Commercial Real Estate Research Advisory Board Meeting November 11, 2021 | 1:00-3:00 PM PT

Analysis and Case Studies on Office-to-Housing Conversions

Gay Cororaton Senior Economist Director of Housing and Commercial Research Brandon Hardin Research Economist

Nov. 12-15, 2021 San Diego





2021 REALTORS[®] Conference & Expo

(f) (O) @NARannual

2021 Analysis and Case Studies on Office-to-Housing Conversions

National Association of REALTORS® Research Group November 2021



Part 1 of Study: Analysis of the potential of office-tohousing conversions in 27 markets with the largest decline in office occupancy since 2020 Q2

Part II. 8 Case studies analyzing market conditions and factors that made office-to-housing conversions successful

- Octave 1320 (Silver Spring, Maryland)
- Legacy West End (Washington, DC)
- Cordell Place (Bethesda, Maryland)
- 70 Pine (New York, New York)
- 20 Broad (New York, New York)
- 100 Van Ness (San Francisco, California)
- Millennium on LaSalle (Chicago, Illinois)
- 180 Water (New York, New York)



2021 Analysis and Case Studies on Office-to-Housing Conversions

National Association of REALTORS® Research Group November 2021



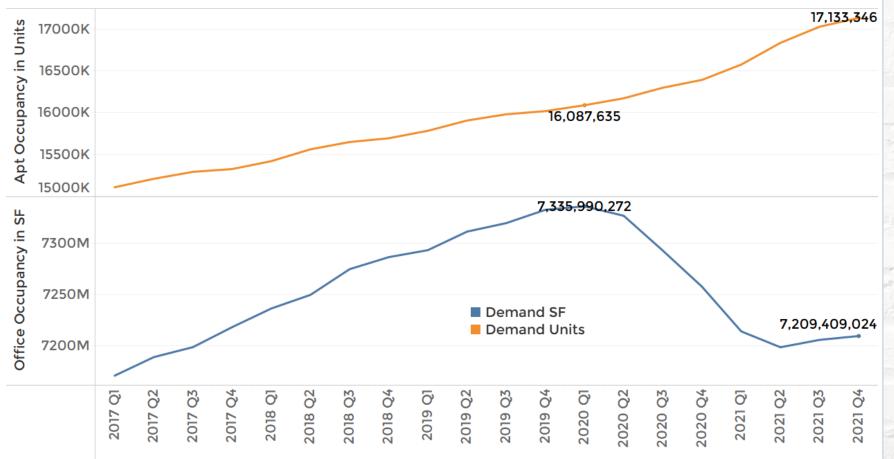
Analysis of Office-to-Housing Conversions





