

UC Davis Health – Aggie Square

REAL ESTATE MARKET ANALYSIS

MARCH 2018



HR&A conducted a market analysis to understand the feasibility of locating the mixed-use Aggie Square district near UC Davis Health in Sacramento.

Aggie Square is envisioned as UC Davis's premier innovation district located in Sacramento, helping the University extend its reach beyond Davis and cement its presence in the state's capital city. UC Davis, the City of Sacramento, civic and non-profit partners, and consultants are currently working to conceptualize Aggie Square as a mixed-use innovation district that will bring together UC Davis' world class research capabilities, the medical institutions of UC Davis Health, and the business community of Sacramento to create a destination for academicindustry partnerships and cutting-edge research.

HR&A Advisors is supporting UC Davis Health in this exciting opportunity by providing real estate market analysis and advisory services to inform as part of the master planning team for Aggie Square being led by Perkins + Will. This briefing book compiles our **findings from our real estate market analysis** to identify the market potential for Aggie Square to host a variety of uses, including residential, office, and retail. We include **initial recommendations on market supportable programs for each of these uses**. In tandem with this market analysis research, HR&A has been investigating UC Davis's existing research strengths through stakeholder engagement to identify the programmatic drivers best positioned to anchor Aggie Square. These efforts will further inform the potential program for the site.

Market Analysis Methodology

This study is critically informed by a synthesis of qualitative and quantitative findings. HR&A supplemented data analysis with stakeholder outreach, including an in-person trip to Sacramento as well as follow-up phone conversations. HR&A engaged the following stakeholders:

- University leaders, faculty, and UCDH stakeholders, including the UCDH CFO, key UC Davis Deans, and faculty;
- Representatives from the City of Sacramento, including the City's Economic Development Manager and the City's Innovation Officer;
- Non-profit partners, including the CEO of the Greater Sacramento Economic Council; and
- Real estate developers active in Sacramento, as well as owners of properties adjacent to UCDH.

Key Findings and Implications from Initial Market Analysis

Residential

- The primary study area lacks Class A multifamily options, and the majority of residents are renters.
- While certain multifamily units market themselves to Sacramento State students, there are no buildings in the area targeting UCDH students and residents.
- Stakeholders identified unmet demand for housing from UCDH employees and students who value proximity to work.
- Aggie Square residential should be positioned to meet unmet demand for Class A rental units, particularly demand from UCDH medical students and residents.

Recommended Residential Program:

600 residential rental units delivered in phases.

Office & Lab

- The Sacramento office market continues to recover from the 2008 Recession, with no significant new office product delivered since 2009.
- The Sacramento office market in general is dominated by the State and other public agencies.
- Aggie Square's ability to attract office and laboratory tenants is predicated on the value that University programming and active involvement bring to potential tenants.
- Positioned well, Aggie Square can be the premier new office district in the Sacramento region for new and mid-sized firms.

Recommended Office & Lab Program:

600,000 square feet of office and laboratory space delivered over ten years.

Retail

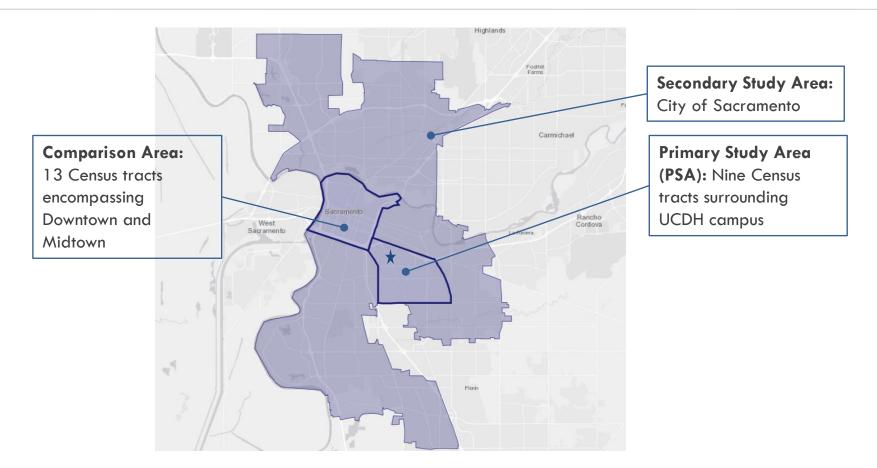
- The bulk of retail immediately surrounding UCDH's campus is small strip retail clustered along Stockton Blvd., including several tire and auto-service shops.
- There is existing unmet demand for convenience retail and food and beverage outlets within the primary study area.
- Offering convenient on-the-go food options to appeal to UCDH staff, visitors, and patients should be a key component of Aggie Square's retail program.
- Providing everyday retail outlets, such as pharmacies or dry-cleaners, at Aggie Square is a way to bring community members to the campus.

