock awards activity under our equity incentive plan and related information for the years ended December 31, 2021, 2020, and 2019:

	Number of Share Awards	Weighted-Average Grant Date Fair Value Per Share
Outstanding at December 31, 2018	1,712,376	\$ 105.22
Granted	768,625	\$ 134.70
Vested	(666,836)	\$ 96.77
Forfeited	(14,480)	\$ 119.88
Outstanding at December 31, 2019	1,799,685	\$ 119.59
Granted	753,473	\$ 147.71
Vested	(688,599)	\$ 115.57
Forfeited	(39,279)	\$ 117.76
Outstanding at December 31, 2020	1,825,280	\$ 132.95
Granted	740,920	\$ 174.32
Vested	(709,737)	\$ 131.54
Forfeited	(33,003)	\$ 99.55
Outstanding at December 31, 2021	1,823,460	\$ 150.89

(In thousands)	Year Ended December 31,		
	2021	2020	2019
Total grant date fair value of stock awards vested	\$ 93,359	\$ 79,578	\$ 64,530
Total gross compensation recognized for stock awards	\$ 94,748	\$ 80,651	\$ 68,036
Capitalized stock compensation	\$ 46,079	\$ 37,149	\$ 24,396

Certain restricted stock awards granted during each year from 2018 to 2021 are subject to performance and market conditions. The grant date fair value of these awards is determined using a Monte Carlo simulation pricing model using the following assumptions for 2021, 2020, and 2019, respectively: (i) expected term of 3.0 years, 3.0 years, and 3.0 years (equal to the remaining performance measurement period at the grant date), (ii) volatility of 29.0%, 17.0%, and 18.0% (approximating a blended average of implied and historical volatilities), (iii) dividend yield of 2.8%, 2.8%, and 3.2%, and (iv) risk-free rate of 0.23%, 1.63%, and 2.60%.

As of December 31, 2021, there was \$222.3 million of unrecognized compensation related to unvested share awards under the equity incentive plan, which is expected to be recognized over the next four years and has a weighted-average vesting period of approximately 19 months.

17. NONCONTROLLING INTERESTS

Noncontrolling interests represent the third-party interests in certain entities in which we have a controlling interest. These entities owned 54 properties as of December 31, 2021 and are included in our consolidated financial statements. Noncontrolling interests are adjusted for additional contributions and distributions, the proportionate share of the net earnings or losses, and other comprehensive income or loss. Distributions, profits, and losses related to these entities are allocated in accordance with the respective operating agreements. During the years ended December 31, 2021 and 2020, we distributed \$112.4 million and \$87.3 million, respectively, to our consolidated real estate joint venture partners.

Certain of our noncontrolling interests have the right to require us to redeem their ownership interests in the respective entities. We classify these ownership interests in the entities as redeemable noncontrolling interests outside of total equity in our consolidated balance sheets. Redeemable noncontrolling interests are adjusted for additional contributions and distributions, the proportionate share of the net earnings or losses, and other comprehensive income or loss. If the amount of a redeemable noncontrolling interest is less than the maximum redemption value at the balance sheet date, such amount is adjusted to the maximum redemption value. Subsequent declines in the redemption value are recognized only to the extent that previous increases have been recognized.

Refer to the “Formation of consolidated real estate joint ventures and sales of partial interest” section in Note 4 – “Consolidated and unconsolidated real estate joint ventures” to our consolidated financial statements for additional information.

18. ASSETS CLASSIFIED AS HELD FOR SALE

As of December 31, 2021, one property aggregating 334,144 RSF was classified as held for sale in our consolidated financial statements. We ceased depreciation of this property upon its classification as held for sale. This property did not meet the criteria for classification as a discontinued operation.

Upon classification of an asset as held for sale, we recognize an impairment charge if the carrying amount of the long-lived asset exceeds its fair value less cost to sell. Subsequently, as a result of our quarterly assessment, we recognize an incremental impairment charge for any decrease in the asset's fair value less cost to sell. Conversely, a gain is recognized for a subsequent increase in fair value less cost to sell, limited to the cumulative net loss previously recognized. Refer to the “Impairment of long-lived assets” section within Note 2 – “Summary of significant account policies” and the “Sales of real estate assets and impairment charges” section within Note 3 – “Investments in real estate” to our consolidated financial statements for information about impairment charges related to our assets held for sale recognized during the year ended December 31, 2021.