Soaring apartment demand as office occupancy falls

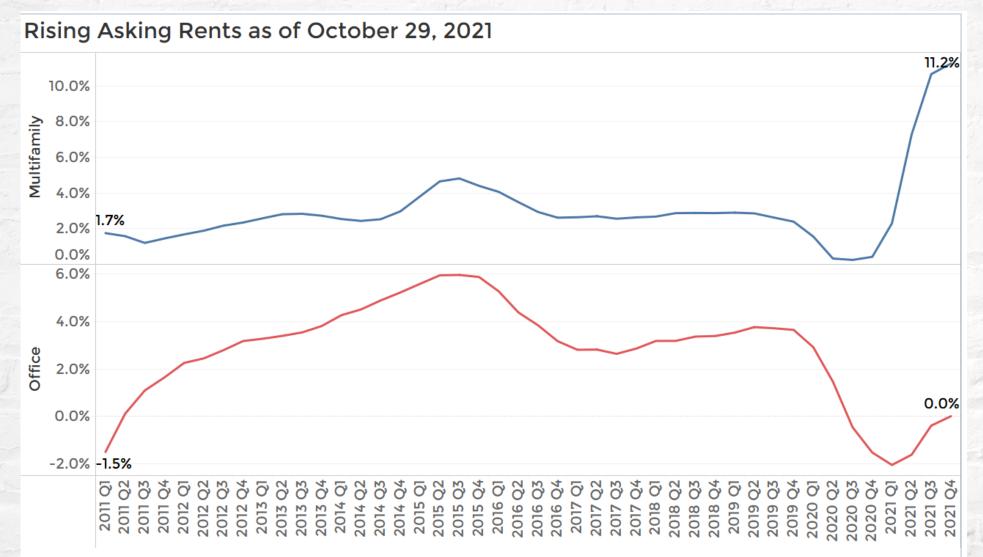
Occupancy as of October 30, 2021





Source of data: NAR analysis of CoStar data on 390 markets/submarkets

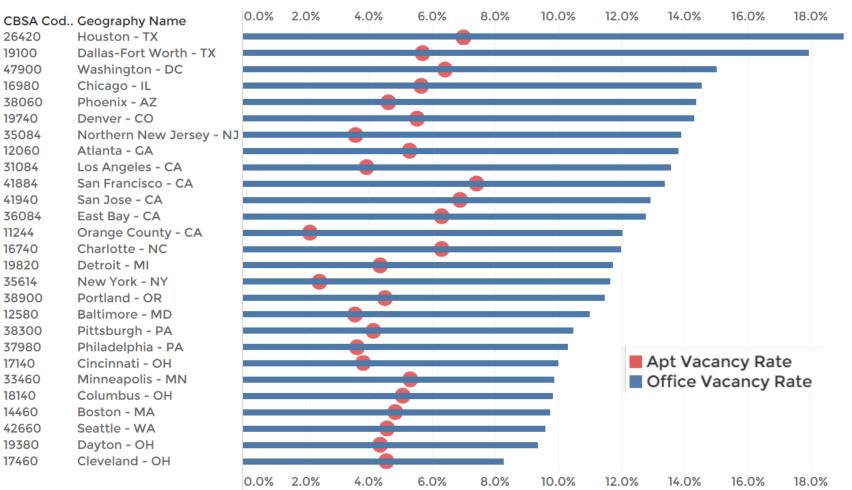
Strong apartment rent growth vs. office



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Source of data: NAR analysis of CoStar data

High office vacancy rates vs. apartment vacancy rates



Comparative Apartment and Office Vacancy Rates



Source: CoStar data

Potential office-to-housing conversion: Class B

35614 New York - NY 58% 32% 10% 41884 San Francisco - CA 47% 44% 9% 8% 36084 East Bay - CA 38% 53% 41940 San Jose - CA 37% 8% 55% 31084 Los Angeles - CA 55% 37% 8% 14460 Boston - MA 50% 44% 6% 11244 Orange County - CA 48% 47% 5% Seattle - WA 4% 42660 49% 46% Chicago - IL 16980 52% 40% 8% 47900 Washington - DC 60% 2% 37% 35084 Northern New Jersey - NJ 6% 70% 24% Portland - OR 41% 38900 44% 15% 37980 Philadelphia - PA 49% 41% 10% 3% 19740 Denver - CO 51% 45% 6% 12580 Baltimore - MD 46% 48% Minneapolis - MN 33460 35% 54% 11% Atlanta - GA 5% 12060 62% 33% 38060 Phoenix - AZ 40% 55% 5% 17460 Cleveland - OH 27% 59% 14% Pittsburgh - PA 51% 41% 38300 8% 5% 19100 Dallas-Fort Worth - TX 55% 40% 16740 Charlotte - NC 58% 36% 6% 26420 Houston - TX 54% 42% 4% 19820 Detroit - MI 26% 59% 15% 17140 Cincinnati - OH 41% 45% 14% 14% 18140 Columbus - OH 43% 43% 0% 20% 40% 60% 80% 0% 20% 40% 60% 5% 10% 15% 20% 25% 30% ClassA ClassB ClassC