Recommended Retail Program:

Approximately 50,000 square feet convenience retail and food & beverage.



HR&A's market analysis focuses on the immediate area surrounding UCDH, complemented by additional analysis of Downtown/Midtown and the region.



The bulk of this real estate market analysis is focused on the primary study area – nine census tracts surrounding the UCDH campus – to best understand market trends and opportunities in the immediate context of the envisioned Aggie Square development. Given the aspirational nature of Aggie Square, we also include analysis of **Downtown and Midtown**, the areas of Sacramento that have **most recently experienced a market transformation comparable to the scale of the vision for Aggie Square in the area surrounding UCDH**.



Demographic Overview

Market Analysis Findings Residential Office and Laboratory Retail The Primary Study Area centers around the UCDH campus and covers an area of just over six square miles.

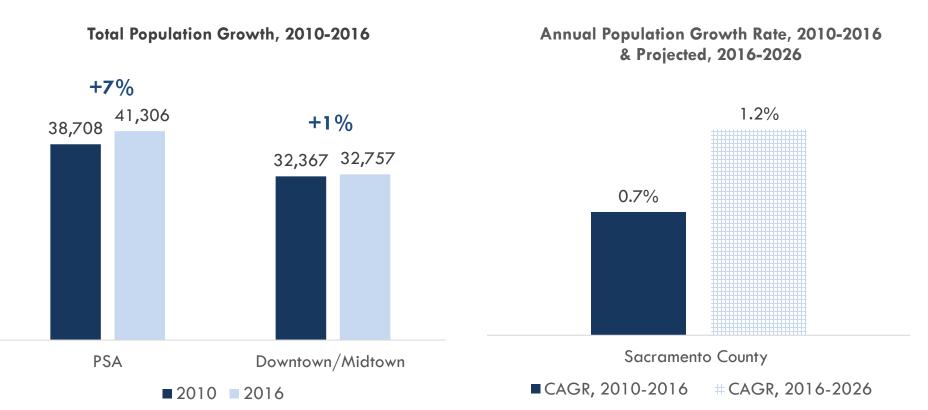


Based on conversations with stakeholders to understand the area surrounding UCDH, the Primary Study Area encompasses nine Census tracts to fully capture the neighborhoods that make up the real estate market in which Aggie Square will exist. Q Street forms the northern border, Railroad Ave. forms the eastern border, Fruitridge Rd. forms the southern border, and Martin Luther King Blvd. and Broadway serve as the western edges. Neighborhoods in the study area include North Oak Park, Oak Park, Elmhurst, Tahoe Park, and Lawrence Park.

Source: ESRI Business Analyst, City of Sacramento City Neighborhood map



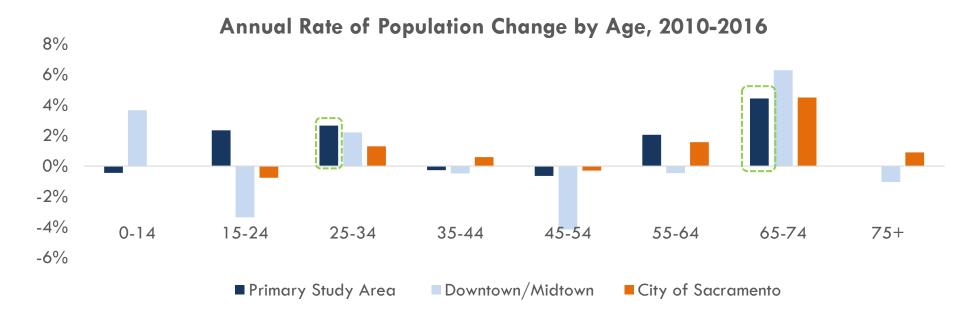
Sacramento is one of California's fastest growing cities, and population growth in the primary study area is outpacing that of Downtown/Midtown.



