

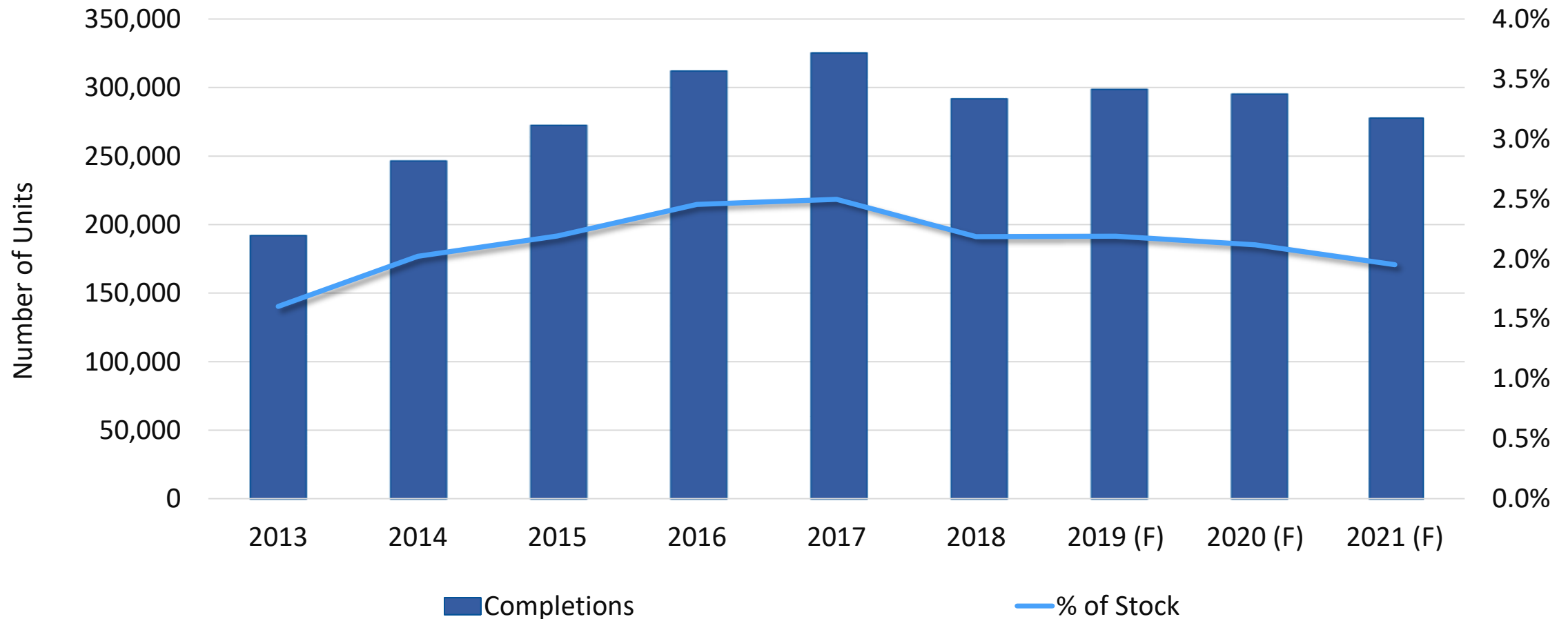


NMHC Annual Meeting
Crosswind Factors: Developers Face Shifting Market Conditions

