Multifamily Amenity Wars:
Defining their Current State in Luxury Urban Markets and Determining Impacts of COVID-19

by

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Submitted to the Program in Real Estate Development in Conjunction with the Center for Real Estate in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development

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ABSTRACT

This paper examines the historic, current and future state of luxury residential amenities and the popularly-called "Amenity Wars" in luxury multifamily housing. The research is based on U.S. urban markets with a special focus on Boston, Massachusetts, where the recent building boom and overall healthy economy have created an active and competitive multifamily development environment. It also aims to answer the question: how has/will COVID-19 (coronavirus disease 2019) impact the thinking behind and programming of residential building amenities?

The discussion of recent Amenity Wars trends incorporates themes such as catering to resident needs on a lifestyle level; the draw of physical amenities vs. service-oriented amenities; and demographic and market conditions that have resulted in the current state of multifamily demand. Following is an exploration of how, as of summer 2020, the coronavirus's rapid person-to-person spread has proved particularly disruptive to the way multifamily housing operates, and how it has challenged existing perceptions about what makes for a desirable multifamily housing experience.

The experience of the COVID-19 pandemic will represent a profound moment in collective memory with the power to alter not only the planning and programming of multifamily features and amenities, but luxury urban residential demand in general. As such, it is now time to rethink what the future of the Amenity Wars will look like in both the evolving new normal and long-term new normal.

This paper demonstrates how, during the pandemic, innovative designs and other creative solutions have already begun to infiltrate multifamily design and construction. It also establishes that a healthy demand for luxury urban multifamily housing is poised to remain in the long term, along with which additional notable shifts in multifamily feature and amenity programming will occur. Going forward, we should expect to see changes to physical space in the form of more spatially-adaptable buildouts that enable flexibility of use in addition to more private areas and less community focus, as well as a shift toward service over some physical amenities. Additionally, some of the most lasting effects of the pandemic will be in regard to how multifamily buildings are designed to accommodate new demands of teleworking.

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Chapter 1: Introduction

1.1 Research Motivation and Purpose

This research is meant to provide a comprehensive overview of the historic and current state of "Amenity Wars" in U.S. urban multifamily luxury properties. The historic data and trends will combine with an examination of the current situation brought on by the novel coronavirus to best determine the impact of the pandemic on the thinking behind and programming of residential amenities. The research is also meant to provide a useful tool for real estate developers, owners managers, and designers in their decision-making for new or rehab residential urban multifamily projects. This is a realm in which "mistakes can be costly, both in upfront design and construction dollars, but also in opportunity costs. Every wrong choice represents a lost opportunity to provide other amenities with potentially greater customer appeal."[1] Understanding how to avoid such mistakes is a core goal of this thesis.

1.2 Research Methodology

The research methodology used in this paper will be primarily qualitative analysis of historical and current urban luxury multifamily amenity trends. Sources predominantly include industry reports and opinions as well as national and local-Boston articles and press. Scholarly research will also provide quantitative components in the analysis, as well as examination and discussion of demographics such as age and socioeconomic standing that affect both the supply and demand of building features and amenities. Additional research will cover Boston apartment and condominium market trends to help determine how local multifamily demand has and continues to change in the face of COVID-19.

[1] Multifamily Design+Construction, "Multifamily Amenities 2019 Report."

1.3 Definitions and Notes on Terminology

1.3.1 Defining "Urban Luxury"

If not otherwise mentioned, references in this paper to "multifamily" imply multifamily properties of both urban and luxury designations. The concentration on urban and luxury enables a more specialized rather than general discussion of multifamily product types, but also is more relevant to a large and notable segment of multifamily properties in Boston's urban core, including in particular properties that have resulted from the City's recent apartment and condominium building boom that has occurred since the Great Recession.

Urban: While there is no single definition of what actually constitutes an urban market, for the purposes of this research, "urban" refers to downtown cores with high rise buildings and dense populations. The Boston urban market is considered to include the following neighborhoods:

- Back Bay
- Bay Village
- Beacon Hill
- Fenway
- Midtown (including Downtown Crossing, Chinatown)
- North End
- Seaport District
- South End
- Waterfront
- West End

Luxury: What are considered the most desirable features, amenities, and styles in luxury residential property not only differ by urban market location, but are also constantly evolving within individual markets. However, for the purpose of this paper and from the Boston real estate perspective, luxury will be defined as properties that sell for approximately $1,200 per square foot or higher or rent for approximately $4.50 per square foot or higher. In Boston, the following apartment and condominium properties meet this designation. This list is not all-inclusive;

however, it provides a comparable set of Boston properties for which relevancies can be established in other urban markets.[2]

Boston Luxury Condominiums with Average Sales & UAG Price per Sq.Ft. (2019)			
Property	**Neighborhood**	**Year Built**	**Avg. $/SF**
Lovejoy Wharf	North End	2017	$1,170
Millennium Place	Midtown	2013	$1,201
The Intercontinental	Waterfront	2006	$1,218
Lewis Wharf	Waterfront	1973	$1,220
Sepia at Ink Block	South End	2015	$1,224
Ritz Carlton	Midtown	2001	$1,267
Battery Wharf	Waterfront	2008	$1,300
Union Wharf	Waterfront	1978	$1,328
Boulevard on the Greenway	Midtown	2017	$1,331
Atelier 505	South End	2003	$1,371
Bryant Back Bay	Back Bay	2009	$1,372
Pierce Boston	Fenway	2018	$1,477
Mandarin Oriental (78 Boylston)	Back Bay	2015	$1,478
The Quinn	South End	2020	$1,537
Trinity Place	Back Bay	2000	$1,597
100 Shawmut	South End	2020	$1,607
EchelonSeaport	Seaport	2019	$1,670
The Archer Residences	Beacon Hill	2019	$1,672
Millennium Tower	Midtown	2016	$1,692
Rowes Wharf	Waterfront	1987	$1,722
The Clarendon	Back Bay	2009	$1,826
Belvedere	Back Bay	2001	$1,871
Mandarin Oriental (76 Boylston)	Back Bay	2008	$1,925
50 Liberty	Seaport	2018	$1,972
Twenty Two Liberty	Seaport	2015	$2,053
Pier 4	Seaport	2019	$2,100
Four Seasons (Boylston St.)	Back Bay	1985	$2,389
One Dalton	Back Bay	2019	$2,572
The Carlton House	Back Bay	1982	$2,659
Heritage on the Garden	Back Bay	1988	$2,830
Source: LINK, MLS & The Collaborative Companies 2019 Year End Report			

Boston Luxury Apartments with Average Effective Rent per Sq.Ft (2019)			
Property	**Neighborhood**	**Year Built**	**Avg. EFF $/SF**
315 on A	Seaport	2014	$4.45
The Devonshire	Midtown	1983	$4.45
The Tower at One Greenway	Chinatown	2016	$4.59
Fenway Diamond Apartments	Fenway	2015	$4.61
Radian Boston	Chinatown	2014	$4.66
Ink Block South End	South End	2015	$4.72
Fenway Triangle Trilogy	Fenway	2006	$4.75
Viridian	Fenway	2015	$4.77
One Canal	West End	2016	$4.83
Avalon at Prudential Center	Back Bay	1968	$4.87
AVA Back Bay	Back Bay	1968	$4.93
The Arlington	Back Bay	2014	$4.98
The Parkside	Fenway	1920	$5.06
28 Exeter	Back Bay	1980	$5.17
Van Ness	Fenway	2015	$5.22
Troy Boston	South End	2015	$5.22
100 Pier 4	South End	2015	$5.38
Kensington	Midtown	2013	$5.47
NEMA Boston	Seaport	2020	$5.48
Hub50House	North End	2020	$5.50
345 Harrison	South End	2018	$5.64
The Harlo	Fenway	2017	$5.68
VIA Seaport Residences	Seaport	2017	$5.77
The Benjamin	Seaport	2017	$5.77
Watermark Seaport	Seaport	2016	$5.85
30 Dalton	Back Bay	2016	$6.01
200 Brookline	Fenway	2018	$6.21
Avalon Exeter	Back Bay	2014	$6.27
Source: Axio Metrics			

Figure 1: Boston Luxury Condominium and Apartment Buildings

1.3.2 Defining "Amenities"

When this paper mentions "amenities," it includes amenities in the common sense of physical spaces in buildings (e.g. fitness center, club room, pool), as well as services (e.g. concierge, social programming) and even some building and in-unit finishes and fixtures (e.g. smart home technology).

[2] Note that comparable properties (i.e. with similar amenities, features, level of luxury, and unit count and mix) in other markets are likely to be priced differently based on local conditions.

1.4 Introduction to the Amenity Wars

"Five-star;" "first-class;" "white-glove;" "artfully curated;" "bespoke;" "luxurious;" "visionary amenities and intuitive service;" these are but a few of the marketing descriptors that have become common for amenities in luxury urban multifamily communities. They are all emblematic of the recent Amenity Wars, in which residential communities, including apartments and condominiums, are engaging in competition-meets-bribery tactics to attract and retain residents for their properties. "The war" is really two-fold, involving simultaneous goals of attracting and retaining residents.

According to a recent renter preference survey of a quarter million multifamily renters in the U.S. from the National Multifamily Housing Council (NMHC) and real estate consulting firm Kingsley Associates, 44 percent of residents say amenities are a major factor when choosing a new place to live and 21 percent report that they would leave because of amenities.[3] Once upon a time, a gym, pool and bicycle storage were enough to set a property apart in catering to luxury clientele. Today, urban apartment renters and condominium buyers are seeking, and developers are providing, a community that offers so much more in terms of features and amenities. This transition over time—the history and current state of the Amenity Wars—is one subject this paper will explore. The discussion incorporates topics and themes such as catering to resident needs on a lifestyle level; the draw of physical amenities vs. service-oriented amenities; and demographic trends and market conditions that have resulted in the current state of multifamily demand from a macro U.S. perspective to Boston, Massachusetts in particular.

Fitting with the "war" or "arms race" metaphor, it is reasonable to expect victors, plateaus, détente and/or de-escalation in amenity trends. Up until the beginning of 2020, opinions were split as to whether or not any of these had become pertinent elements. While many believe the battle to still be raging in full force, other sources were making the claim that this so-called war was actually

[3] "2020 NMHC/Kingsley Apartment Resident Preferences Report." The 2020 National Multifamily Housing Council (NMHC)/Kingsley Apartment Resident Preferences Report surveyed over a quarter million multifamily renters in the U.S. to reveal the apartment and community features that they value most, which ones they won't rent without, and how the latest trends will affect their decisions about where to rent in 2020.

turning, shifting, or even ending. For example, Multifamily Design+Construction's "Multifamily Amenities 2019" survey,[4] which follows up on their 2017 survey of multifamily developers, property owners, designers, and construction professionals, describes the state of the Amenity Wars through 2019 in which "developers are waving the white flag of surrender. The nation's tenants and condo owners have declared victory" because "there is no letup in the quantity and variety of amenities multifamily developers and their project teams are pumping into their rental and owner communities."[5] These remarks paint a picture of the Amenity Wars as developer vs. residents, but just as relevant is the developer vs. developer contest.

Then 2020 brought with it a change to the Amenity Wars caused by neither developer vs. developer, nor developer vs. resident actions. For one, U.S. urban multifamily market outlooks were beginning to question and anticipate a softening marketing after years of unprecedented growth since the Great Recession. And then there was the coronavirus disease (COVID-19) pandemic.

After the history and recent trends of the Amenity Wars, this paper explores how the coronavirus's rapid person-to-person spread is a threat to the way multifamily housing operates. The novel coronavirus has proved particularly disruptive for residents in multifamily housing, and, due to physical shutdowns and lockdowns of communities and construction, the residential Amenity Wars have been forced to a temporary détente. However, innovative design solutions have and will continue to infiltrate multifamily design and construction, and as we will see, it has become a time to rethink what the future of Amenity Wars will look like in both the evolving and long-term new normals.

Research was conducted for this paper during the quarantine in the spring and summer of 2020, before any effective vaccines or treatments were created. While there is currently consensus during

[4] Multifamily Design+Construction, "Multifamily Amenities 2019 Report." The report was designed to determine the extent to which decision makers (multifamily developers, property owners, designers, construction professionals, and others allied to this $63 billion market sector) have included 113 identified amenities in their multifamily communities in the last 24 months, and to compare those results to the 2017 findings.
[5] Multifamily Design+Construction.

this age of COVID-19 that "no matter where you live, where you live has never mattered more,"[6] there is markedly less certainty in regard to the long term effects of the pandemic on multifamily real estate and urban living in general. In fact, the biggest consensus is one of uncertainty; the most popular "predict the future" response in interviews, real estate forums, and concluding remarks in industry articles has been "we will have to wait and see" or "only time will tell."

In the age of COVID-19, previously-standing ideas and perceptions about what makes for a desirable multifamily housing experience, of which amenities have been a vital component, have been challenged and are now being re-examined. This thesis considers current aspects of living with the pandemic in conjunction with previously-occurring multifamily amenity trends, as well as projected residential market shifts, in order to determine what the long-term new normal will actually entail for urban multifamily properties in the U.S.. Together, these considerations show that, not only are the Amenity Wars here to stay, but the demand for urban multifamily housing should remain strong. Notably, though, there will be some shifts in multifamily features and amenity programming. In the long-term, we should expect to see changes to physical space in the form of more flexible or spatially-adaptable buildouts that enable more private areas and less community focus, as well as a shift toward service over some physical amenities. Additionally, some of the most lasting effects of the pandemic will be in regard to how people work. A greater shift to remote working, at least part time, will greatly affect how and where people choose to live, and how multifamily buildings are designed to accommodate the new demands of teleworking.

[6] "No matter where you live, where you live has never mattered more" is the theme of a recent Realtor.com television commercial.

Chapter 2: Defining the Amenity Wars and Best Practice Development

Amenity "Wars:" The metaphor is an apt one for describing the recent history of multifamily development. Just as there are numerous battles or phases that make up a war, complete with periods of escalation, de-escalation and détente, so too have there been multiple competitive stages of amenity programming for apartment and condominium buildings. For developers and designers, the theme extends to the notion of reconnaissance, which has proven to be a common and useful tactic in the sense of surveying the competition to figure how to one-up its offerings. As we will later see, COVID-19 just represents the latest phase of what has been a long-occurring battle.

In tracking usage of the phrase, Amenity Wars, it has commonly appeared in real estate parlance in the latest real estate cycle since the Great Recession, but has also been referenced in decades-old contexts.[7] The phenomenon itself has also been a popular topic in the press and in reports, with one fitting description as a "great battle between developers over who could pile more goodies into their apartment, condo, and townhome communities without going bust."

Beyond simply being able to boast the most expansive or generous list of amenity offerings, the true end goal of multifamily properties is to attract renters and buyers, and sign leases and close condos, both at competitive prices. The war has become a combination of developers responding to resident demand, but also attempting to create new demand.

The Multifamily Housing Development Handbook, written by Aenne Schmitz in 2014,[8] provides the general, best-practice approach developers should take toward amenities in their multifamily communities. The *Handbook* offers the following on Selecting Community Amenities:

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[7] Examples of headlines that speak to the history and current state of "Amenity Wars" terminology: "Apartment developers declare 'amenity wars'" (The Orange County Register, March 2014); "Amenities arms race: Developers attract millennial renters with high-end features" (Construction Dive, February 2017); "The art of selling a unit: Tween rooms, sky lounges are latest salvos in the amenity wars" (TRD Chicago, October 2018)

[8] Schmitz, Aenne. 2014. *Multifamily Housing Development Handbook*. ULI Development Handbook Series. Washington, D.C.: Urban Land Institute. https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1066229&site=eds-live&scope=site. Schmitz, Aenne. Multifamily Housing Development Handbook. Urban Land Institute, 2014.

> The amenities selected for the property and the methods in which they are presented help determine not only the personality of the property but also its position in the market. Differentiating the property from the competition is imperative. In selecting and designing the apartment community's amenities, take the best ideas from the competition and look for ways to improve them.

Immediately there is a bit of a paradox here: differentiate your property while taking ideas from the competition; create a unique personality or image for your property, but incorporate the same base features as others. This is the essence of the Amenity Wars: one-upping what already exists. The idea of plagiarism or copy-catting as best practice development may seem non-intuitive at first, but the actual play-out of this practice has created an astounding range of features and amenities. Thus, perhaps a better descriptor for copy-catting in this case is "developers applying proven processes."

According to the *Handbook*,

> A second function of the amenities offered at a property is generating premiums—for example, selected upgrades in views, security, comfort, or convenience. Many items or services that residents would normally purchase elsewhere can be integrated into the amenity package.

But a challenge in selecting amenities is predicting residents' specific value judgments. Thus, as the *Handbook* advises, before selecting each amenity, the developer should ask the following questions:

- Am I selecting this amenity because of convention?
- Am I making this choice simply because everyone else in the market has it?
- Am I selecting this amenity because of necessity?
- Will residents require this amenity before they select an apartment in this community?
- Am I selecting this amenity because of desire?
- Is this an important amenity for the property simply because residents want it?
- Will the return on investment be justified?

Furthermore, the *Handbook* advises to:

> Take the time necessary to select amenities wisely. Do not mistakenly assume that more features are better. Focus on expanding benefits rather than on just features. Look at the choices from the target market's viewpoint. Balance selections against

> their value and budgetary judgments. Create amenities that come to life as they define the property and the people who live there. Without this quality, the amenity package becomes a standard list of unimpressive bullet points in the marketing brochure.[9]

Quality over quantity, while an over-simplification of the *Handbook's* instruction, is clearly a guiding principle for amenitized developments. In the real-life Amenity Wars, however, and particularly in urban luxury properties in Boston's recently healthy market, a more fitting development maxim has been quality *and* quantity.

[9] Schmitz. *Multifamily Housing Development Handbook.*

Chapter 3: Gathering Data and Presenting Multifamily Amenity Trends

3.1 Overview of U.S. Urban Multifamily Housing and Amenities

Fitting with the *Multifamily Housing Development Handbook*'s guidance for selecting community amenities, the history of the Amenity Wars is one of responding to current resident and prospect demand, but also attempting to create new demand through "the next great thing."

But before delving into the recent expansion of amenities in multifamily properties that has produced and/or resulted in the Amenity Wars, it is important to first note the recent growth of urban multifamily housing in the U.S.—both in the form of renting apartments and owning condominiums—in general. The urban multifamily sector covers a wide range of property configurations. It includes small, individually owned structures, such as duplexes and fourplexes, as well as larger garden apartments/condominiums and high-rise buildings in larger cities. High-rise projects in larger cities are the focus of this research, although boutique urban buildings are often relevant as well. The multifamily sector is classified according to the quality of buildings, price points, and vintage.[10] Class A and/or "luxury" are the pertinent categories of this discussion.

Throughout history, cities have been places where people gather. It is the social nature of people to assemble in cities to worship, celebrate, participate in governance, enjoy the outdoors, exercise, or simply watch other people. Recently, there has been a surge toward urban living with multifamily housing becoming a more popular and longer-term choice for people of all ages and incomes.[11] This urbanization is a global phenomenon and due to a number of factors. One driver is the increasing concentration of industry expertise and wealth into specific cities. "When wealth is concentrated in smaller groups and more occupations revolve around products and services that support these centers of wealth creation, there is a natural pull towards those centers."[12] Private

[10] Class A is the highest category of apartment communities; Class B is a lesser-quality category; and Class C often includes governmentally subsidized rentals.
[11] Historic progression of U.S. urbanization: In 1790, on average, only about one out of every twenty Americans lived in urban areas (cities). This ratio dramatically changed to one out of four by 1870, one out of two by 1920, two out of three in the 1960s, and four out of five in the 2000s.
[12] Some of the many other factors driving urbanization include lifestyle preferences and attitudes, such as in the shift of baby boomers back into U.S. cities. Opportunities also matter, as cities facilitate wealth creation via

development companies trail urbanization, competing with their peers to build and manage housing, venues, and facilities in which people live, shop, eat, and are entertained.

The demand for urban living has set the "battleground" for what has been an ever-growing supply of buildings and amenities. This demand is from broad demographics, meaning developers' supply must appeal to many types of residents at once. In large U.S. cities, Boston included, key renter and buyer categories include students, young professionals, and empty nesters. There is a particular focus on millennial vs. baby boomer demographics in Amenity Wars discussions, literature, and developer decision-making that plays into this research.

In general, there are two ways developers or landlords utilize amenities: first, by using them as a marketing tool to attract tenants, and second, by seeing them as adding long term value to buildings. By either approach, developers are now investing more money and space than ever before. As of the onset of 2020, the vast majority of urban multifamily properties boast long lists of amenities—essentially lifestyle menus— from fully equipped fitness centers to pet spas to social concierge programs that build community among residents, to so much more. Amenities are increasingly extensive and ever-the-more creative, as demonstrated by the following Amenities "Menu" (also included in section 7.2 of the Appendix), which documents multifamily amenities that have been evidenced to exist in U.S. multifamily properties.[13] Following the Amenities "Menu," in section 7.3 of the Appendix, are a selection of images of luxury amenities from recent condominium and apartment developments in Boston.

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scale, network effects, productivity, and efficiency gains realized in recent years. Concentrated wealth creation attracts people, which increases wealth creation potential in a virtuous cycle that accelerates urban growth. Technology also matters, as new technologies facilitate and improve the urban living experience. Finally, the agricultural revolution and increasing mechanization, automation, and innovation in the agriculture sector decrease the number of workers required to sustain agricultural production and drive a greater velocity of migration to cities.
"Urbanization and the Mass Movement of People to Cities."

[13] The Amenities List is meant to be as inclusive as possible, although some offerings have likely been omitted.

3.1.1 Amenities "Menu"

Categorized as 1. Lifestyle Aids, 2. Health, Fitness and Wellness Assistance, and 3. "Fun Stuff"

1. Lifestyle Aids

- Doorman
- Concierge
- Hotel-branded Services
- Parking
  - Garage Parking vs. Uncovered Parking
  - Valet Services
  - Automated Parking
  - Electric Vehicle Charging Station
  - Option to Rent/Purchase Parking
- Storage Outside the Unit
  - Deeded, Reserved or Common
  - General Storage Locker
  - Bike Storage
  - Stroller Storage
  - Scooter Storage
  - Wine Storage
  - Kayak/Canoe/Boat Storage
  - Surf Board Storage
- Transit Access (Rail, Bus)
- Car-share Services (i.e. Zip Car)
- Rideshare Waiting Areas
  - Transit Screens (Displaying real-time information about bus schedules, subway stops, availability of bikes and scooters at nearby docks, and wait times for Uber/Lyft)
- Bicycles
  - Bike Storage
  - Bike Share
  - Bike Maintenance / Repair
- Package Rooms/ Package Solutions
  - Secure Package Room
  - Refrigerated Storage
  - Package Valet
  - Robotic Package Delivery Services
  - "Outbound" Shipping Services
- Trash and Recycling
  - Trash Valet
  - Recycling Program
- Laundry
  - In-unit Washer/Dryer

    - Common Washer/Dryer for Bulk Items
    - On-site Dry Cleaning
    - Laundry Lockers
    - Laundry Valet
- Connectivity
    - Strong Cell Phone Coverage
    - Internet
        - High Speed Internet / 5G
        - Free Wi-Fi
        - Pre-installed Wi-Fi
- Smart Features
    - Smart Thermostat
    - Biometric Security System
    - Bluetooth Sound System
    - Non-key Secure Access
    - Wi-Fi Enabled Doorbell
    - Alarm System
    - Device Charging Stations
    - Powered Window Coverings
    - "Smart Windows" (Auto-dimming)
    - Destination Dispatch Elevators
    - Drone Landing Station
- Other In-Unit Features
    - Direct Elevator Access
    - Air Conditioning
    - Soundproofing
    - Hardwood Floors
    - Underfloor Heating
    - Floor-to-ceiling Windows
    - Private Balcony
    - Fireplace
    - Recessed Lighting
    - Washer/Dryer
    - Stainless Steel / High-end Appliances
    - Gas Stoves
    - Garbage Disposals
    - Premium Countertops
- Onsite Convenience Store
- Onsite Café / Coffee Shop (i.e. lobby Starbucks)
- Personal Shoppers
- On-Site Reservable Guest Suites
- Access to Shared Portfolio Amenities

2. Health, Fitness and Wellness Assistance

- Fitness Centers
    - Branded Fitness Center (i.e. Equinox) or "Regular" Fitness Center
    - Cardio and strength equipment
    - Yoga / Bar / Pilates / Dance Class Studios
    - Spin Studio
    - Boxing Studio
    - Private Training Rooms
    - Special Branded Fitness like Peloton or other Interactive Fitness Services
    - Lap Pool
    - Sport Courts
        - Basketball; Volleyball; Squash; Racquetball; Tennis; Pickleball
    - Batting Cages
    - Dash-track (i.e. 40 yard track)
    - Sport Simulators (i.e. Golf)
- Salon/Beauty Services
    - Hair, Nails, etc.
    - Spa Services: Sauna, Steam, Massage, Physical Therapy; Meditation rooms
- Wellness Certification (e.g. WELL Standard)
- Green Certification
- Medical / Dental Outpatient Services
- Senior Well-being for Aging in Place

3. "Fun Stuff"

- Club Room / Lounge
  - With Bar
  - Fireplace
- Library/Reading Area
- Game Room
  - Billiards, Card Tables, Arcade, Ping-pong
- Common Kitchen
  - Demo Kitchen
  - Industrial Kitchen
  - Caterer's Kitchen
- Private Dining Room
- Coffee Bar / Free Coffee
- Juice Bar
- Wine Bar
- Wine Cellar / Wine Storage
  - Climate Controlled
  - Private wine tastings
  - Sommelier Services
- Pool / Hot Tub (Indoor or Outdoor)
  - Cabanas
  - Lounge Chairs
- Landscaped Outdoor Space
  - At-grade, Central Courtyard, Rooftop, Terrace, etc.
  - Proximate Parks
  - Garden Walk / Walking Path
  - Outdoor Amphitheater
  - Firepit
  - Water Feature
  - Yoga Garden
  - Outdoor Kitchens / BBQ Grills
  - Green Roof
  - Roof Garden / Common Garden / Community Garden / Urban Farming
    - Outsourced Gardeners
    - Home Vegetable Delivery
- Business Center / Private Board Room
- Coworking Space
- Creator Space
- Children
  - Playground
  - Playroom
    - Children playrooms visible from Fitness Center via glass wall

    - Onsite Daycare
    - Childcare service
    - Tween Room
- Video/Film Screening Room/Theater
- Indoor Golf Simulator
- Climbing Wall / Bouldering / Rock Wall
- Bowling Alley
- Cornhole
- Bocce
- Putting Green
- Sport Courts
- Boating/Water Sports
    - Boat / Kayak / Canoe Dock
    - Kayak Share
- Pet Services
    - Dog Park, Dog Run
    - Dog Washing Station
    - Grooming Station
    - Dog Water Fountain
    - Dog Walking Service
    - Pet Overnight Service
    - “Yappy Hour” Pet Play Sessions
- Shop Space / Makerspace
    - Art Supplies, Sewing, Other Crafting
- Art
    - Art Gallery
    - Curated Art Collection
- Music
    - Soundproof Practice Rooms with Plug-in Amps
    - Music Room with Common Equipment
    - Listening Lounge with Playable Instruments
    - Karaoke Room
- Sponsored Events / Building Community / Active Programming
    - Food Trucks
    - Pop-up Events by Neighborhood Restaurants and Stores
    - Live Music
    - Comedy Nights
    - Fashion Shows
    - Skating Rinks
    - Fitness Classes
    - Education Programs

3.2 Competing on Luxury

Changing consumer preferences are an important driver of amenity decisions. When preferences shift, they reshape what landlords are expected to provide. For example, over a decade ago, in the years prior to the Great Recession, sustainability was a key preference for renters and buyers. Multifamily community developers were attempting to out-green each other in their features and amenities. Then, with the Great Recession, renters no longer wanted to pay green premiums and thus competing on sustainability, while still relevant, took a back seat to other preferences. Since then, the most notable trend of the post-2008 market has been a competition on the grounds of luxury.

As stated in Chapter 1, the discussion of amenities in this paper is in regard to luxury urban amenities, particularly those that would be found in multifamily properties in Metro Boston. The general category of luxury also contains the upper echelon of "ultra-luxury," which, barring a few exceptions, includes properties completed approximately since the Great Recession.[14]

An examination of Amenity Wars literature and publications, of which articles and press comprise a clear majority, shows that the Amenity Wars have coincided with the recent growth of luxury and ultra-luxury in American cities. According to Jessica Lautz, vice president of demographics and behavioral insights at the National Association of Realtors, developers focus on ultra-luxury because that is where they think they can make the biggest profit. While this paper does not provide a quantitative account of profits generated from amenitized multifamily properties, the general situation of Boston fits solidly within Ms. Lautz's remarks. Boston in recent

[14] "Ultra Luxury" multifamily condo properties in Metro Boston include Four Seasons Private Residences on Boylston Street (1985); Heritage on the Garden (1988); Residences at The Ritz Carlton (2001); Residences at Mandarin Oriental (2009); The Clarendon (2009); Twenty Two Liberty (2015); Millennium Tower (2016); Pierce Boston (2018); 50 Liberty (2018); Pier Four (2019); Four Seasons Private Residences at One Dalton (2020); St. Regis Residences at 150 Seaport Boulevard (under construction); The Sudbury (under construction).
Boston's top luxury rental properties (defined here are average effective rents above $5.50/SF include 30 Dalton (2016); Watermark Seaport (2016); The Benjamin (2017); VIA Seaport Residences; The Harlo (2017); 200 Brookline (2018); 345 Harrison Avenue (2018); NEMA Boston (2020); Hub50 House (2020).

years has indeed been a market where developers have focused on luxury—and competed on that luxury—for profit maximization.

3.3 Notable recent themes of the Amenity Wars

Within the general umbrella of competing on luxury, innovative, standout amenities have continued to be key differentiators for properties in the most recent market cycle since the Great Recession. However, what has been constantly evolving is the extent to which new levels of innovation, differentiation, and the sheer number of amenities, have been offered. In other words: escalation.

Amenity War escalation is very much a product of consumer expectations. What buyers and renters have come to expect out of properties has grown with each new building delivery. For years, Tracy Campion, the top luxury residential broker in Boston (and all of Massachusetts), says her experiences with buyers and renters is that they tend, almost as if they were programmed, to ask "what else" a particular property offers. Often the answer falls into the realm of, "complete with all the amenities you'd expect, and then some." Expectations used to be of a well-appointed lobby, and perhaps a gym and bicycle storage, which now seem entirely underdeveloped.

The following sections contain an overview of recent notable growth trends in urban multifamily amenities, as well as the very latest discussions and practices that were relevant up until the onset of COVID-19 and its accompanying quarantine and shutdowns. First, and most obviously, highly amenitized buildings tend to be in prime downtown areas, where rents are typically higher. Generally, amenities have trended toward more, thoughtfully designed, and often elaborate physical spaces. Whereas years ago, "20 square feet of amenities per unit was the standard…today that has nearly doubled to between 30 and 40 square feet."[15] These physical spaces become an extension of the private units themselves. There has been a shift towards service

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[15] Quote by Rohit Anand, a principal at architecture and planning firm KTGY in Tysons, VA. "Amenities Arms Race."

and technology (i.e. more services, better technology, and new spaces that can accommodate both), but also a real focus on human connection in the sense of building community.