Percent Distribution of Vacant Office Space



Source: NAR using CoStar® market data

Little potential to convert vacant Office Class A to Apt Class A because of high office rent premium

Comparative Apartment Class A and Office Class A Rent

35614 New York - NY 41884 San Francisco - CA East Bay - CA 36084 41940 San Jose - CA 31084 Los Angeles - CA 14460 Boston - MA 11244 Orange County - CA Seattle - WA 42660 16980 Chicago - IL Washington - DC 47900 Northern New Jersey - NJ 35084 38900 Portland - OR 37980 Philadelphia - PA 19740 Denver - CO 12580 Baltimore - MD Apt Rent_ClassA 33460 Minneapolis - MN Office Rent Class A 12060 Atlanta - GA 38060 Phoenix - AZ 17460 Cleveland - OH Pittsburgh - PA 38300 19100 Dallas-Fort Worth - TX 16740 Charlotte - NC 26420 Houston - TX 19820 Detroit - MI 17140 Cincinnati - OH 18140 Columbus - OH 19380 Dayton - OH \$0 \$65 \$70 \$75



Source: NAR using CoStar® market data

Potential office-to-housing conversion in markets with higher Apt Class A rents vs. Office Class C/B rents

Comparative Apartment Class A and Office Class B Rent



\$0 \$5 \$10 \$15 \$20 \$25 \$30 \$35 \$40 \$45 \$50 \$55 \$60

Source: NAR using CoStar® market data

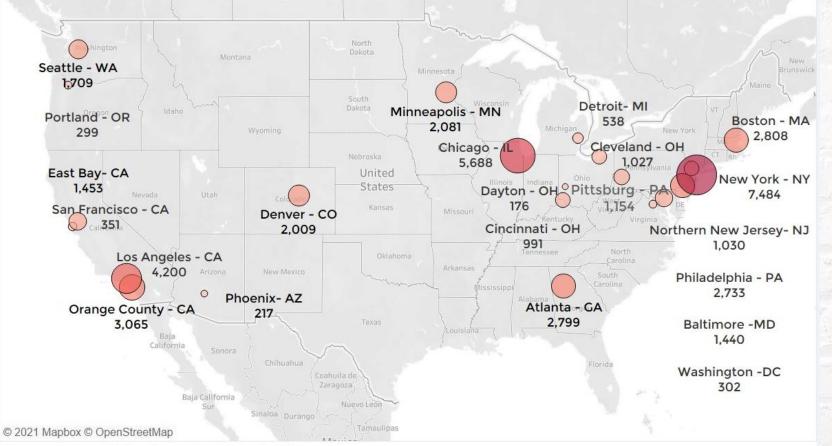


Comparative Apartment Class A and Office Class C Rent

Source: NAR using CoStar® market data

43,500 housing units if 20% of vacant space is converted 6% of 683,134 housing permits (12m Sept 2021)

Estimated Housing Units from Office-to-Housing Conversions in Metro Areas or Submarkets with the Largest Declines in Office Occupancy Since 2020 Q2



Source: NAR analysis using CoStar® market data. No metro area in Alaska and Hawaii are in the list of markets with the largest loss in office occupancy. R ASSOCIATION OF REALTORS®

Table 4. Estimated Housing Units from Office-to-Housing Conversions in Markets with the Largest Declines in Office Occupancy Since 2020 Q2