The following is a summary of net assets as of December 31, 2021 and 2020 for our real estate investments that were classified as held for sale as of each respective date (in thousands):

	December 31,	
	2021	2020
Total assets	\$ 17,749	\$ 117,879
Total liabilities	(1,083)	(33,081)
Total accumulated other comprehensive loss	(1,750)	(841)
Net assets classified as held for sale	\$ 14,916	\$ 83,957

19. SUBSEQUENT EVENTS

For transactions completed in January 2022, refer to the following notes to our consolidated financial statements:

- For completed acquisitions, refer to the “Acquisitions” section in Note 3 – “Investments in real estate.”
- For the formation of consolidated joint ventures, refer to Note 4 – “Consolidated and unconsolidated real estate joint ventures.”
- For equity transactions, refer to the “Common equity transactions” section of Note 15 – “Stockholders’ equity.”

SCHEDULE III

Alexandria Real Estate Equities, Inc. and Subsidiaries
Schedule III
Consolidated Financial Statement Schedule of Real Estate and Accumulated Depreciation
December 31, 2021
(Dollars in thousands)

Property	Market	Encumbrances	Initial Costs			Costs Capitalized Subsequent to Acquisitions			Total Costs			Accumulated Depreciation ⁽²⁾	Net Cost Basis	Date of Construction ⁽³⁾	Date Acquired
			Land	Buildings & Improvements	Land	Buildings & Improvements	Land	Buildings & Improvements	Land	Buildings & Improvements	Total ⁽¹⁾				
Alexandria Center® at Kendall Square	Greater Boston	—	\$ 511,875	\$ 822,706	\$ 1,470,329	\$ 277,958	—	—	\$ 511,875	\$ 2,293,035	\$ 2,804,910	\$ (362,489)	\$ 2,442,421	1995 - 2017	2005 - 2021
Alexandria Center® at One Kendall Square	Greater Boston	196,529	349,952	483,816	509,540	—	—	—	349,952	993,356	1,343,308	(143,728)	1,199,580	1985 - 2019	2016 - 2017
Alexandria Technology Square®	Greater Boston	—	—	619,658	277,958	—	—	—	—	897,616	897,616	(306,522)	591,094	2001 - 2012	2006
The Arsenal on the Charles	Greater Boston	—	191,797	354,611	221,488	—	—	—	191,797	576,099	767,896	(16,705)	751,191	2000 - 2021	2019 - 2021
480 Arsenal Way and 500 and 550 Arsenal Street	Greater Boston	—	104,628	21,623	106,026	—	—	—	104,628	127,649	232,277	(48,239)	184,038	2001 - 2009	2000 - 2021
640 Memorial Drive	Greater Boston	—	—	174,878	1,390	—	—	—	—	176,268	176,268	(51,565)	124,703	2011	2015
780 and 790 Memorial Drive	Greater Boston	—	—	—	55,236	—	—	—	—	55,236	55,236	(27,307)	27,929	2002	2001