Amenities described in this analysis are not an afterthought in the sense of seeing what “extra” or “bonus” space a property has, but rather an early-planned and thoughtful execution. They are the result of careful space-planning exercises which equate to a reduction in sellable and rentable space. The same, or even more, attention is being paid to these spaces as to homes themselves. Common kitchens, for example, are typically fitted with top-of-the line appliances and fixtures even better than what exists in apartments, as well as many condominiums. This points to another important facet of amenities: that they are as much a showcase and marketing tool as they are objects of use, designed for both initial attraction and lasting retention.

While many developers may not approve of or have grown tired of the phrase, Amenity Wars, they simply cannot afford not to buy in to the battle. They cannot exist in a bubble and are thus entirely vulnerable to trends, demographics, and whatever their competition offers. Like most real estate, it is a game of comps. Condominiums are competing to be one of the single largest purchases buyers will ever make, and apartments have to contend with the stock of an entire recent building boom. With new supply on the rise (to be discussed further) and value-add renovations being completed for the more than 51 percent of all rental housing stock built before 1980,[16] the need to remain competitive and up-to-date is paramount.

Location, if categorized as an amenity, will always reign supreme as the most desirable feature of a property. Beyond location, the list of multifamily amenities is vast (see Amenities “Menu” above and included in the Appendix), however it can be generally categorized. Broadly, much of the amenity focus has been on tech, green living, or all-out luxury. Another categorization is to separate amenities into 1. Lifestyle Aids, 2. Health, Fitness and Wellness Assistance, and 3. “Fun Stuff”, which is how the enclosed list is sorted.

[16] “Adding Value in the Age of Amenity Wars.”

3.4 Catering to Luxury and Demographic Considerations

In recent years, corresponding to the nation's overall healthy economy, multifamily properties have increasingly catered to high-end dwellers. According to the annual State of the Nation's Housing report, produced by the Joint Center for Housing Studies (JCHS) at Harvard University in 2017:

> Multifamily construction continues to tilt towards the upper end, chasing an expanding market and offering more amenities (i.e. in 2016, 86 percent of new apartments had swimming pools, and 89 percent had in-unit laundry). The number of high-income renters grew [in 2016], with those making over $100,000 increasing by 5 percent (19 percent of this demographic was renting, an all-time high). That's part of the reason multifamily construction, which delivered 336,000 new units last year, has grown at a pace not seen since the '70s.[17]

In addition to high-end apartment, and similar-trending condominium, dwellers, the Amenity Wars have been focused on attracting millennials, who now make up the largest demographic cohort in the country[18] and "who are voting with their wallets on the features that matter most to them when deciding where to live."[19]

What do millennials value, particularly in comparison to baby boomers? According to a 120,000-person survey of renter preferences from the National Multifamily Housing Council (NMHC) and real estate consulting firm Kingsley Associates in 2015, fitness spaces, high-tech features and communal gathering areas, in particular outdoor

Features and Amenities with Disparate Levels of Interest			
Unit Feature of Community Amenity	**Millennials**	**Boomers**	**Difference (percentage points)**
Outdoor recreational facilities	71.9%	35.9%	35.9
Resident portal - reservations for community facilities	71.7%	50.8%	20.9
Community Wi-Fi	65.1%	44.5%	20.6
Fitness center	85.7%	67.3%	18.4
Fitness classes	63.4%	46.2%	17.3
Lounge area/party room	59.7%	46.0%	13.7
Source: 2015 NMHC/Kingsley Resident Preferences Survey			

Figure 2: Millennial vs. Baby Boomer Value Considerations

[17] Joint Center for Housing Studies of Harvard University, "America's Rental Housing 2017."
[18] Fry and Pew Research Center, "Millennials Overtake Baby Boomers as America's Largest Generation." Millennials, defined as ages 23 to 38 in 2019, numbered 72.1 million, and Boomers (ages 55 to 73) numbered 71.6 million. Generation X (ages 39 to 54) numbered 65.2 million and is projected to pass the Boomers in population by 2028.
[19] "Amenities Arms Race."

recreational facilities, were of more interest to millennials than to baby boomers. Specifically, as Figure 2 shows, nearly 72 percent of millennials included in the renter survey said they are interested in having outdoor recreational facilities in their apartment building, compared to 36 percent of baby boomer respondents who said the same. Data for other millennial-favored features and amenities included a fitness center (85.7 percent to 67.3 percent), community Wi-Fi (65.1 percent to 44.5 percent), a resident portal for reserving community amenities (71.7 percent to 50.8 percent), and lounge area/party room (59.7 percent to 46.0 percent).[20]

Even though baby boomers are willing to pay more (i.e. pay premiums for the features and amenities they most care about) and are likely to be renters for longer (because millennials are going through more transitions that often involve moving), overall, developers design for millennials. Newly released NMHC research and renderings underscore the need for developers, investors, property managers and architects to adapt to both the demographics and psychographics of the renter population in order to effectively meet the demand for 4.6 million new apartment units by 2030.[21] That millennial preferences inform the most design decisions brings up the valid yet unanswered question if the industry is underserving an important demographic segment.

3.5 Determining the Value of Amenities

In truth, it is difficult to determine which amenities add or subtract value because there are often so many amenities bundled together. For example, if there is a basketball court, there is probably a yoga studio, too; if there is an outdoor pool, there is also likely to be a BBQ grill. Differing locational preferences also make it hard to establish exact value for amenities. Developers will attest that the most accurate examination and determination of amenity value comes from having a sizable portfolio of properties in the same (or at least similar) markets to be able to monitor amenity use and analyze against rents. The proven success of the La Vie social concierge program at developer Millennium Partners' Millennium Place in Boston, for example,

[20] "Boomer vs Millennial Wants."
[21] "NMHC Releases Data and Insights on 'The Apartment of Tomorrow'"; "2018 Consumer Housing Insights Survey."

helped inform the program's value in the amenity package of Millennium Tower, which was their subsequent local residential development.

Still, sources have tried to quantify how amenities enhance value. One example is the National Apartment Association (NAA), which authored a report seeking to identify top amenities in apartment communities. This NAA Research study, titled "Adding Value in the Age of Amenity Wars," looked nationwide and in 11 selected cities, at both the community and unit level, and which amenities have the greatest impact on revenue.[22] Per the findings, generally on a city-wide basis, building-level amenities tend to command higher rent premiums than unit-level amenities.[23] A concierge was most prevalent, ranking in the top 10 for rent premiums in nine of the 11 cities included in the study.

In regard to the frequency of what amenities developers have been offering, clubhouses and common areas for socializing made the report's top five, with swimming pools, outdoor kitchens and play areas also proving popular. Fitness centers remained a must-have in any community. Other amenities related to health and wellness such as bike storage, walking/jogging paths and fitness classes did not make the study's top ten but were still fairly prevalent among the survey respondents. Despite the importance of community-wide Wi-Fi to many residents, business centers still outweighed it in terms of what owners are offering. Pet-friendly amenities rounded out the top five and ranged from pet-washing stations to off-leash dog parks.[24] At the individual residence level, washers and dryers[25] were by far the most common feature that owners chose to add or upgrade, followed by high-end appliances and hardwood floors. Lighting, plumbing or electrical improvements and energy-efficient appliances were also near the top of the list.[26]

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[22] The NAA Research study included 43 unique amenities, added or upgraded from January 2014 to September 2016. The universe of survey responses totaled more than 100,000 units in 35 states. NAA also worked with Enodo Score, a real estate predictive analytics company, to provide a more objective, data-driven assessment of which amenities deliver the highest return on investment in various markets.
"Adding Value in the Age of Amenity Wars."
[23] This aligns with National Apartment Association's research. "Adding Value in the Age of Amenity Wars."
[24] "Adding Value in the Age of Amenity Wars."
[25] 91 percent of renters are interested in having in-unit washers and dryers, and 55 percent would not rent without this feature.
[26] "Adding Value in the Age of Amenity Wars."

While this information is telling, it must be taken as generalizations rather than fact for specific segments of the market, such as luxury urban amenities in Boston, which will have their own unique trends.

3.6 Amenity Lifecycle(s)

Still, a few general themes stand out in the wider discussion of recent Amenity Wars trends. For one, features and amenities that once, not too long ago, set properties apart are now considered basic, or simply, "check the box." This follows the typical amenity lifestyle that has emerged over the course of the wars. In other words, what was once a luxury is now an entry-level or commonplace amenity.

At this point, developers have raised residents' expectations to the extent where they now have to provide a huge selection of amenities just to get a prospect's attention, let alone have that resident chose to make their property home. By some accounts, the "must-have basics" currently include a doorman, elevator, laundry, roof deck and gym.[27] As Joe Bousquin describes, "other must-have amenities at the top of operators' lists include a pool, a package solution, a co-working space and some kind of pet-oriented feature, such as a grooming station or dog run."[28]

But simply "checking the box" on an amenity will not suffice for communities attempting to compete in the Amenity Wars. Any standard gym won't do, for example. Rather, to now appeal to the active generations who do not want to pay separately for a gym membership elsewhere, the fitness center must represent a larger, better, and/or more thoughtful reimagination. There has been an upping of the ante to include machines like private training rooms, Peloton bikes, virtual and on-demand services, spa-like locker areas, third-party management, and so much more.

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[27] At least for New York, Nancy Wu, an economist at StreetEasy, identified these (doorman, elevator, laundry, roof deck and gym) as the top five core amenities that added about 20 percent to the purchase price and 20 to 30 percent to the rent an owner can charge.
Sullivan, "Pet Spa?"
[28] Bousquin, "Putting Meaning into Amenities."

Summing this up would be to say that features and amenities need to become more creative versions of their predecessors and competitors. Creativity applies to how the amenities are designed, how they can be used, and even who will be using them (i.e. older demographics prefer and require more machines in fitness centers as opposed to free weights or virtual fitness programs). However, it is important for developers to know that there is a general danger in designing a building for one demographic cohort; “you are doing yourself a disservice if you build strictly for either Baby Boomers or Millennials,” warns a Managing Director of Development for Mill Creek Residential, Mid-Atlantic.[29]

Creativity leads to memorability, and being memorable is key when a prospect tours a building, especially when, as is so often the case in Boston, they may be considering three, four, or more potential new homes.

[29] “Beyond the Amenity Wars.”

Chapter 4: Amenity Wars Categories

The 2018 Consumer Housing Insights Survey has noted some general trends and overarching themes of the recent Amenity Wars. Specifically, the survey illuminates "the growing need for flexible living spaces, personalization, healthy living features and amenities, convenience and connectivity in apartment homes."[30] Healthy living features include the new trend toward Wellness, but also the need for environmentally friendly spaces, which in turn includes increased value on low-carbon designs and increased resiliency. Other headline-grabbing offerings to gain popularity in recent years include co-working and maker spaces, 5G networks, biometric security systems, and a host of other smart home technologies. But beyond an overview of recent amenity trends, this discussion will now examine specific topics that hold weight in the Amenity Wars.

4.1 Outdoor Amenities

In urban settings where density is constantly increasing, outdoor space is vital to multifamily appeal and success. As recent surveys confirm, there has been a (pre-COVID-19) increasing interest in outdoor spaces and amenities.[31] The enclosed portion of the Amenities "Menu" provides a glance at the numerous outdoor amenities that have manifested themselves in multifamily properties.

Outdoor Amenities

- Landscaped Outdoor Space
  - At-grade, Central Courtyard, Rooftop, Terrace, etc.
- Proximate Parks
- Garden Walk / Walking Path
- Outdoor Amphitheater
- Playground
- Firepit
- Water Feature
- Yoga Garden
- Outdoor Kitchens / BBQ Grills
- Green Roof

[30] "2018 Consumer Housing Insights Survey."
[31] "CE Center - Multihousing Trends and Design Solutions."

- Roof Garden / Common Garden / Community Garden / Urban Farming
  - Outsourced Gardeners
  - Home Vegetable Delivery
- Climbing Wall / Bouldering / Rock Wall
- Cornhole
- Bocce
- Putting Green
- Sport Courts (Tennis, Basketball, Volleyball, Pickleball, etc.)
- Batting Cages
- Dog Park / Dog Run
- Boating/Water Sports
  - Boat / Kayak / Canoe Dock

Since ground space is often limited by lot size, roof decks and terraces became an early and easy way for buildings to utilize additional area. No longer is a building's roof just for holding mechanical equipment. Rather, such spaces have become an amenity that gets residents access to more daylight and vitamin D,[32] brings them closer to nature and outdoor air, and leads to so many other positive physical, psychological, and general wellness benefits, not to mention the aesthetic benefit of a beautiful landscape design.[33] Today, lifestyle deck is perhaps the best description of what these spaces have become.

Outdoor space is one of the few amenities that manifests itself in both private and common forms in a multifamily community. In determining the value of both, the following are some of the relevant considerations: first is size. Larger spaces, while often preferred, are not always better. More square footage can cause diminishing returns from the offset increase in potential maintenance or common charges, as these expenses tend to rise with larger outdoor spaces. Size contributes to usability and layout, which in urban settings are perhaps the best metrics to determine value. Spaces with the best usability and layout are those offering a high level of design, as well as flexibility for how the space can be programmed. Location, too, is an obvious consideration. Outdoor space on a low floor with views of the street and little privacy is very

[32] Access to more daylight and Vitamin D are legitimate and growing concerns and are being prescribed as particularly important by doctors in the age of COVID-19.
[33] "CE Center - Multihousing Trends and Design Solutions."

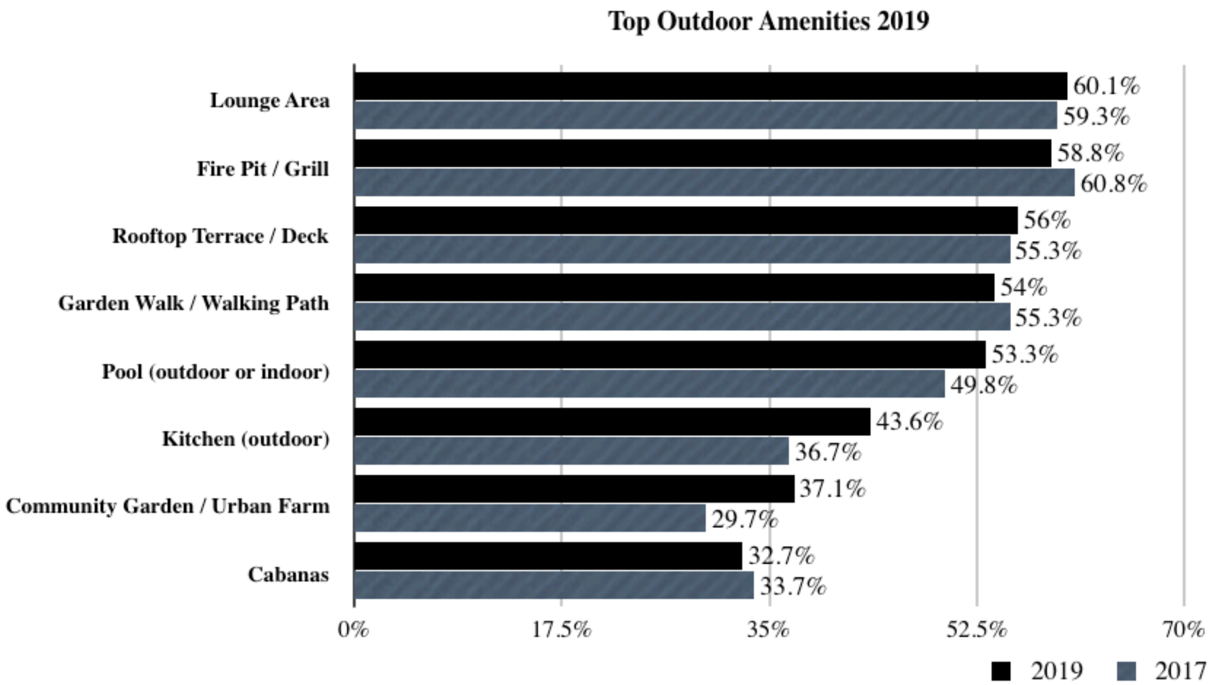
different than a similarly sized rooftop space with expansive views and considerable privacy. Climate also affects usability. In Boston, for example, outdoor spaces are typically only comfortable from late spring until early fall, which represents approximately half of a year in which to enjoy something that commands a premium in multifamily properties. Somewhat curiously, outdoor space is often a deal breaker in the acquisition of an apartment or a condo, but it is an amenity that is largely used much less than originally intended. Of course, this is not the case with every resident (COVID-19 will especially challenge this), but the evidence is very anecdotally strong in interviews with the local brokerage community.

At least in Boston, outdoor space is not counted in Living Area square footage measurements. However, it does affect price per square foot calculations by adding a premium to overall price. Overall value is typically based on comps (comparable offerings), however there are some proposed types of analysis to calculate price per square based on both interior and exterior space. Jonathan Miller of NYC-based real estate appraisal firm, Miller Samuel, has written extensively on this topic and believes outdoor space square footage should be added to interior square footage at a 25-50 percent portion of what interior square footage commands. For example, if an apartment has 1,000 square feet of interior space and 200 square feet of outdoor space, he would take 100 percent of the 1,000 square feet and add it to 25-50 percent of the 200 square feet to obtain an adjusted square footage for the overall unit.

Benefits to outdoor and green amenities beyond user experience have also fueled their role in the Amenity Wars. For one, numerous local zoning ordinances require a minimum amount of open space,[34] so open/outdoor areas ultimately become a vital part of the entitlement process. As another example, green roofs are a sustainable design that helps achieve LEED certification, absorb rainwater, help keep the roof cool, and can be integrated with stormwater management and a rainwater collection system for reuse.[35]

[34] Article 17 of Boston's Zoning Code describes the City's Open Space Requirement for Residences. Specifics of zoning regulations can be found at https://library.municode.com/ma/boston/codes/redevelopment_authority.
[35] In addition to LEED certification, outdoor features are also an important component of WELL certification.

Figure 3: Outdoor amenities being included in multifamily communities



This figure is based on findings of Multifamily Design+Construction's "Multifamily Amenities 2019 Report." The report was designed to determine the extent to which decision makers (multifamily developers, property owners, designers, construction professionals, and others) have included 113 identified amenities in their multifamily communities in the last 24 months, and to compare those results to the 2017 findings.

4.2 Parking

According to the Multifamily Design+Construction 2019 survey, less covered parking was becoming the trend in some denser cities, especially for high-rise rental projects served by decent transit, or where there was a strong Uber/Lyft presence. In some cases, developers have even been able to negotiate zero or near-zero parking with local officials.

From a city leadership perspective, Boston has been a proponent of less car usage and less parking. In fact, Mayor Walsh's climate goals call for cutting Boston's car use in half by 2030.[36] Beyond climate concerns, the City has been facing rising housing costs and fewer homes on the market, and so an approach to bolster housing stock and attract new residents has been to ease the longstanding city practice of requiring at least one parking space per unit. Lovejoy Wharf, a 15-story, 157-unit condominium project launched in 2017, was the first large downtown Boston condo without parking for owners. Of the 76 residential developments approved by the Boston Planning and Development Agency (BPDA) the year prior in 2016, 30 included less than one space per unit.

The City is also pushing for transit-oriented development, or TOD, as an approach to development that focuses land uses around a transit station or within a transit corridor. TOD occurs within one-quarter mile, or a five to seven minute walk, of a transit station. Transit-oriented projects in Boston that are newly completed, under construction, or in the planning phase include Hub on Causeway, Bulfinch Crossing, South Station tower, Back Bay Station towers, Washington Village, and Assembly Row.

Even though Boston city leaders are approving increasing numbers of residential developments with less parking, as an amenity, it still carries a lot of weight with luxury renters and buyers. Even though most Bostonians have more and more ways of getting around town – public transit, bikes, scooters, ride-hailing apps, and car shares – their propensity for car ownership is not fading away.

[36] But to date, there's been no strong evidence that the city has any progress toward that benchmark; instead of declining, recent data show that the total number of miles traveled by motor vehicles in Boston has continued to increase. Additionally, in 2019, the Boston planning and Development Agency (BPDA) approved 59 new development projects that include 5,080 more parking spaces for the City of Boston. Most of this new parking will be built in transit-rich neighborhoods located within half a mile of an MBTA rapid transit, Silver Line, or commuter rail stop, and more than 90 percent will be attached to residential and mixed-use projects.

In fact, the number of registered vehicles in the Boston metro area jumped 300,000 from 2014 to 2019, according to an analysis of data from the Registry of Motor Vehicles. One explanation for why cars are gaining in popularity is that the city has seen a sharp uptick in wealthier households, which are more inclined to own vehicles. Also, recall that a large segment of luxury clientele are empty nesters who struggle to commit to a car-less life after years of multi-car garages in the suburbs (confirmed by interviews with the local brokerage community). Millennials too, who at first thought are expected to own fewer cars, actually have similar car ownership trends to baby boomers.[37]

A recent Greystar resident survey confirms that the demand for parking is still strong. The survey, which included more than 28,000 responses from new residents collected between March and September 2018, asked residents to rank 18 apartment features and 29 community amenities based on how much of a priority each feature was for them when making a leasing decision. With regard to community amenities, renters put the highest value on secure parking. In fact, this was the case with all car-related amenities. While reserved parking was the fifth most prioritized amenity, valet parking was one of the lowest priority features. "As long as folks are guaranteed a spot," said the assistant director of research at Greystar, "they are fine parking their own cars." However, when it came to paying monthly premiums, valet parking was seen as having some of the highest values, which indicates that for those who prioritize valet parking, they value it highly.[38]

Typically, parking options and amenities for luxury urban multifamily properties have included secured parking areas, often with reserved individual spaces, within garages with options for valet services and/or self-parking. But with growing demands for parking, better technologies, and increasing constructions costs, more developers are offering stacked and other innovative

[37] In his paper “Generational Trends in Vehicle Ownership and Use: Are Millennials Any Different?,” MIT Sloan professor Christopher Knittel finds that millennials are not different from baby boomers when it comes to owning as many cars. They do, however, put more miles on their cars compared to the older generation. “Actually, Millennials Don’t Own Fewer Cars.”
[38] “Resident Preferences: Key Findings of the 2019 Greystar Design Survey Report.”

parking systems. For example, The Boulevard in Boston, a newly completed luxury condo building downtown, has a fully automated underground parking garage that uses a complex system of lifts, conveyors, and stackers to store 35 vehicles without the constraints of turning radii, space to open doors, ramps, and places for people to walk.[39] To signal for their cars, drivers simply use an app. While the technology behind automated garages has existed for years and has become popular in parts of Asia and Europe, New York City, and San Francisco, the concept has been slower to catch on in Boston. The Boulevard is one of the city's first adopters of the feature, and is likely to be just one of many going.

4.3 Fitness and Wellness

Amenity "Menu:" Health, Fitness and Wellness Assistance

- Fitness Centers
    - Branded Fitness Center (i.e. Equinox) or "Regular" Fitness Center
    - Cardio and strength equipment
    - Yoga / Bar / Pilates / Dance Class Studios
    - Spin Studio
    - Boxing Studio
    - Private Training Rooms
    - Special Branded Fitness like Peloton or other Interactive Fitness Services
    - Lap Pool
    - Sport Courts
        - Basketball; Volleyball; Squash; Racquetball; Tennis; Pickleball
    - Batting Cages
    - Dash-track (i.e. 40 yard track)
    - Sport Simulators (i.e. Golf)
- Salon/Beauty Services
    - Hair, Nails, etc.
    - Spa Services: Sauna, Steam, Massage, Physical Therapy; Meditation rooms
- Wellness Certification (e.g. WELL Standard)
- Medical / Dental Outpatient Services
- Senior Well-being for Aging in Place

[39] The Boulevard is equipped with 48-space PARKPLUS AGV Automated Parking system on 4 subterranean floors.

As briefly described above, fitness centers have transformed dramatically over the decades and remain a must-have in any community because they allow developers to be popular with their active resident demographics. Historically, designs for multifamily fitness centers entailed certain designated areas for cardio, stretching and weight training. These designs have evolved to be more conscientious and reflective of customization and branding; and to be more inclusive of features like yoga, cycling, boxing and functional training areas, and a host of other bespoke fitness options. Today, they must be compelling enough to compete at the level of trending boutique studios (i.e. SoulCycle, Orangetheory, Barry's Bootcamp, Core Power Yoga) that have upped the fitness ante.

Fitness and wellness-related amenities represent the category which residents are typically most willing to pay extra for, confirmed by a 2016 study by J Turner Research which found that 46 percent of tenants are willing to pay a premium for centers with classes. Installation costs can thus be conveyed to residents in the form of higher rents and quickly recouped. Clearly, obsolete fitness spaces pose serious detriment to a building's appeal, which helps to explain why they have been the most upgraded community-wide amenity since 2014.

Beyond the basic "room with workout equipment" is the trend of buildings partnering with third party designers and operators, as well as local fitness studios and gyms to host on-site classes, offer membership discounts, or enable residents to go offsite for a workout. Employing third-party specialists brings an additional level of expertise of the analytics that goes into fitness space design itself. What size fitness center is needed? How many lockers? How many showers? How many users should be anticipated? How can noise be attenuated? Beyond planning and design, third party providers are now also providing management and creating an engaging environment for members through specialized individual and group exercise, fitness technologies, social programming and general back office support.

Karen Hollinger, vice president of corporate initiatives at Arlington, Virginia–based AvalonBay Communities explains why partnering with local fitness providers might be another option to enhance multifamily fitness amenities beyond the (often limited) capabilities of residential buildings: "While everyone likes the idea of a gym in their building, residents now want the latest and greatest from their fitness experience. The demand for the latest and greatest will only be met by providers who focus on that individually and specialize in it."[40]

Simply offering exercise equipment used to satisfy the demand for residents interested in fitness, but more recently, an emphasis on a holistic approach to well-being has changed renters' priorities. Millennials, specifically, are devoting a lot more attention to overall self-care routines. So, residents are not just focused on working out; they are looking for ways to de-stress, meditate, get better sleep, and eat healthier foods, too. This is where amenities like meditation rooms, saunas, on-site massage therapist, partnerships with delivery services to bring healthy meals to residents and offering discounts on meal services like HelloFresh are on the cutting edge.

4.3.1 Wellness and WELL Building Standard

Wellness is both a category and designation that has gained traction lately, based on the idea that building features and amenities have the potential to contribute to human health and well-being by supporting mental restoration, physical activity, and social connection. While certifications such as LEED (Leadership in Energy and Environmental Design) focus on the environmental impact of the facility itself, there is now a WELL Building Standard focused on the physical, emotional, and mental health of the people within the building.

In 2012, the WELL Building Standard (WELL) was unveiled and became "the world's first building standard focused exclusively on human health and wellness." [41] According to the International WELL Building Institute (IWBI), the public benefit corporation which oversees the validation process, the WELL Building Standard is a "performance-based system for measuring, certifying, and monitoring features of the built environment that impact human health and wellbeing, through air, water, nourishment, light, fitness, comfort, and mind." While WELL can

[40] Shanesy, "What's Next For Apartment Amenities?"
[41] On September 24, 2012 in New York, New York, at the 2012 Clinton Global Initiative (CGI) Annual Meeting, Delos, a U.S. based real estate developer and the pioneer of Wellness Real Estate, introduced the WELL Building Standard as the result of six years of research, development and collaboration with a board of researchers and doctors from Columbia University Medical School, as well as with architects, engineers and contractors.

be applied to many building types including offices, schools, retail, and multifamily residential, Version 1 of the program focuses on commercial and institutional. Pilot programs do exist for the other building types in WELL v2, the next version of the WELL Building Standard.[42]

The program positions itself as a new standard in responsible construction, with benchmarks and guidelines for the design of buildings, interiors, and core and shell. Some aspects of the WELL Building Standard include top-of-the-line HEPA air filters in the HVAC system; reverse osmosis filters on water fountains that are changed out regularly; healthy snacks on site; operable windows; and fitness center amenities. There are countless other aspects in the WELL checklists, many of which are much more specific.[43] Examples of wellness features at one residential property, the Delos Living project at 66 East 11th Street in NYC, include Vitamin-C infused showers, purified air and water, posture-supportive flooring, a kitchen herbarium and dawn simulation provided by a proprietary circadian lighting design.

According to the 2019 Multifamily Design+Construction Amenities Study, "Wellness certification (e.g., WELL standard) more than doubled (to 8.0 percent, from 3.5 percent in 2017) and may be catching on in some health-conscious submarkets."[44] Where it is catching on, WELL is assuredly a top-level luxury item.

4.4 Pet Services

Whether or not a property allows pets was the original frontier of pet amenities, a frontier that has expanded immensely in the latest real estate cycle. Back in 2005, which is approximately five to seven years before the latest real estate market was in full recovery and growth, a survey of tenants across the country by the Massachusetts-based Foundation for Interdisciplinary Research

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[42] There are ten concepts in WELL v2: Air, Water, Nourishment, Light, Movement, Thermal Comfort, Sound, Materials, Mind and Community.
"Standard | WELL v2."
[43] For more information on WELL v1 project type checklists: "Project Types | WELL Standard"; "New & Existing Building Checklist | WELL v1 | Tools | WELL International WELL Building Institute."
[44] Also from the report: Nearly 1 in 6 respondents (16.0 percent) had installed building-wide water purification systems; it's conceivable that many developers include them at the individual unit tap.
Multifamily Design+Construction, "Multifamily Amenities 2019 Report."

and Education Promoting Animal Welfare found 82 percent of pet-owning respondents actually had trouble finding a rental unit that welcomed pets. The Foundation rightly found the "lack of available pet-friendly rental housing…puzzling when one considers the high numbers of U.S. households with companion animals."[45]

But properties banning pets outright has been slowly changing, largely due to record levels of pet ownership and shifting U.S. demographics. Now, with the levels of empty nesters growing and more young people getting married later and delaying having children, pets are filling a notable companionship category.

According to the 2017-2018 edition of the U.S. Pet Ownership & Demographics Sourcebook, published by the American Veterinary Medical Association (AVMA), dogs continue to dominate in popularity among American households. At the end of 2016, approximately 38 percent of households nationwide owned a dog—the highest estimated rate of dog ownership since the AVMA began measuring it in 1982. Both the share and number of dog-owning households grew in the five years since the previous survey, bringing the population of pet dogs to nearly 77 million—up 10 percent from 2011.[46]

The inclusion of pet amenities has not only shown a shift by developers to open their properties up to a wider client base, but also a change in the mindset of developers for their amenities to be both practical and usable. Pet amenities tend to be used every day, and sometimes more than once. Compare this to some other industry research that has found that about 10 percent of apartment or condo residents will consistently use a fitness center, and fewer than that will use a community or party room.[47] This just proves the multi-faceted character of the Amenity Wars. There is the battle to add new and as many luxuries as possible to lure buyers, but also the battle to expand more practical and usable offerings.

[45] Spivak, "Going to the Dogs."
[46] American Veterinary Medical Association (AVMA), "AVMA Pet Ownership and Demographics Sourcebook."
[47] Spivak, "Going to the Dogs."