Jeff Adler
Vice President, Yardi Matrix

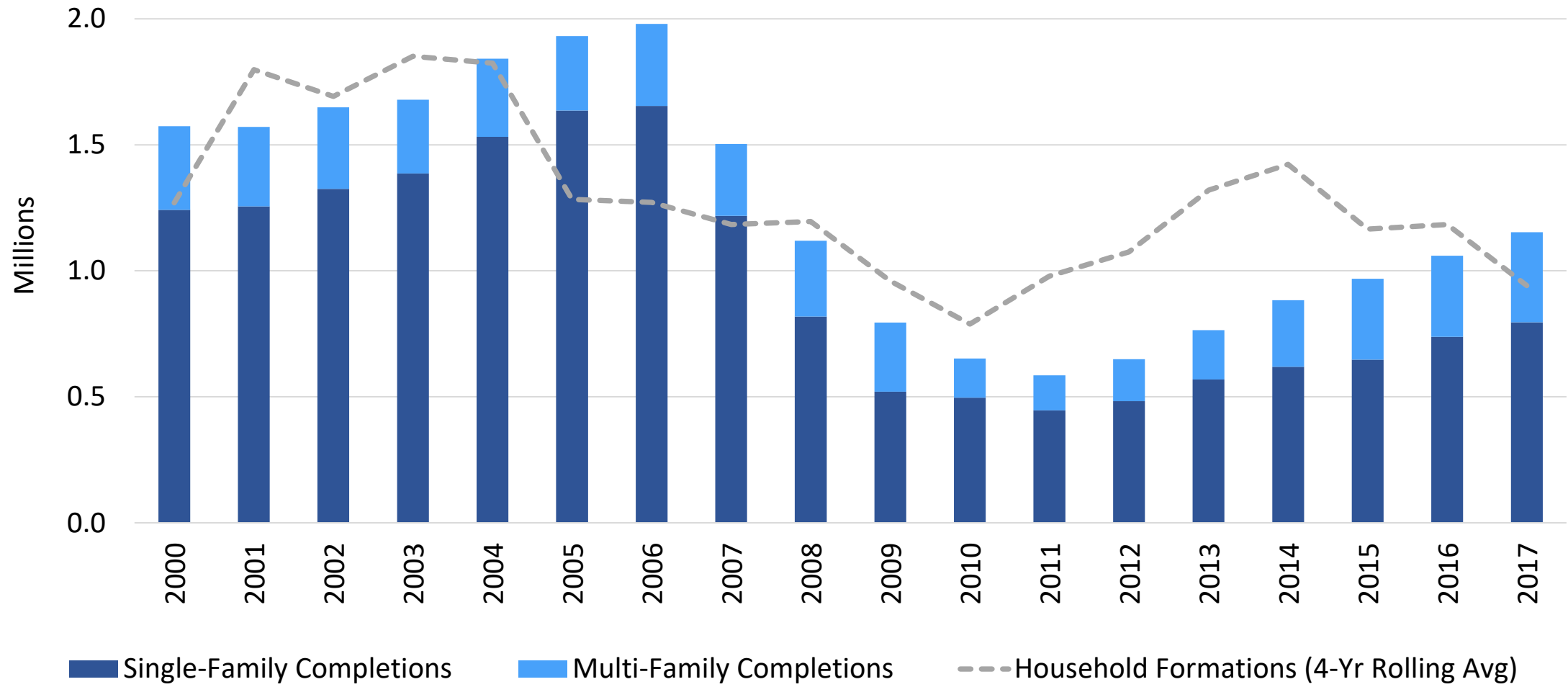
January 29, 2019

Demand is Not a Problem, so Attention Turns to Supply- Multifamily Supply Has Leveled Out; Construction Delays and Financing are a Factor