Between 2010 and 2016, the primary study area grew by 7%, adding nearly 3,000 new residents. In comparison, Downtown/Midtown grew by just 1%, while the City of Sacramento grew by 4%, reaching a total population of 484,530 residents in 2016. Overall, in 2016, the population of the primary study area accounted for 9% of the City's total population. Sacramento was the state's fastest growing large city last year, with a reported population increase of 1.42% from 2016 to 2017. This growth is projected to continue, with Sacramento County growing by an average rate of 1.2% through 2026, when the total Sacramento County population is projected to reach 1.69 million.

Source: ESRI Business Analyst, California Department of Finance

The primary study area is seeing the fastest growth in young professional and retiree population age groups.



The fastest growing population group in the primary study area is people aged 25-34, a cohort that has grown at twice the pace of the City overall. This is likely due to young professionals and families seeking affordable, centrally located housing in Sacramento, as well as the area's medical student population. In 2016, there were 7,503 residents aged 25-34 in the PSA, representing 18% of the area's total population. Young professionals, especially those who work near UCDH and place a premium on living close to work, will be a key market to target for residential product included as part of Aggie Square. In addition to growth in the young professional age cohort, the study area has also seen growth in residents aged 65-74. In 2016, there were 2,781 residents aged 65-74, representing 7% of the area's total population. Retirees who seek an urban, walkable lifestyle are another source of potential demand for residential at Aggie Square, as well as older residents who want to live independently but value close proximity to healthcare providers.

Source: Social Explorer

The PSA is not yet as competitive as Downtown/Midtown in several key demographic indictors, including educational attainment and per capita income.



Residents 25+ w/ a Bachelor's Degree Primary Study Area: 27% Downtown/Midtown: 44% City of Sacramento: 31%



Non-Family Households **Primary Study Area: 48%** Downtown/Midtown: 77% City of Sacramento: 41%



Per Capita Income Primary Study Area: \$23,841 Downtown/Midtown: \$36,259 City of Sacramento: \$27,146



<u>Median Household Income</u> **Primary Study Area: \$46,180** Downtown/Midtown: \$39,094 City of Sacramento: \$52,071



Housing Units Occupied by Renters **Primary Study Area: 51%** Downtown/Midtown: 87% City of Sacramento: 53%



Labor Force Unemployment Rate **Primary Study Area: 6.3%** Downtown/Midtown: 5.7% City of Sacramento: 6.6%

Sacramento's most pioneering recent development is happening in Downtown/Midtown. Compared to the PSA, residents of Downtown/Midtown are more likely to have a college degree, have a higher per capita income, and live in rental housing than residents of the PSA. Downtown/Midtown has a lower median household income than the PSA, attributable to the higher percentage of non-family households and overall smaller household size. This trend of higher per capita income but lower median household income is seen in downtown cores across the county. **Including multifamily residential as part of a vibrant, mixed-use Aggie Square is an opportunity to attract residents of the City interested in the types of urban, walkable housing available in Downtown/Midtown into the PSA. Medical students and residents at UCDH who value living close to work will be another prime audience for residential included at Aggie Square.**