Expanded pet amenities seem like a no-brainer for usability, as well as marketability, confirmed by the data from the 2017 NMHC renter preferences survey revealing that an apartment's pet policies is a critical component in a renter's decision-making. According to the survey, 59 percent of renters said that reviewing pet policies online was an important part of their apartment search, and one third of renters (33 percent) said that a community's pet policy helped them decide to visit a community. A Resident Marketing publication from Apartments.com states that this "puts the impact of pet policies nearly on par with the impact of online ratings or reviews."[48]

In additional to being able to cater to a large-and growing-pool of potential residents, other benefits for providing pet-friendly communities include increasing resident retention and increasing revenue streams from add-on services and/or by charging a recurring pet fee, increasing the total rent, or collecting a larger security deposit or pet deposit to mitigate the risk of pet-related damage.[49]

The 2017 NMHC survey, in which over 89,000 renters reported that they owned pets, specified a few pet-friendly amenities that are of interest to renters along with the renters' estimations of rent increases for having access to the amenity, showing the added value of such amenities:

Figure 4: Pet-friendly amenities of interest to renters

Trending Pet Amenities and Estimated Monthly Cost		
Amenity	**Interest Level**	**Estimated Monthly Cost**
Community Dog Park	45 percent	$28.65/mo.
Community Pet-Washing Station	37 percent	$26.48/mo.
Pet Daycare Service	33 percent	$33.24/mo.
Dog Treats in Lobby	29 percent	$21.70/mo.
Pet Walking Service	27 percent	$30.57/mo.
Source: 2017 NMHC Survey		

[48] "Fetching an Edge with Pet-Friendly Apartment Amenities | Apartments.Com."
[49] "Fetching an Edge with Pet-Friendly Apartment Amenities | Apartments.Com."

Other sources find less quantitative value in pet amenities. According to Jonathan J. Miller, chief and executive of Miller Samuel, a real estate appraisal and consulting firm in New York, the additional pet spa value was negligible. "[Pet spa] branding gives you the impression of dogs and cats lounging in chairs by the pool with a drink and an umbrella. All it was was a slop sink in a closet" he said.[50]

Still, the trend toward pet-specific amenities, in particular dog amenities, continues to strengthen. Especially in the last decade, pet-friendly accommodations have represented a new frontier of multifamily housing. Catering to pets in the real estate industry has followed cities which have been developing dog parks, and the retail industry which has long catered to pets with doggy daycare, pet clothing and boutiques, and even fitness classes that people can take with their dogs. Five to ten years ago, apartment and condominium developers were unique for incorporating any pet amenities. More recently, as Multifamily Design+Construction's 2019 survey indicates, 57.1 percent of developers, owners and builders offer Dog Washing Stations, and 72.5 percent include a Dog Park/"Bark Park."[51] Other services for pet owners include grooming

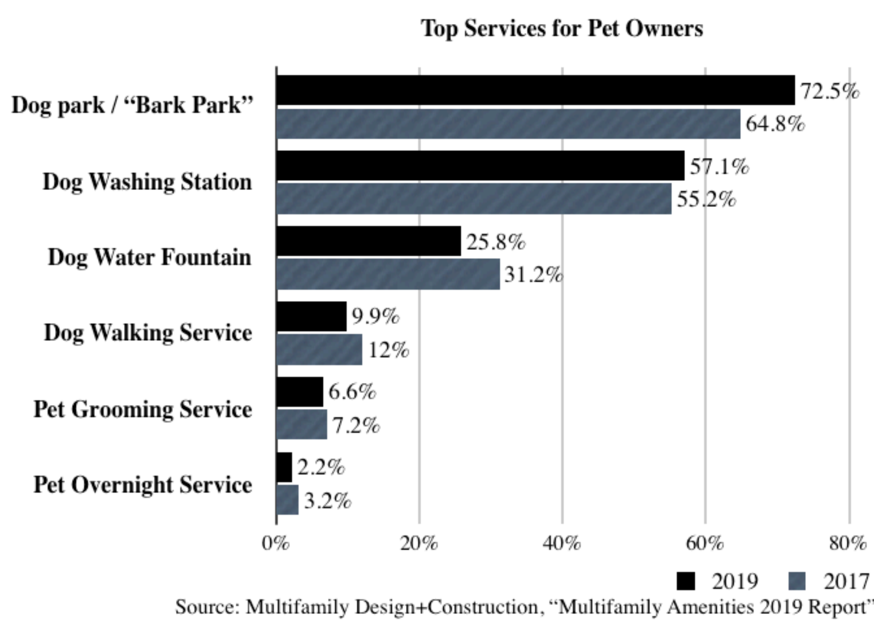

Figure 5: Pet Services Offered

[50] Sullivan, "Pet Spa?"
[51] Multifamily Design+Construction, "Multifamily Amenities 2019 Report."
Figure 5: In the past decade, particularly as real estate recovered from the Great Recession and a new wave of multifamily projects started to cater to populist lifestyles, the multifamily industry has been taking a largely pet-friendly approach. This chart, with data taken from Multifamily Design+Construction's "Multifamily Amenities 2019 Report," shows the extent to which decision makers (multifamily developers, property owners, designers, construction professionals, and others) have included 113 identified amenities in their multifamily communities in the last 24 months, and to compare those results to the 2017 findings.

stations, day boarding facilities, dog-walking services, veterinary clinics, miniature dog parks, and even rooftop dog walks with special cleaning systems.

While dog-washing rooms with non-slip ramps to the tub and hair dryers may seem frivolous to some, they serve the dual purpose of pampering the family pet and sparing units the mess that comes with washing a dog in the bathtub.

A few new residential buildings with notable pet amenities in Boston include EchelonSeaport, Hub50House, and The Quinn. At EchelonSeaport, which began closing the first of its residences at the end of 2019, there is a dog run and pet spa with the option to coordinate with the groomer directly through the building's Echelon Life app. A turf-covered "Woof Deck" at Hub50House is complete with pet obstacles, while a heat lamp-outfitted overhang makes the space more comfortable for owners throughout the year. There is also a pet washing area and an oversized laundry unit ideal for items like dog beds. The Quinn, a Related condo project in the South End which began pre-sales in 2019, is the first property outside of NYC to offer Dog City. Dog City's mission is to "improve the lives of city dogs." Its concept emerged after Related Companies determined from tenant research in its other high rises that 60 percent of residents have a dog. Memberships to the Quinn's unique Dog City facility will include doggy day care, vet appointments, pickup and drop-off arrangement, access to an indoor play space, and more.

Pet accommodations do incur extra upfront investments and maintenance costs:

> Some buildings add insulation between walls and floors to muffle pet noises, particularly barking, and a grooming room with a tub and running water can cost a few thousand dollars to build. Many of the rooftop dog parks are made of porous artificial sod with drainage and sprinkler systems both above and below the sod. The sprinklers are turned on several times a day to wash away any waste and odors.[52]

But properties can recover these expenses with special pet fees.

It is also entirely possible for pet trends to spawn a backlash from non-pet-owning residents and/or those who prefer to live without the noises, mess, presence, etc. of

[52] Spivak, "Going to the Dogs."

animals within their buildings. Catering to this cohort, we could very well see a new niche of pet-free in multifamily.

4.5 Co-working and Workshare Space

In the recent stages of the Amenity War, multifamily developers have been upgrading the old business center—think rooms with a conference table and/or a few desks with common computers and printers, similar to quintessential hotel business centers—into co-working models. Co-working, in its simplest definition, is when people gather in an office or work environment to share equipment and ideas. This trend began to emerge a couple of years ago in multifamily but has now become one of the most requested additions in new developments.

The Multifamily Design+Construction survey that compared the inclusion of co-working space as an amenity between 2019 and 2017 showed a substantial jump: from 27.6 percent in 2017, to 39.1 percent in 2019. In the latest survey, nearly 4 in 10 multifamily providers said they had built co-working or workshare spaces into their retail or condo communities.[53]

No longer are developers looking at a space as a business center, but as a way to service the growing contingent of freelance workers, independent contractors, or those who generally work from home. These co-working spaces are highly designed and equipped with add-on services and the best technology, all as part of the evolution toward more full-service, hotel-like multifamily experiences. For example, common features of co-working spaces that users value include fast and powerful internet, scheduling technology, mixed-use workspace, private desks, a kitchen, coffee shops or free coffee, lounge areas, and indoor and outdoor working areas. In addition, developers are often choosing to build these spaces into the communal areas of the property, rather than working with an operator or building a ground-floor commercial space with the intention of leasing to an operator. Such is the case at NEMA, a brand new Crescent Heights development in Boston's Seaport District, where there is both a CoWork space and Creators Suite. In keeping with the

[53] Multifamily Design+Construction, "Multifamily Amenities 2019 Report."

neighborhood's "innovation hub" status, the Creators Suite features a leading-edge equipment collection that has been custom-curated for peak creativity and productivity, including 3D scanning and printing as well as coding and design stations. Some features of the CoWork space include screen-sharing capabilities and individual work stations.

For multifamily housing developers and owners, co-working spaces can also represent an additional revenue stream through pay-per-day or longer-term membership fees to use the facilities, both from residents and from opening up the space to non-residents.

4.6 Connectivity and Smart Home Technology

In today's online age, it is no surprise that residents prioritize connectivity via multiple devices. According to the 2020 National Multifamily Housing Council/Kingsley Apartment Resident Preferences Report, the number-one community amenity that residents expressed interest in is reliable cell reception. 91 percent of all renters said this was important, or very important in their decision to rent. 44 percent of renters would not rent without reliable cell service. 47 percent of all renters even said they checked the connectivity of their mobile phone while touring properties. High-speed internet access is similarly a top priority for residents and ranked in fourth place as a most highly ranked apartment feature. 92 percent of residents expressed interest in high-speed internet, while 48 percent would not rent without it. One of the contributing explanations for the high priority placed on connectivity is the popularity of online streaming services for home entertainment. 64 percent of renters currently get their entertainment at home from streaming services, while only 43 percent have cable, only 5 percent have an HD antenna, and only 4 percent satellite.[54]

There has been a long-developing trend of technological innovation and acceptance—justly described as technical disruption—in real estate that has had a profound impact on the multifamily sector. Smart home technology, as the phenomenon is generally known, now enables seamless

[54] "2020 NMHC/Kingsley Apartment Resident Preferences Report."

connectivity among devices, building systems, residents, and management, and represents a fundamental shift in how today's present and future multifamily residents desire to live.

Smart home technology, or simply, smart apartments, is the combination of smart amenities, community management, and building automation systems, such as HVAC and Access Control, integrated into one fully connected system. Sometimes, rather than full integration, a property can have singular smart features. Although smart home technology is mostly associated with newly developed construction, older buildings can be retrofitted to have similar connectivity. Importantly though, true smart home capabilities start with infrastructure. Simply installing some smart thermostats or speakers can be a useful upgrade, but to maximize the potential of smart home technology requires an intelligent infrastructure with the capacity to move data from diverse systems and the bandwidth to support future applications and their higher requirements. Some sources are predicting that built-in IoT (internet of things) networks and smart HVAC systems will soon be considered utilities like water and electricity.

Tech-enabled amenities are increasingly sought after by residents of all ages, but particularly millennials, because of the conveniences they provide. These amenities have become so in demand that, according to Schlage and Wakefield Research, 86 percent of millennials are willing to pay 1/5 more for a smart apartment than they are for traditional units. Additionally, 65 percent of baby boomers are reportedly willing to pay more for smart apartments with updated tech features.[55]

Multifamily Design+Construction's 2019 survey also provides telling information about smart home and technology trends. Developers are answering the demand and providing the latest technology services. Having high-speed fiber optic increased to 44.3 percent in 2019 vs. 37.9 percent two years ago. Smart home technology like Nest grew from 24.7 percent in 2017, to 34.8

[55] According to the study by Wakefield Research and Schlage of 1,000 U.S. renters in multifamily units, nine in 10 (86 percent) millennial renters are willing to pay more for a unit outfitted with automated or remote-controlled devices, compared with 65 percent of baby boomers. This research was released in late 2016. It is likely that, by 2020, the demand for smart features represent even larger percentages. Other interesting findings were that 44 percent of millennial respondents would give up a parking space to live in an apartment fitted with smart technology.
Schlage, "Results of Schlage's Industry Insight Survey Reveals What Millennial Renters Want in 2017."

percent currently. Phone charging stations were also up more than 10 percentage points, to 32.0 percent. Over half of the survey group provided free Wi-Fi (51.4 percent).[56]

Smart devices currently most attractive to residents include mobile entry keypads, delivery lockers, and smart thermostats. Other amenities with a high-tech edge include wireless connected lights, outlets, window coverings, and sound systems, and water, motion, and temperature sensors. The list is much more exhaustive, ever-evolving, and increasingly creative. For example, there is potential of drone landing stations and robotic package delivery services, but those have yet to make any direct inroads yet.

Smart homes also contribute to ease and efficiency of living by being able recognize the residents' daily patterns and then automate room temperatures, lighting, and other personal settings accordingly. Taking convenience a step further, they also offer "set it and forget it" controls.

Smart home features are clearly a draw for residents, but their connectivity also provides property managers with a means of better community management, an important conduit for data collection to help them run the community more efficiently and effectively, and even a potential source of ancillary income. The dual fronts of energy and people efficiencies that smart home technologies enable cannot be underestimated in our age of tech disruption. Smart appliances are more energy efficient compared to analog appliances, but together they create even more efficiency through the entire building system. Property staff also become more efficient and effective in a connected building. Managements spend countless hours each year on maintenance and resident assistance, but with smart locks, in-unit maintenance trips become faster, more transparent, and secure. Smart apartments also give management better oversight of their staff and their activities.

Even with these many benefits accompanying smart-home technology, significant challenges also exist. For example, a lack of centralized control systems, seemingly endless brands and technologies to choose from (and different resident brand preferences), steep learning curves for

[56] Multifamily Design+Construction, "Multifamily Amenities 2019 Report."

on-site associates, future proofing, and degradation of a community's Wi-Fi. Regardless of adoption headaches or learning curves, this is one trend in which developers cannot afford to be left behind.

4.7 Community and Social Connectedness

The community aspect of apartment and condominium living is another strong draw for a wide range of residents. In fact, the need for community is at the heart of human society, and that is exactly what multifamily projects strive to create: a place for neighbors to meet, connect, share, and feel a sense of connection to others. A sense of community and connectedness is well known to lead to a healthy resident base that creates a vibrant and attractive multifamily project for long-term success. Put another way, according to panelists at the NYU Schack Institute of Real Estate's Third National Symposium of Women in Real Estate in October 2019, "what is capturing the [prospective tenant] crowd is the desire for belonging."[57]

According to NAA's report on adding value in the age of Amenity Wars, half of the top ten amenities added or upgraded since 2014 involve bringing people together.[58] Additionally, 83 percent of respondents from the 2018 Consumer Housing Insights Survey believe places to socialize face-to-face with friends and family is an important housing feature.[59] These respondents noted face-to-face interaction is still important in an increasingly digital world. Importantly, though, the most successful community spaces and social events are those that are unique and tailored to the specific characteristics and demands of a specific property's residents. In other words, while common themes exist, there is no one-size-fits all response to engendering a sense of community and connectedness in the recent Amenity Wars.

In Boston, one of the most immersive and successful social amenities has been Millennium Partners' 'La Vie' Lifestyle Program. The proprietary program was launched as an amenity of Millennium Place, the firm's 256-unit luxury condominium building in the Downtown Crossing

[57] Brown, "In the Apartment Amenity Wars a Sense of Community Is Most Important."
[58] "Adding Value in the Age of Amenity Wars."
[59] "2018 Consumer Housing Insights Survey."

neighborhood (also known as Midtown) completed in 2013. It provides a carefully curated selection of exclusive activities and events designed to connect residents to each other and to the city of Boston. La Vie's robust calendar of unique, social events ranges from fireside chats with notable guests in the Owner's Lounge to Movie Nights in the screening room, on- and off-site winemaker and culinary events, musical and theatrical performances, and more.

Along with the program, Millennium Partners introduced a new, immersive La Vie app. Within the app is "La VIP," a members-only program designed to give residents exclusive access to the city, including a range of perks, privileges, and experiences.

Richard Baumert, a partner at the firm, remarked in 2013 that:

> We're thrilled to see how quickly our buyers have embraced the unprecedented lifestyle and dynamic new Bostonian urbanism afforded by Millennium Place. As the market continues to respond to this project with record sales, we look forward to introducing new La Vie events as an opportunity for residents and their invited guests to embrace this evolving Downtown Crossing neighborhood.[60]

La Vie has indeed been a success since its introduction, which has triggered it to become an amenity of other Millennium Partners developments, including Millennium Tower completed in 2017.

Another approach many operators take is programming events in their spaces that help foster a sense of fun and community without adding costs. According to a Lendlease executive, "residents love pop-up events that neighborhood restaurants and stores host in our amenity spaces, which don't necessarily translate into additional costs for the building or themselves."[61] Whether amenities take the form of free collaborations, or incur incremental or high costs, they still have the power to aid in the all-important resident retention and recruiting, which is why they have been mainstays or recent phases of the Amenity Wars.

[60] "Millennium Place Launches 'La Vie' Lifestyle Program With Inaugural Fireside Chat."
[61] Bousquin, "Putting Meaning into Amenities."

4.8 Smaller Homes and More Amenities: *Sleep in the apartment, but live in the building.*

As amenity spaces and other available conveniences grow, designs of the units themselves are changing. Unit sizes, particularly apartments, have continued to shrink because additional, communal living spaces have become available in the form of all the amenities. In other words, external amenity spaces expand the occupant's living experience beyond the special confines of their individual unit, which essentially becomes a "crash pad." According to an analysis by RENTCafe using Yardi Matrix data, a comprehensive commercial real estate data analysis system, many studios and one-bedroom apartments are now up to 10 percent smaller than they were previously.[62]

Units are also continuing to shrink because they are evolving with technology. For example, conveniences such as increasingly-popular food delivery services mean that many people no longer need large kitchen spaces.[63]

Smaller apartments and condos not only enable more efficiency for developers, but they also provide more amenable absolute price points to residents. Rising housing costs in urban areas like Boston have essentially forced people to rent smaller apartments, which are often referred to as micro units. The smaller units with more affordable price points enable another recent trend of the Amenity Wars that will be described in more detail later on, namely, building-hopping to chase the next newest thing.[64] Millennials are the main occupants of the smaller homes, and the most responsible for the building-hopping trend.

4.9 Affordability and Amenitization

Not surprisingly, many features and amenities carry costs that may drive up both rent and sales prices, and so affordability remains a major concern for many residents. In fact, according

[62] "Average Apartment Size in the US."
[63] However, it would be a mistake to design all apartments based on the food delivery trend. While millennials may need less space because of Uber Eats and Grubhub, empty-nesters have different tastes. If people are stepping down from existing homes, they will desire a larger kitchen than typical of micro units. "Beyond the Amenity Wars."
[64] Building-hopping to chase the next newest thing often coincides with taking advantage of concessions.

to the 2020 National Multifamily Housing Council/Kingsley Apartment Resident Preferences Report, seeking lower rent, at 47 percent, was the number one reason why renters planned on moving to a different apartment community.[65]

The intersection of affordability and amenitization have led operators to come up with creative solutions like micro units (see the following discussion on co-living), but also a-la-cart services that residents have the choice to use and pay for. Otherwise known as pay-as-you-go add-ons, many of these services resemble those long offered by hotels. Setting up pay as-you-go add-ons has even been shown to help with retention. According to Houston-based Spruce, a provider of hotel-like services to the multifamily industry, residents who take advantage of at least two hotel-style services at their apartments have an 81.4 percent renewal rate, well above the industry average of 52 percent."[66]

4.10 The Sharing Economy's Effect on Multifamily

Smaller and more affordable units are important elements of another recently growing trend and force facing the real estate industry: the sharing economy. Considered by many to be a powerful disruptor, the sharing economy "[chips] away at the divide between public and private space," and requires tomorrow's apartment communities to be integrated into the fabric of the larger community.[67]

At first thought, the term "sharing economy," evokes vacationing in an Airbnb rental property or riding in an Uber or Lyft. However, these are just a few examples of early successes of a new way of organizing economic activity that is slowly displacing the corporate-centric model of the 20th century. The sharing economy, which is largely driven by those who value convenience and access over ownership, is shifting work out of centralized companies and into crowd-based platforms that connect millions of independent providers with consumers.

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65 "2020 NMHC/Kingsley Apartment Resident Preferences Report."
66 Bousquin, "Putting Meaning into Amenities."
67 "NMHC Releases Data and Insights on 'The Apartment of Tomorrow.'"

The idea of homeownership is also shifting with the notion that personal and dedicated ownership may no longer be the primary way in which consumer needs are fulfilled. Over time, this shift could spill over to the housing market. In a trend foreshadowed by the enthusiasm with which corporations have embraced co-working spaces, as cities continue to grow, co-living spaces like those pioneered by Common and WeLive could see a future in which shared housing is more common. In fact, based on the amenities higher on the lists of the 2019 Multifamily Design+Construction amenities study, the idea of the sharing economy is already influencing which amenities are being installed and used most.

In Boston, co-living is being introduced with the August 2019 groundbreaking of 7INK, a 14-story, 180-unit co-living building at the corner of Albany and Herald Streets in the South End. 7INK is the seventh and final building at Ink Block[68] featuring move-in ready, fully-furnished studios, one-bedroom apartments and shared suites.[69]

How does the sharing economy affect the Amenity Wars? For one, amenities within these alternative housing forms, such as kitchens, dining rooms, activity and social spaces, gardens and play spaces for children, typically take up more space and take on even more important roles for residents and forging community networks. Community gardens, car- and bike-share programs, and tool, technology and sport equipment sharing are also becoming integrated elements in these living arrangements and amenity offerings.[70]

Many architects designing new cohousing communities are also embracing codesign, a process in which prospective occupants help design the community they will inhabit. A more collaborative design process provides members of cohousing communities greater opportunities to influence

[68] Ink Block is the transformation of the former Boston Herald headquarters in the South End by National Development. Previous phases of the development include three apartment buildings (1Ink, 2Ink, 3Ink) in Phase 1; a condo building (Sepia) in Phase 2; and a condo building (Siena) and AC Ink Block by Marriott hotel in Phase 3. The first buildings were completed in 2015. Ink Block also includes a 50,000 square foot Whole Foods supermarket plus additional retail.
[69] 7INK is a National Development Community expected to be completed by the end of 2021.
[70] Madden, "Exploring the New Sharing Economy - NAIOP."

operational and physical design to meet their changing needs. This is done through a flex-design process that enables residents to reconfigure walls and rooms as their family units evolve.

In addition, the sharing economy is helping to change the ways multifamily owners view amenities. Whereas approximately five years ago, it would have been unheard of to allow nonresidents to use in-house amenities, more recently some developers have been opening in-building amenities such as rooftop decks, fitness centers, and kitchens and screening rooms to nonresidents as a way to generate interest in a property and attract new lessees. For example, Property Market Group's X Social Communities in Chicago and Miami host a wide array of events that are free to residents, but for which organizers can charge what they want to nonresidents. These events include fitness boot camps and spin classes, screenings and viewing parties, dog meetups and galas, and networking and workshops.[71]

According to the data from NMHC's 2018 Consumer Housing Insights Survey, fifty-eight percent of millennials believe apartments should provide helpful services and amenities for the surrounding community.[72] However, there are also residents and developers who resist opening up amenities to nonresidents. Doing so, they believe, can devalue a building, especially a newer, Class-A residential property, because amenities packages are baked into rents. There are also security and liability issues associated with "uninvited guests," as well as a dilution of a luxury property's exclusivity.

4.11 Amenity Growth in Boston

While the Amenity Wars have been a national phenomenon, analysis on a per-market basis will note differences in the popularity of amenities across different areas. In other words, what is most popular in one city may barely get noticed in another. Therefore, the paper will now turn to

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[71] PMG's Brand and Experiences Manager, Brian Koles said many new leases start from people discovering a building through an event, and PMG plans to expand the program beyond the three assets where this is being applied.
"Amenity-Rich Buildings Embrace The Sharing Economy, Offer In-Building Perks To Nonresidents."
[72] "NMHC Releases Data and Insights on 'The Apartment of Tomorrow.'"

a more in-depth analysis of Boston's overall real estate market and its specific Amenity Wars scene.

First, it is important to set the stage for the health of Boston's market. Widely considered as one of the nation's premier cities and a growing global center, Boston is a hub of both history and innovation with a world-renown concentration of higher education, health care, advanced R&D, and life sciences. While debate exists as to whether the City can currently claim "world-class" stature,[73] there are many points in favor, including the region's economic performance and influence.[74] Capital within the city is worldwide capital, and its current stability makes it an attractive place for continued investment. Particulars of the debate aside, it is easy enough to agree that Boston's world-class stature has bourgeoned in recent market cycle (post 2008 Recession), and that it has been gaining ground with each year since recovery.

Numerous sources—such as universities, public agencies, think tanks, consulting firms, research firms, and the media—have embarked on studies analyzing city performance to understand how cities can be "global" and competitive. Looking at one such study, JLL's list of the top 20 Established World Cities,[75] Boston was included for the first time in 2019. "Boston's rise as a globally recognized real estate market is as much due to the stability of its real estate as it

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[73] Many rankings are subject to different categories for "world-class" or "global city" stature. Some definitions of a global city require having at least a million residents, under which parameter Boston, with a 2020 population of just over 710,000, does not qualify.

[74] The strength of Boston's economy is demonstrated by its #12 world ranking for metropolitan GDP (Gross Domestic Product). In 2017, Boston's metropolitan area GDP was $438 billion, placing it just behind Mexico City and Washington, DC. This represents enormous economic production for a moderately-sized American city. "OECD Factbook 2015-2016." Additionally, The Brookings Institution's Global Cities Initiative places Boston in its "knowledge capital" category, one of seven types of global cities described by that think tank. The knowledge capitals are the focal centers of the global innovation economy.
Jesus Leal Trujillo and Joseph Parilla, "Redefining Global Cities: The Seven Types of Global Metro Economies."

[75] For nearly a decade, JLL and The Business of Cities have been analyzing cities around the world and their ability to attract investment and sustain growth over the long term. Based on major performance benchmarks such as economic growth, job performance, and investment attraction; a clear division amongst global cities emerged to establish The Big Seven, led by London and New York.
Over the years, second tier global cities have joined The Big Seven to comprise a comprehensive list of Established World Cities. These Global Contenders are continually challenging The Big Seven and are beginning to close the gap between themselves and this top tier. For the first time since 2017, four new Global Contenders – Boston, Berlin, Munich and Stockholm – have gained entry onto this list. Times, "Boston Makes Its First Appearance on the List of Top 20 Established World Cities."

is for its dominance in the life sciences and technology clusters," shared JLL New England Research Director Julia Georgules. "With one of the most mature and capital-rich innovation ecosystems in the world, Boston's long-term planning is now more integrated to meet its quality-of-life, equity, mobility and resilience imperatives."[76]

As a Global Contender, Boston is also beginning to acquire many of the assets of the traditional top tier cities: gateway connectivity to national and continental economies, effective metropolitan scale and market size, trust of global capital, a sizable talent pool, and multiple clustered specializations. Additionally, the city is establishing new tools for accessing affordable housing as well as implementing its first coordinated citywide plan in over 50 years through its Imagine 2030 initiative.

In particular regard to residential real estate, while Boston was once considered a second city by international buyers, thanks to several high-end developments, it has quickly been catching up with the likes of New York, Miami, Los Angeles, and San Francisco. Richard Friedman, long-time Boston developer whose latest project is the ultra-luxury Four Seasons Private Residences One Dalton Street, Boston, attributes the growing international draw to the fact that Boston is a very safe place to invest due to its stability. He has said that "even in past recessions, Boston stayed quite level. It's not like Miami or New York or L.A." Marketing for his project was attentive to promoting expanded flights out of Logan International Airport, which have also helped solidify Boston as an easily accessible world-class destination. At least as of 2016, when sales and marketing efforts were underway for the to-be-completed building, Boston offered more than 50 direct flights from overseas, having recently added flights from Beijing, Shanghai, Istanbul and Tokyo. Emirates Airlines also added a second daily non-stop between Dubai and Boston.

Tracy Campion, who has been Boston's top luxury residential broker for approximately two decades, echoes the sentiment of Boston's residential stability in the luxury market. Rather than

[76] "Boston continues to attract and retain a unique pool of technical talent which will only further strengthen its educational and innovation prowess," Georgules further explained. "With its improving scores as a global financial services provider and its reputation for smartness, Boston's role in the global economy doesn't look to be slowing any time soon." Times.

prices taking any marked dips for downtown high-end properties during the most recent Recession, buyers and sellers mostly "kept their hands in their pockets," meaning that rather than prices falling, properties simply took longer to sell at pretty consistent dollar amounts. "Pause" rather than "crash" or "crisis" is a more apt descriptor for what happened to Boston residential real estate amidst wider market corrections, and, as the market has only strengthened in the ~10 years since then, the "pause" provides a useful point of comparison for looking at future shocks (i.e. COVID-19). And while her experience with Boston's market is that local buyers, in particular suburban relocators, make up the largest contingent of Boston's luxury clientele, there is a strong international draw mainly for the area's schools and hospitals.

She attests that among high-end buyers who have recently been putting properties under agreement or who are still active in their search, the overwhelming draw is toward new construction offering direct elevator access, ceilings heights upwards of ten feet, panoramic views through floor-to-ceiling glass, access to outdoor space and garage parking. Additional amenities included in this discussion are also an important draw, however these are the core features creating Boston's condominium demand.

More on Boston's strong overall fundamentals and how it translates to the residential real estate market:

Following a fast recovery from job losses in 2009, economic conditions in Boston remained strong up to 2019, supported by its highly educated and skilled labor force that attracts many employers.[77] Part of the city's strong growth is actually a result of increased construction activity in the area, much of which was multifamily.

The U.S. Department of Housing and Urban Development's most recent "Comprehensive Housing Market Analysis" describes the strength of Boston's overall market as of the beginning of 2019. The report details the entire Boston Housing Market Area,[78] of which the City of Boston

[77] "Comprehensive Housing Market Analysis Boston, Massachusetts."
[78] The Boston Housing Market Area (HMA) includes Essex, Middlesex, Norfolk, Plymouth, and Suffolk Counties in Massachusetts. "Comprehensive Housing Market Analysis Boston, Massachusetts."

and Suffolk County makes up the central district. According to the analysis, the construction sector's percentage increase was one of the largest of any sector, expanding by 5.9 percent and adding 6,600 jobs. Also, according to the analysis, 8 of the 10 employment sectors[79] measured by the U.S. Bureau of Labor Statistics added jobs in 2018, with the largest increase occurring in the professional and business services sector, which added 21,100 jobs, or 4.4 percent. The professional and business services sector, fueled in part by the city's renown as a center for education and research that attracts many businesses to the area and creates many small startups, has been the fastest growing sector with the start of the most recent expansion, adding an average of 13,600 jobs, or 3.1 percent, annually.

Education and health services[80] was the second fastest growing employment sector in the area. 6 out of the 10 largest employers in the HMA are in this sector, including the top 3: Partners Healthcare, Harvard University, and Massachusetts institute of Technology, which each have more than 10,000 employees. According to a 2012 study titled "Metroversity," authored by Evan Dobelle and Michael Konig, the universities in the HMA have more than a $31 billion annual economic impact on the HMA.