167 Sidney Street and 99 Erie Street	Greater Boston	—	—	12,613	13,909	—	—	—	—	26,522	26,522	(8,783)	17,739	2006 - 2012	2005 - 2006
79/96 13th Street (Charlestown Navy Yard)	Greater Boston	—	—	6,247	8,762	—	—	—	—	15,009	15,009	(6,817)	8,192	2012	1998
Alexandria Center® for Life Science – Fenway	Greater Boston	—	912,016	617,552	164,634	—	—	—	912,016	782,186	1,694,202	(11,927)	1,682,275	2019	2021
380 and 420 E Street	Greater Boston	—	156,355	9,229	7,418	—	—	—	156,355	16,647	173,002	(1,556)	171,446	2013	2020
5, 10, and 15 Necco Street	Greater Boston	—	277,554	55,897	73,345	—	—	—	277,554	129,242	406,796	(3,442)	403,354	2019	2019
99 A Street	Greater Boston	—	31,671	878	15,480	—	—	—	31,671	16,358	48,029	(938)	47,091	1968	2018
One Upland Road, 100 Tech Drive, and One Investors Way	Greater Boston	—	67,329	301,000	3,541	—	—	—	67,329	304,541	371,870	(16,100)	355,770	1999 - 2015	2018 - 2021
Reservoir Woods	Greater Boston	—	88,840	214,038	11,440	—	—	—	88,840	225,478	314,318	(7,139)	307,179	2009 - 2010	2020
275 Grove Street	Greater Boston	—	70,476	150,159	14,052	—	—	—	70,476	164,211	234,687	(6,713)	227,974	2000	2020
Alexandria Park at 128	Greater Boston	—	10,439	41,596	82,097	—	—	—	10,439	123,693	134,132	(52,060)	82,072	1997 - 2010	1998 - 2008
225, 266, and 275 Second Avenue	Greater Boston	—	17,086	69,994	84,475	—	—	—	17,086	154,469	171,555	(34,655)	136,900	2014 - 2018	2014 - 2017
19 Presidential Way	Greater Boston	—	12,833	27,333	25,230	—	—	—	12,833	52,563	65,396	(23,044)	42,352	1999	2005
840 Winter Street	Greater Boston	—	12,470	44,395	23,290	—	—	—	12,470	67,685	80,155	(1,362)	78,793	1999	2021
100 Beaver Street	Greater Boston	—	1,466	9,046	26,736	—	—	—	1,466	35,782	37,248	(10,453)	26,795	2006	2005
285 Bear Hill Road	Greater Boston	—	422	3,538	7,094	—	—	—	422	10,632	11,054	(2,926)	8,128	2013	2011
111 and 130 Forbes Boulevard	Greater Boston	—	3,146	15,725	4,574	—	—	—	3,146	20,299	23,445	(7,296)	16,149	2006	2006 - 2007
20 Walkup Drive	Greater Boston	—	2,261	7,099	9,029	—	—	—	2,261	16,128	18,389	(4,710)	13,679	2012	2006
Other	Greater Boston	7,991	92,156	137,831	46,099	—	—	—	92,156	183,930	276,086	(144)	275,942	Various	Various
Alexandria Center® for Science and Technology – Mission Bay	San Francisco	—	211,450	210,211	493,396	—	—	—	211,450	703,607	915,057	(184,410)	730,647	2007 - 2014	2004 - 2017
Alexandria Technology Center® – Gateway	San Francisco	—	\$ 193,004	\$ 364,078	\$ 303,215	—	—	—	\$ 193,004	\$ 667,293	\$ 860,297	\$ (106,956)	\$ 753,341	1984 - 2021	2002 - 2020