	CBSA Code	Geography Name	Housing Units if 25% Vacant Office Class A is Converted	Housing Units if 25% Vacant Class B is Converted	Housing Units if 25% Vacant Class C is Converted	Total Housing Units from Office Conversion	12-Month Housing Permits	Housing Units As % of Housing = Permits
	38300	Pittsburgh - PA	0	955	199	1,154	2,154	54%
	16980	Chicago - IL	0	4,725	964	5,688	17,726	32%
	17460	Cleveland - OH	0	836	191	1,027	3,440	30%
	12580	Baltimore - MD	0	1,270	170	1,440	7,659	19%
	14460	Boston - MA	0	2,460	348	2,808	17,054	16%
	35614	New York - NY	0	5,742	1,742	7,484	54,176	14%
	31084	Los Angeles - CA	0	3,479	721	4,200	31,552	13%
	37980	Philadelphia - PA	0	2,192	541	2,733	21,120	13%
	17140	Cincinnati - OH	0	755	236	991	8,204	12%
	36084	East Bay - CA	0	1,256	197	1,453	12,549	12%
	11244	Orange County - CA	1,480	1,442	144	3,065	31,552	10%
	3460	Minneapolis - MN	0	1,739	342	2,081	24,890	8%
	2060	Atlanta - GA	0	2,440	359	2,799	38,247	7%
	9740	Denver - CO	0	1,871	138	2,009	27,995	7%
	2660	Seattle - WA	0	1,558	150	1,709	26,725	6%
	9820	Detroit - MI	0	0	538	538	9,054	6%
	1884	San Francisco - CA	0	0	351	351	12,549	3%
	8900	Portland - OR	0	0	299	299	14,828	2%
	5084	Northern New Jersey - NJ	0	811	219	1,030	54,176	2%
in the	7900	Washington - DC	0	0	302	302	27,795	1%



2021 Analysis and Case Studies on Office-to-Housing Conversions

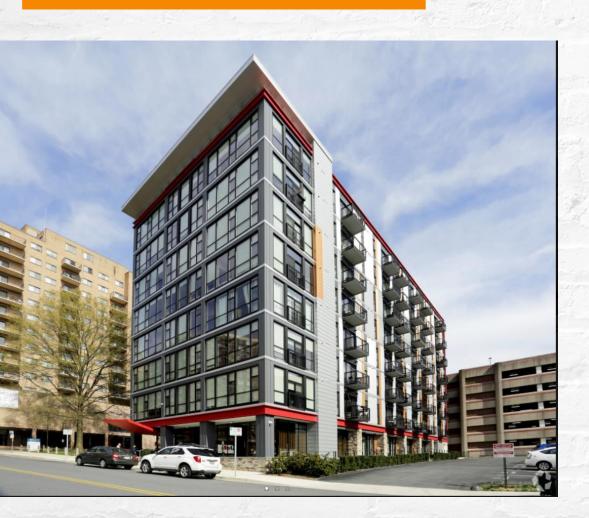
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NAR Research Group



Case Study 1. Octave 1320 Silver Spring Maryland Adaptive Re-use: Midrise Efficiency Condominiums



Project purpose: Repurposed from an office building built in 1964, Octave 1320 is an 8-story apartment condominium with efficiency units intended to attract first-time buyers looking for affordable and walkable properties. The building is an 8-minute walk from the Silver Spring transit stop and the Silver Spring Commuter Rail. In 2017, Octave 1320 earned the Excellence in Adaptive Reuse award from the prestigious Urban Land Institute Washington, a District Council of the Urban Land Institute (ULI).

- Efficient and aesthetic building and unit designs
- Proximity of building to commuter stations.
- Public-private financing
- Construction cost savings and faster build time



Case Study 1. Octave 1320 Silver Spring Maryland Adaptive Re-use: Midrise Efficiency Condominiums



Location: 1320 Fenwick Lane Silver Spring Maryland Year office building was built: 1963 Year conversion construction started: August 2014 Year conversion was completed: May 2016 Number of Units: 102 Gross building area: 81,600 sq. Ft. Typical Floor: 8,876 sq. ft. Bedroom size: 800 sq. ft. (2-bedroom) and 500 sq. ft. (1-bedroom) Sale price in market area : \$240,000/unit (as of October 2021) Financing: \$4.1 million investment from the Montgomery County