Multifamily Construction Catching Up to HH Formation

Housing Completions vs. Household Formations



Secondary Tech Cities – Most Active Supply Pipelines

Market	Units Under Construction	UC as a % of Stock	Planned Units	Market	Units Under Construction	UC as a % of Stock	Planned Units
North Dallas	24,872	7.3%	19,198	San Francisco	8,424	7.1%	7,636
Seattle	24,443	10.2%	23,528	Fort Worth	8,386	4.3%	7,234
Denver	23,598	9.1%	11,074	Raleigh - Durham	8,060	5.4%	6,287
Austin	17,975	7.9%	21,051	Salt Lake City	7,758	8.0%	8,639
Los Angeles Metro	17,634	10.1%	20,238	San Antonio	7,360	3.8%	13,437
Boston	17,573	8.0%	26,274	Charleston	6,866	11.5%	8,550
Phoenix	15,763	5.2%	17,607	Tampa	5,476	2.6%	7,852
Charlotte	13,296	7.9%	14,544	Jacksonville	5,101	5.2%	4,542
East Bay Area	12,136	9.2%	7,674	Orange County	4,536	2.2%	4,855
South Bay Area	11,419	9.3%	15,202	Winston-Salem	3,738	4.5%	3,525
Orlando	10,875	5.2%	18,241	East Houston	3,448	1.8%	3,124
West Houston	10,731	2.4%	10,628	Las Vegas	2,990	1.7%	4,224
San Diego	9,514	5.2%	2,583	Sacramento	2,725	2.1%	6,395
Nashville	9,260	7.1%	11,218	Eastern LA County	2,716	2.8%	5,358
Suburban Dallas	9,205	4.8%	5,093	West Palm Beach	2,030	3.1%	7,154
Portland	8,642	5.8%	11,314	Albuquerque	312	0.6%	1,014

*As of January 2019
Source: Yardi®Matrix

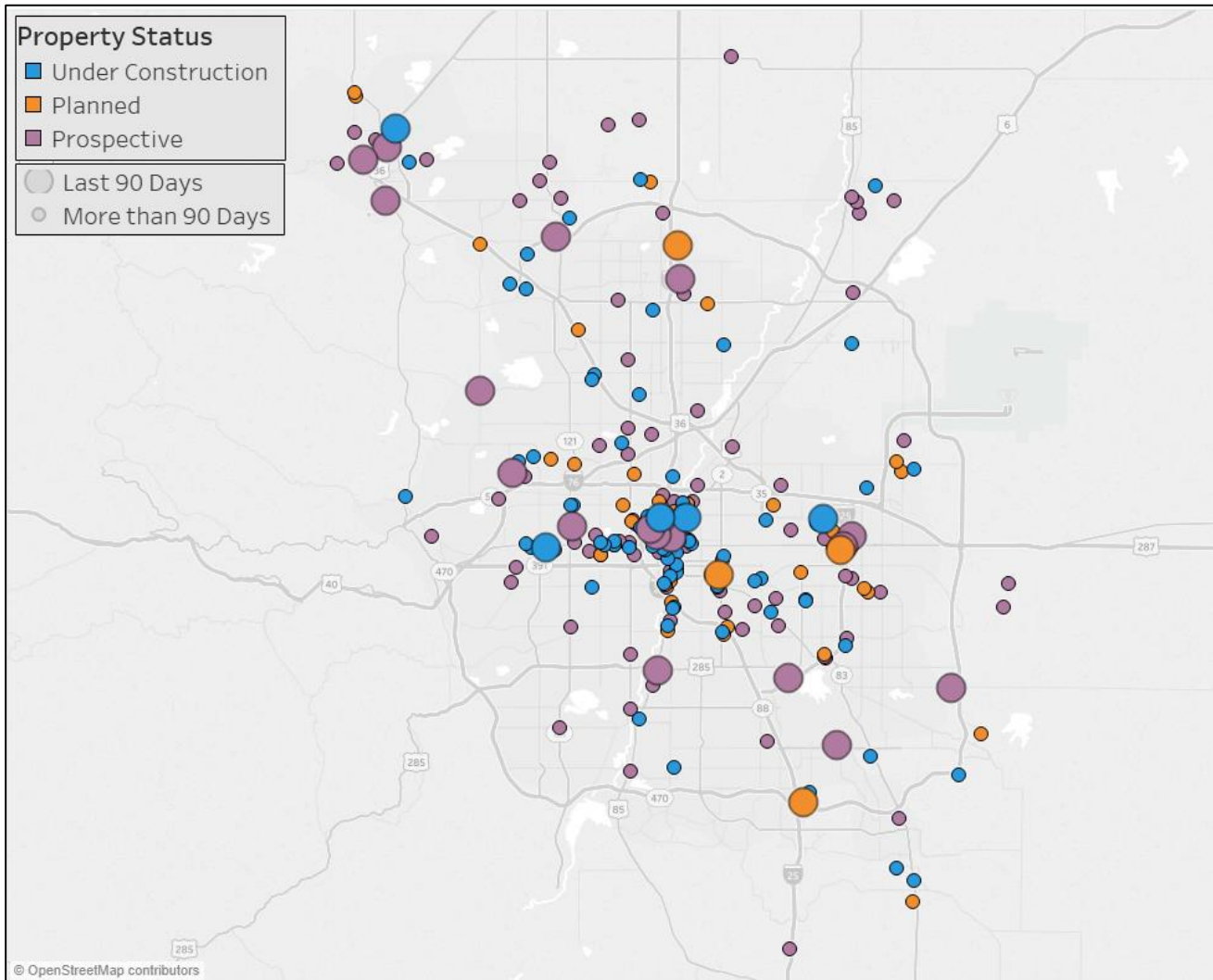
Tech Hub Markets at Risk of Multifamily Oversupply in the Next Two Years (Margin of Error +/- 1.0%)