SCHEDULE III (continued)

Property	Market	Encumbrances	Initial Costs			Costs Capitalized Subsequent to Acquisitions			Total Costs			Accumulated Depreciation ⁽²⁾	Net Cost Basis	Date of Construction ⁽³⁾	Date Acquired
			Land	Buildings & Improvements	Buildings & Improvements	Land	Buildings & Improvements	Buildings & Improvements	Total ⁽¹⁾						
										\$	\$				
21213, 249, 259, 269, and 279 East Grand Avenue	San Francisco	—	\$ 59,199	\$ —	\$ —	\$ 545,037	\$ 545,037	\$ 59,199	\$ 545,037	\$ 604,236	\$ (91,206)	\$ 513,030	2008 - 2019	2004	
Alexandria Center® for Life Science – South San Francisco	San Francisco	—	32,245	1,287	458,833	32,245	460,120	492,365	460,120	492,365	(71,668)	420,697	2012	2002 - 2017	
1122 and 1178 El Camino Real	San Francisco	—	231,707	5,224	4,370	231,707	9,594	241,301	9,594	241,301	(3)	241,298	1971 - 1972	2021	
500 Forbes Boulevard	San Francisco	—	35,596	69,091	17,503	35,596	86,594	122,190	86,594	122,190	(31,522)	90,668	2001	2007	
7000 Shoreline Court	San Francisco	—	7,038	39,704	27,993	7,038	67,697	74,735	67,697	74,735	(24,327)	50,408	2001	2004	
341 and 343 Oyster Point Boulevard	San Francisco	—	7,038	—	44,189	7,038	44,189	51,227	44,189	51,227	(21,280)	29,947	2009 - 2013	2000	
849/863 Mitten Road/866 Malcolm Road	San Francisco	—	3,211	8,665	30,162	3,211	38,827	42,038	38,827	42,038	(15,731)	26,307	2012	1998	
Alexandria Center® for Life Science – San Carlos	San Francisco	—	433,634	28,323	601,498	433,634	629,821	1,063,455	629,821	1,063,455	(15,576)	1,047,879	1970 - 2021	2017 - 2021	
3825 and 3875 Fabian Way	San Francisco	—	194,424	54,519	3,007	194,424	57,526	251,950	57,526	251,950	(6,175)	245,775	1969 - 2014	2019	
Alexandria Stanford Life Science District	San Francisco	—	—	260,931	79,029	—	339,960	339,960	339,960	339,960	(22,084)	317,876	1998 - 2019	2003 - 2020	
33330, 3412, 3420, 3440, 3450, and 3460 Hillview Avenue	San Francisco	—	—	332,257	9,730	—	341,987	341,987	341,987	341,987	(7,873)	334,114	1978 - 2018	2020 - 2021	
Alexandria PARC	San Francisco	—	72,859	53,309	28,972	72,859	82,281	155,140	82,281	155,140	(9,575)	145,565	1984 - 2019	2018	
2475 and 2625/2627/2631 Hanover Street	San Francisco	—	—	103,005	12,661	—	115,666	115,666	115,666	115,666	(13,257)	102,409	2000 - 2003	1999 - 2021	
242425 Garcia Avenue/2400/2450 Bayshore Parkway	San Francisco	678	1,512	21,323	26,261	1,512	47,584	49,096	47,584	49,096	(25,242)	23,854	2008	1999	
Shoreway Science Center	San Francisco	—	20,049	48,554	252	20,049	48,806	68,855	48,806	68,855	(3,828)	65,027	2016	2019	
1450 Page Mill Road	San Francisco	—	—	84,467	110	—	84,577	84,577	84,577	84,577	(9,908)	74,669	2017	2017	
3350 West Bayshore Road	San Francisco	—	4,800	6,693	38,494	4,800	45,187	49,987	45,187	49,987	(7,956)	42,031	1982	2005	
901 California Avenue	San Francisco	—	—	—	3,797	—	3,797	3,797	3,797	3,797	—	3,797	N/A	2021	
88 Bluxome Street	San Francisco	—	148,551	21,514	153,615	148,551	175,129	323,680	175,129	323,680	(23,098)	300,582	N/A	2017	
Other	San Francisco	—	32,111	8,345	85,104	32,111	93,449	125,560	93,449	125,560	(5,989)	119,571	Various	Various	
Alexandria Center® for Life Science – New York City	New York City	—	—	—	1,007,571	—	1,007,571	1,007,571	1,007,571	1,007,571	(229,709)	777,862	2010 - 2016	2006	
21219 East 42nd Street	New York City	—	141,266	63,312	3,363	141,266	66,675	207,941	66,675	207,941	(31,730)	176,211	1995	2018	
Alexandria Center® for Life Science – Long Island City	New York City	—	47,746	53,093	112,855	47,746	165,948	213,694	165,948	213,694	(2,213)	211,481	1926 - 1942	2018 - 2019	
One Alexandria Square	San Diego	—	247,423	192,755	500,972	247,423	693,727	941,150	693,727	941,150	(207,633)	733,517	1980 - 2021	1994 - 2021	
ARE Torrey Ridge	San Diego	—	22,124	152,840	83,741	22,124	236,581	258,705	236,581	258,705	(52,130)	206,575	2004 - 2021	2016	
ARE Nautilus	San Diego	—	6,684	27,600	124,705	6,684	152,305	158,989	152,305	158,989	(61,040)	97,949	2009 - 2012	1994 - 1997	
Alexandria Point	San Diego	—	88,016	393,713	482,841	88,016	876,554	964,570	876,554	964,570	(159,767)	804,803	1988 - 2019	2010 - 2019	
5200 Illumina Way	San Diego	—	38,340	96,606	196,915	38,340	293,521	331,861	293,521	331,861	(65,439)	266,422	2004 - 2017	2010	
University District	San Diego	—	61,753	49,692	219,059	61,753	268,751	330,504	268,751	330,504	(104,500)	226,004	1989 - 2018	1998 - 2020	
SD Tech by Alexandria	San Diego	—	\$ 81,428	\$ 254,069	\$ 192,032	\$ 81,428	\$ 446,101	\$ 527,529	\$ 446,101	\$ 527,529	\$ (17,119)	\$ 510,410	1988 - 2015	2013 - 2020	