The strong job market has contributed to a surging real estate market, both for buyers and renters, since recovery from the Great Recession. The city center of Suffolk County has surged in popularity with a housing supply that has struggled to keep up, due in part to high construction costs and regulatory constraints. With a 12.1 percent population increase in Boston from 2010 to 2019, compared with a 6.3 percent increase for the US population as a whole,[81] developers and builders have struggled to keep up with demand, which has been a major factor causing housing

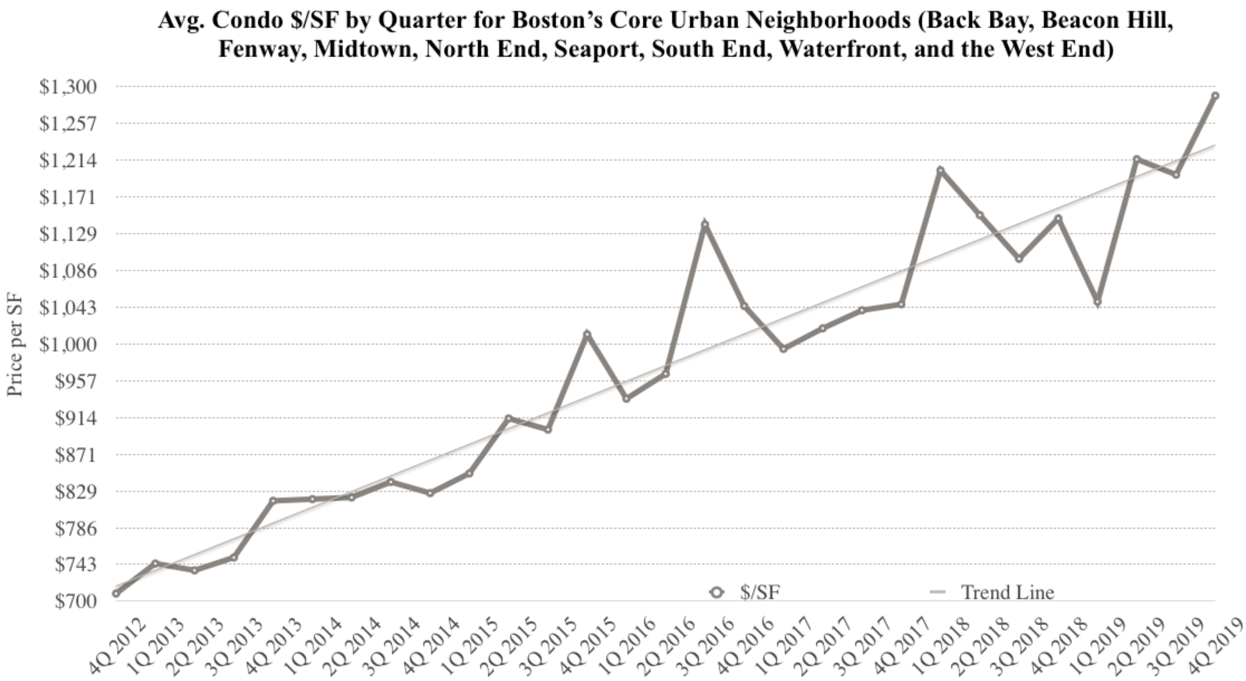
[79] Sectors include: Mining, Logging & Construction; Manufacturing; Government; Trade, Transportation & Utilities; Information; Financial Activities; Professional & Business Services; Education & Health Services; Leisure & Hospitality; Other Services.

[80] The Boston Housing Market Area is home to 56 institutions of higher education that currently enroll more than 420,000 students combined, including Harvard University and the Massachusetts Institute of Technology, both of which ranked among the top 10 universities by *U.S. News & World Report*. Boston's highly regarded hospitals include the Massachusetts General Hospital and the Brigham and Women's Hospital, which were both ranked in the top 20 best hospitals in the nation by *U.S. News & World Report*.

[81] "U.S. Census Bureau QuickFacts."

prices to rise. Growth was fully underway by 2012, and the Boston Home Price Index has increased 53 percent from 2012 through 2020's first quarter.[82] Using another source, the LINK Annual Sales Summary that measures the Citywide Price Index, prices are up 92 percent from 2012 through 2019.[83] The Figure below also relies on LINK data, but shows the growth in average condo price per square foot for just the core urban neighborhoods of Boston being considered here.

Figure 6: Boston Price per Square Foot Growth



Data Source: LINK Boston

[82] S&P Dow Jones Indices LLC, S&P/Case-Shiller MA-Boston Home Price Index [BOXRSA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BOXRSA, June 25, 2020.
More on Boston becoming more expensive: Boston prices have been increasing. According to the U.S. Federal Housing Finance Agency, All-Transactions House Price Index for Boston, MA, prices are up 45 percent from the beginning of 2012 trough 2020's first quarter.[82] According to S&P/Case-Shiller, the Boston Home Price Index has seen a 53 percent increase from the beginning of 2012 trough 2020's first quarter.
[83] "Boston 2019 Annual Sales Summary."

Boston is well known to be expensive. The Council for Community and Economic Research ranks it the 10th most expensive urban area in the country in its Quarter 1, 2020 publication.[84] This composite index is based on six component categories: housing, utilities, grocery items, transportation, health care, and miscellaneous goods and services. Median home prices in Boston, according to the LINK Citywide Annual Sales summary, reached $899,000 in 2019, whereas the average sales price was nearly $1.37million. The average price per square foot paid for homes was $1,056. Putting this into perspective, a typical urban studio would cost at least $500,000 and a moderately sized, 1000-square foot two-bedroom would cost over $1million. Available inventory remained at very low levels, helping to create competition that pushed approximately 25 percent of sales to close over their last asking price.

Figure 7: Boston Condominium Sales Summary

Boston Citywide Annual Sales Summary 2019											
Year	**Sales**	**% +/-**	**Avg. Sale Price**	**% +/-**	**Median Sale Price**	**% +/-**	**Avg. $/SF**	**% +/-**	**Median $/ SF**	**% +/-**	**Avg. Market Time**
2015	3,205	-	$965,943	-	$680,000	-	$809	-	$748	-	45
2016	3,431	7%	$1,159,178	20%	$791,000	16%	$927	15%	$864	15%	46
2017	2,996	-13%	$1,110,391	-4%	$784,963	-1%	$916	-1%	$872	1%	48
2018	3,209	7%	$1,221,912	10%	$875,000	11%	$1,014	11%	$957	10%	55
2019	2,936	-9%	$1,370,167	12%	$899,000	3%	$1,056	4%	$955	0%	65
Source: LINK (Listing Information Network) Boston Annual Sales Summary 2019											

Even with these strong 2019 numbers, the rate at which they were growing was beginning to decline from previous years, and a level of uncertainty was beginning to set in in Boston in regard to where it stood in the cyclical nature of the market. Brokers have described this as a psychological shift in the marketplace as buyer/seller behavior began to be affected by expectations of a

[84] The *Cost of Living Index* measures regional differences in the cost of consumer goods and services, excluding taxes and non-consumer expenditures, for professional and managerial households in the top income quintile. It is based on more than 90,000 prices covering 60 different items for which prices are collected quarterly by chambers of commerce, economic development organizations, and university applied economic centers in each participating urban area. The composite index is based on six component categories – housing, utilities, grocery items, transportation, health care, and miscellaneous goods and services. Note that the Council for Community and Economic Research's data collection for Quarter 2 2020, as well as the Quarter 2 publication, have been cancelled due to COVID-19.

correction or a rebalancing. As of the end of 2019, market watchers were in much of a "wait and see what happens" mode. While there were rumblings over declining prices and a greater shift to a buyer's market, they had not manifested themselves yet. At this point, the threat of COVID-19 was nowhere in mind.

Considering the apartment market, Boston's rentals also continued to thrive through 2019, particularly in new construction buildings. Despite the increase in the number of units added since the recovery of the Great Recession,[85] occupancy rates had not dropped below 95 percent in the last decade. From 2017 through 2019, these occupancy rates actually held above 96 percent. Boston apartments have becoming increasingly pricier, being ranked third most expensive in the nation according to Zumper's June 2020 report (see Figure 8).[86] Every month in 2019 achieved greater average urban core asking rents per square foot than in 2018. The average asking rent for urban core apartments reached $3,440 and price per square foot of $4.45 for an average sized apartment of 774 square feet.[87] Effective rents for new, luxury apartments in Boston were starting to exceed $6 per square foot in select buildings. See Figure 9 for a breakdown of Boston's urban core apartment rents broken down by bed type.

Figure 8: Zumper National Rent Report, June 2020

As of early 2020, rent appreciation had not put a dent in demand for luxury product, and Boston was expected to remain a desirable place to live across all age demographics, from students and

[85] According to Axio Metrics Estimates, the Greater Boston/ Cambridge/Newton submarket added 38,000 worth of inventory since 2014.
[86] Boston ranked third behind New York and San Francisco for most expensive rents in 2019. The year prior, Boston was ranked fifth most expensive.
[87] The Collaborative Companies, "2019 Rental Recap and 2020 Forecast." Data is sourced from Axio Metrics and excludes units believed to be affordable.

young professionals to empty nesters who prefer to rent either prior to or instead of purchasing downtown.

Figure 9: Boston Apartment Rents by Bed Type

Boston, MA: Annualized Urban Core Asking Rents by Bed Type			
Micros		**One Bedroom + Dens**	
Average Asking Rent	$2,020	Average Asking Rent	$3,514
Average $/SF	$6.00	Average $/SF	$4.03
Average Square Footage	337	Average Square Footage	872
Total Units	631	Total Units	1,115
Studios		**Two Bedrooms**	
Average Asking Rent	$2,836	Average Asking Rent	$4,230
Average $/SF	$5.24	Average $/SF	$4.04
Average Square Footage	541	Average Square Footage	1,047
Total Units	5,979	Total Units	5,530
One Bedrooms		**Three Bedrooms**	
Average Asking Rent	$3,185	Average Asking Rent	$6,004
Average $/SF	$4.49	Average $/SF	$4.34
Average Square Footage	710	Average Square Footage	1,383
Total Units	8,933	Total Units	811
Source: Axio Metrics & The Collaborative Companies 2019 Year End Report			

For many of Boston's large-scale buildings, the focus has been on amenities rather than price as the key driver in a potential resident's decision making. These amenities include the physical spaces – gyms, lounges, pools, kitchens, work spaces, pet areas, etc. – as well as services, events and other programming and curated experiences that have become just as critical to attract prospects. For many Boston renters, particularly millennials who occupy smaller units, building-hopping has become common in order to take advantage of the next newest building offerings, as well as concessions for new tenants that typically take the form of one to two free months of rent.[88] This has been a particularly common in the Seaport, where at least eight new apartment buildings

[88] The Collaborative Companies.

(not including buildings with condominiums) have opened since 2014.[89] The hopping phenomenon has applied to sales as well, albeit not as frequent and more typically described as "moving up" to the next newest things where amenity wars have been taken further. In Millennium Partners' Boston properties, for example, a contingent of buyers moved from One Charles (2005) to Millennium Place (2013) to Millennium Tower (2017) and were even given exclusive pre-sale opportunities to do so. Moving up is also a common practice between different developers' projects within the same neighborhood. Back Bay, widely considered to contain Boston's most desirable real estate, is perhaps the best example where the brand new One Dalton has absorbed buyers from previous luxury top spots like the old Four Seasons on Boylston Street and the Mandarin Oriental.[90]

Although not as "flashy" with its real estate or overt in displays of wealth as other markets,[91] Boston has surely been a battleground for the Amenity Wars. According to a study from trade group, the National Apartment Association and analytics firm, Enodo Score, amenities in Boston are among the most valued compared with other cities, with the highest rent premiums on average, over other markets like Chicago, Los Angeles, San Francisco, Seattle, Austin, Phoenix and even New York.[92] Specifically, lounges

Figure 10: Valued Amenities in Boston

Boston, MA: Amenity Frequency and Avg. Premium ($/unit/ month)		
Amenity	**Frequency**	**Avg. Rent Premium**
Lounge	60.1%	59.3%
Concierge	58.8%	60.8%
24-House Fitness Center	56.0%	55.3%
Club House	54.0%	55.3%
Roof Deck	53.3%	49.8%
Source: National Apartment Association and Enodo Score, "Adding Value in the Age of Amenity Wars"		

89 Seaport Apartment buildings include 315 on A (2014); Waterside Place (2014); 100 Pier 4 (2015); Watermark Seaport (2016); VIA Seaport Residences (2017); The Benjamin (2017); Gables Seaport (2020); NEMA Boston (2020).
90 Exact statistics of building-hopping and "moving-up" are either not available or are proprietary information. This is based on common anecdotes and from experience in luxury residential sales and marketing in Boston.
91 i.e. New York, Miami, Los Angeles. The old Puritan ideals and Brahmin tendencies toward thrift and understating wealth, maintaining modesty, a focus on culture, educations, and hard work have retained lasting legacies in the city. There are of course many exceptions to this, but overall the market remains understated compared with other world class cities.
92 Boston, along with Miami, command the highest amenity rent premiums of all markets in the study.

commanded the highest average rent premium ($80.15) followed by concierge ($74.87), 24-hour fitness center ($66.93), club house ($64.30), and roof deck ($56.38).[93] In terms of amenity frequency in the Boston market, as of mid 2017, fitness centers, concierges, and roof decks were the most common amenities in luxury apartment buildings in Boston (with measures of frequency of 25 percent, 22 percent, and 20 percent, respectively).[94]

4.11.1 Examples of Amenity-rich Residences in Boston:

A. Condominium Example: One Dalton

Completed in 2020,[95] One Dalton, more formally knowns as the Four Seasons Private Residences One Dalton Street, Boson, now stands as New England's tallest[96] and most expensive residential building, with 160 condos priced between approximately $2 million and $40 million located on the floors above the 215-room Four Seasons Hotel. One Dalton includes some of the finest amenities the city has to offer, including an on-site parking garage with valet services, a fine dining restaurant with bar and lounge, state-of-the-art fitness center, 65 foot lap pool and signature spa and salon. The ultra-luxury property also boasts a permanent art collection curated by distinguished international art dealer, Kate Chertavian. Exclusive resident amenities include a private residential lobby with doorman and concierge services, an owner's Club Lounge on the 50th floor designed by legendary architect and designer Thierry Despont, as well as a theater room, golf simulation room, yoga studio, and family activity center on the 24th floor. In regard to the 50th-floor restaurant and club room just for the condo owners, Richard Friedman, president and

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93 "Adding Value in the Age of Amenity Wars."
94 "Adding Value in the Age of Amenity Wars."
95 The Official Groundbreaking Ceremony took place on January 14, 2015 and the Official Topping Off Ceremony took place on August 7, 2018. Residential closings commenced in Spring 2019 with some building work continuing into 2020.
96 At 61 stories and over 740 feet, Four Seasons Private Residences One Dalton Street, Boston surpasses Millennium Tower to become the city's tallest residential building. Designed by world-renowned architect Henry N. Cobb, the all-glass tower is shaped as an equilateral triangle with rounded bays and floor-to-ceiling windows that feature wrapping views of the Back Bay skyline, the Charles River, Fenway, South End and beyond to Boston Harbor and the Blue Hills. The luxury building becomes Boston's third tallest structure overall, behind the 750-foot Prudential and the 790-foot John Hancock Tower, both office buildings. Hancock Tower architect Henry N. Cobb is designing the new project along with Cambridge 7 Associates.

chief executive of Carpenter & Company and the developer of One Dalton, tells buyers: "Don't build a dining room for 15 people. Just go up to the restaurant…You can smoke a cigar outside. Or the bartender will just have your drink ready for you at 5 p.m."[97]

In addition, residents have access to the Four Season Hotel's five-star services. The concept of branded residences, which may well have begun in the 1920s at the Sherry-Netherland Hotel on New York's Fifth Avenue, offers wealthy buyers not just a luxury home, but the reputation, allure, and enticing appeal of a world-renowned name. All brand owners set rigid guidelines and design specifications to developers so that the residences accurately reflect their brands down to the smallest details. Additional hotel-branded developments in Boston, which comprise many of the city's most expensive properties, include the Residences at the Ritz-Carlton, Boston Common; another Four Seasons Residences overlooking the Public Garden in Back Bay; the Residences at Mandarin Oriental, Boston; the Residences at W Boston; the St. Regis Residences currently under construction in the Seaport; the Raffles Hotel and Residences currently under construction in Back Bay.

B. Apartment/Condominium Example: EchelonSeaport

EchelonSeaport is the first "luxury destination lifestyle" concept introduced to the Boston market by developer, Cottonwood Management. Encompassing 1.3 million square feet across 3.5 acres in the Seaport District, the development, which broke ground in 2017, becomes the largest luxury residential project to Boston upon its 2020 completion. It is comprised of three luxury residential towers with a total of 717 residences atop two floors of street-level retail with 50,000+ square feet of indoor and outdoor private residential amenities. In the theme of branded residences, EchelonSeaport is the first U.S. residential address branded by Regent Hotels & Resorts, an internationally recognized leader in five-star hospitality and service.

[97] Sullivan, "Pet Spa?"

EchelonSeaport offers a combination of luxury urban resort style apartment and condominium residences, expansive indoor/outdoor amenity spaces, a public central courtyard and two levels of high-end retail. Kohn Pedersen Fox and CBT Architects were the architects of the building while interiors were envisioned and executed by Jeffrey Beers International.[98] Jeffrey Beers International chose EchelonSeaport as its inaugural residential project in Boston. Their design of the 50,000 square feet of indoor/outdoor amenity spaces includes two signature outdoor pools with lush landscaping, sun decks, an indoor infinity edge relaxation pool, an 8,500 square-foot wellness center with a tranquility spa, and two sky lounges. There are two underground garages on-site including one private garage dedicated solely to residents with valet service available. Through the Echelon Life App, residents gain access to a global luxury lifestyle management and concierge service.

Retail and restaurants will be located across EchelonSeaport's first two stories and will be centered about Autumn Lane, a new pedestrian mall, and Harbor Square, a new courtyard. Multiple passages and streets will be constructed throughout EchelonSeaport, featuring outdoor seating on multiple levels, distinctive artwork and beautiful tree canopies.

EchelonSeaport’s own retail offerings combined with its connection to the wider Seaport neighborhood is emblematic of a wider theme of local experiential retail as a multifamily amenity. The entire Seaport District itself, though comprised of a host of condo and apartment buildings by numerous developers, is able to market a trifecta of live/work/play and offer Seaport Square’s retail as additional amenities. Beyond the Seaport, some of Boston’s largest projects are now offering key restaurant and retail experiences, making individual buildings that much more attractive as live/work/play destinations. For example, Hub50 House offers 210,000 square feet of restaurants and retail, along with a 60,000-square-foot Stop and Shop that provides an undeniable convenience to residences. Future developments such as Washington Village in South Boston and Cambridge Crossing will continue this mixed-use amenity trend as well.

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[98] Jeffrey Beers International is renowned for designs including the Fontainebleau in Miami and is currently designing residential amenities for Rafael Vinoly’s 277 Fifth Avenue project in New York.

4.12 Amenities with Staying Power

One of the latest developments of the Amenity Wars is the thought by some that the amenities race has plateaued. Call it a plateau, call it a détente, call it a sellers' market that is now shifting toward buyers and bears; at its core, this is the idea that the Amenities Wars cannot continue unchecked. Corresponding to the doubt of continued amenity innovation and momentum is realization of the need for amenities staying power. A popular sentiment of real estate media and industry professionals of late has been for a return to a focus on "the basics", to what has proven to be lasting, and to what the *Handbook* recommends as quality over quantity. Greg West, President and Chief Executive Officer of ZOM Living, makes this point: "Developers and renovators need to focus on the basics…While coworking, pets and indoor-outdoor space are popular features, past popular amenities—such as golf simulators and virtual reality rooms—have disappeared."[99]

So, what's not likely to get old? At least in a pre-COVID-19 world, proximity to public transportation and employment centers ("location, location, location"), along with garage parking, secure building access and on-site grocery retail. But again, there is no one-size-fits-all answer and an amenity that is a hit in one market might fail elsewhere. Additionally, renters on the whole will typically prioritize the rent and unit mix, and in most realistic cases general amenities fall behind these. In other words, for any amenities to be proper recruiters of residents, rent and unit mix, as well as location mentioned above, must first be at least partially met.

Amenity Scale-Back and a Shift toward Service

Even though many amenities have staying power, albeit with different lifespans, the very latest discussion and activity regarding developers' amenity decisions does point to a type of de-escalation. In the last year or two in particular, developers are scaling back on new amenities and altering their focus to service. They will still build the top-of-the-line essentials for luxury

[99] "Beyond the Amenity Wars."

communities, but may reduce completely unique amenities. "Count on developers to spend those incremental dollars on service in order to fill up units as quickly as possible," The Apartment Report states in an April 2019 article.[100]

The shift toward services is largely due to rising land prices, construction costs outpacing rents, and fierce competition to both sell units and lease them for property stabilization. In a tightening market—as of April 2019, The Apartment Report research called for development to continue but wind down slightly—there is overall less room for error. The Apartment Report rightly claims that "an off-the-wall amenity that a developer isn't certain renters will want to pay for will be the first thing on the chopping block." Also, since concessions are "running rampant in the most overheated MSAs…service as an amenity is a strong selling point to lower some of the high vacancy levels in the space."[101]

We must understand what service means to modern buyers and renters. Thanks to 21st-century technology, these consumers are conditioned to expect an Uber ride, dinner delivery, or order from Amazon in no time at all. Likewise, residents at the average luxury property expect their community to provide the same instant gratification with access to on-site concierge services on-demand, including dog walking, transportation, dry cleaning, and food delivery.

Many developers have partnered with a number of local and national service providers to offer concierge services, paid for by the resident. Others, such as Bozzuto, have opted for an all-inclusive service provider that facilitates resident services such as laundry, cleaning, food delivery, pet care, and more. An in-house resident services manager is on staff to assist with requests, but

[100] Crittenden Research, Inc., "Developers De-Escalate Amenity War."
The article calls to look for a number of developers to build while keeping service as an amenity in mind, including Alliance Residential, Greystar Real Estate Partners, Mill Creek Residential, Lincoln Property Company, JPI, Trammell Crow Residential, Kettler, Gables, Related Companies, StreetLights Residential, Prometheus, ZOM Living, AMLI Residential, Picerne Real Estate Group, Bainbridge Companies, Middleburg, Madison Marquette, Lang Partners and Rooney Properties.
[101] Crittenden Research, Inc.

sometimes the request calls for bringing in someone like Hello Alfred[102] to help supplement the building's service platform.

In this same vein of utilizing outside service providers, a possible growing trend of the Amenity Wars will have to do with third party management of amenity spaces themselves, such as fitness and co-working rooms, both of which have been discussed above. If done properly, having third-party operators managing larger amenities will be a revenue driver for the owner, provide more exposure to the building and add to rather than take away from the resident experience.[103]

This paper has established how extensive amenity and service packages have become the new normal of urban multifamily living, and that, if developers program their spaces, activities, and amenities the right way, people will get out of their unit to use them and connect with the community. In 2020, however, the notion of a new normal has taken on an entirely new meaning. What's more, events of this year bring up the question, what happens when residents cannot even leave their units?

[102] Hello Alfred is an American technology company that connects consumers with on-demand and local services to complete errands and tasks. Members are assigned a personal home manager, or Alfred, and make requests in the company's app. The company operates in Boston, San Francisco, Los Angeles, Jersey City, Stamford, Chicago, Washington, D.C. and New York City, with stated plans to expand to several other cities.
[103] "Amenity-Rich Buildings Embrace The Sharing Economy, Offer In-Building Perks To Nonresidents."

Chapter 5: The COVID-19 Impact

From the very onset of the coronavirus pandemic[104] and the ensuing mandates for social distancing, it was clear that adjustments were needed to just about every facet of daily life. The old normals of how people interact, work, dine out, learn, exercise, shop, travel, and even dwell, have all been disturbed, and quite frankly, tested, by this new invisible force. Particularly for those in urban settings, where person-to-person spread is the most threatening, each and every realm of daily life has been affected in a way that no disaster, illness, or any other force in recent memory has caused before.[105]

A discussion of amenity usage may seem trivial in the broader context of public health, but the COVID-19 virus has caused a real and profound disruption to the way multifamily housing has been operating. For example, in the past, it was been typical for a second bedroom to be used for an office or entertaining space. Then, residents transitioned to taking computers down to a coworking space or inviting friends to watch the football game in their property's club room. With the closing of common spaces due to the coronavirus, not to mention the dangers of even sharing

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[104] COVID-19, which stands for *coronavirus disease 2019*, is caused by a virus named SARS-CoV-2. It first appeared in late 2019 in Wuhan, China.

[105] According to a Pew Research study published March 30, 2020, nearly nine-in-ten U.S. adults say their life has changed at least a little as a result of the COVID-19 outbreak, including 44 percent who say their life has changed in a major way. Pew Research Center, "Most Americans Say Coronavirus Outbreak Has Impacted Their Lives."

More on this: Beyond government mandates of business closures and other expert-initiated calls for distancing, individuals' comfort levels and decision-making have also been affected. For example, as of March 30, 2020, "about nine-in-ten U.S. adults (91 percent) say that, given the current situation, they would feel uncomfortable attending a crowded party. Roughly three-quarters (77 percent) would not want to eat out at a restaurant. In the midst of a presidential election year, about two-thirds (66 percent) say they wouldn't feel comfortable going to a polling place to vote. And smaller but still substantial shares express discomfort even with going to the grocery store (42 percent) or visiting with a close friend or family member in their home (38 percent)." There are some differences in responses by age category: Compared with older Americans, young adults are more likely to say they are comfortable going to a crowded party, a restaurant or a small gathering with close family or friends. Still, most adults under 30 say they are *un*comfortable eating out at a restaurant (73 percent) or going to a crowded party (87 percent). Pew Research Center.

Unsurprisingly, concerns about public activities and changes to personal lives have been felt more acutely in states with higher numbers of COVID-19 cases. As of this study (March 22), Massachusetts was considered a "medium" impact state based on a combination of the total number and the per capita number of people who tested positive for coronavirus. Pew Research Center.

an elevator cab, there has been an immediate shift back to in-unit working and living, and whatever level of entertaining is possible.

This paper explores how the COVID-19 virus's rapid person-to-person spread is a threat to the way multifamily housing operates, and what necessary actions urban multifamily buildings have been taking in response. Homes, offices, kitchens, and amenity and common spaces have all essentially become COVID-19 triage centers, where immediate and long term adaptation will surely affect the old normal of daily life, and certainly the Amenity Wars going forward. Adaptation is certainly profound in the short run, but the question remains as to longer term effects and the lasting legacy of the experience of the coronavirus. The most popular response of industry professionals is "only time will tell," or "we will have to wait and see" but this research attempts to better describe more plausible and likely outcomes in the industry as a whole, but with a particular focus on Boston.

5.1 COVID-19 Timeline in Boston

A timeline of key coronavirus-related development in the City of Boston will be helpful to contextualize the following discussions:[106]

- On February 1, 2020, the City of Boston announced its first confirmed case of COVID-19. On March 10, Governor Charlie Baker declared a state of emergency to support the Commonwealth's response to coronavirus.
- On Friday, March 13, 2020, Mayor Martin J. Walsh and Boston Public Schools Superintendent announced the district-wide closure of all Boston Public Schools for students, effective on Tuesday, March 17.
- On Sunday, March 15, 2020**,** Mayor Walsh announced the Boston Public Health Commission (BPHC) is declaring a public health emergency in the City of Boston due to the Coronavirus Disease 2019 (COVID-19) pandemic. Also on March 15, effective immediately and until further notice, restaurants, bar rooms, and nightclubs are required to reduce capacity by 50 percent, remove tables and chairs to reflect that reduced capacity, follow the guidelines around social distancing, and not allow lines outside. Also on Sunday, March 15, 2020, but effective March 17 and effective through April 5 (which was later

[106] "Coronavirus Disease (COVID-19) Timeline."

extended), Governor Baker issued an emergency order limiting gatherings to 25 people and prohibiting on-premises consumption of food or drink at bars and restaurants.

- Effective Tuesday, March 17, the City suspended all regular activity at construction sites in Boston. The MBTA also announced that reduced service would begin Tuesday, March 17.
- On Thursday, March 18, the City of Boston temporarily closed all playgrounds and tot lots. Parks remained open for passive use, but we encourage everyone to practice social distancing.
- On Monday, March 23, Governor Baker issued an emergency order requiring all employers that do not provide "COVID-19 Essential Services"[107] to close their physical workplaces and facilities to workers, customers, and the public from Tuesday, March 24, until Tuesday, April 7. The Order also limited gatherings to 10 people during the state of emergency, a reduction from the 25-person limit previously established. The Massachusetts Department of Public Health issued a two-week stay-at-home advisory outlining self-isolation and social distancing protocols.
- On Wednesday, March 25, Governor Charlie Baker issued an emergency order extending the closure of all public and private schools, and all non-emergency childcare programs, until May 4 in an effort to prevent the further spread of COVID-19.
- On Tuesday, March 31, Governor Baker extended his emergency order requiring all non-essential businesses to close their physical workplaces until Monday, May 4. The order still limited gatherings to 10 people.
- On Sunday, April 5, Mayor Walsh announced strict new measures for social and physical distancing for Boston residents, effective Monday, April 6, through Monday, May 4. The City encouraged everyone to wear a face covering over their mouth and nose when in public. The Boston Public Health Commission issued a Public Health Advisory for everyone in Boston except essential workers to stay at home from 9 p.m. to 6 a.m. each day. City parks with recreational sports areas were closed.
- On Tuesday, April 21, Governor Baker announced the closure of K-12 schools in Massachusetts and non-emergency childcare programs through the end of the school year.
- On Monday, April 27, The City of Boston and Public Health Commission extended the public health emergency declaration until further notice.
- On Tuesday, April 28, Governor Baker extended the state's limit on gatherings and the closure of non-essential businesses until May 18. A stay-at-home advisory remained in effect.
- On Wednesday, April 29, a Public Health Advisory for everyone in Boston, except essential workers, to stay at home from 9 p.m. to 6 a.m. each day was extended until May 18.

[107] Exempt industries include: healthcare, public safety, groceries and take-out restaurants, utilities and infrastructure, and other essential services.

- On Friday, May 1, Governor Baker ordered all Massachusetts residents to wear a mask in public places when it is not possible to maintain proper social distance.
- Approaching Reopening:
- On Monday, May 18, the state commenced its four-phase[108] approach to reopening Massachusetts. While construction and manufacturing could resume, the City of Boston announced it would reopen construction in a phased manner. Work was allowed on schools, hospitals, some residential projects, and open-air construction until May 25. Starting May 26, the City said it would permit any construction type that is allowed by the state, with the required COVID-19 Safety Affidavits and COVID-19 Safety Plans for permitted construction work in place.
- On Thursday, May 28, the City of Boston released a return to workplace framework for commercial spaces in the City. It also announced a plan to reimagine streets in Boston to better support local businesses and restaurants.
- Phase 2 began Monday, June 8, three weeks after Massachusetts began its initial move to reopen on May 18. “Cautious” Phase 2 allowed for restaurants and hotels to relaunch operations, with restrictions, along with the return of in-store browsing for retailers that will include occupancy limits and additional safety restrictions.
- Step 1 of Phase 3 began on Monday, July 6, except for Boston, where it began on Monday, July 13. This phase allowed higher-risk businesses — including gyms, museums, movie theaters, outdoor performance venues, and casinos — to open under strict new guidelines and limited capacities. It also allowed professional sports teams to hold games without spectators. Park facilities, including athletic fields, courts, splash pads, and playgrounds also opened as of July 13, 2020 as part of the Phase 3 reopening.
- Phase 4 will be effective upon the development of vaccines and treatment. Full resumption of activity in this "new normal," includes travel, all outdoor recreation and activities as well as events in large venues and nightclubs. People will still be urged to wear face coverings, maintain proper hygiene and physical distance.