Market	Current Inventory (000's units)	2-Year Supply Growth	2-Year Demand Growth	Net %	Excess Units
Denver	252	9.7%	4.5%	(5.2%)	13,692
Seattle	231	9.0%	4.4%	(4.6%)	11,192
Charlotte	163	7.0%	2.7%	(4.3%)	7,190
Dallas	709	5.4%	2.2%	(3.3%)	23,953
Phoenix	295	4.5%	1.9%	(2.6%)	7,876
Miami	275	8.3%	5.7%	(2.5%)	7,756
Kansas City	149	4.3%	2.3%	(2.1%)	3,286
Atlanta	424	3.6%	1.6%	(2.0%)	8,736
Pittsburgh	89	2.5%	0.8%	(1.7%)	1,531
Boston	214	6.1%	4.5%	(1.6%)	3,805
Portland	147	4.8%	3.4%	(1.4%)	2,306
Washington DC	510	4.5%	3.3%	(1.1%)	6,727
Twin Cities	199	3.3%	2.3%	(1.0%)	2,095
Orlando	204	4.2%	3.3%	(1.0%)	2,253
San Antonio	189	3.1%	2.3%	(0.8%)	1,816

Market	Current Inventory (000's units)	2-Year Supply Growth	2-Year Demand Growth	Net %	Excess Units
St Louis	120	2.5%	1.8%	(0.7%)	978
Baltimore	217	1.9%	1.4%	(0.4%)	1,114
Philadelphia	288	2.3%	2.0%	(0.3%)	1,006
Tampa	206	3.2%	3.4%	0.2%	10
Cincinnati	108	1.6%	1.9%	0.2%	(157)
San Francisco	248	5.7%	6.1%	0.4%	(274)
Detroit	208	0.9%	1.3%	0.4%	(752)
Las Vegas	169	1.8%	2.3%	0.5%	(661)
Chicago	333	3.9%	4.6%	0.7%	(1,328)
San Diego	181	3.2%	4.2%	1.0%	(1,516)
New York	1,000	4.3%	5.4%	1.1%	(10,384)
Sacramento	128	1.3%	2.6%	1.3%	(1,486)
Houston	629	1.0%	2.6%	1.6%	(8,974)
Inland Empire	150	1.5%	3.8%	2.3%	(3,281)
Los Angeles	410	5.7%	9.2%	3.5%	(13,047)