2013 Q3	2016 Q2	2021 Q3
12.8%	13.9%	15%
6.2%	6.6%	6.3%
\$35.40	\$36.82	\$38.64
-0.3%	2.5%	-1.3%
\$1,643	\$1,762	\$1,960
2.0%	2.3%	8.7%
6.0%	6.5%	6%
6.3%	5.6%	4.5%
\$90,132	\$94,293	\$108,706
22.0%	22.45	21.6%
	12.8% 6.2% \$35.40 -0.3% \$1,643 2.0% 6.0% 6.3% \$90,132	12.8% 13.9% 6.2% 6.6% \$35.40 \$36.82 -0.3% 2.5% \$1,643 \$1,762 2.0% 2.3% 6.0% 6.5% 6.3% 5.6% \$90,132 \$94,293



Case Study 2. Legacy West End Washington, DC Adaptive Reuse: Luxury Apartments



Project purpose: Legacy West End is a 9-story 198-unit luxury apartment building that was constructed from a concrete office building built in 1989 and that had functioned as a Cadillac dealership from 1935 to the late 1970s. It is about a 10-minute walk from Foggy Bottom and Dupont Circle in Washington. The building is targeted towards the high-end market, offering a range of high-end amenities such as a 24-hour state-of-theart fitness center, an elegant club lounge, a library and flexible space for hosting events, a spectacular rooftop deck with two-tiered pools, penthouses, and even a pet spa.

- Utilization of vacant adjacent lot for expansion
- Continued business operation of tenants during construction
- Aesthetic and functional use of space
- Private financing



Case Study 2. Legacy West End Washington, DC Adaptive Reuse: Luxury Apartments

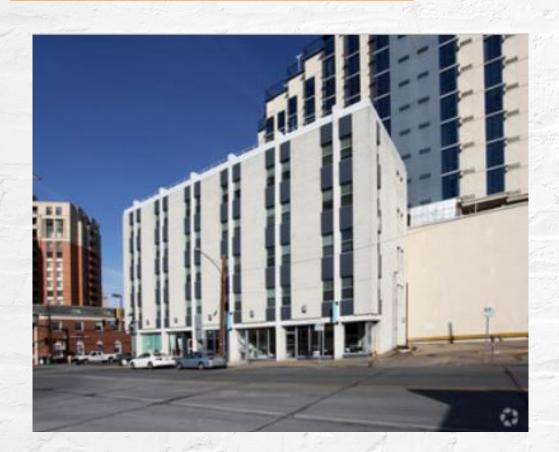


Location: 1255 22nd St. NW Dupont Circle, Washington DC Year office building was built: 1989 Year conversion construction started: August 2016 Year conversion was completed: March 2018 Number of Units: 198 (20 affordable units) Gross Building Area: 198,205 sq. ft., 9 stories Typical Floor: 19,799 sq. ft. Average Unit Size: 753 sq. ft. Rent Type: \$3,936 for 1-bedroom unit (as of October 2021) Financing: Privately funded; construction loan of \$20.6 million in 2017 and \$108.5 million in 2018

Washington DC metro area	2015 Q3	2018 Q1	2021 Q3
Office vacancy rate	13.9%	12.9%	15%
Apartment vacancy rate	6.7%	6.6%	6.4%
Office asking rent per sq. ft.	\$36.2	\$37.9	\$38.6
Office asking rent, y/y % change	2.0%	1.3%	-1.3%
Apartment asking rent	\$1,727	\$1,794	\$1,960
Apartment rent, y/y % change	3.3%	1.4%	8.7%
Office cap rate	6.9%	6.3%	6.0%
Apartment cap rate	5.5%	5%	4.5%
Median household income	\$92,819	\$100,341	\$108,706
Rent as a percent of income	22.4%	21.5%	27.5%
Source: CoStar®			



Case Study 3. Cordell Place Bethesda, Maryland Adaptive Reuse:Homeless Permanent Supportive Housing



Project purpose: Cordell Place is a homeless permanent supportive housing shelter building that was formerly an office building built in 1967. It is a project of the non-profit organization Montgomery County Coalition for the Homeless (MCCH) and its developer affiliate, Coalition Homes (CH). Cordell Place provides permanent supportive housing to formerly homeless individuals who can live independently but have need of on-site supportive services and have income below 40% of the area median income.