SCHEDULE III (continued)

Property	Market	Encumbrances	Initial Costs			Costs Capitalized Subsequent to Acquisitions			Total Costs			Net Cost Basis	Date of Construction ⁽³⁾	Date Acquired
			Land	Buildings & Improvements	Buildings & Improvements	Buildings & Improvements	Land	Buildings & Improvements	Total ⁽¹⁾					
Sequence District by Alexandria	San Diego	—	\$	\$ 163,610	\$ 281,389	\$	9,270	\$ 163,610	\$ 290,659	\$ 454,269	\$ (4,941)	\$ 449,328	1997 - 2000	2020 - 2021
Pacific Technology Park	San Diego	—	—	96,796	66,660	22,112	96,796	88,772	185,568	(1,205)	184,363	1989 - 1991	2021	
Summers Ridge Science Park	San Diego	—	—	21,154	102,046	3,685	21,154	105,731	126,885	(11,016)	115,869	2005	2018	
ARE Portola	San Diego	—	—	6,991	25,153	40,038	6,991	65,191	72,182	(18,338)	53,844	2005 - 2012	2007	
7330 and 7360 Carroll Road	San Diego	—	—	4,674	24,012	2,125	4,674	26,137	30,811	(9,978)	20,833	1983 - 2007	2010 - 2021	
5810/5820 Nancy Ridge Drive	San Diego	—	—	3,492	18,285	32,750	3,492	51,035	54,527	(11,990)	42,537	2021	2004	
9877 Waples Street	San Diego	—	—	5,092	11,908	12,080	5,092	23,988	29,080	(1,180)	27,900	2020	2020	
5871 Oberlin Drive	San Diego	—	—	1,349	8,016	20,320	1,349	28,336	29,685	(3,103)	26,582	2021	2010	
3911, 3931, 3985, 4025, 4031, 4045, and 4075 Sorrento Valley Boulevard	San Diego	—	—	18,177	42,723	28,584	18,177	71,307	89,484	(37,143)	52,341	2007 - 2015	2010 - 2019	
11025, 11035, 11045, 11055, 11065, and 11075 Roselle Street	San Diego	—	—	4,156	11,571	46,247	4,156	57,818	61,974	(16,879)	45,095	2006 - 2014	1997 - 2014	
Other	San Diego	—	—	117,866	155,803	79,722	117,866	235,525	353,391	(28,341)	325,050	Various	Various	
The Eastlake Life Science Campus by Alexandria	Seattle	—	—	51,750	83,012	707,183	51,750	790,195	841,945	(175,538)	666,407	1997 - 2021	2002 - 2020	
Alexandria Center® at South Lake Union	Seattle	—	—	76,070	1,128	288,917	76,070	290,045	366,115	(38,986)	327,129	1984 - 2017	2007 - 2019	
219 Terry Avenue North	Seattle	—	—	1,819	2,302	20,166	1,819	22,468	24,287	(8,686)	15,601	2012	2007	
830 4th Avenue South	Seattle	—	—	6,500	12,062	1,656	6,500	13,718	20,218	(358)	19,860	1995	2020	
3000/3018 Western Avenue	Seattle	—	—	1,432	7,497	24,583	1,432	32,080	33,512	(22,314)	11,198	2000	1998	
410 West Harrison Street and 410 Elliott Avenue West	Seattle	—	—	3,857	1,989	17,559	3,857	19,548	23,405	(6,765)	16,640	2006 - 2008	2004	
1010 4th Avenue	Seattle	—	—	46,200	—	5,195	46,200	5,195	51,395	—	51,395	N/A	2020	
Other	Seattle	—	—	245,754	224,600	18,153	245,754	242,753	488,507	(4,120)	484,387	Various	Various	
Alexandria Center® for Life Science – Shady Grove	Maryland	—	—	88,157	261,626	311,686	88,157	573,312	661,469	(113,427)	548,042	1985 - 2021	2004 - 2021	
1330 Piccard Drive	Maryland	—	—	2,800	11,533	36,302	2,800	47,835	50,635	(22,015)	28,620	2005	1997	
1405 and 1450 Research Boulevard	Maryland	—	—	2,788	24,507	10,988	2,788	35,495	38,283	(17,324)	20,959	1980 - 2006	1997 - 2021	
1500 and 1550 East Gude Drive	Maryland	—	—	1,523	7,731	10,485	1,523	18,216	19,739	(10,247)	9,492	1995 - 2003	1997	
5 Research Place	Maryland	—	—	1,466	5,708	30,706	1,466	36,414	37,880	(17,079)	20,801	2010	2001	
5 Research Court	Maryland	—	—	1,647	13,258	24,099	1,647	37,357	39,004	(16,591)	22,413	2007	2004	
12301 Parklawn Drive	Maryland	—	—	1,476	7,267	1,697	1,476	8,964	10,440	(3,388)	7,052	2007	2004	
Alexandria Technology Center® – Gaithersburg I	Maryland	—	—	20,980	121,952	49,525	20,980	171,477	192,457	(49,941)	142,516	1992 - 2019	1997 - 2019	
Alexandria Technology Center® – Gaithersburg II	Maryland	—	—	17,134	67,825	101,016	17,134	168,841	185,975	(36,064)	149,911	2000 - 2021	1997 - 2020	
20400 Century Boulevard	Maryland	—	—	3,641	4,759	7,817	3,641	12,576	16,217	—	16,217	2017	2021	
401 Professional Drive	Maryland	—	—	1,129	6,941	11,130	1,129	18,071	19,200	(8,602)	10,598	2007	1996	
950 Wind River Lane	Maryland	\$	\$	\$ 2,400	\$ 10,620	\$ 1,050	\$ 2,400	\$ 11,670	\$ 14,070	\$ (3,919)	\$ 10,151	2009	2010	

SCHEDULE III (continued)