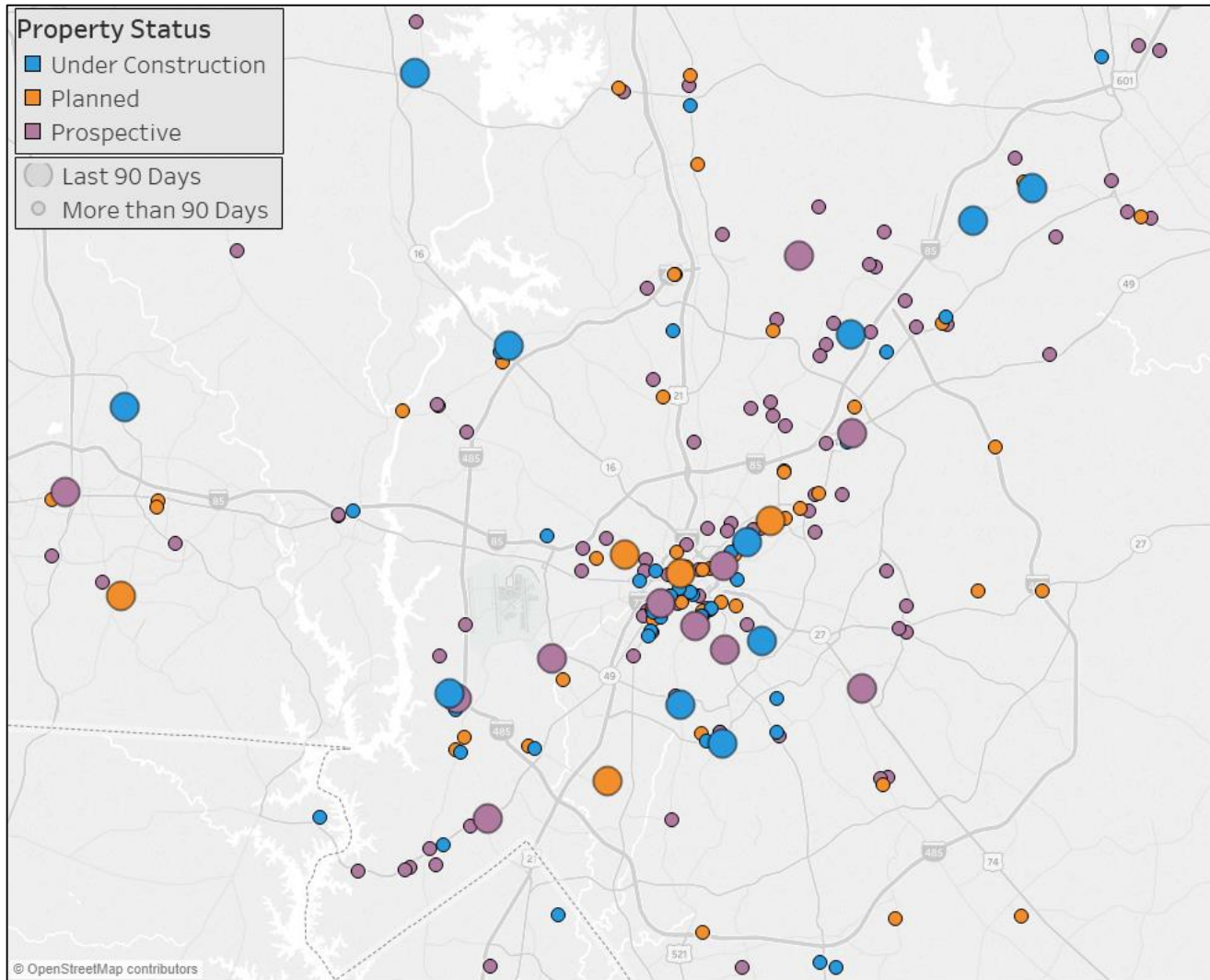
*As of May 2018. Demand is a function of renter households growth and apartments as a % of the rental market
 Source: Moody's Analytics; U.S. Bureau of Labor Statistics (BLS); Yardi® Matrix

Denver Has a Lot of Multifamily Units in the Pipeline, but Opportunities Exist Outside of the Urban Core