By mid-March 2020, as cases of the coronavirus had spread across the country and public health emergencies were being declared, apartment firms and condominiums were faced with preparing for potential impact to their communities. These properties had to address both employee and resident concerns of potential exposure at their properties or workplaces, as well as take

[108] The state’s reopening Massachusetts plan provided information on how and when different industries could reopen. Per the City, Phase 1 will be “Start:” limited industries resume operations with severe restrictions; Phase 2 will be “Cautious:” additional industries resume operations with restrictions and capacity limits; Phase 3 will be “Vigilant:” additional industries resume operations with guidance; Phase 4 will be the “New Normal:” development of vaccine and/or therapy enables resumption of new normal. The Reopening MA Report is available here: Commonwealth of Massachusetts, “Reopening Massachusetts.”

measures to help stop the spread of the virus. While different properties of course had unique considerations, there were general responses and guidelines to follow put out by organizations such as the Center for Disease Control (CDC), World Health Organization (WHO), Department of Labor (DOL), Environment Protection Agency (EPA), Department of Housing and Urban Development (HUD) and others.

At first, the focus was for staff to sanitize work areas, public places and commonly touched elements (door handles, elevator buttons, etc.) and supply hand sanitizers in common areas and fitness centers. There was also an emphasis on placing clear signage at the entrance of fitness centers, locker rooms/bathrooms, and other oft-used amenity spaces asking residents to wash their hands before and after use.[109]

Summary of typical measures implemented to provide safer environments:

- Daily disinfecting and in-depth cleaning
- Hand sanitizer stations
- Distanced seating
- Enforcing social distancing
- Social distancing reminders
- Contactless service
- Temperature screening

As the outbreak progressed, service calls, trash collection, supply delivery, security, maintenance and move-in/move-out were impacted, often transitioning to emergency-only policies, and nearly always causing a severe disruption of service-oriented living. And then there was the outright closing of facilities and amenity spaces that followed mandated closures outside multifamily communities. This was in keeping with recommendation of the CDC and other authorities, which urged apartment communities to avoid any activities that are counter-productive to greater mitigation efforts. For instance, once local authorities closed gyms, it would become "unwise" to continue onsite arrangements that mimic those fitness settings.

[109] Though a simple solution, posting signs about basic hygiene is shown to make residents more likely to wash their hands and wipe down their equipment than if there are no reminders. Posting CDC resources in public areas also make residents and employees aware of the facts surrounding COVID-19 and ways they can help prevent its spread.

Recall that this all occurred at a time in which there were some expectations of a market correction, but there was largely a positive outlook for multifamily. According to FreddieMac Multifamily's "2019 Mid-Year Outlook," the multifamily market [was] expected to remain healthy and robust for the rest of 2019 and into 2020. This was despite rising construction costs and challenges finding space in urban cores. But this was also despite any impact of COVID-19, which, as of the summer of 2020 has proven to be exceptionally unique and persistent.[110]

Going forward, the experience of COVID-19 will generally fall into two categories. For one, there is actively living with and combatting the coronavirus. And on the other hand is the fact that, even if a vaccine is discovered, the COVID-19 experience will be scarred into collective memory. In other words, this second category is living with the "lessons learned" from COVID-19. In either case of living with the threat of disease or living with its legacy, some responses and changes to the way multifamily properties operate will be the same. Others this paper will attempt to make best guess of based on the sum of information available now, combined with lessons from relevant "shocks" that have occurred before.

Also in either case, the stakes are high. For owners, operators, and developers, mitigating risk is paramount. In the warning words of one coronavirus consultant in regard to restaurant re-opening, "just because it's allowed doesn't mean it's safe." For multifamily buildings, the same applies to resumption of "old normal" amenity and common space operation. The coronavirus is

[110] For a better understanding on the national economic impacts of COVID-19: The pandemic's toll on the U.S.'s economy was made clear in the U.S. Department of Commerce's Second Quarter GDP Estimate released July 30, 2020. According to the release, the nation's GDP, the broadest measure of goods and services produced, fell 9.5 percent in the second quarter of the year as consumers cut back spending, businesses pared investments and global trade shrank. While this measure does not reflect multifamily housing, or Boston multifamily housing in particular, it does speak to the general severity of the temporary slowdown and hints at evidence of more lasting damage. However, note that while residential construction slumped in the second quarter, more recent data suggests the housing market has experienced a strong rebound, buoyed by low interest rates. "Gross Domestic Product, Second Quarter 2020 (Advance Estimate) and Annual Update." Additionally, even as Q2 GDP are reported as showing historic declines, some high-frequency activity data, which are more timely than traditional sources of data, actually seem to be trending modestly upwards in July. For example, travel to workplaces and retail locations continue to rise, as well as restaurant reservations and airplane travel. Mahoney, "LaSalle's August 2020 Macro Deck."

an unprecedented challenge, and therefore absolutely requires changes for the wellbeing of the people within the buildings, as well as for the buildings as businesses themselves.

Tracing an outbreak back to a building's spaces or as a result of its procedures could mean not just illness for those afflicted, but could have legal[111] and reputational repercussions as well. The question remains, how to mitigate risk while still providing the high level of services and amenities, answers to which will be explored in this paper. Importantly, there will be a grace period where buyers and renters accept that much of their buildings must be off-limits or non-operational, but with the premiums they pay, either they will have to regain services from where they live, or choose to find a home elsewhere.

5.2 Post-COVID-19 Predictions

What do luxury amenities in multifamily communities look like in the quarantine era and how will this continue into the "new normal?" Will we see less demand for particular amenities "post COVID-19?" Will we see less demand for multifamily housing in general, particularly in Boston where, prior to the outbreak, there has been such as housing shortage as to prompt Mayor Martin J. Walsh to create the goal of adding 69,000 residential units by 2030?

As of summer 2020, it is still far too early to determine what a post-pandemic world may look like. The coronavirus has and continues to exhibit fluidity of phases with both the resurgence of infection rates in the U.S. as well as localized second-order shutdowns in a wide variety of places. Nevertheless, it is likely that an "under control" phase will eventually arrive once an effective vaccine is available and produce the "new normal" which has been popularly coined.

[111] The spread of COVID-19 raises a host of liability sources such as resident illness, employee exposure to sick residents, evictions and employee leave scenarios. The National Multifamily Housing Council recommends that companies should be aware that according to a 2005 American Bar Association (ABA) article, *force majeure* provisions in contracts may not protect businesses against liability for failure to perform contractual duties during a pandemic. Legal precedent suggests that "once an event is no longer unforeseen, *force majeure* law suggests that one or both parties to the contract should bear the risk." Legal experts advise businesses to examine risk allocation in time of emergencies during contract negotiations. Finally, the same ABA article suggests that a failure to plan ahead for a potential pandemic could expose businesses to novel charges like "negligent failure to prepare." Such legal claims were advanced after the 2003 SARS (Severe Acute Respiratory Syndrome) outbreak.
"Coronavirus Preparedness for Apartment Firms."

On one spectrum is the prediction of a full return to the normalcy as we knew it before COVID-19. One industry professional describes this as, “eventually things will return to normal and it seems a safe bet that residents will return to amenities en masse once the situation stabilizes.”[112] Conversely is the thought that the new normal will look entirely different, and that multifamily demand will very much shrink in favor of suburban exodus in a pattern resembling the mid-20th century.[113] This narrative has been a common tale of just about every media outlet in the country, taking this general form:

> After the outbreak of the COVID-19 pandemic, city dwellers fled urban centers in droves, hoping to escape the rapid spread of the virus. Now, unshackled from cities by work-from-home policies, these urban ex-pats are causing a housing market boom in suburban and rural areas. [114]

While COVID-19 may have accelerated the decisions of some urban dwellers to move out of cities (likely those who had plans in their life trajectory to move out at some point in the future anyways[115]), supporting evidence does NOT describe an en masse migration.[116] In other words, though anecdotally strong, data does not yet exist to determine if an urban exodus is or will occur. Definitive evidence of the exodus could eventually show in home prices and sales volume, but, due to the drawn out nature of the moving process, that would likely take at least a year to become visible in real estate data.

For now, a few months into the pandemic, the most viable metric to gauge urban exodus is to look to online real estate search data from providers such as Zillow, Trulia, Realtor.com, etc., as well as at public surveys of intent. But even search data is faulty in trying to validate the exodus anecdotes. For one, searching for a home in another city online is a very weak indicator of intent

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112 Bousquin, “Putting Meaning into Amenities.”
113 An idea that some mortgage companies are cleverly championing with adds like being together is good, but “together with more space is better” (Rocket Mortgage)
114 Andrews, “All These Stories About People Fleeing Cities Are Total Nonsense.”
115 Now that millennials have started growing up, suburban home are expected to have more robust demand. The population of people in their 30s will increase by 7.1 percent by 2025, while the rest of the population will only grow by 3.8 percent, according to The US Census Bureau.
116 According to Jeff Tucker, an economist with Zillow, “There are people who really believe the urban exodus hypothesis. If there’s an evidence for it in the data, it’s very weak.”

because it includes a large number of "window shoppers." Still, to go through the exercise, we can look at Zillow data showing the percentage of searches for urban, suburban, and rural properties within major U.S. markets for the week ending May 10, which was near the height of the pandemic and shut-down activity.[117] For Boston, the data shows that there was a year-over-year increase in search activity for out-of-Boston homes,[118] however, the searches skewed toward searching in other urban areas. Specifically, between 2019 and 2020, traffic from Zillow users in Boston to homes in other urban areas increased from 16.8 percent to 18.5 percent (see Figure 11 for statistics for other metro areas). This follows Zillow nationwide trends for April 2020 compared to April 2019, in which web traffic to urban listings in other metro areas grew from 8.6 percent to 9.9 percent.[119] And, among people specifically looking at listings outside their own metro area, the share of traffic going to suburban listings shrank from 62.8 percent to 60.7 percent.[120] So the online search data, which is a questionable indicator in and

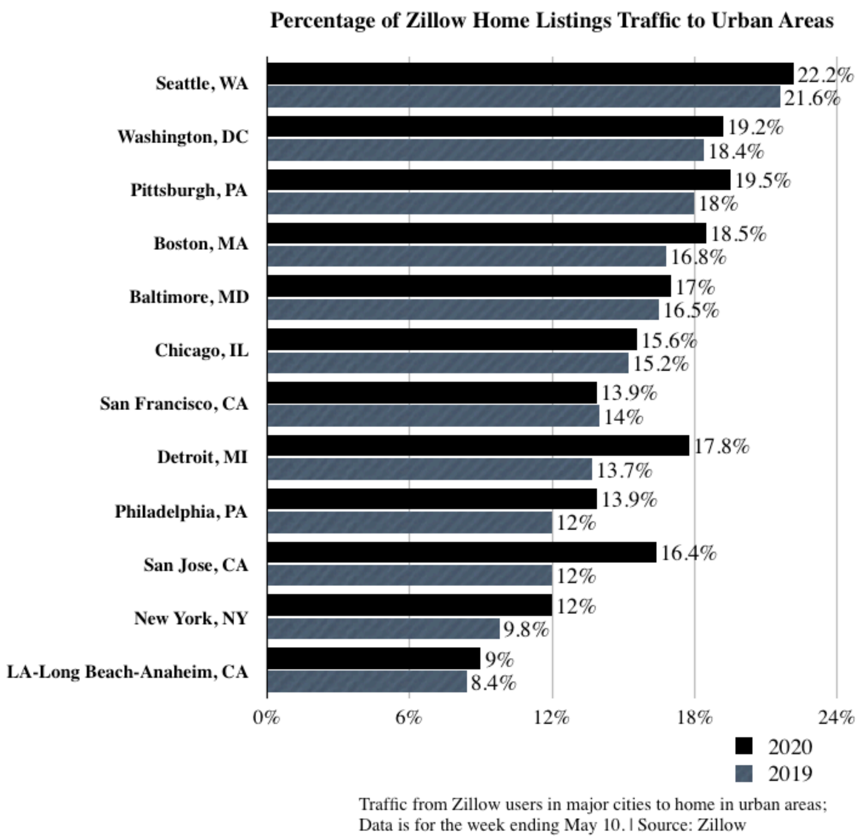

Figure 11: Search Traffic to "Other Urban Areas"

[117] Andrews, "All These Stories About People Fleeing Cities Are Total Nonsense."
[118] According to Zillow, Bostonians had the most growth in traffic for listings in the nearby Providence, Cape Cod, and Portland (Maine) metro areas.
[119] Tucker, "Coronavirus Not Yet Driving a Surge in Suburban Home Searches."
[120] In mid-April, page views of for-sale listings on Zillow were 18 percent higher than in 2019, meaning that an overall reduction in search traffic cannot explain the shrinking share of traffic going to suburban listings. In fact, traffic to listings in all kinds of neighborhoods was up in spring 2019: Listings in urban areas got 23 percent more traffic this April than last; rural listings got 19 percent more traffic and views to suburban listings were up 12 percent from a year ago.

of itself, does not actually reflect a growing interest in moving to suburban or rural areas from urban cores.

Other high frequency alternative data sources have also begun to shed light on out-of-metro migration patterns, including the Zumper Migration Report[121] and United States Postal Service (USPS) mail-forwarding. At least for New York City, the Zumper data does show migration toward more affordable and suburban locations. Much of the migration is temporary, but some is also likely to be permanent. Importantly, all of the migration data includes a warning to be interpreted with caution. Also of note, the Zumper Migration Report's list of cities with the most searches leaving the metro area (see Figure 12) did not include Boston.[122]

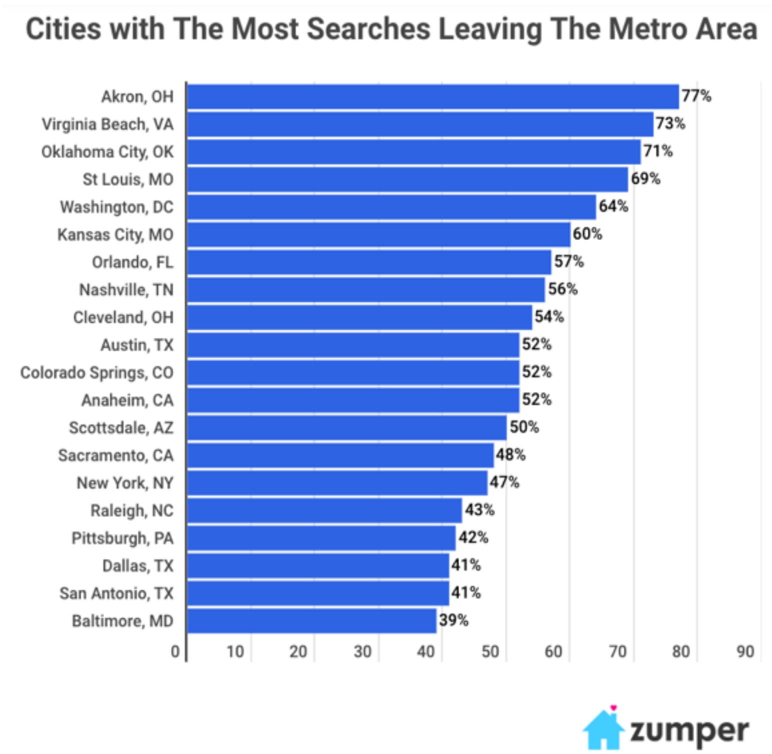

Figure 12: Zumper Migration Report's List of Cities with the Most Searches Leaving the Metro Area

A New York Times analysis of USPS data, dated as of May 2020, shows where New Yorkers moved, as least temporarily, during the pandemic. In March, the USPS received 56,000 mail-forwarding requests from New York City, more than double the monthly average. In April, the number of requests went up to 81,000, twice the number from a year earlier. 60 percent of those new requests were for destinations outside the city. These

For the week ending May 10, which was cited for Boston data above, overall traffic was up 42 percent from the comparable week in 2019, again suggesting a continuation of demand from home buyers.
Tucker.

[121] Chen, "Zumper National Rent Report." Zumper's first ever migration report uses search data to analyze patterns and trends across the U.S. to see where renters are most interested in moving to and where renters are most interested in leaving.

[122] With over 70 percent of their total outbound searches going elsewhere in the U.S., Akron, Virginia Beach, and Oklahoma City were the top cities where residents were interested in moving out of. The top out-of-metro area Akron renters were looking to move was the Detroit metro, while Virginia Beach residents were looking for new homes in Birmingham, and Oklahoma City renters were most interested in the Dallas Fort Worth area.

forwarding requests generally came from higher-income residents who have the financial flexibility to relocate. The requests do not tell whether these moves are temporary or permanent, but their sheer numbers show that it is valid to at least question suburban exodus trends.

Looking at survey data is another method to determine shifting attitudes. For example, a recent Zillow survey[123] found that three quarters of Americans who recently began working from home because of the coronavirus say they want to continue if given the option. And two-thirds say they would consider moving if given that flexibility, particularly to find a home with a dedicated home office or generally more space, which is more typically found in the suburbs. But whether or not such stated preferences will result in physical moves, the data does not yet show. In any case, it is important to realize that factors like significant shifts toward remote working, rather than outright fears of density, are likely to be the real forces shifting markets.

The outcome—the new normal—is realistically likely to fall between the two poles. This is assuming the eventual arrival of a vaccine, as well as the resumption of food and beverage, culture, arts, entertainment, nightlife and other services and conveniences that make cities attractive places to live. Like with any major disruption, there will be those that leave the city, but it will not be the most common response. In fact, the long-term new normal is likely to be more in line with the first prediction, which is a closer resemblance to the old normal.

Other reasons as to why the new normal will resemble the first prediction include that, as previously established, luxury urban multifamily dwellers comprise a generational and demographical mix, but the largest single category is that of young professionals, a category that generally faces less of a health risk caused by the coronavirus. While the lives of these young professionals may have been disrupted for a time, there is overall less danger to resuming their amenitized urban lifestyles. Plus, as has also been noted, human beings are fundamentally social creatures, which will continue to support dense, urban living. This basic human appetite for

[123] The survey was conducted online within the United States by The Harris Poll on behalf of Zillow from May 4-6, 2020 among 2,065 U.S. adults ages 18 and older. The survey is summarized in: “More Remote Work Opportunities May Make Suburbs More Desirable.”

interaction and engagement for conversation and participation, for places to see and be seen, requires inviting physical spaces, places conducive to social and communal interaction, will still be well met by (properly designed) multifamily amenities.

Even though COVID-19 and its accompanying quarantine, having been a months-long disruption to living, working, traveling, and socializing, will be scarred into collective memory, the reality is that amenitized housing makes for a markedly easier, healthier and more enjoyable life for large segments of the population,[124] so it is likely a matter of time before the Amenity Wars resume in full, albeit "shifted" force. The new war will have to address how to engage the residents and continue to provide a best-in-class experience, despite the limitations dictated by the current circumstances. Flexibility and spatial adaptability, which have become paramount in the age of the coronavirus, will take on even more important and lasting roles.

5.3 Comparisons to Other Shocks to Urban Living: September 11, 2001

The age of COVID-19 has been novel in so many capacities, but to best predict future demand for urban real estate, it is also useful to examine other historical shocks to city living. Predictions of New York's demise after the 9/11 attacks, along with cities in general, was based on the premise that people would feel unsafe living in such densely populated "target zones." Then, however, came a major urbanization push in the residential market, where residents preferred living downtown in areas with amenities and high walk scores rather than in the suburbs, where they would have to rely on cars.

Barbara Corcoran described the situation of 9/11 and present-day comparisons in a recent interview with Fox Business.[125] Barbara was asked if, akin to 9/11, there was a short-lived drought in regard to sales and activity before the New York City real estate market turned around. Her

[124] In a society that's now more stimulated than ever, consumers are constantly looking to alleviate stress. Nearly two-thirds (63 percent) of respondents to the NMHC 2018 Consumer Housing Insights Survey said their lives are so hectic that they look for ways to make things easier. Shanesy, "What's Next For Apartment Amenities?"
[125] *"America Together: Open House"*

response was that New York "had a nine-month bloodbath when people panicked; ran to the suburbs, swore they were over with the city. They didn't want to be at risk. That's what happens in extreme stress and extreme uncertainty." Then, however, after nine months, almost to the day, people started stampeding back. She continued to say:

> So, is this a direct parallel? No, because we don't see a real end in sight, whereas with 9/11 after a few months you felt like it was over. There's no clarity here. But once there's clarity, people will return to the city. I think it's been greatly overblown, but it makes sense of course and its credible. But I don't believe it's a long term problem, I believe it's a short term problem.

So, by the 9/11 comparison, at least in the longer term there should be healthy demand for urban living in the U.S.. The key will be determining at what point the "clarity" as Barbara describes it can set in. That will likely be with the vaccine, which, while in development, does not have a defined timeline for completion.

5.3.1 2008 and the Great Recession

Comparison to the 2008 financial crisis may also prove informative for widespread effects of the pandemic and its resulting shutdowns. Three major economic similarities between the COVID-19 and 2008 crises include(d) uncertainty as a key factor; collapse in terms of initial drops in the stock exchanges of major countries (up to one-fourth of their valuation); and reactions to limit such shocks by monetary and fiscal policies providing massive support. Importantly, though, the coronavirus pandemic is not at heart a crisis in the financial system. Rather, it is a public health crisis whose economic effects stem from measures that government officials are taking across the world to stop its spread. While monetary and fiscal policies can temper short-term distress in financial markets and hard-hit businesses and communities, they do not address the urgent priority of disease containment and mitigation.

There is broad consensus that the best way to revive the global economy is by flattening the COVID-19 infection curve. Once the virus is brought under control (i.e. vaccine), a fast recovery could be more possible than was the case after 2008, in which there were fundamental imbalances that had to be corrected. This is why a Great Recession comparison is not entirely apt and it might be better to look to shocks such as 9/11, as described above.

While there remains no consensus as to the severity of what is to come for urban multifamily real estate, the global health crisis has already triggered a host of changes for this property type. These changes are described in the following section after a discussion of other industries that, like historic market occurrences, provide useful comparisons to best understand present and future COVID-19 impacts.

5.4 Restaurant Industry Comparison

In order to help make post-pandemic predictions, it is useful to look to the restaurant industry, which, like multifamily housing is concentrated in urban settings, but necessitates a faster response to the coronavirus (in order to remain in business) than housing. Beyond masked staff, tables and seating in common areas spaced six feet apart, plexiglass barriers, disposable menus and place settings, restaurants, often with the help of other designers, are coming up with creative ways to reopen while adhering to social distancing guidelines. For example, Creator, a San Francisco-based firm of restaurant designers and engineers, created a sanitary food transfer window—essentially a unique take-out window—to enable food transfer from restaurants to delivery people with no hand-to-hand contact. Other makers are following suit with similar contactless-enabling designs.

Fully utilizing outdoor dining space, where coronavirus infection is less likely to occur, is where much of the restaurant innovation has occurred thus far. Utilizing outdoor space has not just meant implementing safer outdoor-seating design, such as with wider spacing, dividers between tables, "eating pods," individualized "rooms," and outdoor cabanas, but it has often incorporated an expansion into the streets where, in conjunction with city governments, parking lanes and even some traffic has been blocked off. In New York City, for example, the Open Streets plan has called for 67 miles of streets to close to vehicular traffic, with over 2.6 miles dedicated to Open Restaurants, an initiative that gives restaurant owners permission to expand their footprint onto the sidewalks and streets on the weekends provided they meet certain criteria. Around Boston, licensing commissions have voted to allow restaurants to serve customers outside on sidewalks and in private parking lots, and permit restaurants with liquor licenses to serve alcohol to diners. Dining parklets have popped up in the city's core neighborhoods, the product of restaurants owners being able to submit plans to the City through a new, accelerated application process that invites them to expand their outdoor dining space.[126]

[126] The City of Boston does have an existing parklet program, of which some of its rules, including no table service or alcohol consumption allowed on the parklet, have been waived for restaurants wanting to use a

Creativity—and thinking past the obvious to find innovative and fresh solutions—has been key with restaurant adaptation and survival, and, as is the case with multifamily properties and amenities, has much to do with flexible spatial design. In a recent Architectural Digest article, David Rockwell, president and founder of the Rockwell Group that has undertaken the pro bono DineOut NYC project,[127] described the upcoming flexibility requirements for restaurants in a way that very much resembles discussions about the future of multifamily amenity spaces:

> I believe that by continuing to think about flexibility and how to improve outdoor dining, this 'new normal' will be sustainable…Based on what we know about COVID-19, I think we will see more restaurants redefining the boundary between indoors and out. In the long run, restaurants will have to be adaptable, with seating plans that expand and contract easily and quickly, providing a great experience in every format."[128]

Flexibility, adaptability, and being able to redefine boundaries, are all principles that can be expected for the future of multifamily amenities. These approaches also play integral roles in this paper's upcoming predictions for the new condominium and apartment normals in the age of and after COVID-19.

5.5 Commercial/Office Industry Comparison

Looking to office environments is also telling. Among the changes being considered to keep workers both safe and productive are wider corridors with one-way foot traffic, improved air filtration, touchless elevator controls, antimicrobial materials in new construction, videoconferencing, even within the office, to avoid the conference room, and dividing up the workforce to alternate when they can be in office. Open, shared, collaborative environments with

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parklet as an outdoor dining space. While some restaurants in Boston have been utilizing parklets, many others have chosen to use one of the simpler barriers (metal fencing, jersey barriers, heavy planters, etc.) in order to create an outdoor dining space as quickly as possible.

[127] "DineOut NYC, designed pro-bono and in coordination with the NYC Hospitality Alliance, is an adaptable and modular outdoor dining system that allows businesses to operate under the current health guidelines, and creates places for diners to feel safe and comfortable. Inspired by open-air cafes, and drawing on our modular work and experience designing restaurants, the DineOut NYC prototype addresses flooring, barriers, shading, lighting, and furniture as well as space for sanitation and restaurant equipment."
"DineOut NYC - Rockwell Group."

[128] "How Restaurant Design Is Changing As a Result of COVID-19 | Architectural Digest."

bench working stations have reigned supreme in recent years, but now there might be a place for the high-walled cubicles—a la “Office Space”—to pose a comeback. Firms like Gensler, a global design and architecture firm, have even created software to show clients how to start "de-densifying" the office.[129]

The term “officle” is now gaining in popularity for space that is not quite an office, but not quite a cubicle. It is larger and more flexible than a cubicle to provide space division, privacy, and a sense of ownership while remaining flexible, efficient, and collaborative. Other firms, such as UPLIFT, are expanding into office space design to help reconfigure office furniture for better space division before offices fully reopen.[130] Also, now that "janitorial staff often cannot clean desks with personal items on them, as it's a liability," it will “likely be more sanitary to have open desks and workstations — equipped with the latest technology — that employees can pick each day and can be cleaned afterwards."[131]

In offices too are flexibility, adaptability, and redefining boundaries facets of the current new normal. How these principles inform the lasting new normal of multifamily amenities will be discussed next, along with other general predictions for the lasting new normal of condominiums and apartments.

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[129] Another example is Hermit Crab for Grasshopper, Spatiometric’s open source spatial analytics tool for social distancing.

[130] UPLIFT has implemented multiple changes at their offices that partition or divide open areas for space separation that creates social distancing. Examples are: 1. Side and back acoustic privacy panels were installed on all individual workstations 2. Increased panel height wherever more separation was needed by adding acoustic panels to the top of short cubicles 3. Desks were rotated or moved to provide at least 6 feet of spacing between employees 4. Collaborative, multi-person workstations were removed and replaced with individual standing desks 5. In some conference rooms, conference tables were replaced with standing desks, transforming them into private or semi-private offices depending on the size of the room 6. Two to three monitors on monitor arms were installed on all desks to help create another substantial barrier directly in front of the face 7. Additional safeguards include providing desk drawers and cabinets to stow keyboards, mice, and personal belongings when not in use 8. Acoustic Phone Booths provide some separation for phone calls. “Reconfiguring Office Furniture for Better Space Division before Returning to Work?”

[131] Quote is by Armen Vartanian, Vice President of Okta's global workplace services. Wells, “After Coronavirus.”

5.6 Going Contactless

The new normal requires people to keep their distance. Touching germ-ridden keypads, mobile devices, elevators, and terminals must be avoided. Food delivery and payments will require contactless solutions, as will most interactions and services that take place within multifamily properties. The question to ask for these properties is how will the business of servicing residents change?

Going contactless is paramount for residents, but equally so for building staff, whose personal safety and the safety of their families is also at stake. The following are existing and theoretical solutions to keep both staff and residents safe and limit exposure to the virus during daily operations.

For one, incorporating automatic sensors or voice-user interfaces (VUIs; i.e. voice activation) can assist in opening doors, windows, trash cans, calling elevators, or interacting with other often-touched features.

Smartphones are also key for many contactless operations and will become integral to the post-pandemic living experience. They can be used to order concierge or valet services, interact with building management, retrieve cars, reserve amenity spaces, control IoT devices in units and common spaces, and so much more. According to experts, in just a few years, 90 percent of the U.S. population will connect to the grid via these devices.[132]

Even before the pandemic, many developers were focused on providing as many amenities through residents' smartphones as possible, in the thought that made for better living experiences. It is an expected next phase of the technology wave in which connectivity and access to almost everything you already touch will continue to grow. In this regard, the coronavirus is simply accelerating trends already in place.

[132] Shanesy, "What's Next For Apartment Amenities?"

5.7 A Greater Focus on Air Flow and Outdoor Amenities

Scientific evidence continues to point to trends that the coronavirus is exponentially more contagious indoors versus outdoors. This is because the coronavirus is aerosolized, meaning it can remain suspended in the air and be inhaled by others. Thus, keeping people outdoors while maintaining social distancing is one of the most plausible, and has been the most common, solutions. Beyond obvious health benefits, outdoor spaces also help prevent feelings of confinement, which too is a real danger in times of quarantine and social distancing. But improving indoor airflow—and so airflow in general—is also something important to design for.

First, there are numerous simple retrofits that can help with airflow in residential properties, of which opening windows, increasing air movement, introducing filters, and turning on purifying fans are but a few. Going forward, the designs of common spaces should keep airflow in mind, one of the simplest solutions being a return to large, operable windows and designs for cross ventilation to encourage breezes, which apartments in newer buildings sometimes lack. Better air flow is also achieved by avoiding designs with closed-off hallways, waiting areas, and other spaces where possible. But because these areas represent non-sellable square footage, filters become especially important for space-saving.

Beyond airflow, access to outdoor space is becoming more and more paramount. Sheltering in place and social distancing mean that fresh air is urban real estate’s most coveted amenity right now, whether it is in the form of roof-deck access, a private terrace or balcony, or close proximity to a park. Outdoor space "is very important, and probably as high on everyone's list as a washer and dryer at this point," says Connie Maali, the business manager for a 190-unit apartment in the West Loop of Chicago. She also remarked that some tenants with expiring leases have even switched to units with balconies.