Property	Market	Encumbrances	Initial Costs				Costs Capitalized Subsequent to Acquisitions				Total Costs			Net Cost Basis	Date of Construction ⁽³⁾	Date Acquired
			Land		Buildings & Improvements		Land		Buildings & Improvements		Buildings & Improvements	Total ⁽¹⁾				
			\$		\$		\$		\$							
620 Professional Drive	Maryland	\$ —	\$ 784	\$ 4,705	\$ 8,235	\$ 13,724	\$ 784	\$ 8,235	\$ 12,940	\$ 13,724	\$ 7,165	\$ 6,559	2012	2005		
8000/9000/10000 Virginia Manor Road	Maryland	—	—	13,679	10,238	23,917	—	10,238	23,917	23,917	(11,662)	12,255	2003	1998		
14225 Newbrook Drive	Maryland	—	4,800	27,639	22,535	54,974	4,800	22,535	50,174	54,974	(19,918)	35,056	2006	1997		
Alexandria Center [®] for Life Science – Durham	Research Triangle	—	90,686	471,263	128,949	690,898	90,686	128,949	600,212	690,898	(14,556)	676,342	1985 - 2021	2020 - 2021		
Alexandria Center [®] for Advanced Technologies	Research Triangle	—	27,784	16,958	138,532	183,274	27,784	138,532	155,490	183,274	(14,375)	168,899	2007 - 2012	2012 - 2021		
Alexandria Center [®] for AgTech	Research Triangle	—	2,801	6,756	180,881	190,438	2,801	180,881	187,637	190,438	(9,807)	180,631	2018	2017 - 2018		
Alexandria Technology Center [®] – Alston	Research Triangle	—	1,430	17,482	32,662	51,574	1,430	32,662	50,144	51,574	(26,489)	25,085	1985 - 2009	1998		
108/110/112/114 TW Alexander Drive	Research Triangle	—	—	376	44,943	45,319	—	44,943	45,319	45,319	(22,969)	22,350	2000	1999		
Alexandria Innovation Center [®] – Research Triangle	Research Triangle	—	1,065	21,218	30,583	52,866	1,065	30,583	51,801	52,866	(22,564)	30,302	2005 - 2008	2000		
7 Triangle Drive	Research Triangle	—	701	—	32,612	33,313	701	32,612	32,612	33,313	(9,084)	24,229	2011	2005		
2525 East NC Highway 54	Research Triangle	—	713	12,827	20,700	34,240	713	20,700	33,527	34,240	(13,280)	20,960	1995	2004		
407 Davis Drive	Research Triangle	—	1,229	17,733	1,028	19,990	1,229	1,028	18,761	19,990	(4,609)	15,381	1998	2013		
601 Keystone Park Drive	Research Triangle	—	785	11,546	7,314	19,645	785	7,314	18,860	19,645	(7,211)	12,434	2009	2006		
6040 George Watts Hill Drive	Research Triangle	—	—	—	27,900	27,900	—	27,900	27,900	27,900	(4,725)	23,175	2015	2014		
5 Triangle Drive	Research Triangle	—	161	3,409	12,678	16,248	161	12,678	16,087	16,248	(7,230)	9,018	1981	1998		
6101 Quadrangle Drive	Research Triangle	—	951	3,982	11,419	16,352	951	11,419	15,401	16,352	(4,161)	12,191	2012	2008		
Alexandria Center [®] for NextGen Medicines	Research Triangle	—	94,184	—	1,872	96,056	94,184	1,872	1,872	96,056	—	96,056	N/A	2021		
Canada	Canada	—	22,801	99,693	15,410	137,904	22,801	15,410	115,103	137,904	(29,408)	108,496	1998 - 2020	2005 - 2021		
Various	Various	—	200,590	265,065	237,136	702,791	200,590	237,136	502,201	702,791	(52,503)	650,288	Various	Various		
Total – North America		205,198	6,811,325	9,824,856	12,096,927	28,733,108	6,811,325	12,096,927	21,921,783	28,733,108	(3,766,758)	24,966,350				
Asia		—	—	—	18,802	18,802	—	18,802	18,802	18,802	(4,483)	14,319	2015	2008		
		\$ 205,198	\$ 6,811,325	\$ 9,824,856	\$ 12,115,729	\$ 28,751,910	\$ 6,811,325	\$ 12,115,729	\$ 21,940,585	\$ 28,751,910	\$ (3,771,241)	\$ 24,980,669				

SCHEDULE III (continued)

Alexandria Real Estate Equities, Inc.
Consolidated Financial Statement Schedule of Rental Properties and Accumulated Depreciation
December 31, 2021
(Dollars in thousands)

- (1) As of December 31, 2021, the total cost of our real estate assets aggregated \$28.8 billion, which was less than the cost of real estate for federal income tax purposes aggregating \$29.3 billion by approximately \$578.4 million.
- (2) The depreciable life ranges up to 40 years for buildings and improvements, up to 20 years for land improvements, and the term of the respective lease for tenant improvements.
- (3) Represents the later of the date of original construction or the date of the latest renovation.