Source: US Census ACS 2016 5-Year Estimates

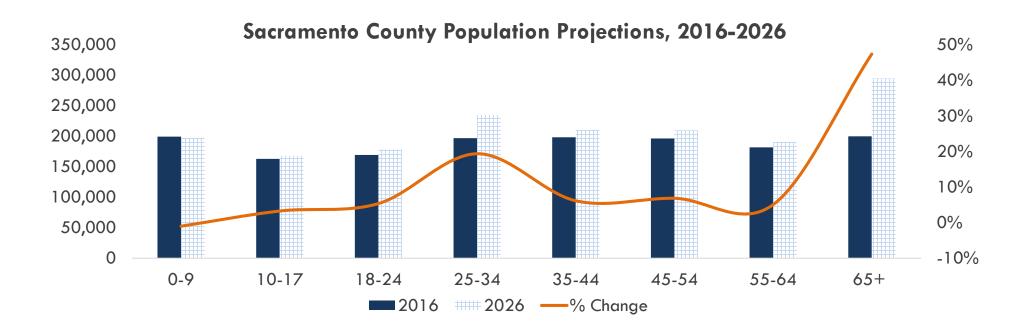


Aggie Square is a key opportunity to drive economic development for surrounding neighborhoods, in addition to the broader region.



As UCDH recognizes, the community surrounding its campus has suffered from disinvestment, and the PSA lags Downtown/Midtown on several key indicators of socioeconomic health. The development of Aggie Square can help drive economic development in several ways, injecting new life into the area that supports the community while taking action to minimize the risks of displacement and gentrification that are attendant to such investment. The development will support new jobs available at a variety of education levels; community space will offer a forum for neighborhood meetings and local events; and on-site residential tailored to medical students, residents, and fellows will draw them back to campus, freeing up housing for residents and families in surrounding neighborhoods.

Sacramento County's growth is projected to continue into the future, driven largely by retirees and young professionals.



Sacramento County is projected to grow by 12% over the next decade, adding over 180,000 new residents to reach a projected total population of 1.69 million by 2026. Consistent with current trends in the PSA, the County's growth will be driven largely by those aged 65+, followed by those aged 25-34. It is projected that the County's population of families – those aged 35-44 and those aged 0-17 – will remain relatively stable over the next decade. These population trends suggest a growing demand for housing that is attractive to adults over the age of 65 as well as young adults. In Sacramento, units delivered in amenity-rich, walkable communities are likely to be attractive to both age groups.

Source: California Department of Finance

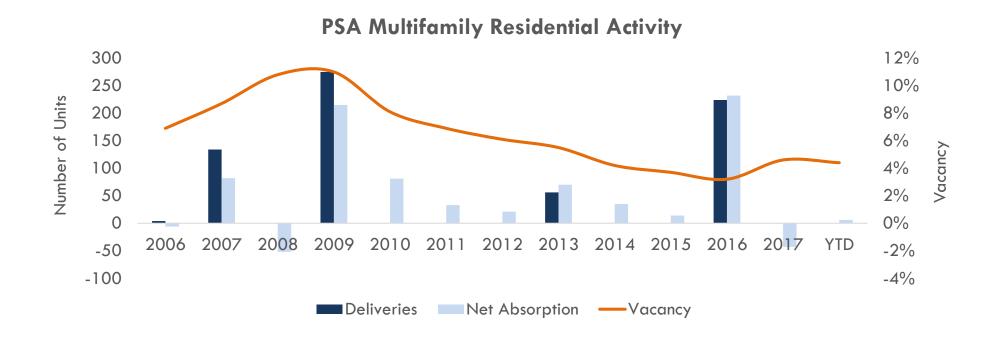
The PSA has the opportunity to gain up to 15,000 new residents in the next decade if it increases its share of the County's total projected population.

	Sacramento County Total Population	PSA's Share of County Population	PSA Total Population
2010	1.42 M	2.7%	38,700
2016	1.48 M	2.8%	41,300
2026	1.69 M	3.2%	54,000

The PSA has historically represented just under 3% of the County's total population. If trends towards urban population growth and investment continue and the PSA is able to increase its share of County population to 3.2%, by 2026, the PSA will have a population of 54,000, based on the population growth projected for Sacramento County over the next ten years. As PSA current population trends and County projections demonstrate, the majority of this growth will come from the age cohorts of those aged 65 and above, and those aged 25-34.

Source: Social Explorer, California Department of Finance

Demographic Overview Market Analysis Findings **Residential** Office and Laboratory Retail The primary study area has seen little in the way of new multifamily construction over the past ten years, resulting in sustained low vacancy rates.