Ways for developers to provide more urban access to nature are with larger or more gardens, balconies and terraces. At The Sudbury in Boston for example, which is currently under construction, developer HYM has enhanced the design and marketing for the building’s multiple separate outdoor amenity spaces, including the private 48th-floor Rooftop Garden exclusive to the condominiums, and the 32nd-floor Sky Deck and Sky Lounge and 9th-floor pool deck, both of which are shared by condominiums and apartments. Paul Whalen, a partner at Robert A.M. Stern Architects offered another idea to provide more open space and access to fresh air: "In a tight city, where every square foot is expensive to build, it can also be done with, say, French doors in a living room" and a Juliet balcony. "In a way, the whole living room, or whole dining room, could sort of feel like an outside loggia."[133]

Access to the outside is one thing, but following recent trends of the Amenity Wars, it is obvious that elevated design and features will follow. This paper has already discussed how size, location, usability, layout, and privacy are relevant value considerations for outdoor space. These will be the same guiding tenets for new and altered designs.

Enhancements will also take the form of upgrading materials used for outdoor space. For developers and designers to be able to deliver high-quality spaces, they may have to rethink and improve their landscaping products and systems, which is not to insinuate that they currently are taking shortcuts or using lower caliber materials. There will likely be an increased demand in products that are environmentally friendly with durability, longevity, maintainability, as well as a range of textures, sizes, and colors to create visually appealing shared and private outdoor oases.

5.8 (Virtual) Changes to Sales and Leasing

Just prior to the pandemic, the 2020 Apartment Resident Preferences Report released by the National Multifamily Housing Council and Kingsley Associates, found that, while emerging technologies have allowed communities to offer virtual tours and other opportunities for online engagement, the majority of renters still prefer an in-person tour with a community representative. Still, 14 percent of renters noted they would rent an apartment sight unseen.[134]

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[133] McKeough, "How the Virus May Change Your Next Home."
[134] "National Multifamily Housing Council & Kingsley Associates 2020 Apartment Resident Preferences Report Takes Residents' Pulse on Top Leasing Factors."

Then, practically overnight, physical distancing and the lockdown of physical spaces have magnified the importance of digitization for resident experience. Even more so for apartments than condominiums, when shutdowns began, prospective tenants were often able to—and did—lease apartments through virtual leasing. This process typically comprised of self-guided tours of units, where prospects could tour an apartment without a leasing agent,[135] or virtual tours where the leasing team was filming the walk-through to the prospect at home. Many leasing agents have also been using apps like Google Hangouts, FaceTime, and Zoom to interact with the prospects. Other listing tools that were gaining popularity long before the arrival of COVID-19 and have since become even more useful include digital floorplans, e-brochures, 3D Studio, Matterport Tour, and other 3D and rendering services.

A survey taken in early May showed that about a quarter of buyers are now making a home purchase without ever having stepped foot in the house.[136] In comparison, historically, only about 3.5 percent of buyers purchase a home without having seen it in person.

Going forward into the new normal, the pivot to virtual leasing and sales, as well as the use of virtual open houses and showings, augmented and virtual reality, and virtual marketing collateral, will likely be a more common and lasting change in the industry.

5.9 Changes to Lease Language and Condo Docs

During COVID-19 shutdowns, buildings had to rethink their access control to amenities, which are typically 24/7 access, by varying degrees. Some were put on a reduced or sign-up only use schedule while others were closed completely. In many cases, use restrictions have garnered resident pushback during the pandemic.[137] Going forward, leases and other property use and

[135] When prospective residents physically visit the apartment alone, the leasing agent typically tags along virtually via smartphone to answer any questions. This allows the prospects to physically see a space while enabling agent/customer relationships without physical interaction.

[136] "Lifestyle Adjustments from COVID-19 Will Change Homebuyer Preferences."

[137] In many cases, use restrictions have garnered resident pushback during the pandemic. Why? Residents are not getting the amenitized lifestyles they are paying for. It is a case by case basis how buildings deal with and try to appease their residents in these unprecedented times, but, at least for condo owners, they are still responsible for condominium fees and maintenance dues. From a legal perspective, common area closures during COVID-19 (gym, pool, lounge, etc.) do not warrant not having to pay full monthly dues.

operation documents will likely be redone to emphasize operators' ability to shut down amenities for health and safety with language that will specifically address the ramifications of a pandemic. Beyond these documents, every contract regarding residents, lenders, contractors and insurers will be evaluated for pandemic impacts.

At the same time, more multifamily properties will offer more flexible leasing terms, alternative payment plans, and other reasonable policies that allow residents break their leases, an assurance that many residents will now be looking for. To the benefit of ownership, flexibility creates goodwill that results in more resident loyalty, as well as better referral probabilities.

Finally, resident screening criteria and security deposits are likely to increase, which would enable companies to grow their cash flows and reserves to face future outbreaks of the current virus, or perhaps an even more dangerous one in the future. Research shows that some consider one year of reserves adequate and healthy. Others take the stance that that might be enough to survive, but comfortably having two years of working capital will prove much more opportunistic in the face of downturn.[138]

5.10 Changes to Maintenance Policies

Beyond virtual sales and leasing, maintenance and preventative repairs will likely see lasting impacts as well. For one, buildings are now in the position to allow residents to handle minor maintenance issues themselves. At the height of quarantine, building managers were forced to prioritize service requests, such as for emergency leaks and stopped drains rather than other less pressing issues. Allowing resident do-it-yourself maintenance, even though it contradicts service as a multifamily amenity and creates new liability concerns for residents and the physical units

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Condominiums are not vendors like standalone gyms. Condo residents own a portion of the common areas in addition to their unit and are responsible for its upkeep. Additionally, condo associations have lien rights on individual units, which means that if dues are not paid, the resident could be liable for collection costs and could face foreclosure if they continue not to pay.

[138] Such is the sentiment of Diane Batayeh, CEO of Southfield, Mich.-based third-party management company Village Green, which operates 41,000 apartment homes.
"The Lasting Impacts of COVID-19 on Residents and Operators."

themselves, it does reduce the buildup of work orders[139] and enables faster fixes for the residents who are so inclined to take on the work.

5.11 Employee/Staff Management

The services that employees and staff provide in multifamily properties are often just as significant as physical amenity offerings, and, as previously described in the recent shift toward service, form an important category of the Amenity Wars. As such, preparedness and response plans from the corporate and management levels need to include specific provisions addressing the impact of COVID-19 on their employees. The Centers for Disease Control and Prevention have issued specific recommendations. For one, it is in the best interest of building management to consider non-punitive, "liberal leave" policies for their employees and staff. Such policies require sick individuals to stay home and accommodate situations where healthy employees are absent due to events like mandatory isolation, critical infrastructure failures and public transportation closures.[140] It is also important to cross-train employees to perform multiple job functions in anticipation of increased employee/contractor absenteeism, as well as keep operating instructions, manuals, and records for equipment and building systems accessible onsite in the event individuals with primary responsibility for those tasks are unavailable.

With the potential loss of staff and on-site personnel, most multifamily properties will face needing to scale back or curtail services. But curtailing services represents a reversal of Amenity Wars practices, and is certainly not what service-minded residents are looking for in their choice of home. Still, there are offerings that can be scaled without losing a service-oriented experience.

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[139] For example, Diane Batayeh, CEO of Southfield, Mich.-based third-party management company Village Green, which operates 41,000 apartment homes said that enabling resident DIY fixes has probably reduced the buildup of work orders by about 15 percent. To empower residents to complete projects, the company even produced more than 25 do-it-yourself videos on its YouTube channel featuring instructions on everything from resetting a tripped GFCI outlet to replacing a refrigerator water filter, stopping a running toilet and even realigning a door. "The Lasting Impacts of COVID-19 on Residents and Operators."

[140] Policies should also provide clear guidance for identifying and dealing with abuse of absence policy, as outlined by The Centers for Disease Control and Prevention. "Coronavirus Preparedness for Apartment Firms."

For one, implementing community apps or other electronic platforms can enable social distancing while improving convenience and efficiency for management, staff, and residents.[141] Beyond online-leasing and prioritizing electronic rent payment, these online platforms can serve as the resident's portal for all things building related, such as interacting with management, putting in service requests, receiving package notifications, paying rent, and staying informed of building events. These platforms would also allow residents to seamlessly reserve amenity spaces during strict social distancing periods, all while providing important usage data for ownership.[142] According to the 2020 NMHC/Kingsley Apartment Resident Preferences Report, overall, 81 percent of all residents said that it is important or very important for them to be able to access their resident portal from a mobile device. 4 percent signed their current lease online in some way, and given the choice, 58 percent of renters would rather pay rent using a resident portal mobile app than a property website via laptop/desktop.[143]

5.12 Innovative Design Solutions

Even before the onset of the coronavirus, thinking innovatively about design in general has been a multi-industry trend. Thus, it comes as no surprise that designers from around the world are quickly putting forth creative solutions for battling COVID-19 and its aftermath. Not just medical

[141] The use of online platforms is an example of recent tech-centered tends for multifamily properties. Depending on demographics and individual preferences, however, the "going digital" trend can be considered progress or problematic (i.e. younger generations might prefer operating online only, but older residents who are less tech savvy may struggle with it). And while the efficiencies may enable ownership to scale back on personnel costs, the loss of jobs is concerning from the employee perspective.

[142] Many communities are already using electronic booking and reservation systems, as well as access control, to enforce the lower numbers in amenity areas.
Example of app use for amenity spaces in Chicago: Residents at Optima Signature, built by Optima Inc. and DeBartolo Development, now use an app to schedule times for some of the spaces they would ordinarily use without planning. That includes reserving the basketball court, bocce and squash courts, children's playground, 40-yard dash track, sundeck terraces with fireside lounges, and private dining areas. The complex rolled out the app on June 3, when the city began Phase 3 of its reopening that included — with restrictions — residential amenities. If Optima residents want to use the terrace for grilling, they can reserve space, limited to two hours. "Chicago Luxury Renters And Buyers Look For Amenities That Offer Privacy."

[143] "2020 NMHC/Kingsley Apartment Resident Preferences Report."

professionals, but architects and designers too have an important role to play in the age of COVID-19.

For example, there has been a rush of many architecture firms, furniture designers, installations artists, and others worldwide to issue designs for face visors for healthcare workers to assuage the shortage of personal protective equipment (PPE). Some have repurposed their production to make the masks themselves while others have distributed specs for 3D-printed equipment or have shared open-source designs for product that can be mass-produced using simpler technology. Furniture companies also have prototyped easily assembled cots, as well as medical grade curtains, gowns and other items, for the quick set up of emergency facilities.[144] In the same vein of emergency facilities, a coalition of medical engineers, consultants, contractors, and engineers have even created quick-deploy intensive care units that repurpose shipping containers as overflow respiratory ICUs.[145] Other protective products being introduced and fabricated include protective acrylic screen dividers, countertop screens, reception screens, mobile screen dividers, clean boxes, and UV light phone sanitation stations.

Beyond masks, gear, ventilators and other health and food service supplies, other designers, manufacturers, maker networks and incubators have turned toward spaces such as residential and multi-family housing to tackle the coronavirus pandemic with a design-first approach. Succinctly and powerfully put by American studio MASS Design Group, an architecture and design collective that has recently released a number of COVID-19 Design Guides,[146] "the design of our spaces has

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[144] North Carolina–based furniture company, EJ Victor, has transformed its 20,000-square-foot manufacturing facility into a hub for producing health care supplies. In addition to PPE like hospital gowns and face masks, the company—in partnership with fellow companies in the Carolina Textile District network—has prototyped an adjustable flat-pack cot that can be assembled in minutes. According to EJ Victor's CFO, David Bennett, the manufacturer has also devised medical-grade curtains to quickly enable medical hospital to set up emergency triage facilities. Gray, "8 Innovative Design Responses to the Coronavirus."

[145] The quick-deploy intensive care units are the vision of architects Carlo Ratti Associati and Italo Rota in Italy. The open-source project, called CURA (Connected Units for Respiratory Ailments), has support from the World Economic Forum and is currently being deployed in Milan. Similarly, start-up Jupe Health has developed three deployable, tent-like shelters that can be easily transported on the back of a standard flat-bed trailer and hauled by a heavy pickup truck.

[146] MASS Design Group is a team of over 120+ architects, landscape architects, engineers, builders, furniture designers, writers, film makers, and researchers representing 20 countries across the globe whose mission is to

the power to hurt us or to keep us safe." Thus, "from floor layouts, to the choice of materials, to the circulation of air, every decision we make matters." Noteworthy designs with the intention of keeping those in multifamily housing safe include the following:

- Setting up protective screens and dividers around concierge desks, mail and package stations, and other multifamily amenities spaces where person-person interaction is necessary;
- installing doorknobs and other often-touched fixtures made of copper, brass, bronze, silver, or other elements known to maximize protection against bacterial and viral threats;
- integrating touchless doors, elevators, trash receptacles, blinds and faucets.

For the best choice of materials to use in common spaces, from floor coverings to furniture to window treatments, there are conflicting thoughts. Illnesses of the past[147] have taught us to make surfaces antimicrobial and to reduce the porosity of fabrics to prevent the spread of pathogens. In the case of the coronavirus, however, porosity could be beneficial. Studies are actually showing that the virus is more stable on plastic and steel (up to three days) than on porous fabrics like cotton, leather, and even cardboard (less than 24 hours).[148] So now, designers must question guidelines we have made for previous diseases in the face of new ones that may have different properties. But even with a consensus that the virus does not live long on surfaces, it is still imperative to the resident's perception that properties—in particular common spaces—feel clean and sanitized. "Clean, crisp and clutter free" is what CambridgeSeven, a renowned architecture and design firm in Cambridge, Massachusetts, is calling for in their reimagination of hospitality space design, which will parallel multifamily spaces closely. They predict that "design will evolve

research, build, and advocate for architecture that promotes justice and human dignity. Their COVID-19 guidelines have included "Designing Spaces for Infection Control," "Guidelines for Limiting Contagion in COVID-19 Tent Clinics," "COVID-19 Construction Safety Guidelines," "Spatial Strategies for Restaurants in Response to COVID-19," and "Designing Senior Housing for Safe Interaction."

[147] Some interesting comparisons to illnesses of the past include century-old associations with diseases like tuberculosis and the 1918 influenza. According to Paul Whalen, a partner at Robert A.M. Stern Architects, these in particular "had an enormous impact on architecture, with the creation of sanitariums that were very open and were all about the balcony, light and air…Whether it was subconscious or not, that kind of architecture had a big influence on residential architecture throughout the whole 20th century." Even before that, Olmsted's design for Central Park in New York City, the Haussmann plan for Paris, and the Shanghai Customs Harbour Quarantine Station were all 19th Century responses to infectious diseases. McKeough, "How the Virus May Change Your Next Home."

[148] Murphy, "The Role of Architecture in Fighting a Pandemic."

to create a brand-new kind of luxurious space based on purity and simplicity."[149] Purity and simplicity evoke the "less is more" tenet of the mid-century Modernist Movement,[150] of which we are likely to see a resurgence as a best approach to design. Importantly, design will not have to suffer with a "less is more" approach. The architectural movement has proved time and time again in history that a clean, contemporary aesthetic can still be both memorable and luxurious.

COVID-19 is still a new phenomenon, and thus there is still so much that remains unknown about its cause, spread, and cure. While scientists and medical professionals' race to find the facts, best-guess mitigation approaches will have to suffice. Of course, this is not to say that the virus remains a complete mystery. We do know that handwashing, remaining contactless and maintaining social distance are paramount,[151] so more sinks and/or sanitization stations will be features more commonly incorporated into multifamily common spaces, perhaps as more of a design element rather than a Purell dispenser atop a simple plastic stand in a lobby. But for more elaborate designing or retrofitting of spaces amid the coronavirus pandemic, owners and developers can now look to a new breed of coronavirus consultants for both proven and best-guess advice on how to operate with minimal risk. One example is the newly-created, COVID Consultants, a firm based out of Denver, Colorado dedicated to advising entities from restaurants to nursing homes about how to reopen with minimal risk. Interpreting guidelines is a major facet of coronavirus consultants' work, and is vital to mitigate dangerous risks. The potential market for coronavirus consulting is massive as businesses, building owners, and even individual Americans must deal with the coronavirus safely as the country reopens in the summer amid rising infection numbers and fears of a coming second wave.

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[149] "Hotels in a Post Pandemic World."

[150] German architect and designer Ludwig Mies van der Rohe**,** a leading figure of the Modernist Movement in the 1930's and 40's, is often associated for his fondness of the aphorism, "less is more."
"Less is more" became the principle at the base of his new style of architecture, of which form was the final result of a constructive process.

[151] The CDC's general advice stands: Wash your hands frequently and avoid close contact with people.

Even before relying on coronavirus consultants, building owners should have a "Crisis Team" in place comprised of high-level executives as well as personnel from risk management, human resources, legal, information technology, and operations. The Crisis Team should devise a flexible and actionable plan, regardless of whether the they are facing a COVID-19 outbreak or frankly any other disaster.

Beyond designs meant for safety or protection, the pandemic will have other effects on apartment design long after the lockdowns are over. COVID-19 has greatly altered user demands on homes, especially urban apartments and condos where the functions of offices, classrooms, gyms, art studios, workshops, and storage lockers have all been forced into space-constrained units. The following effects and changes are not all necessarily designs for a pandemic but will be appreciated in the new way people live. Interestingly, some of these possible new ways of living actually represent a shift back to trends and features of the past.

Likely design changes for multifamily unit types include:

- *"Flex" or "plus" space*: A "flex-space" in apartments and condos comprised of windowless alcoves or nooks that can be closed off, such as with sliding glass doors. Smaller than a bedroom, these "plus" spaces can be utilized as a home office, a library, a gym, a learning space for children, etc.[152]
- *Closed-concept living*: Open-concept layouts in general, which have reigned supreme in the last decade and even before, will be re-thought to enable more privacy/quiet. This is particularly applicable for those with multiple adults or family members sharing a space in which living, working, learning, exercising, dining, etc. all occur. This does not mean a return to complete room division of bygone decades, rather just a shift in that direction. Adding nooks, alcoves or other "plus" spaces are but a first step here.
- *Proper foyer*: Proper foyers where residents and guests can take off their shoes and outerwear, unload packages, and overall transition away from outside contact with the virus, germs, etc. are spaces often absent in contemporary floor plans. Such entrances with a sense of enclosure are likely to be another feature more common to floor plans.
- *In-unit storage solutions*: Shopping trips have not only become a health and exposure hazard, but they are generally more burdensome and often take more time because of lines and capacity requirements. Additionally, the pandemic has affected trust in supply chains. All these factors combined mean that sufficient storage space for "stocking up" is likely to

[152] Having a power source in or nearby the alcove or nook is essential for computers and other electronics.

become essential, and therefore larger, more efficiently planned pantries, closets, and cabinets are needed.

- *Larger kitchen appliances*, even in compact kitchens: Angelica Trevino Baccon, a partner at SHoP Architects told the *New York Times* that kitchen appliances in smaller apartments may swell in size after shrinking in recent decades. “Our refrigerators kept getting smaller and smaller,” she said, including under-counter models that seemed acceptable when people were dining out regularly. “But now this idea of storage, and being able to have food for more than a week, is a thing,” she said. “I had never thought about a chest freezer until now.”[153]
- *Enhanced technology within units*: In the “minimize touching” (and therefore spread of bacteria and viruses) trend, there are existing and readily available technologies that up until the novel coronavirus have been a considered a specialty add-on. These add-ons are likely to become the norm and include automatic lights, automatic door locking and unlocking mechanisms, and even voice-controlled elevators. In fact, leveraging technology in multifamily housing in general will be a product of the new normal. COVID-19 greatly accelerated the increased digitization of the housing industry, especially in regard to tools that enable contactless living and keep communication possible. And since the adoption of technology has proven to be a one-way street (i.e. once adopted, new technologies tend to remain and continue to evolve), many technology changes and/or digital efforts will not disappear when we reach the vaccine-enabled new normal.
- *Improving indoor air quality*: Indoor air is prone to the risk of pathogen proliferation. Beyond operable windows that provide air flow, having equipment that provides sufficient ventilation and maintaining recommended relative humidity levels can decrease the risk of contracting COVID-19. Filtering solutions such as anti-bacterial filters and UV-C light disinfection, which have been used effectively in hospitals for decades to kill bacteria, viruses, and fungi, could be easily implemented in multifamily buildings that use air circulation for heating and cooling.[154] Additional measures to take include properly air sealing to avoid cross-contamination between units and maintaining humidity levels between 40 percent and 60 percent relative humidity, which has proven to be effective in limiting the propagation of common pathogens present in buildings.[155]
- *Larger units in general*: As described in the previous discussion of Amenity Wars trends, a mantra of multifamily housing design in recent years has been “sleep in the apartment, but live in the building,” which has resulted in dense complexes with smaller units and lots of common area amenities. Some industry professionals claim that this trend will not change in the long-term new normal: "Developers in recent years built smaller residences

[153] McKeough, “How the Virus May Change Your Next Home.”
[154] Central and individual air conditioners, but also air source heat pumps, could adopt these technologies to improve air quality.
[155] Additional air quality information is available in the following paper by Dom Lempereur: Lempereur, “The COVID-19 Pandemic Is Accelerating the Indoor Air Quality and Health Crisis in Multifamily Buildings.”

> while urging tenants to socialize in beefed-up amenity spaces. Social distancing won't change that, says Vickie Alani, residential design expert and CBT principal."[156] Now and in the immediate future, however, this mantra could resonate less with virus-wary residents who want fewer amenities and larger, more-spread-out units with less shared common space.[157]

Michael Murphy, the founding principal and executive director of MASS Design Group, the architecture and design collective, summarizes the active role architecture can take in a situation such as that presented by COVID-19:

> Our present-day situation marks a moment that will surely change the way we consider designing and building the spaces we need in the future. Architecture has been relegated as a passive backdrop, but if it is deployed as an active agent in the fight against the coronavirus pandemic, we can recapture trust over our public spaces and solve problems.[158]

Architecture and unit and common space design choices play a unique role in contributing to a cure by assisting in the prevention, containment, and treatment of not just COVID-19, but all infectious diseases. What's more, purposeful design also helps with mitigating the strain and impact on everyday life. Making life a bit easier or a bit more comfortable amongst all the disruption of the pandemic can become an amenity in and of itself.

5.13 A Change in How People Work

Likely the most profound and lasting change from the experience of COVID-19 is a shift in how—and where—people work. Traditionally, where people choose to live has been closely tied to where they work. While working from home with the help of digital tools was a trend long

[156] "Facing Pandemic, Amenity-Filled Developments Get Creative."

[157] Some operators are already seeing the shift away from smaller units and denser urban living. For example, "Los Angeles-based multifamily housing investor and developer Cityview, which has generated more than $4 billion in urban investment across more than 100 projects, had routinely seen its studios generate the most demand at its apartment communities. Now "our studios have been much more challenging to rent and to lease up during the pandemic," says CEO Sean Burton. "But our one- and two-bedrooms have been flying off the shelves to the point where we don't have availability in those units anymore. Clearly people are spending a lot more time at home, and they want the extra space." "The Lasting Impacts of COVID-19 on Residents and Operators."

[158] Murphy, "The Role of Architecture in Fighting a Pandemic."

before the pandemic hit, prior to COVID-19, only 7 percent of civilian workers in the United States had the option to work from home as a workplace benefit, according to the Pew Research Center.[159] It is also generally agreed upon, and demonstrated by the 2019 Zillow Group Consumer Housing Trends Report that the longest one-way commute buyers, sellers and renters would be willing to accept was 30 minutes when considering a new home or job. These geographical ties to offices have "helped push home values up very strongly in fast-growing urban job centers — especially on the coasts — and has led to housing scarcity and affordability concerns in several cities," Boston included.[160]

But a May 2020 survey conducted by The Harris Poll finds those priorities appear to change if people have the flexibility to work from home regularly. "When given that option, half of those who are able to do their job from home (50 percent) say they would be open to a commute that was up to 45 minutes or longer."[161] Obviously this brings into question some of the appeal of living in urban multifamily properties, which typically offer the shortest commutes to CBD offices. But it is not just short commutes that draw residents to urban multifamily properties; the city, and Boston in particular, offers numerous amenities — including dining, culture, arts, retail, nightlife and history — that can't be found in the suburbs or the country. These amenities are in addition to the expansive list of offerings provided by urban multifamily buildings themselves.[162]

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[159] 7 percent of civilian workers in the United States had the option to work from home as a workplace benefit, though 40 percent, or 63 million, worked in jobs that could potentially be performed remotely. In another Pew Research Center survey conducted in late March 2020, 40 percent of adults ages 18 to 64 reported they had worked from home as a result of the coronavirus outbreak. Pew Research Center, "Most Americans Say Coronavirus Outbreak Has Impacted Their Lives." This 40 percent figure rises to a majority among working-age adults with college degrees and upper-income earners, who typically tend to be the residents of amenitized urban multifamily buildings.
Kochhar and Passel, "Telework May Save U.S. Jobs in COVID-19 Downturn, Especially among College Graduates."
[160] "More Remote Work Opportunities May Make Suburbs More Desirable."
[161] Still, even with remote work as an option, only 10 percent of those able to do their job from home would consider a commute longer than an hour.
"More Remote Work Opportunities May Make Suburbs More Desirable."
[162] More about remote workers who live in cities, based on pre-COVID Zillow research from February 2020: "But while working from home does enable people to work in any number of far-flung or off-the-beaten-path locales unattached to traditional urban job centers, working remotely is – perhaps surprisingly – more common in urban areas.

In another Pew Research Center survey conducted in late March 2020, 40 percent of adults ages 18 to 64 reported they had worked from home as a result of the coronavirus outbreak.[163] This 40 percent figure rises to a majority among working-age adults with college degrees and upper-income earners, who typically tend to be the residents of amenitized urban multifamily buildings. Since the onset of COVID-19, working from home—teleworking—has been widely accepted as a productive way to work, especially with help of digital tools. Thus, even after offices reopen, teleworking, even just part time, is likely to remain in a major way.

With more companies shifting to a more permanent teleworking model because of the coronavirus, on-site amenities become that much more appealing. The case is true for both condo and apartment dwellers, who normally are more space constrained within their private living areas. But it is especially true for renters, who typically cannot undertake significant remodeling work, such as adding an office, in light of their new ability to work from home, and must rely on what the building offers. But working from apartment or condominium communities does not just mean working from in-unit offices or common business centers or co-working spaces. Fitting with the Amenity War era, working can become a much more amenitized experience: "The way people work has changed. We have a few residents who work from the pool every single day. They like the relaxing, spa-like atmosphere."[164]

While altering unit floor plans to include some type of designated office or desk space (including nooks or alcoves described above) is one option for developers to better enable working

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Just a quarter (24 percent) of employed buyers who said they always work at their employer's location live in urban areas, compared to 41 percent who said they work remotely at least sometimes. Similarly, almost half (48 percent) of sellers who said they work remotely live in urban areas, compared to 29 percent who work on-site full-time. The trend is similar, though slightly more muted, among homeowners and renters.
Some of the differences in remote workers choosing to live in urban areas may be due to younger workers (who are typically more attracted to urban centers) being more likely to work remotely, though the trend persists within each age group. Being somewhat close to a job center may also be important for couples in which one partner works remote and the other has an in-office role that requires a more traditional commute. Remote workers may also prefer the amenities and conveniences common to urban areas. It's also possible that workers with the types of sometimes well-paid jobs that enable remote work may be more able to afford to live in urban areas, which tend to be more expensive." Coursolle, "30-Minute Movers."

[163] Pew Research Center, "Most Americans Say Coronavirus Outbreak Has Impacted Their Lives."

[164] Quote from Evan O'Donnell, Managing Director at AKA University City. Bousquin, "Putting Meaning into Amenities."

from home, according to Yanni Tsipis, Vice President - Seaport at WS Development, it could actually represent an erosion of project value compared with larger, common workspace amenities. Adding approximately fifty square feet for a nook is inefficient in regard to building and unit layouts, and significantly less impactful than say a couple thousand square feet of common work space, work space that can be designed with proper health and safety parameters, as a building amenity.

5.14 Privacy as a New Amenity

In a COVID-19 world, privacy has become one of the ultimate amenities.[165] So much so, that the word "private" appears in promotional material now more than ever before. According to a Chicago source, whose luxury multifamily market claims many similarities with Boston, amenities that offer privacy, such as "balconies, large roof decks, sundecks… have overtaken "tween" rooms, squash courts and pools as must-have items for Chicago luxury renters and condo owners."[166]

Developers, landlords and real estate brokers have reacted to the change in priorities toward privacy, and are altering marketing strategies accordingly. After having spent years promoting shared experiences, brokers are increasingly incorporating social distancing into their pitches, highlighting both outdoor and secluded spaces, using the word "private" now more than ever before. Such is certainly the case in Boston, where the sales team for The Sudbury at Bulfinch Crossing is specifically marketing the separate outdoor amenity spaces to their advantage. This fits with a larger trend we are likely to see going forward, namely that the virus will change how amenity spaces are marketed, even if not so much what the spaces are themselves.

5.15 Transportation and Ride Sharing

According to the Multifamily Design+Construction 2019 survey, and as discussed above, less covered parking was becoming the trend in some denser cities—although Boston is still a

[165] "Chicago Luxury Renters And Buyers Look For Amenities That Offer Privacy."
[166] "Chicago Luxury Renters And Buyers Look For Amenities That Offer Privacy."

questionable adopter—especially for high-rise rental projects served by decent transit, or where there was a strong Uber/Lyft presence.

In regard to car use, at least in the near term post COVID-19, people are going to prefer the safety of their own cars over public or shared modes of transportation, and thus will still be purchasing vehicles and will require parking options at their homes, offices, and whatever other destinations they drive to. A July survey from Cambridge-based CarGurus shows the growing preference for car ownership and usage. According to the survey, 22 percent of current car-shoppers nationwide had not considered buying one before the pandemic.[167] Additionally, even as Boston's restaurants and shops have been reopening, ridership on trains has not moved beyond 25 percent of where it was pre-COVID-19 (and on buses, 40 percent).[168] The idea that collective reluctance may be a longer-term shift in behavior is suggested by a MassINC survey from May that found that, even after making it through the worst of the pandemic, about a third of respondents would cut down on public transit, carpools, and ridesharing, and as many as 28 percent would likely do more trips in their cars, alone.[169]

The following provides telling data on rideshare and mass transit as just two more industries negatively affected by COVID-19. As of April 9th in Boston, subway ridership was down 92.7 percent and bus ridership down 78 percent compared to the week of February 24th – February 28th, according to MBTA general manager Steve Poftak.[170] And, even though ride-sharing providers were deemed an essential service in the state per Governor Baker's March order that called for the closure of all non-essential services, according to MarketandMarket's April 2020 report on "the COVID-19 Impact on Ride Sharing Market," the ride sharing market was estimated

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[167] CarGurus, Inc (last), "CarGurus Releases Latest COVID-19 Sentiment Study."
[168] "I Hate Cars, but Thanks to COVID I'm Buying One."
[169] MassINC Polling Group, "Poll Of Mass. Residents Finds Sharp Shift In Commuting Attitudes Amid Pandemic."
[170] "The MBTA Expects To Lose $231 Million Due To Coronavirus." Meanwhile, the T's service for people with disabilities (The RIDE) is serving just 18 percent of its usual ridership, and the commuter rail is serving around 6-8 percent of its usual riders, Poftak said during the T's Fiscal Management and Control Board meeting.

to lose its share by 50–60 percent during 2020.[171] The report does project that, by 2021, ride sharing will "gain its market by 70–80 percent because of new strategies like providing partitions to keep the distance between driver and passenger, equipping the vehicle with sanitizers, and installing devices to measure the body temperature of passengers to eliminate the threat of such infections in future."[172]

What would changes look like in the multifamily market to mirror the COVID-19 response for ride sharing? In line with previous discussions, more partitions would be added in public and community spaces such as fitness centers, club rooms, and coworking spaces. Operators would also build in more sanitizer and handwash stations, as well as create systems to monitor temperatures. For ride sharing, implementing such changes comes with the expectation that fares would increase due to the added precautionary measures."[173] The same could be true for multifamily properties, however resident pushback is a likely possibility. The result is likely to be a combination of developers having to pay more for such measures, cutting budget/services elsewhere, and passing one what they can to residents.