Top 20 Submarkets: Under Construction, Planned, Prospective	Units	% of Total
CBD/Five Points/North Capitol Hill	23,240	30.8%
Champion	3,252	4.3%
Hampden/Virginia Village/Washington Virginia Vale	2,715	3.6%
Fort Collins-North	2,633	3.5%
Douglas County-North	2,594	3.4%
Greater Boulder	2,431	3.2%
Aurora-Westcentral	2,412	3.2%
East Colfax/Lowry Field/Stapleton	2,225	3.0%
Arvada	2,073	2.8%
Capitol Hill/Cheesman Park/Hale	1,999	2.7%
Broomfield/Todd Creek	1,804	2.4%
College View/Ruby Hill	1,716	2.3%
Berkley/North Washington	1,660	2.2%
Northglenn/Thornton	1,561	2.1%
Aurora-Northwest	1,537	2.0%
Boulder	1,530	2.0%
Arapahoe-East	1,530	2.0%
City Park/City Park West	1,515	2.0%
Longmont	1,515	2.0%
Douglas County-South	1,455	1.9%

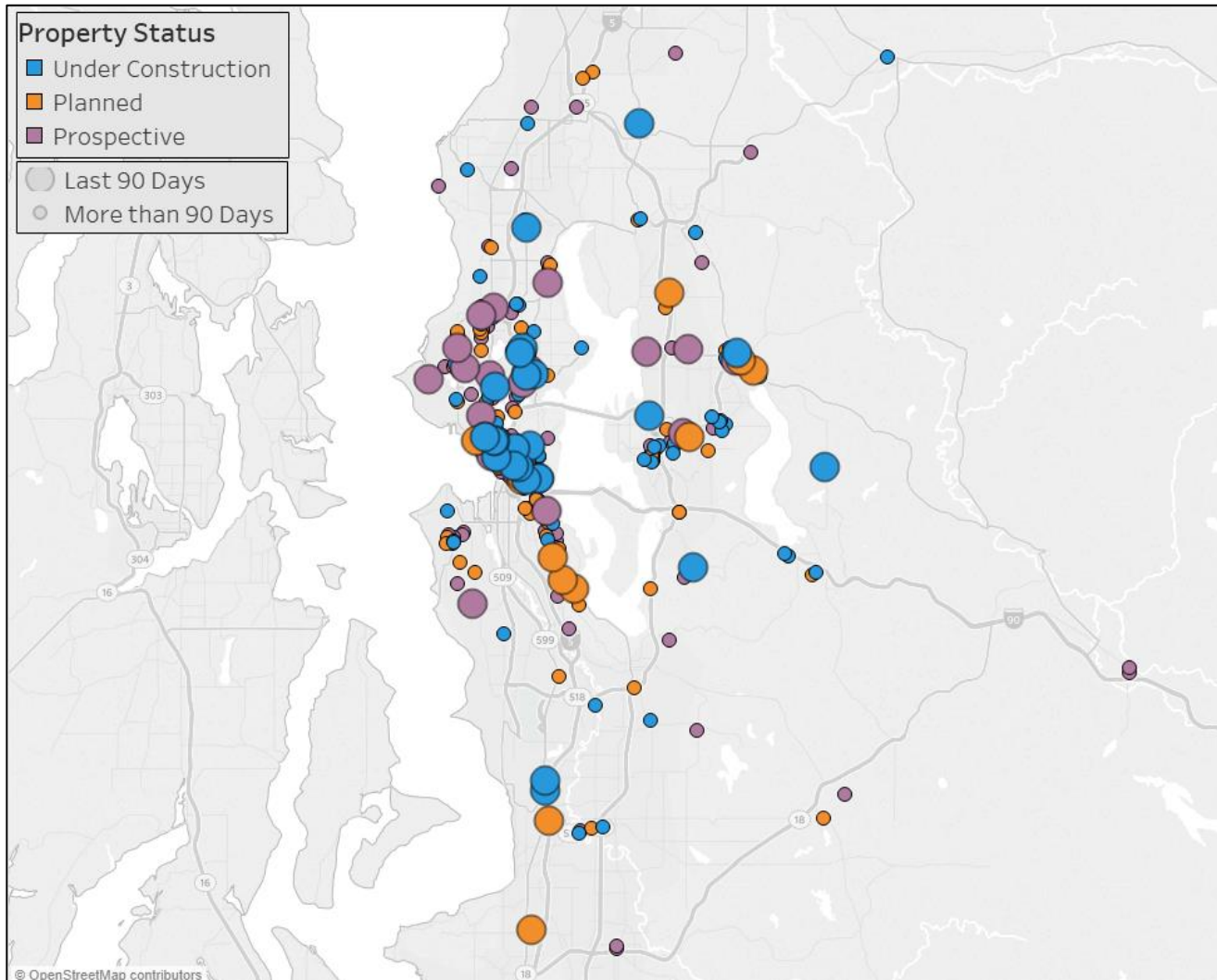
Charlotte Also Has a Heavy Multifamily Development Pipeline, but Many Opportunities Still Exist