SCHEDULE III (continued)

Alexandria Real Estate Equities, Inc.
Consolidated Financial Statement Schedule of Real Estate and Accumulated Depreciation
December 31, 2021
(In thousands)

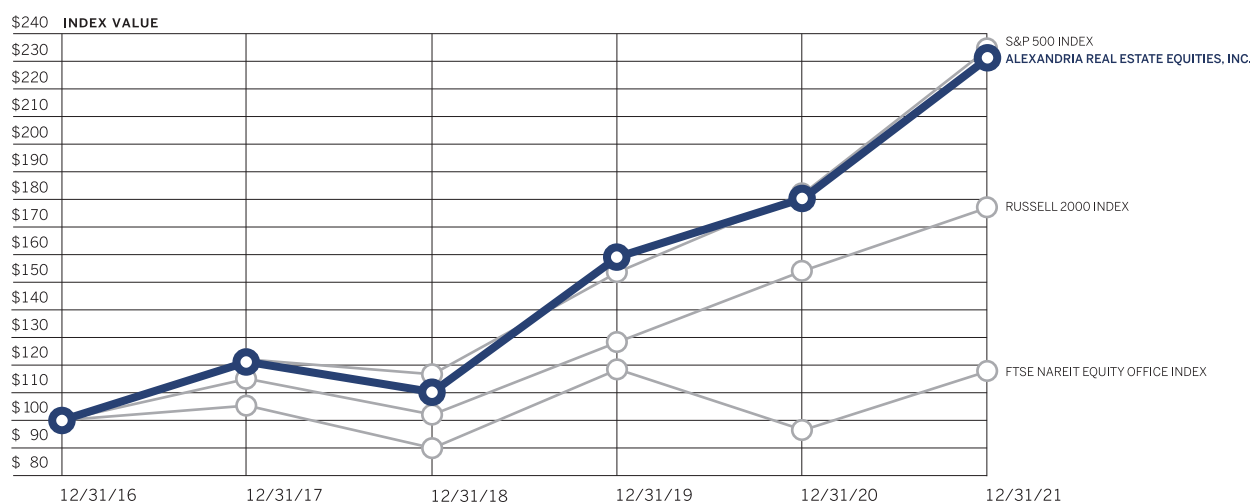
A summary of activity of consolidated investments in real estate and accumulated depreciation is as follows:

Real Estate	December 31,		
	2021	2020	2019
Balance at beginning of period	\$ 21,274,810	\$ 17,552,956	\$ 14,181,780
Acquisitions (including real estate, land, and joint venture consolidation)	5,405,569	2,825,537	2,240,376
Additions to real estate	2,267,848	1,505,152	1,143,035
Deductions (including dispositions and direct financing leases)	(196,317)	(608,835)	(12,235)
Balance at end of period	<u>\$ 28,751,910</u>	<u>\$ 21,274,810</u>	<u>\$ 17,552,956</u>

Accumulated Depreciation	December 31,		
	2021	2020	2019
Balance at beginning of period	\$ 3,182,438	\$ 2,708,918	\$ 2,268,087
Depreciation expense on properties	607,927	530,226	448,661
Sale of properties	(19,124)	(56,706)	(7,830)
Balance at end of period	<u>\$ 3,771,241</u>	<u>\$ 3,182,438</u>	<u>\$ 2,708,918</u>

PERFORMANCE GRAPH

The following performance graph compares the cumulative total return on our common stock over the five-year period ended December 31, 2021 to the cumulative total return of the S&P 500 Index, the Russell 2000 Index, and the Equity Office Index prepared by FTSE Russell and Nareit (the “FTSE Nareit Equity Office Index”) for the same period. The graph assumes that \$100 was invested on December 31, 2016 in our common stock, the S&P 500 Index, the Russell 2000 Index, and the FTSE Nareit Equity Office Index, and that all dividends were reinvested. The returns shown on the graph are not necessarily indicative of future performance.



INDEX	PERIOD ENDED					
	12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21
ALEXANDRIA REAL ESTATE EQUITIES, INC.	\$100.00	\$120.95	\$110.10	\$158.58	\$179.63	\$230.09
S&P 500 INDEX	\$100.00	\$121.83	\$116.49	\$153.17	\$181.35	\$233.41
RUSSELL 2000 INDEX	\$100.00	\$114.65	\$102.02	\$128.06	\$153.62	\$176.39
FTSE NAREIT EQUITY OFFICE INDEX	\$100.00	\$105.25	\$ 89.99	\$118.26	\$ 96.46	\$117.68

Source: S&P Global Market Intelligence © 2022

CORPORATE INFORMATION

COMMON STOCK

Listed on the New York
Stock Exchange
Symbol "ARE"

CORPORATE OFFICE

26 North Euclid Avenue
Pasadena, California 91101
(626) 578-0777

TRANSFER AGENT

American Stock Transfer &
Trust Company, LLC
6201 15th Avenue
Brooklyn, New York 11219
(800) 937-5449