5.16 Monetizing Amenities

For building owners and developers, COVID-19 brings with it a new category of costs: construction delays; more expensive HVAC systems; less efficiency per square foot; extra cleaning and PPE costs are to name but a few. In regard to common space cleaning expenses, a report by the Boston Business Journal gives average pre-COVID-19 cleaning costs of $0.25 per square foot, which have since tripled to $0.75. Additionally, underwriting numbers have shifted so that now the underwriting criteria on the operating side are more conservative. Owners may have been able to project 3 to 4 percent rent increases pre COVID-19, but now, it's more like a 2 percent increase.[174]

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[171] "COVID-19 Impact on Ride Sharing Market."
[172] "COVID-19 Impact on Ride Sharing Market."
[173] "COVID-19 Impact on Ride Sharing Market."
[174] "The Lasting Impacts of COVID-19 on Residents and Operators."

With spontaneous added costs, developers, owners, and their project teams may need to look for ways to "monetize" amenities and turn operating costs in revenue streams. Examples include charging coffee, gym services, a la carte pet services, etc. to a resident's unit. Other options are having occupants pay for Wi-Fi, rather than providing it as a free service like the 51.4 percent of survey responders[175] said they had access to in 2019. Multifamily Design+Construction expects "Monetizing Your Amenities" to be the next frontier in the Amenities Saga, and probably more so now because of the coronavirus.

5.17 The Sharing Economy Post-COVID-19

What will multifamily communities look like in the new normal generation of the sharing economy? For one, the future of the co-living trend, which was meant to remedy Boston's ongoing housing shortage and skyrocketing rents, while providing a sense of community and connectedness for its residents, is less certain. In Boston, co-living was about to take hold with the August 2019 groundbreaking of 7INK, a 14-story, 180-unit co-living building at the corner of Albany and Herald Streets in the South End. 7INK is the 7th and final building at Ink Block featuring move-in ready, fully-furnished studios, one-bedroom apartments and shared suites.[176]

The concept was especially meant to provide younger renters an affordable, cleaner way of living in a downtown residential complex without the need to find roommates on their own. Given Boston's affordability crisis, the concept seems like a no-brainer. Now with the pandemic, however, its core tenets of sharing, socializing, and building community may seem more of a non-starter than a no-brainer. Taylor Cain, director of Boston's Housing Innovation Lab,[177] which studied co-living as a way to create more housing density and meet the Mayor's goal of adding 69,000 new residential units by 2030, agreed that the thought of co-living in this moment is enough to give anyone pause. "At this moment," she said, "it's making us do some reflection on what

[175] Multifamily Design+Construction, "Multifamily Amenities 2019 Report."
[176] 7INK is a National Development Community expected to be completed by the end of 2021.
[177] Boston's Housing Innovation Lab

sharing space means and what we want and need from our housing."[178] Even with the pause, she is correct that it is not something "we now have to completely throw out of the toolbox.''[179] For one, since 7INK is still a few years from completion, it gives medical researchers time to find a vaccine, as well as time for pandemic fears to subside.

The reality of space sharing is that it meets an important demand, and though the concept may see delays in further expansion in Boston, there will remain a market for its product through and beyond COVID-19. For one, Boston's exceptionally high cost of living and housing shortages will cause residents to still need and look for ways to afford living in the city. Co-living also remains a viable solution because it is a natural extension of current trends. While the concept has been branded as a new and noteworthy kind of living, at its core, co-living is not completely novel. People living with people they did not know before is an old phenomenon, and one that is just now being labeled, structured (and amenitized) in an innovative way. In fact, according to a 2018 Pew research Center study, nearly 1 in 3 American adults already live in a "shared household,'' or in one with someone they aren't linked to by marriage or family relations.[180] "Doubling up," as this arrangement is often called, gained notice in the wake of the Great Recession,[181] and has been a growing trend to this day, particularly for those in their 20's and 30's who make up the predominant co-living clientele. For "doubled up" Americans who did not vacate their city homes to ride out quarantine with family or friends or at less congested places, their experiences of staying home included numerous non-family members and sharing living, working, dining and exercising spaces. Combine the effects of the Amenity Wars with doubling up, and the result is co-living.

It is also important to note that co-living and multifamily buildings have not seen disproportional COVID-19 outbreaks compared to other real estate types (not including nursing

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[178] "Will COVID-19 Spell the End of the Co-Living Trend in Boston?"
[179] "Will COVID-19 Spell the End of the Co-Living Trend in Boston?"
[180] In 2017, nearly 79 million adults (31.9 percent of the adult population) lived in a shared household (defined as a household with at least one "extra adult" who is not the household head, the spouse or unmarried partner of the head, or an 18- to 24-year-old student). For comparison, in 2004, at the peak of homeownership and before the onset of the home foreclosure crisis, 27.4 percent of adults shared a household. Fry, "More U.S. Adults Now Share Their Living Space."
[181] Fletcher, "Census Bureau."

homes). A reason for this may be that the typical co-living demographic is generally less vulnerable to COVID-19, and therefore has fewer immediate health risks to sharing spaces.

In regard to 7INK, Ted Tye, who is a managing partner at National Development, makes the point that community building should not be misconstrued with close living quarters. At 7INK, even the multi-bedroom units come with private bedrooms that include both sleeping and living spaces, so spatial separation is indeed possible. Still, while the overall concept remains the same, the developer will be implementing some changes due to COVID-19. These include scaling-down some common areas so they be used by smaller groups or individuals; expanding fitness areas for social distancing; adding more operable windows; and enhancing HVAC, all industry standard amenity changes to expect going forward.

But co-living also provides another amenity, one that that is a particularly relevant in the age of COVID-19: safely combatting the difficulties of social isolation. Tye says that "to understand co-living is to know that there is privacy, safety, and support in these communities, in many cases more, or as much as, in traditional apartments.''[182] Amenities thus can be so much more than physical spaces.

5.18 Additional Post-COVID-19 Predictions

The following are additional projections based on the experience with the coronavirus pandemic, non-COVID-19-related trajectories of recent amenities trends, as well as the potentially shifting real estate market. Some have appeared in previous sections, but have been regrouped here for general similarities:

- More automatic sensors or voice-user interfaces for doors, elevators, trash receptacles, sinks, etc.
- More hygienic entry/keying in to buildings and units
- More built-in handwash and sanitizer stations
- Use restrictions / stricter sign-up policy to use spaces
- Clear signage / directions / policies for using a space

[182] "Will COVID-19 Spell the End of the Co-Living Trend in Boston?"

- Segmented gym and common-area use sections
- Nothing reusable
- Increased use of waivers for people to act/use spaces at own risk
- Temperature screenings, particularly for employees when they come to work, coupled with filling out a form of whether or not they have any symptoms. With any symptoms at all, they go home.
- More/secure package services. Package-handling solutions were already making big inroads into multifamily communities before COVID-19.[183] According to the pre-pandemic, 2020 NMHC/Kingsley Apartment Resident Preferences Report, 84 percent of residents expressed an interest in secure, self-service 24/7 package access as a top community amenity.[184] Then, with mandates of social distancing and self-isolation during the coronavirus pandemic, many Americans actively avoided in-store crowds, including at grocery stores, in favor of shopping online.[185] Rising deliveries coincided with many communities stopping the handling of packaging altogether.[186] Now and going forward, multifamily properties will require more or larger secure package lockers and rooms that residents can access without staff assistance, including those with camera monitoring for security and refrigeration for storing food and other perishables.
- Prefabricated Prefinished Volumetric Construction: The coronavirus pandemic is likely to accelerate the spread of Prefabricated Prefinished Volumetric Construction (PPVC)-built properties. For one, much of the finishing and construction work is carried out in factories, where social-distancing can be more easily implemented than on a building site. Modular construction also requires fewer physical bodies to be present on a building site, which proves to be an asset at a time when the U.S. construction industry, Boston in particular—even with COVID-19 aside—has seen a shortage of available labor.

[183] "Five years ago [from 2019], no one was even thinking about putting package lockers in their communities, but now, every community has one," says Russell Tepper, senior managing director at national developer Mill Creek Residential.
[184] "2020 NMHC/Kingsley Apartment Resident Preferences Report."
[185] Trends toward online shopping were already quickly growing even before COVID-19. Amazon Prime has become a service that more than half of all U.S. households now subscribe to, according to Consumer Intelligence Research Partners. In 2018, 1.79 billion people world- wide shopped online. By 2021, that number is projected to reach 2.14 billion. Shanesy, "What's Next For Apartment Amenities?"
[186] According to MRI, a Cleveland-based multifamily housing solutions provider, package handling dropped 70 percent across the million-plus units it tracks. "The Lasting Impacts of COVID-19 on Residents and Operators."

5.19 Communication is Key

In the discussion of specific multifamily changes and adaptions to COVID-19, it is worth noting that accurate, timely and regular communications between management, employees, residents, and even suppliers is paramount. Building owners must be able to inform and educate their residents. Communication tools may include frequent awareness campaigns and guidance on how to prevent and respond to this or any other pandemic or crisis. Having all available contact information for staff, residents and suppliers (cell, e-mail, etc.), allows building management to safely and effectively disseminate information through corporate websites, app-based notifications, mobile messaging, etc. in cases where contact is disrupted.

Best results occur when a building owner or management company clearly explains how they plan to implement best practices for increasing global environmental health. Engineers and scientists have the ability to design and upgrade building systems for higher indoor air quality; however, technical improvements must be implemented alongside clear communication tools. Beyond logistics, communication is a large part of making people feel safe in their multifamily community.

5.20 Boston-Specific COVID-19 Impacts to Multifamily

Prior to COVID-19 and the negativities associated with urban living, Boston had reason to anticipate a growing population and growing housing demand for decades to come. Metrics and markers supporting this include the following: According to Axio Metrics Estimates, the Greater Boston/ Cambridge/Newton submarket has added 38,000 worth of inventory since 2014, and occupancy rates have not dropped below 95 percent in the last decade. From 2017 through 2019, these occupancy rates actually held above 96 percent. Developers were riding a record-breaking wave of construction right up until the onset of the pandemic, with nearly 100 major projects under way within Boston's city limits alone.

Still, even with the recent strength of the market and expectation of continued growing housing demand, Boston luxury multifamily development has started to see some changes coinciding with

COVID-19. The question is whether or not these changes are a result of COVID-19, or if they represent the natural market cycle at work. As is the general consensus with most COVID-19 impacts, only time will reveal the true answer, but conjecture is still possible.

So far into the market shutdown, and particularly examining 2020's second quarter, downtown Boston has performed similarly to a number of American cities with not much movement on condo prices but distinct declines in number of sales. In this market largely shut down by the coronavirus, price stability is suggested by the Q2 median sales price declining at the same rate as average sales size.[187] The year over year sales drop of 42.5 percent was at the highest rate in at least nineteen years, which reflected the near market shutdown. And in regard to inventory, the number of listings moved higher (7.7 percent) for the first time in three quarters as compared to the year-ago quarter. All of this together shows that, at least by summer 2020, major market hits were really to sales velocity above other factors.

Even with its degree of price stability, as well as favorable interest rates,[188] Boston's stalled market has many sources expecting further softening. From the agent perspective, however, the softening, if any at all, is to be found in larger, urban high-density buildings with more than 100 units. That and at ultra-luxury price points (approximately $5 million+) for which developers have recently been very aggressive—and aspirational—in building and pricing. In general, there is no question that Boston's housing market has taken a hit from the pandemic, but it is unlikely that the downturn represents the start of a lasting market shift. Instead, it is likely a shorter adjustment that postponed our traditional spring market.

Still, at least for the time being, new construction may not be able to be as aspirational as the last few years, and Boston may very well may be entering a phase in the market where developers

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187 Median condo sales price dropped 3.8 percent to $875,000, while the average square footage of sold properties decreased by 3.2 percent to $1,137 from the same quarter last year. Miller, "The Elliman Report: Q2-2020 Downtown Boston Sales Prepared by Miller Samuel Real Estate Appraisers."

188 As of July 2, 2020, Mortgage buyer Freddie Mac reported that the average rate on the key 30-year fixed-rate mortgage fell to 3.07 percent, down from the previous week's 3.13 percent. For the second week in a row, it is the lowest level since Freddie began tracking average rates in 1971. A year ago, the rate stood at 3.75 percent.

are re-programming their projects and where price is going to matter more than amenity offerings. For example, in the first week of June 2020, prominent developer Millennium Partners[189] announced programming changes for its new Winthrop Square project, known as Winthrop Center.[190] As designed and approved, the project will be the fourth tallest building in the city and the tallest structure in Downtown Crossing containing residential, office, retail, restaurant, parking and other commercial uses along with Great Hall space totaling up to 1,545,021 gross square feet. While construction on Winthrop Center began in late 2018 and was expected to open in 2022, work has stalled in recent pandemic months. Work stoppage was initially due to the city's March 17th ban on most construction activity in an effort to stem the spread of the novel coronavirus.[191] By late June, the city completed the final phase of reopening the city's construction industry following the shutdown,[192] but before Winthrop Square resumes, the developer is needing to revise programming and capital structure.

As detailed in the Notice of Project Change (NPC) filed June 10th, Millennium sought to essentially remove a wing of the building and reduce the Project's total square footage to 1,447,000 gross square feet. This plan reduces the number of residential units from 387 to 321, and the developer is now planning to rent those units out as apartments, rather than sell them as condos. In its request to the Boston Planning and Development Authority (BPDA), Millennium cited "the unprecedented COVID-19 pandemic" for making it harder to gain financing to complete the

[189] Millennium Partners (MP), specifically MP Boston, is a developer of large-scale, mixed-use luxury properties that has been active in Boston for two decades. Millennium Partners' Boston residential properties include The Ritz-Carlton Towers (2001-2002); One Charles Condominium (2004); Millennium Place (2011); and Millennium Tower (2016).
[190] MCAF Winthrop LLC c/o MP Boston, "2020-06-10_Notice of Project Change (NPC)_115 Winthrop Square." Available at https://bpda.app.box.com/s/wsa5a9tzbsbfgl67w61s7qyiaulpruex.
[191] Boston was the first U.S. city to do so.
[192] Boston city officials shut down all but emergency construction in mid-March as coronavirus deaths and infections soared. In order to get permission to reopen, contractors are required to take an array of safety measures. These include installing handwashing stations, requiring the use of masks and other personal protective equipment, temperature checks, and ensuring that workers follow social distancing guidelines.

building that is already under way and to then attract what was already a limited pool of buyers.[193] $800 million in loans fell through at the start of the pandemic for the $1.3 billion project.

In evaluating Millennium's Notice of Project Change, the BPDA hired the accounting firm Ernst & Young. As reported by The Boston Globe, the firm's report largely backed up the developer's claims, finding that financing has dried up for luxury condo towers since the pandemic began but is still available for rental units. "There are not, from Ernst & Young's perspective, lenders who are currently making loans on high-end luxury condos," said Devin Quirk, the BPDA's director of real estate. "That is not a financing course that is readily available."[194]

Millennium told the BPDA that the proposed changes would cut around $100 million in construction costs[195] and the adjustment of the residential units from apartments to condos would help secure the necessary funding. As of mid-July, when the BPDA approval was issued, Joe Larkin, who directs the development activities of MP Boston, said he has had detailed talks with potential investors[196] and aims to close on new financing this summer, with work restarting in September. But, he acknowledged, there are no guarantees; his cautious optimism directed toward the press is just one more of the COVID-19 examples of "wait and see."

The Winthrop Square changes could come at a cost to the City. When Millennium Partners offered $151 million to buy the city-owned site four years ago, the agreement was to pay $101

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[193] The Millennium press release says: "In response to changing market conditions due to the global impact of COVID-19, Millennium Partners Boston is reducing the scale of the residential portion of the project by 14 percent while keeping its signature height intact [691 feet] and maintaining the building's integration of core design principles developed in conjunction with MIT professors [Metabolic Design Office]." … "The COVID-19 pandemic has had a wide-reaching effect, from impacting the construction process to infiltrating the banking environment. Adjusting the building in response to new economic constraints, Millennium Partners Boston's priority is to move the building into the next phase of construction and ensure no compromise is made in the quality, safety, comfort, and well-being that Winthrop Center will deliver to occupants as Boston emerges from COVID-19."

[194] "Changes to Winthrop Center Tower OK'd in Bid to Salvage Stalled Project - The Boston Globe."

[195] Some sources say $80 million in cost savings

[196] New/potential sources of financing are unknown for Winthrop Center but generally, there are investors with longer timelines and the ability to weather the short-term crises for returns further out, such as deep-pockets pension funds and sovereign wealth funds. As an example, firms like Commercial Construction Consulting, are currently engaged in helping such funds evaluate projects as potential investment opportunities that "were planning to start this year who have lost some or all of their financial backing recently." Commercial Construction Consulting is working not only in Boston, but across the country and the world.

million upfront (which did occur in 2018) and the remaining amount incrementally as it closed sales of condos upon completion. Now, however, those remaining payments to the City will be spread over 10 years. There is also now $26 million of diminished housing funding. The reprogramming to rental units will lower Millennium's required payments into Boston's affordable-housing fund, from $48 million under the original plan to $22 million, which could affect an affordable development Millennium is planning to help build in Chinatown. City councilor Michelle Wu has since called this a "bad deal and absence of transparency."

Winthrop Square shows one of the likely post-COVID-19 outcomes for multifamily housing, which will be in regard to financing requirements for development. The City had allowed Millennium to launch construction on the city-owned site without the financing fully locked down, no doubt a sign of the healthy market and project confidence of the time. Now, however, more stringent requirements for the finance and business side of multifamily properties will likely be required before project groundbreakings.

Even though Millennium has not been the only developer forced to restructure their plans or revise capital structure amid financing issues in this now-tougher economy as compared to the beginning of the year before the pandemic, it is still too early to call an end to Greater Boston's epic building boom, even if the coronavirus has managed to turn the global economy and all our lives upside down in a few short months.

5.21 Some Things won't Change: Focus on Community and Connectedness

If the strength of past trends is any indication, some things will not change when the new normal—i.e. in the era of a vaccine—sets in. This especially applies to a focus on community and connectedness, two mantras of recent Amenity Wars, that, so far in 2020, have taken a big hit. Socializing will become the norm once again once a vaccine is delivered. It is simply human nature.

In a plea for community, one Chicago-based interior designer, Mary Cook, said that for the last 15 years, "all of our focus has been on designing amenity spaces that enhance the community, bring people together and elevate the building. Let's try not to break community down and lose sight of what we spent a lot of time building."

5.22 Value-Add Rehab: Adding Value in the Age of Amenities

The amenity discussion reaches further than new and luxury communities. Value-add redevelopment is bringing improved and new amenities to older communities as well, modernizing their offerings and broadening their appeal. Since more than 51 percent of all rental housing stock was built before 1980[197] and new supply is on the rise, the need to remain competitive and up-to-date through value-add rehab is paramount.

For existing properties with neither the capital, or, quite frankly, the demand for over-the-top features and amenities, there are plenty of ways to increase their communities' appeal through amenities, many of which are simple to implement and require little up-front investment, such as those described in the following paragraphs.

Surveys have revealed that modern residents are far more interested in technology add-ons than the amenities traditionally associated with high-end apartment communities—like swimming pools, parking garages, and community centers.[198] More than 75 percent of survey respondents indicated that they'd be willing to shoulder a rent increase in exchange for add-ons such as high-

[197] "Adding Value in the Age of Amenity Wars."
[198] "What Apartment Renters Actually Value."

speed internet and cable television, the ability to pay rent online, and "smart" home features like wireless security cameras, keyless entry, and app-enabled thermostats. Interior amenities that can add value without adding much cost include replacing outlets with USB duplex receptacles, upgrading from "analog" locks to keyless entry, adding security cameras, installing inexpensive wood or tile laminate flooring to refresh worn-out carpet or tile, and adding secure storage lockers to meet the rise of package deliveries. Finally, from an event programming perspective, another approach many operators take is planning events in their spaces that help foster a sense of fun and community without adding costs.

Data from the National Apartment Association's Annual Income & Expenses Survey show a steady run-up in capital expenditures since 2011, with owners spending approximately $1,200 on average per unit in 2015. During the past five years, apartment owners have increased spending by an average of 13 percent annually, adjusted for inflation, showing that, as the apartment market landscape becomes more competitive and new product comes on line, owners are reinvesting profits to keep their properties attractive to prospective residents.[199]

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[199] For purposes of the survey, capital expenditures are defined as monies spent on items such as asphalt/parking, concrete, masonry, water heaters, range/cooktop/ovens, dishwashers, glass, blinds/draperies, sidewalks/curbing, vinyl, pool, new carpet, washers/dryers, club amenities, fitness equipment, etc. "Adding Value in the Age of Amenity Wars."

Chapter 6: Conclusion

6.1 Future of the Amenity Wars

Developers have raised renters' expectations to the point that they now have to provide a huge selection of amenities just to get a prospect's attention. But, like any race, the Amenity Wars cannot go on forever. As one article describes:

> Multifamily amenities packages in new buildings are likely to be pared down at some point soon as developers take a closer look at what features are (and aren't) making a positive contribution to their bottom line. Tastes change over time, and different groups of renters want different amenities.[200]

The most recent installment of the Amenity Wars has been a competition of luxury, which, by changing tastes, not to mention monetary and feasibility constraints, cannot last indefinitely. Features and amenities that are likely to phase out include those that require a lot of space and offer limited benefits. These include sport courts as well as theaters, which, due to their upfront cost and lack of flexibility in use, are being replaced by large TVs in less formal lounge areas with moveable seating. Film screening rooms in particular represent "a lot of square footage and expensive furniture and equipment for a service that may be going the way of the fax machine."[201]

Then of course, there is the coronavirus component to what the future of amenities and multifamily building designs will be. A conversation between readers in the comments section of a May *New York Times* article about "How the Virus May Change your Next Home"[202] describes opposing outcomes rather well. First, JC from Pennsylvania writes:

> I think developers of both new apartments and condos should focus less on building amenities as shared common spaces will be less desirable. People will prefer large square footage in their own homes and the days of buildings going overboard on common areas and shared spaces like bowling, rock climbing wall etc. will no longer be strong selling points. Apartments/condos need to have less common areas, larger apartments, less open concept design, better kitchens, and good closets. Of course, also a focus on in-unit washers and dryers. Those are considered

[200] "Amenities Arms Race."
[201] Multifamily Design+Construction, "Multifamily Amenities 2019 Report."
[202] McKeough, "How the Virus May Change Your Next Home."

> luxury in Manhattan, they will be more useful than other features previously marketed.

But Joe Bob III from MN takes an opposing view:

> @JC I would think the opposite on amenities. Given the choice I would rather use amenities in my own building, where they are used by fewer people, instead of going to a something like a fitness club that has hundreds of patrons per day."

In truth this is a conversation occurring amongst many others right now, including, of course, developers themselves. While the coronavirus pandemic and its accompanying quarantines have put cities under siege and have essentially turned our homes, offices, kitchens, and dormitories into COVID-19 triage centers, exactly how the industry will be transformed by the fallout of this outbreak is still up for debate. It may seem like we have been stuck inside for years, but it has only been a few months into this unique and persistent outbreak, and so any market responses thus far are just the beginning of a much longer battle. Where there is general agreement is with the idea that the new normal is still an evolving normal. There is also agreement in the fact that making life more comfortable, more convenient, healthier, or even just a bit easier is a goal not just of the fight against the disruptive coronavirus pandemic, but of the general Amenity Wars themselves.

6.2 Concluding Remarks

Prior to the outbreak, major trends in luxury urban multifamily Amenity Wars included the growing need for flexible living spaces, personalization, healthy living features and amenities, and convenience and connectivity in apartment and condominium homes. In defining the next stages of the Amenity Wars, the following questions become particularly relevant:

- Will luxury urban multifamily designs and offerings represent the next frontiers of health and wellness?
- Will architectural flexibility carry even more value?
- Will changes to design and programming prioritize privacy?
- Will there be an amenity “détente” to reduce overall development costs?

As we have demonstrated, sales and rentals of luxury urban housing may have experienced a pause during the early months of the COVID-19 pandemic, but demand for this particular product type is likely to remain robust in the long-term. Thus, in response to what the future holds for luxury urban multifamily Amenity Wars, the “arms race” is not likely to end, however amenity substance is likely to reign over sheer quantity and variety. Residents will continue to look for amenity spaces and services that cater to their needs on a lifestyle level while developers will continue to seek a competitive edge by catering to that demand. We have shown that, going forward, the ability for spatial adaptability will be a key component of best-practice design, and residential buildings will be smart to improve their offerings for non-traditional working models. Adhering to these and other efforts laid out in this discussion will pay dividends in the form of superior loyalty and the ability to create brand new revenue streams while better meeting the needs and wishes of luxury clientele.

7.1 Amenities "Menu"
Categorized as 1. Lifestyle Aids, 2. Health, Fitness and Wellness Assistance, and 3. "Fun Stuff"

1. **Lifestyle Aids**
    - Doorman
    - Concierge
    - Hotel-branded Services
    - Parking
        - Garage Parking vs. Uncovered Parking
        - Valet Services
        - Automated Parking
        - Electric Vehicle Charging Station
        - Option to Rent/Purchase Parking
    - Storage Outside the Unit
        - Deeded, Reserved or Common
        - General Storage Locker
        - Bike Storage
        - Stroller Storage
        - Scooter Storage
        - Wine Storage
        - Kayak/Canoe/Boat Storage
        - Surf Board Storage
    - Transit Access (Rail, Bus)
    - Car-share Services (i.e. Zip Car)
    - Rideshare Waiting Areas
        - Transit Screens (Displaying real-time information about bus schedules, subway stops, availability of bikes and scooters at nearby docks, and wait times for Uber/Lyft)
    - Bicycles
        - Bike Storage
        - Bike Share
        - Bike Maintenance / Repair
    - Package Rooms/ Package Solutions
        - Secure Package Room
        - Refrigerated Storage
        - Package Valet
        - Robotic Package Delivery Services
        - "Outbound" Shipping Services
    - Trash and Recycling
        - Trash Valet
        - Recycling Program
    - Laundry
        - In-unit Washer/Dryer

        - Common Washer/Dryer for Bulk Items
        - On-site Dry Cleaning
        - Laundry Lockers
        - Laundry Valet
    - Connectivity
        - Strong Cell Phone Coverage
        - Internet
            - High Speed Internet / 5G
            - Free Wi-Fi
            - Pre-installed Wi-Fi
    - Smart Features
        - Smart Thermostat
        - Biometric Security System
        - Bluetooth Sound System
        - Non-key Secure Access
        - Wi-Fi Enabled Doorbell
        - Alarm System
        - Device Charging Stations
        - Powered Window Coverings
        - "Smart Windows" (Auto-dimming)
        - Destination Dispatch Elevators
        - Drone Landing Station
    - Other In-Unit Features
        - Direct Elevator Access
        - Air Conditioning
        - Soundproofing
        - Hardwood Floors
        - Underfloor Heating
        - Floor-to-ceiling Windows
        - Private Balcony
        - Fireplace
        - Recessed Lighting
        - Washer/Dryer
        - Stainless Steel / High-end Appliances
        - Gas Stoves
        - Garbage Disposals
        - Premium Countertops
    - Onsite Convenience Store
    - Onsite Café / Coffee Shop (i.e. lobby Starbucks)
    - Personal Shoppers
    - On-Site Reservable Guest Suites
    - Access to Shared Portfolio Amenities

2. Health, Fitness and Wellness Assistance

- Fitness Centers
  - Branded Fitness Center (i.e. Equinox) or "Regular" Fitness Center
  - Cardio and strength equipment
  - Yoga / Bar / Pilates / Dance Class Studios
  - Spin Studio
  - Boxing Studio
  - Private Training Rooms
  - Special Branded Fitness like Peloton or other Interactive Fitness Services
  - Lap Pool
  - Sport Courts
    - Basketball; Volleyball; Squash; Racquetball; Tennis; Pickleball
  - Batting Cages
  - Dash-track (i.e. 40 yard track)
  - Sport Simulators (i.e. Golf)
- Salon/Beauty Services
  - Hair, Nails, etc.
  - Spa Services: Sauna, Steam, Massage, Physical Therapy; Meditation rooms
- Wellness Certification (e.g. WELL Standard)
- Green Certification
- Medical / Dental Outpatient Services
- Senior Well-being for Aging in Place

3. "Fun Stuff"

- Club Room / Lounge
    - With Bar
    - Fireplace
- Library/Reading Area
- Game Room
    - Billiards, Card Tables, Arcade, Ping-pong
- Common Kitchen
    - Demo Kitchen
    - Industrial Kitchen
    - Caterer's Kitchen
- Private Dining Room
- Coffee Bar / Free Coffee
- Juice Bar
- Wine Bar
- Wine Cellar / Wine Storage
    - Climate Controlled
    - Private wine tastings
    - Sommelier Services
- Pool / Hot Tub (Indoor or Outdoor)
    - Cabanas
    - Lounge Chairs
- Landscaped Outdoor Space
    - At-grade, Central Courtyard, Rooftop, Terrace, etc.
    - Proximate Parks
    - Garden Walk / Walking Path
    - Outdoor Amphitheater
    - Firepit
    - Water Feature
    - Yoga Garden
    - Outdoor Kitchens / BBQ Grills
    - Green Roof
    - Roof Garden / Common Garden / Community Garden / Urban Farming
        - Outsourced Gardeners
        - Home Vegetable Delivery
- Business Center / Private Board Room
- Coworking Space
- Creator Space
- Children
    - Playground
    - Playroom
        - Children playrooms visible from Fitness Center via glass wall

        - Onsite Daycare
        - Childcare service
        - Tween Room
    - Video/Film Screening Room/Theater
    - Indoor Golf Simulator
    - Climbing Wall / Bouldering / Rock Wall
    - Bowling Alley
    - Cornhole
    - Bocce
    - Putting Green
    - Sport Courts
    - Boating/Water Sports
        - Boat / Kayak / Canoe Dock
        - Kayak Share
    - Pet Services
        - Dog Park, Dog Run
        - Dog Washing Station
        - Grooming Station
        - Dog Water Fountain
        - Dog Walking Service
        - Pet Overnight Service
        - "Yappy Hour" Pet Play Sessions
    - Shop Space / Makerspace
        - Art Supplies, Sewing, Other Crafting
    - Art
        - Art Gallery
        - Curated Art Collection
    - Music
        - Soundproof Practice Rooms with Plug-in Amps
        - Music Room with Common Equipment
        - Listening Lounge with Playable Instruments
        - Karaoke Room
    - Sponsored Events / Building Community / Active Programming
        - Food Trucks
        - Pop-up Events by Neighborhood Restaurants and Stores
        - Live Music
        - Comedy Nights
        - Fashion Shows
        - Skating Rinks
        - Fitness Classes
        - Education Programs