After delivery of the Linq, a 275-unit Class A building in 2009, the primary study area has seen little new multifamily activity, reflected in a declining vacancy rate, which was at just 3.2% in 2016. Two new buildings came on line in 2016, and vacancy is at 4.4% so far this year, indicating demand for multifamily units is sustained, despite a market that is not delivering much in the way of new construction. Given this lack of competition, combined with the City's overall growth and the general excitement of stakeholders across the City in the potential to create a compelling innovation district at Aggie Square, there is likely room for Aggie Square to deliver new multifamily product successfully.



The primary study area, dominated by single-family homes and small apartment complexes, has seen a total of 555 new units delivered since 2009.



Of the four Class A buildings, only one – the Linq – is intended for non-students and non-elderly populations. It should be noted that the Linq, while in the PSA, is across the freeway from UCDH, and thus can more closely market itself to Downtown/Midtown. The Arbors at Oak Park provides senior apartments, while the Foundation and Upper Eastside Lofts cater to nearby Sacramento State students. These two student-oriented developments market themselves as preferred off-campus options for Sacramento State, and make no reference to students at the UC Davis Health campus. Multiple stakeholders expressed that multifamily housing options close to campus would be attractive to medical students and residents, which is currently an untapped niche in the market that new development at Aggie Square can help fill.



The majority of UCDH students and residents live in close proximity to campus. Aggie Square is a chance to deliver a new type of product to meet their needs.



Today, the UCDH campus in Sacramento is home to 994 medical and nursing students, and 908 residents and fellows. The majority (an estimated 60-80%) of these students and residents choose to live within a three to five mile radius from campus, presenting a strong preference for being able to bike or walk to work easily. While there are some small apartment complexes in the neighborhoods surrounding UCDH, many students and residents rent rooms in single-family homes. Medical students, residents, and fellows occasionally find themselves in competition for housing close to campus. A typical budget for a medical student is in the \$600 range for monthly housing costs, with a common arrangement of three medical students renting a three-bedroom house for a total of approximately \$1,800 a month. Residents and fellows, who are employees of UCDH, generally have a higher budget for housing than medical students. Salaries for UCDH residents and fellows range from \$55,000 - \$73,000 a year. In certain neighborhoods where UCDH students and residents currently seek housing, there are existing safety concerns, primarily around burglaries.

Stakeholders across UCDH think there is currently unmet demand for multifamily product in close proximity to UCDH that offers amenitized apartments to students, residents, and fellows. In reaching this demographic, it will be essential for Aggie Square to offer apartments that appeal specifically to the needs and preferences of this population – emphasizing wellness, offering amenities like outdoor space and lots of natural light, highlighting the holistic community of Aggie Square, and providing a safe and secure environment.

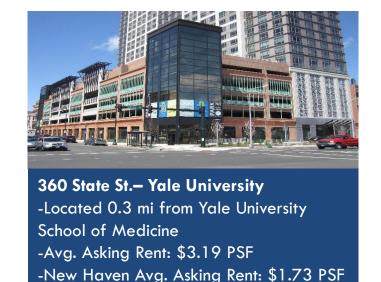
Source: UC Davis School of Medicine, Office of Medical Education



Apartments in urban locations near medical schools have delivered high-end housing catering to students, providing precedent for Aggie Square.



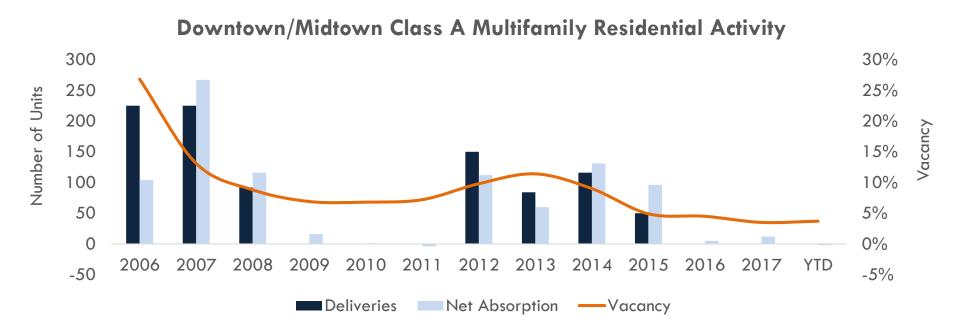
Trinity Commons – Duke University -Located directly across the street from Duke University Medical Center -Avg. Asking Rent: \$1.68 PSF - Durham Avg. Asking Rent: \$1.09 PSF