- Suitable structure for conversion into a residential building (narrow)
- Non-profit group receives financial support from Montgomery County

Case Study 3. Cordell Place Bethesda, Maryland Adaptive Reuse:Homeless Permanent Supportive Housing



Location: 4715 Cordell Avenue, Bethesda, Maryland, 20814 Year office building was built: 1967 Year Opened as a Homeless Shelter: 2010 Number of Units: 32 Rentable area: 17,500 sq. ft. Typical floor : 3,500 sq. ft. Number of Buildings: 1; 5 stories Financing: \$8 million loan from Montgomery County, Maryland

Washington DC metro area	2011 Q1	2021 Q3	
Office vacancy rate	12.3%	15%	
Apartment vacancy rate	6.0%	6.4%	
Office asking rent per sq. ft.	\$35.4	\$38.6	
Office asking rent, y/y % change	1.4%	-1.2%	
Apartment asking rent	\$1,564	\$1,961	
Apartment rent, y/y % change	4.7%	8.7%	
Office cap rate	6.8%	6.1%	
Apartment cap rate	6.4%	4.8%	
Median household income	\$84,933	\$114,914	
Rent as a percent of income	22%	27.5%	
Unemployment rate	6.2%	5.3%	
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Source: CoStar, US Bureau of Labor Statistics



Case Study 4. 70 Pine Manhattan, NYC Adaptive Reuse: Luxury rentals/mixed use



Project purpose: . One of three beautiful and iconic New York skyscrapers, the building and its first-floor interior were designated as official New York City landmarks in June 2011. The former Citgo/AIG building was repurposed as a 931,126 square feet mixed use apartment building with 96.2% of the square footage for multifamily use (896,126 sq. ft.) and 3.8% (35,000 sq. ft.) for retail use. It has 589 units with an average size of 899 square feet and average rent of \$5,571 per unit. The residential building offers high-end amenities such as a gourmet grocer and food hall (City Acres), several fine-dining restaurants, several lounges for hosting events and networking, golf simulators, a bowling alley, and a screening room in the historic bank vault. Some 132 units are run as hotel rooms.

- Big role of private capital/financing
- Commitment by local developers (Rose Associates, DTH Capital)



Case Study 4. 70 Pine Manhattan, NYC Adaptive Reuse: Luxury rentals/mixed use



Location: 70 Pine Street, New York, NY, 10270 (Lower Manhattan Financial District) Year office building was built: 1932 Year conversion construction started: June 2012 Year conversion was completed: October 2015 Number of Units: 589 Gross Building Area: 931,126 sq. ft., 66 stories Typical Floor: 28,325 sq. ft. Average Unit Size: 899 sq. ft. Average unit Size: 899 sq. ft. Average asking rent: \$5,751 /unit (as of October 2021) Financing: acquired for \$205 million in 2011; \$386 million refinancing loan in 2020 provided by Goldman Sachs

New York-Newark-Jersey City	2011 Q4	2015 Q4	2021 Q3
Office vacancy rate	8.8%	8.5%	11.6%
Apartment vacancy rate	3.5%	3.3%	2.4%
Office asking rent per sq. ft.	\$44.2	\$56.3	\$56.2
Office asking rent, y/y % change	5.7%	7.1%	-2.7%
Apartment asking rent	\$2,380	\$2,614	\$2,838
Apartment rent, y/y % change	1.1%	3.2%	4.2%
Office cap rate	6.5%	6.1%	6.7%
Apartment cap rate	6.5%	5.0%	6.0%
Median household income	\$57,982	\$62,452	\$76,777
Rent as a percent of income	49.3%	50.2%	44.4%
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Source: CoStar®