Top 20 Submarkets: Under Construction, Planned, Prospective	Units	% of Total
Tryon Hills	4,887	9.1%
Third Ward - Lakewood	3,807	7.1%
Second Ward	3,731	6.9%
Southwest Charlotte	3,634	6.8%
Colonial Village - Montclair	3,500	6.5%
North Charlotte	3,485	6.5%
Foxcroft	2,304	4.3%
Hidden Valley - Oak Forest	2,186	4.1%
Uptown	2,148	4.0%
UNC at Charlotte	2,112	3.9%
Ballantyne - Providence	2,014	3.8%
Wedgewood	1,962	3.7%
Huntersville	1,850	3.4%
Southside Park - West Blvd	1,703	3.2%
Belmont	1,551	2.9%
Lancaster County	1,165	2.2%
Concord - West	1,130	2.1%
Fort Mill	1,128	2.1%
Morningside	1,055	2.0%
Mooresville	911	1.7%

*As of January 2019
Source: Yardi®Matrix; Tableau

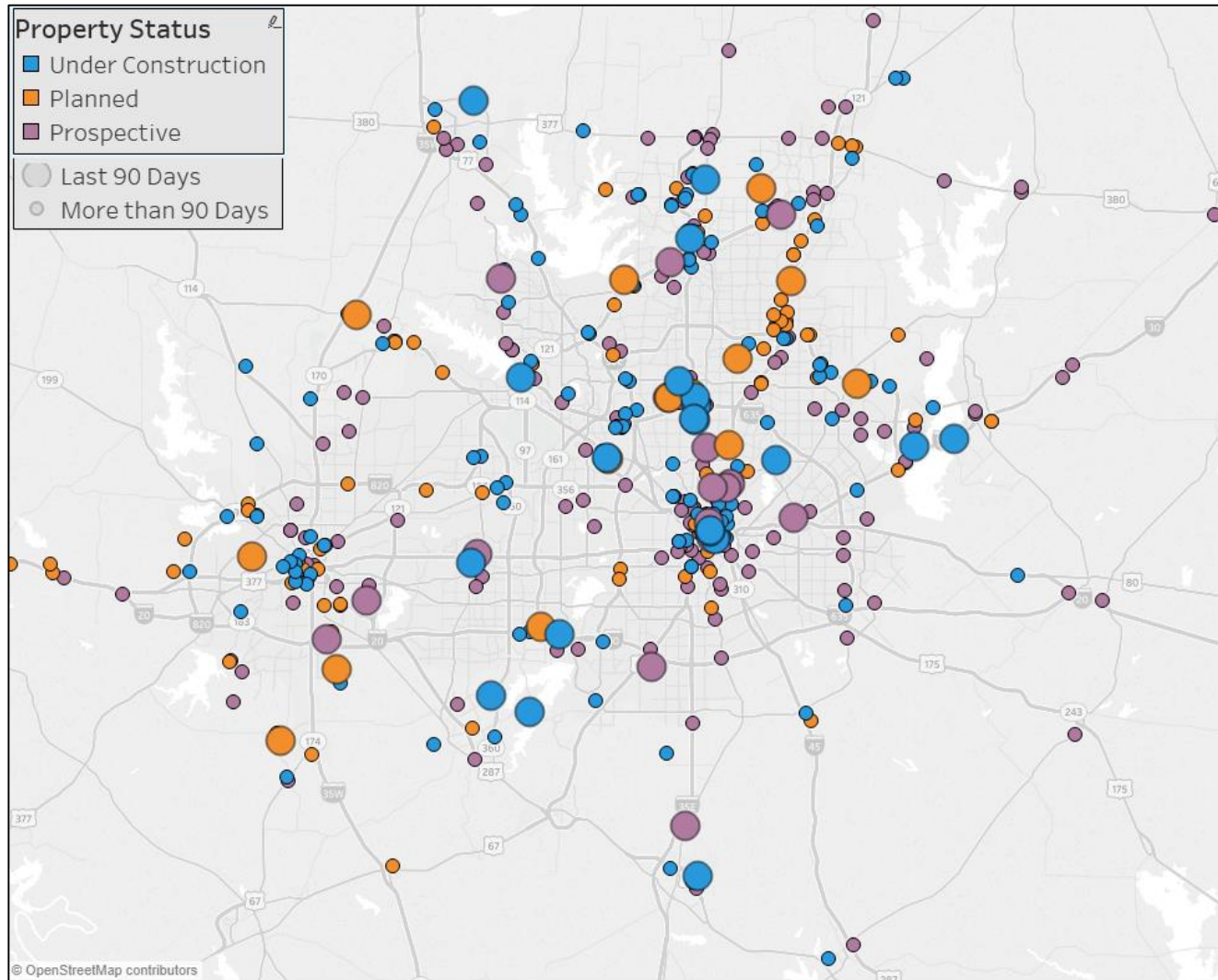
Seattle Also Has a Heavy Multifamily Development Pipeline, but Many Opportunities Still Exist