7.2 Amenity Comparison for Select Luxury Condominium Buildings (Boston)

CONDOMINIUMS	Hotel Amenities	Concierge	Valet Parking	Brand Name Fitness Center	Regular Fitness Center	Club Room / Lounge	Pool	Roof Deck / Terrace	Business Center	Spa	Garden/ Courtyard	Kids Room	Library	Screening Room	Game Room	Dry Cleaning /Laundry	Wine Bar / Storage	Cappuccino Bar	Private Shuttle Service	Pets OK	Storage
St. Regis Residences (2021)	X	X	X		X		X	X	X	X			X			X	X			X	
One Dalton (2020)	X	X	X		X	X	X		X	X		X	X	X	X	X				X	X
The Quinn (2020)		X			X	X	X	X	X				X		X	X				X	
EchelonSeaport (2020)		X	X		X	X	X	X	X	X	X	X	X			X	X			X	
Pier 4 (2019)		X	X		X	X		X								X				X	
Pierce Boston (2018)		X	X		X	X	X	X					X		X	X				X	X
Siena at Ink Block (2018)		X			X	X	X	X												X	
50 Liberty (2017)		X	X		X	X		X	X		X					X				X	
Millennium Tower (2016)		X	X		X	X	X	X		X	X	X		X	X	X	X			X	
22 Liberty (2015)		X			X	X		X	X		X					X		X	X	X	
Sepia at Ink Block (2015)		X			X	X	X	X										X		X	X
Millennium Place (2013)		X	X	X		X						X		X		X	X			X	
W Residences (2009)	X	X	X	X		X				X						X				X	X
45 Province (2009)		X	X	X		X	X	X		X			X	X		X		X		X	X
The Clarendon (2009)		X	X	X		X		X	X			X	X			X				X	X
The Intercontinental (2006)	X	X	X		X		X									X				X	X
Mandarin Oriental (2008)	X	X	X		X				X	X						X				X	X
One Charles (2004)		X	X		X	X			X							X				X	X
Ritz Carlton (Avery) (2001)	X	X	X	X			X			X						X				X	X
Four Seasons (1985)	X	X	X		X		X									X				X	X

7.3 Images of Select Luxury Apartment and Condominium Building Amenities in Boston

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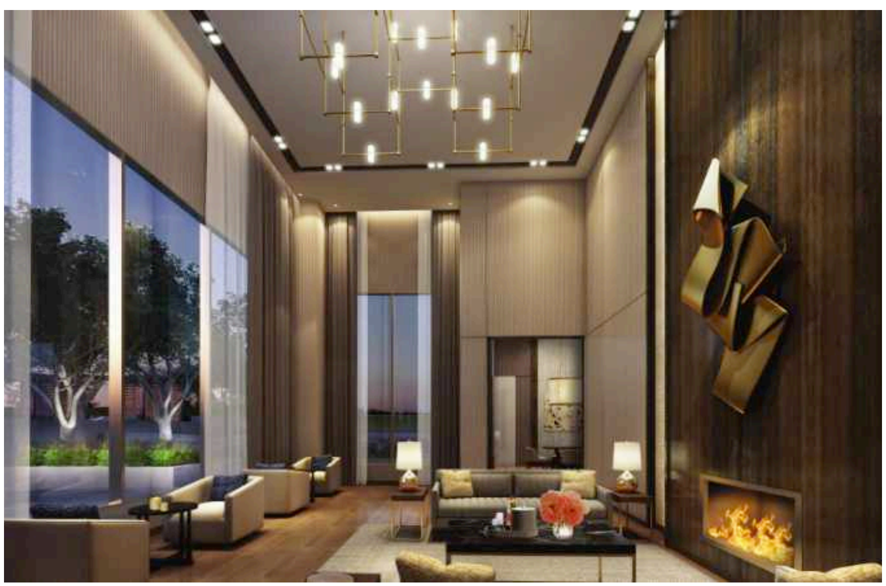
Amenities: Club Rooms & Lounges

One Dalton - Club 50 Private Residents' Club Lounge

7Ink - Common Space



EchelonSeaport - Fireplace Lounge and Library Lounge

Amenities: Club Rooms & Lounges

The Quinn - Sports Lounge

St. Regis Residences - Lounge

Millennium Place - Ground Level Lounge

One Charles - Club Room

Amenities: Club Rooms & Lounges

Twenty Two Liberty - Club Room

Siena Boston - Club Room Lounge

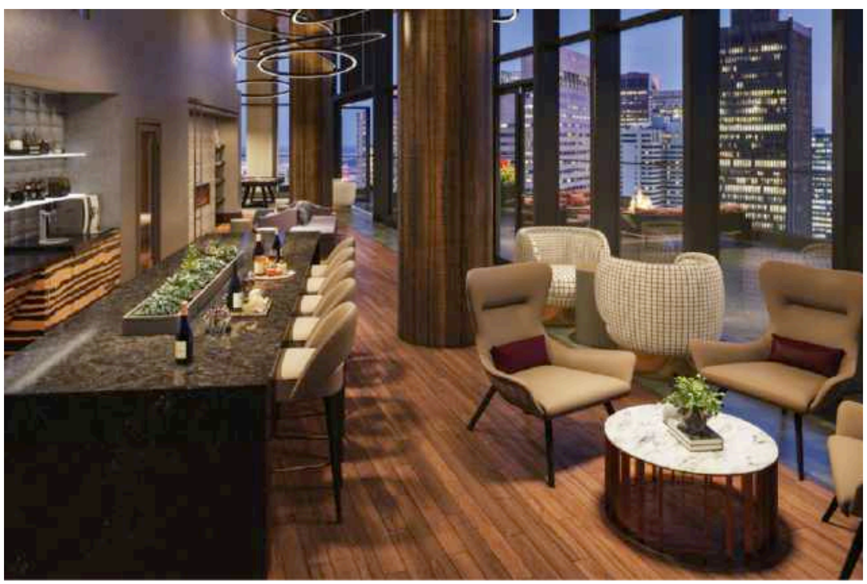
Millennium Tower - Double-height Resident Lounge

Pierce Boston - Levity Lounge

Amenities: Club Rooms & Lounges

Watermark Seaport - Lounge Area

Watermark Seaport -Lounge Area



The Sudbury - The Lounge

Via Seaport - Vibe Lounge

Amenities: Kitchens & Private Dining

The Sudbury - Chef's Kitchen & Private Dining Room

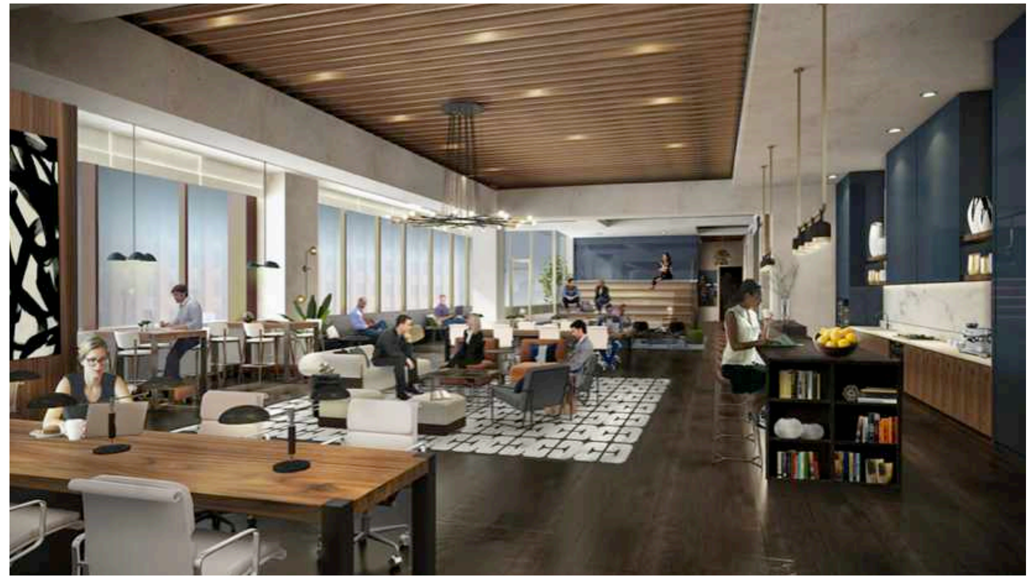
Millennium Tower - Function Room

One Dalton - Club 50 Private Dining

100 Shawmut - Resident's Private Dining Room

Amenities: Business Centers & Co-Working

345 Harrison - Board Room



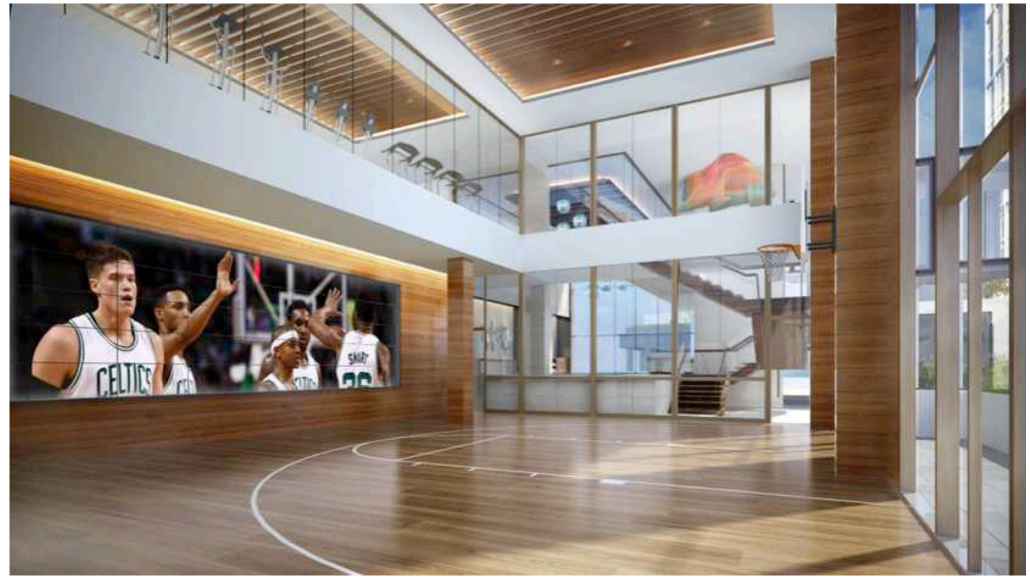
EchelonSeaport- Innovation Center

The Viridian - Lounge & Work Lab

NEMA - Creators Suite

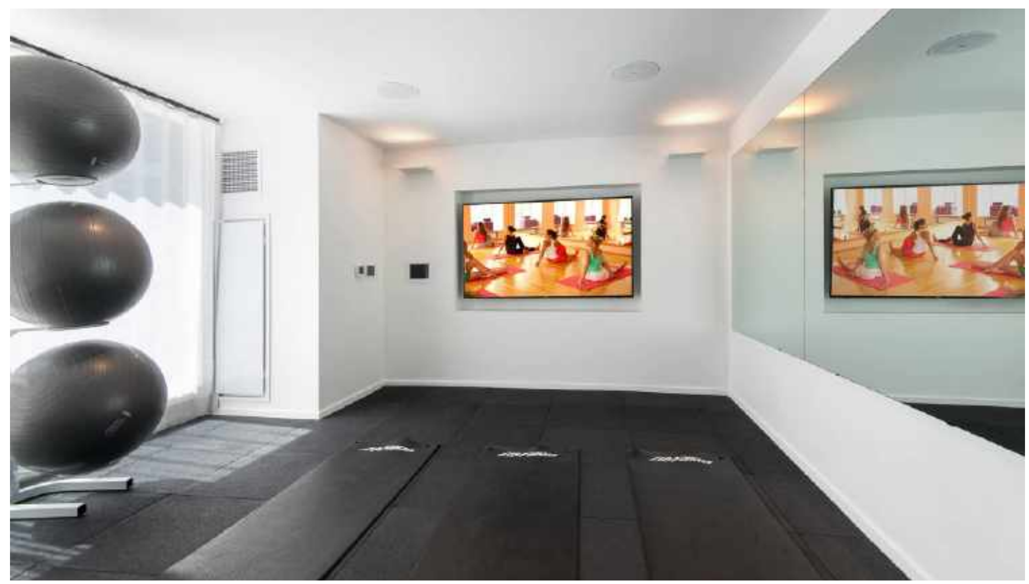
Amenities: Fitness

Millennium Tower - FLX Fitness Center (Level 9)
10,000 SF with Pilates & Group Fitness Studios



EchelonSeaport- Hi-Def Basketball Court

Pierce Boston- Fitness Center (Level 18) & Yoga Studio



345 Harrison - Yoga Room

Amenities: Fitness

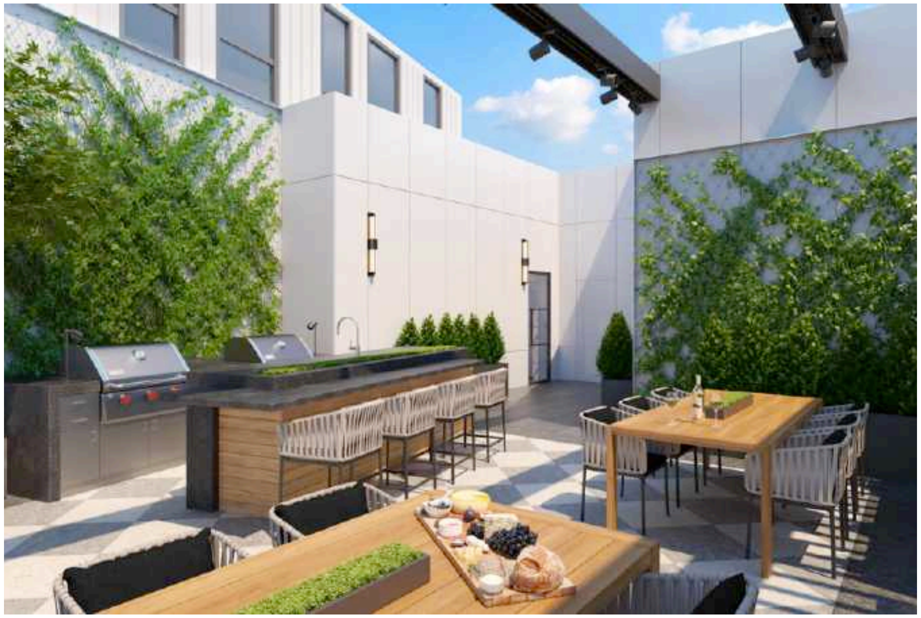
The Quinn - Squash Court

TheSudbury- Fitness Center

Watermark Seaport - Yoga Studio

Watermark Seaport - Fitness Center

Amenities: Roof Decks & Terraces



The Sudbury - 48th Floor Rooftop Garden

The Sudbury - 32nd Floor Sky Deck

Hub50House - Outdoor Fireplace Lounge

Amenities: Roof Decks & Terraces

Watermark Seaport - Skydeck

The Clarendon - 6th Floor Terrace

45 Province - 33rd Floor Roof Deck

EchelonSeaport - Outdoor Fireplace Lounge

Amenities: Roof Decks & Terraces

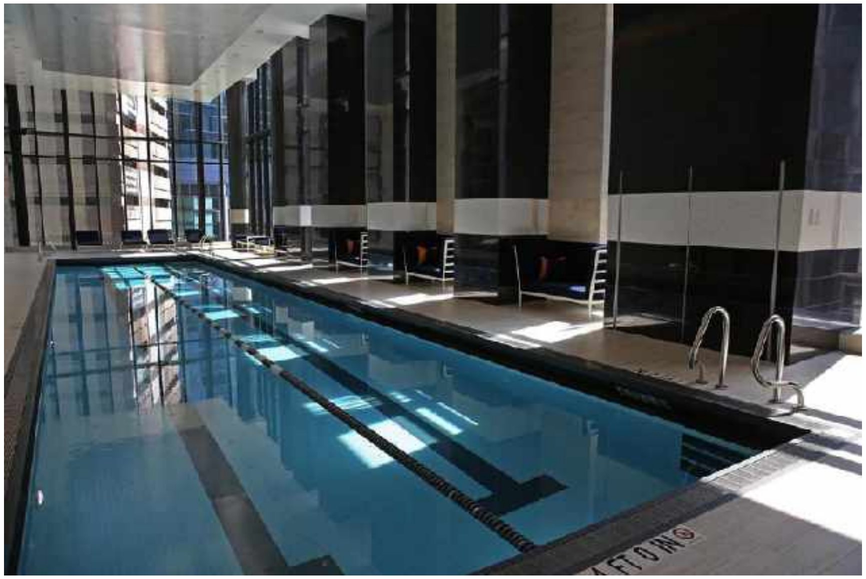
Via Seaport - Air Social Terrace

Lovejoy Wharf - Outdoor Terrace

100 Shawmut - Courtyard

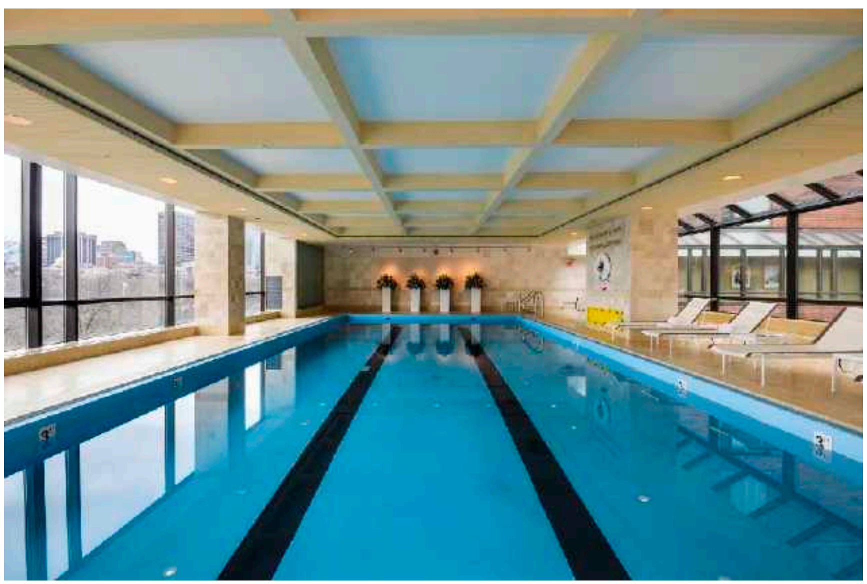
Hub50House - Outdoor Skyline Deck

Amenities: Pools

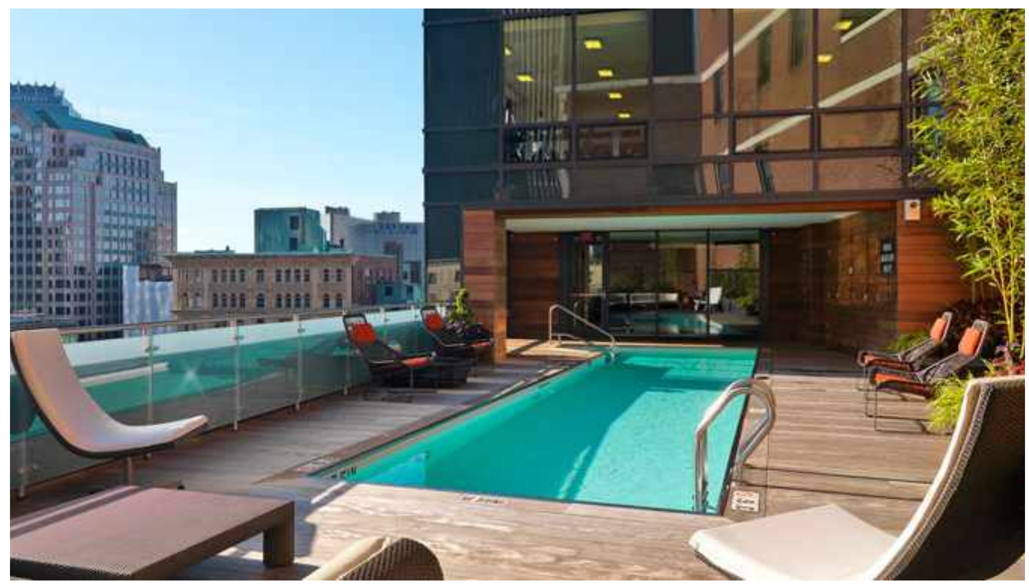


Millennium Tower- Indoor 75 foot lap pool

One Dalton- Indoor 65 foot/20 meter lap pool



Four Seasons (Boylston St.) - Indoor 44 foot pool

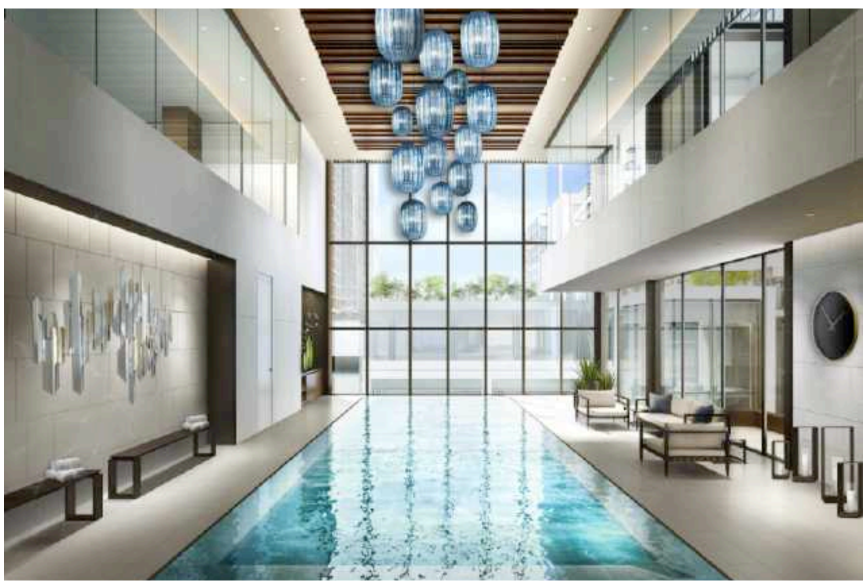


45 Province - 11th floor heated pool

Amenities: Pools

EchelonSeaport- The Waterfall Terrace Pool

EchelonSeaport- The Grand Pool



EchelonSeaport- The Relaxation Pool

The Benjamin - 4th floor Pool Terrace

Amenities: Pools

345 Harrison - Roof Deck Pool

The Quinn - Lap Pool with Sauna and Waterfall

St. Regis Residences - Pool and Terrace

Pierce Boston - Rooftop Pool

Amenities: Playrooms

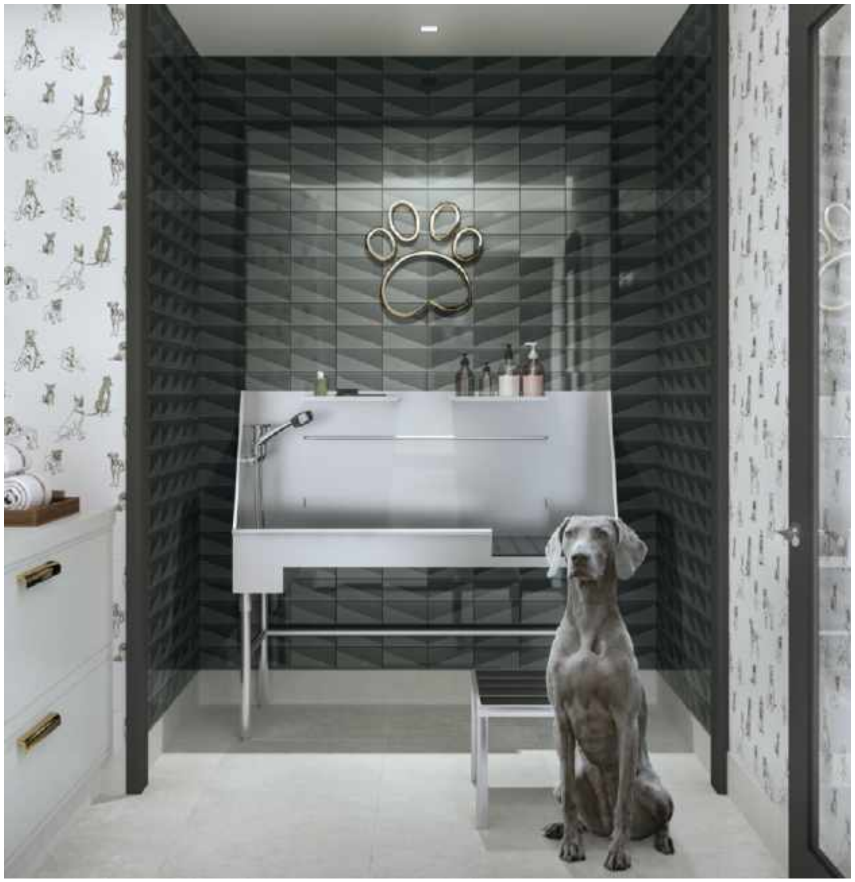
The Clarendon - 6th Floor Children's Playroom

Millennium Tower - Children's Playroom

100 Shawmut - Children's Playroom

Pierce Boston - Arcade

Amenities: Pet Services



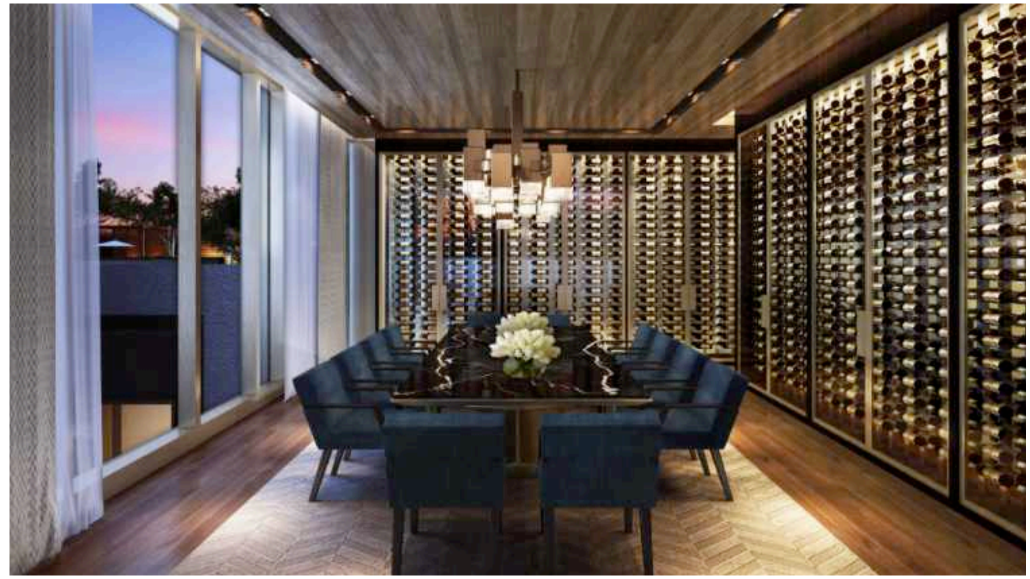
100 Shawmut - Pet Spa

345 Harrison - Paws Pet Park

Hub50House - Woof deck and Pet Spa

Amenities: Miscellaneous

Mandarin Oriental, Boston - 5-Star Spa

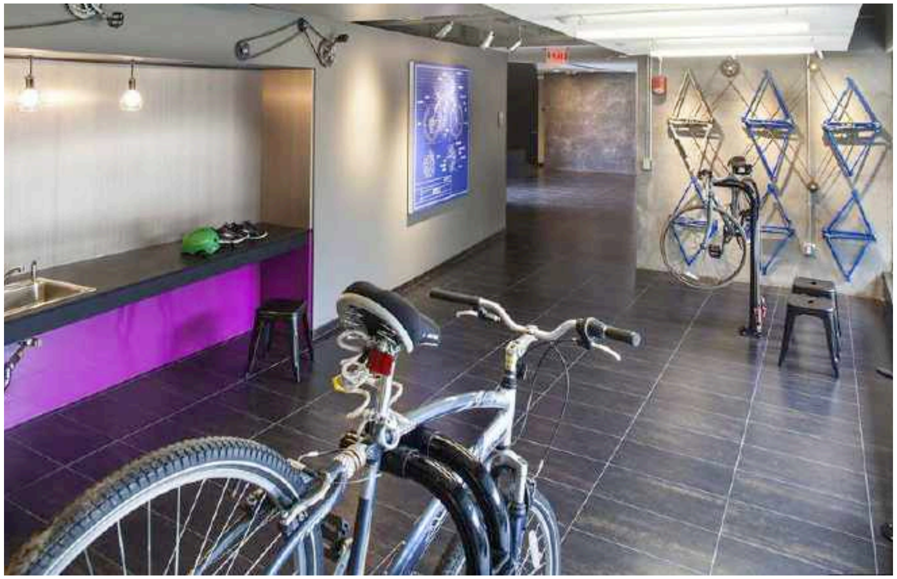


EchelonSeaport - Tasting Room

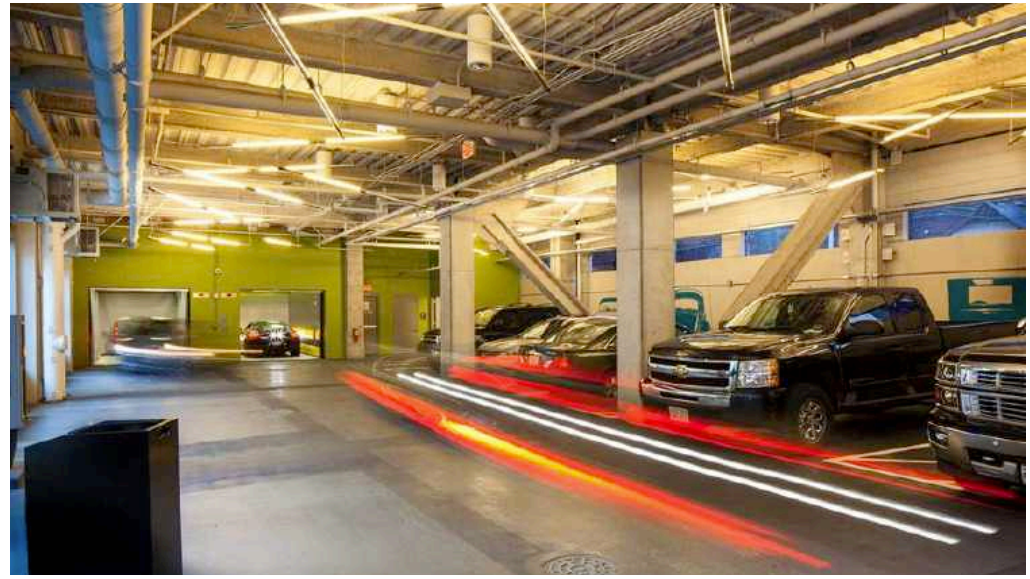
Millennium Tower- Screening Room

Watermark Seaport - Mail Center

Amenities: Miscellaneous



AVA Back Bay - Bike Room



AVA Theater District - Garage Parking & Car Elevators

One Dalton- Golf Simulator

Avalon North Station - Electric Vehicle Charging