Case Study 5. 20 Broad New York, New York Adaptive Re-use: Luxury rentals/mixed-use



Project purpose: Located in Lower Manhattan, at the heart of the Financial District and on one of the most historic streets in New York City was a 27-story, former New York Stock Exchange building that has since been transformed from 4star Class A office space with 21,000 sq.ft. of retail space into high-rise luxury apartments called 20 Broad. 20 Broad has a gross building area of 473,000 square feet and 385 units where the average unit size for a studio unit is 500 square feet, 1-bedroom units is 600 square feet, 900 square feet for 2-bedrooms and 1,100 square feet for 3-bedrooms.

- Aesthetic building and unit designs
- Building location (1/2 block from intersection of Wall St. and Broad or the Times Square of the Financial District)
- Positive lender sentiment



Case Study 5. 20 Broad New York, New York Adaptive Re-use: Luxury rentals/mixed-use



Location: 20 Broad St, New York, NY 10005 Year office building was built: 1956 Year adaptive re-use construction started: September 2016 Number of Units: 385 Rent Type: Market Bedroom size: 1,100 sq. ft. (3-bedroom), 900 sq. ft. (2-bedroom), 600 sq. ft. (1bedroom), 500 sq. ft.(studio) Typical Floor: 18,150 sq. ft. Gross building area: 473,000 sq.ft. Number of Buildings: 1 Financing: Private (Debt: construction loan of \$90 million in 2016, mortgage loans of \$81 million (2016), \$16 million (2016), and \$125 million (2015); Equity: \$45 million (2015))

2015 Q3	2021 Q3
	LOLL GO
8.7%	10.7%
3.1%	2.4%
7.3%	-2.7%
3.5%	4.2%
5.4%	6.8%
5.2%	5.9%
\$62,188	\$76,777
\$2,608	\$2,838
	3.1% 7.3% 3.5% 5.4% 5.2% \$62,188

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Source: CoStar

Case Study 6. 100 Van Ness San Francisco, California Adaptive Reuse: Luxury rentals/mixed-use



Project purpose: Located in the Civic Center submarket as part of the San Francisco skyline with unobstructed views of the San Francisco Bay area, the 100 Van Ness luxury apartment building was converted from a 29story, Class B, 4-star office building with retail space built in 1974. The original building was designed by architect Albert F. Roller Associates and featured a precast concrete wall system. Prior to the office-toresidential conversion, the office building was owned by National Real Estate Advisors (NREA) and was home to longtime tenant and property manager, California State Automotive Association (also known as "AAA").

- Did not need a huge retrofit the building
- Increase in nearby commercial office space and demand for residential development
- Community buy-in



Case Study 6. 100 Van Ness San Francisco, California Adaptive Reuse: Luxury rentals/mixed-use



Location: 100 Van Ness Ave, San Francisco, CA, 94102 Year office building was built: 1974 Year adaptive reuse construction started: June 2013 Number of Units: 418 Rent Type: Market/Affordable Average Unit Size: 732 sq. ft. Typical Floor: 19,198 sq. ft. Gross Building Area: 373,334 sq. ft., 29 stories Number of Buildings: 1 Financing: Private (Debt: construction loan of \$15 million in 2018, mortgage loans of \$142 million in 2013 and \$5 million (2014))

San Francisco metro area	2012 Q3	2021 Q3
Office vacancy rate	8.3%	11.5%
Apartment vacancy rate	6.7%	6.4%
Office asking rent, y/y % change	15.9%	-4.7%
Apartment rent, y/y % change	3.3%	8.7%
Office cap rate	5.4%	4.6%
Apartment cap rate	5.2%	4.8%
Median household income	\$80,267	\$138,314
Apartment asking rent	\$2,476	\$2,928

Source: CoStar



Case Study 7. Millennium On LaSalle Chicago, Illinois Adaptive Reuse: Luxury Rentals



Project purpose. The Millennium On LaSalle is an adaptive reuse of an historic a 3-star office building that was once home to the Chicago Bar Association. Built in 1900 and located in the heart of the Loop's financial district, the new Millennium On LaSalle highrise apartment building has a rentable area of 156,973 square feet. situated near the Chicago Board of Trade, City Hall, banking headquarters, numerous law firms, CTA public transportation, Union Station, public parking and Ogilvie Transportation. The modern building offers studio, one-bedroom, and twobedroom residences that feature "smart" systems and several amenities.