LEGAL COUNSEL

Morrison & Foerster LLP
Los Angeles, California

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Ernst & Young LLP
Los Angeles, California

ANNUAL MEETING

The annual meeting will be held
at 11:00 a.m., Eastern Time, on
May 17, 2022, at the
Alexandria Center® for Life Science
450 East 29th Street
New York, New York 10016

SEC FORM 10-K

A copy of the Company's Annual Report
on Form 10-K, as filed with the Securities
and Exchange Commission, is available
without charge, upon written request to:

Alexandria Real Estate Equities, Inc.
26 North Euclid Avenue
Pasadena, California 91101
(626) 578-0777
www.are.com

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Talent Management

ALEXANDRIA REAL ESTATE EQUITIES, INC. (NYSE:ARE), an S&P 500® urban office REIT, is the first, longest-tenured, and pioneering owner, operator, and developer uniquely focused on collaborative life science, agtech, and technology campuses in AAA innovation cluster locations, with a total market capitalization of \$44.0 billion as of December 31, 2021, and an asset base in North America of 67.0 million SF. The asset base in North America includes 38.8 million RSF of operating properties and 4.8 million RSF of Class A properties undergoing construction, 8.7 million RSF of near-term and intermediate-term development and redevelopment projects, and 14.7 million SF of future development projects. Founded in 1994, Alexandria pioneered this niche and has since established a significant market presence in key locations, including Greater Boston, the San Francisco Bay Area, New York City, San Diego, Seattle, Maryland, and Research Triangle. Alexandria has a longstanding and proven track record of developing Class A properties clustered in urban life science, agtech, and technology campuses that provide our innovative tenants with highly dynamic and collaborative environments that enhance their ability to successfully recruit and retain world-class talent and inspire productivity, efficiency, creativity, and success. Alexandria also provides strategic capital to transformative life science, agtech, and technology companies through our venture capital platform. We believe our unique business model and diligent underwriting ensure a high-quality and diverse tenant base that results in higher occupancy levels, longer lease terms, higher rental income, higher returns, and greater long-term asset value. For additional information on Alexandria, please visit www.are.com.

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FORWARD-LOOKING STATEMENTS: This document includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such forward-looking statements include, without limitation, statements regarding our 2022 earnings per share attributable to Alexandria’s common stockholders – diluted, 2022 funds from operations per share attributable to Alexandria’s common stockholders – diluted, net operating income, our projected sources and uses of capital, our ESG policies, practices, and performance, our 2025 sustainability goals, and the prospects for success of any treatment approach to the opioid crisis, addiction, mental health, any new medicines or technologies or approach to address other threats to human health, hunger and food insecurity, deficiencies in support for services for the military, educational disparities, and homelessness. You can identify the forward-looking statements by their use of forward-looking words, such as “forecast,” “guidance,” “goals,” “projects,” “estimates,” “anticipates,” “believes,” “expects,” “intends,” “may,” “plans,” “seeks,” “should,” “targets,” or “will,” or the negative of those words or similar words. These forward-looking statements are based on our current expectations, beliefs, projections, future plans and strategies, anticipated events or trends, and similar expressions concerning matters that are not historical facts, as well as a number of assumptions concerning future events. There can be no assurance that actual results will not be materially higher or lower than these expectations. These statements are subject to risks, uncertainties, assumptions, and other important factors that could cause actual results to differ materially from the results discussed in the forward-looking statements. Factors that might cause such a difference include, without limitation, our failure to obtain capital (debt, construction financing, and/or equity) or refinance debt maturities, lower than expected yields, increased interest rates and operating costs, adverse economic or real estate developments in our markets, our failure to successfully place into service and lease any properties undergoing development or redevelopment and our existing space held for future development or redevelopment (including new properties acquired for that purpose), our failure to successfully operate or lease acquired properties, decreased rental rates, increased vacancy rates or failure to renew or replace expiring leases, defaults on or non-renewal of leases by tenants, adverse general and local economic conditions, inflation, supply chain disruptions, construction delays, an unfavorable capital market environment, decreased leasing activity or lease renewals, failure to obtain LEED and other healthy building certifications and efficiencies, the ongoing COVID-19 pandemic, and other risks and uncertainties detailed in our filings with the Securities and Exchange Commission (SEC). Accordingly, you are cautioned not to place undue reliance on such forward-looking statements. All forward-looking statements are made as of the date of this document, and unless otherwise stated, we assume no obligation to update this information and expressly disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise. For more discussion relating to risks and uncertainties that could cause actual results to differ materially from those anticipated in our forward-looking statements, and risks to our business in general, please refer to our SEC filings, including our most recent annual report on Form 10-K and any subsequent quarterly reports on Form 10-Q.



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