UCDH's medical and nursing students, as well as residents and fellows, represent the key target market for residential included at Aggie Square. There are several precedents of highly-amenitized apartments located close to university medical centers that market directly to a similar captive audience and achieve rents substantially above the market average. For example, Trinity Common's website has a page entitled "Do You Work at Duke University Medical Center? Consider Living at Trinity Commons." 360 State St. is one of a handful of apartments buildings discussed on Yale School of Medicine blogs as one of the nicest options for medical residents, within walking distance of the main hospital. Both of these precedents achieve average asking rents above the market average, signaling that medical students, residents, and fellows are willing to pay a premium for high-end product in a prime location near a medical center.



Downtown/Midtown has a more active multifamily market compared to the PSA, and Class A absorption has outpaced deliveries since 2014.

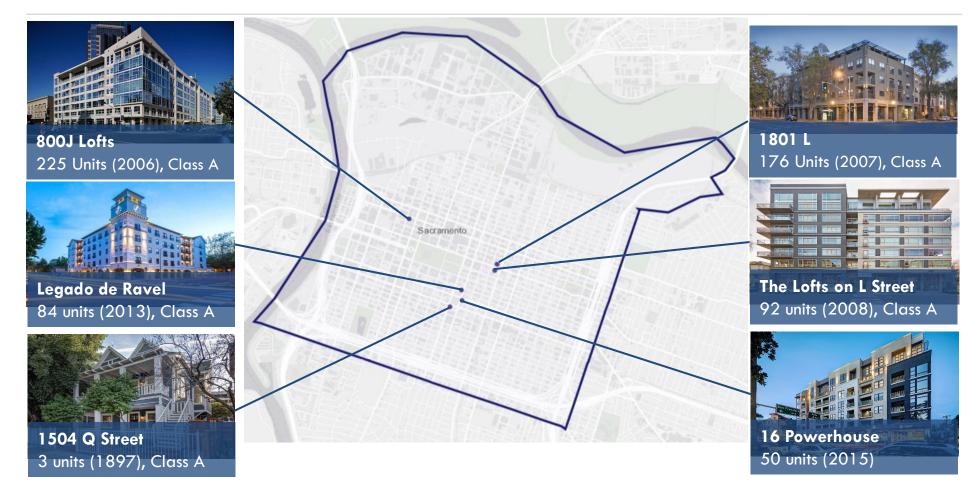


After a slowdown in deliveries during the Great Recession, 807 new units have been delivered in Downtown Sacramento since 2011, 400 of which are in new Class A multifamily buildings. These units are meeting existing demand, with net absorption of Class A units outpacing deliveries. With no new Class A deliveries since 2015, when the 50-unit 16 Powerhouse opened, Class A vacancy downtown has dropped to 3.7%. Developers in the market indicate that high construction costs (driven in part by a tight construction labor market in the Bay Area) is responsible for a lack of activity, but a strong pipeline of new units indicates confidence in demand. There has also been recent activity in the Bridge District, outside of the Downtown/Midtown market. In terms of rent, Class A asking rents in Downtown/Midtown average \$2.45 PSF, which is considerably higher than the highest rate in the PSA (the Linq at \$2.21 PSF). The strong performance of existing Downtown/Midtown projects highlights the value residents in Sacramento place upon proximity to urban amenities, employment centers, and walkable communities, which are features Aggie Square can offer.