- Modern amenities
- Location (heart of Chicago's financial district)
- Experienced multifamily developer



Case Study 7. Millennium On LaSalle Chicago, Illinois Adaptive Reuse: Luxury Rentals



Location: 29 S LaSalle, Chicago, II, 60603 Year office building was built: 1900 Year adaptive reuse construction started: June 2016 Number of Units: 216 Building Area: 195,432 sq. ft. Typical floor: 12,000 sq. ft. Number of Buildings: 1; 13 stories Bedroom size: 1,122 sq. ft. (2-bedroom), 812 sq. ft. (1-bedroom), 605 sq. ft.(studio) Financing: Private (\$51.6 million, variable rate, LIBOR-based structure containing a senior mortgage and mezzanine loan)

Chicago metro area	2020 Q2	2021 Q3
Office vacancy rate	12.4%	14.5%
Apartment vacancy rate	7.6%	5.7%
Office asking rent, y/y % change	1.6%	-0.4%
Apartment rent, y/y % change	-0.8%	7.9%
Office cap rate	9.4%	8.0%
Apartment cap rate	8.8%	7.6%
Median household income	\$74,453	\$78,111
Apartment asking rent	\$1,446	\$1,535

Source: CoStar



Case Study 8. 180 Water New York, New York Adaptive Re-use: Luxury rentals/mixed-use



Project purpose. Originally built in 1971 and located in Lower Manhattan with views of the Brooklyn Bridge and the New York City skyline on 180 Water Street was a 24-story, 534,675 square foot 4-star office building with 21,000 sq.ft. of retail space. The property is located near Tribeca, World Trade Center. As a result of new office space in the vicinity e.g., World Trade Center complex and renovated Brookfield Properties office space, office vacancy rates increased, while simultaneously, residential demand was increasing in the surrounding area. The office building was converted into a 573-unit building, of which 203 are 1-bedroom units that rent out for \$4,540 (724 sq.ft.)

- Big role of private capital (Bank of America, Brookfield Asset)
- Commitment and experience of local developer



Case Study 8. 180 Water New York, New York Adaptive Re-use: Luxury rentals/mixed-use



Location: 180 Water Street, New York, NY 10038 Year office building was built: 1971 Year adaptive re-use construction started: January 2016 Number of Units: 573 Rent Type: Market Bedroom size: 1,258 sq. ft. (3-bedroom), 886 sq. ft. (2-bedroom), 724 sq. ft. (1bedroom), 561 sq. ft.(studio) Typical Floor: 13,713 sq. ft. Gross building area: 498,671 sq.ft. Number of Buildings: 1; 32 stories Financing: Private (Debt: \$151 million acquisition, \$240 million construction/mortgage loan, \$450 million mortgage loan)

New York – NY metro area	2015 Q1	2021 Q3		
Office vacancy rate	7.6%	10.7%		
Apartment vacancy rate	3.0%	2.4%		
Office asking rent, y/y % change	7.5%	-2.7%		
Apartment rent, y/y % change	3.1%	4.2%		
Office cap rate	5.9%	6.8%		
Apartment cap rate	5.5%	5.9%		
Median household income	\$61,504	\$76,777		
Apartment asking rent	\$2,558	\$2,838		
CoStar				



Source: CoStar





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Commercial Real Estate Research Advisory Board November 11, 2021 | 1:00-3:00 PM PT

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