Top 20 Submarkets: Under Construction, Planned, Prospective	Units	% of Total
Belltown	19,956	23.3%
Central	6,558	7.7%
Redmond	6,469	7.6%
University	4,745	5.5%
North Seattle	4,243	5.0%
First Hill	3,703	4.3%
Rainier Valley	3,570	4.2%
Bellevue-East	3,067	3.6%
Queen Anne	2,950	3.4%
Greenlake/Wallingford	2,650	3.1%
Bellevue-West	2,619	3.1%
Beacon Hill	2,577	3.0%
Capitol Hill/Eastlake	2,044	2.4%
Shoreline	1,959	2.3%
Factoria	1,768	2.1%
Woodinville/Totem Lake	1,740	2.0%
Marysville/Monroe	1,509	1.8%
West Seattle	1,446	1.7%
Issaquah	1,249	1.5%
Renton	1,211	1.4%

*As of January 2019
Source: Yardi® Matrix; Tableau

Dallas Also Has a Heavy Multifamily Development Pipeline, but Many Opportunities Still Exist



Top 20 Submarkets: Under Construction, Planned, Prospective	Units	% of Total
North Frisco/West McKinney	15,463	14.3%
North Carrollton/The Colony	10,437	9.6%
Cityscape/Downtown	8,762	8.1%
South Frisco/Parker	6,415	5.9%
Lake Village/South Irving/West Dallas	5,850	5.4%
North Garland/Rowlett/Sachse	5,482	5.1%
East Plano/Allen	3,900	3.6%
Addison	3,862	3.6%
Uptown	3,480	3.2%
Prestonwood/Galleria	3,129	2.9%
North Oak Cliff/Irving	3,065	2.8%
Las Colinas	2,615	2.4%
Park Cities/Preston Hollow/West Oak Lawn	2,443	2.3%
Downtown Denton	2,338	2.2%
Southeast Dallas County	2,331	2.2%
East McKinney/Wylie/Princeton	2,308	2.1%
Northeast Mesquite	1,948	1.8%
Central Lewisville	1,846	1.7%
North Oak Lawn	1,591	1.5%
Gastonwood/Junius Heights/Lake Park Estates	1,462	1.4%

*As of January 2019
Source: Yardi®Matrix; Tableau

Contact Information

Thank you! I am happy to answer any questions.

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