Source: CoStar, Cushman + Wakefield Sacramento CBD Update 2017



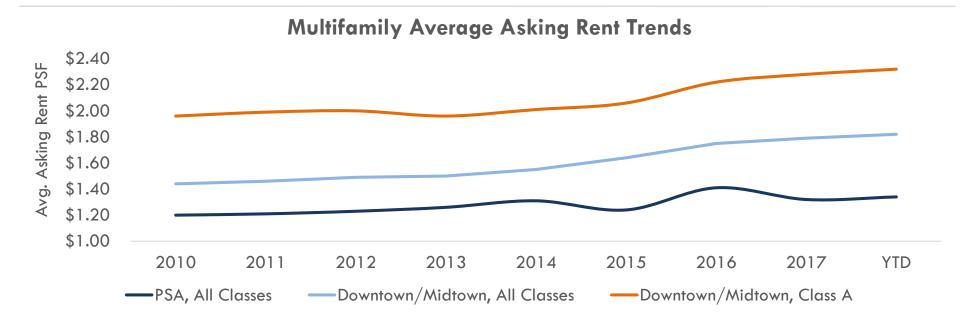
Amenitized apartments in Downtown and Midtown that are in close proximity to dining, shopping, and entertainment command market-leading rents.



The highest rental rates in Downtown/Midtown are achieved by buildings in extremely walkable locations like 1801 L and 16 Powerhouse. Both projects have Walk Scores of 96 out of 100. By contrast, the Linq, the property in the PSA with the highest asking rents, has a Walk Score of 81. Aggie Square is envisioned as mixed-use destination, so incorporating residential with an array of amenities and in proximity to a variety of walkable destinations will be essential to its ability to compete with product Downtown/Midtown and appeal to residents in Sacramento who value an urban lifestyle. Source: CoStar



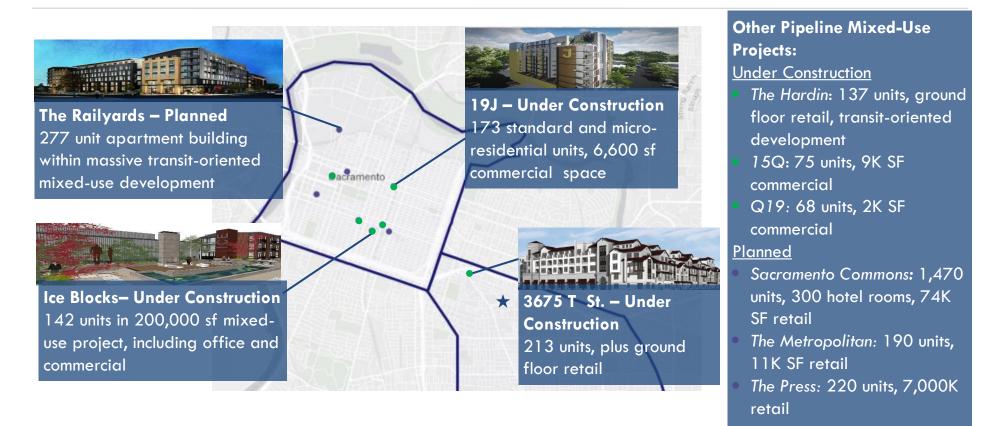
Rents in the PSA lag those of Downtown/Midtown, particularly the Class A product in Downtown/Midtown that has asking rents above \$2.30 PSF.



Rents in the primary study area lag those of Downtown/Midtown, which is unsurprising, given the PSA currently lacks the types of amenities and walkable residential options found in Downtown/Midtown. Average asking rents per square foot in the primary study area are currently at \$1.34, a decrease from a market high of \$1.41 in 2016. The Linq, the study area's sole Class A, non-student building, achieves the highest rents, at an average asking rate of \$2.21 per square foot. In Downtown/Midtown, two buildings have asking rents above \$3 per square foot – 16 Powerhouse and 1801 L both have average asking rents of \$3.08 PSF. Developers indicate that rents need to be around \$2.50 a square foot for projects to be financially feasible, given existing development costs in the Sacramento market. UCDH employees and students who value proximity provide Aggie Square with a potential tenant base who may be willing to pay a premium for the location.

Source: ESRI Business Analyst, CoStar

There are several major mixed-use projects being developed, clustered mainly in Downtown/Midtown, which provide aspirational precedent for Aggie Square.



There are several large mixed-use projects planned or under construction in the Sacramento area, signaling confidence in sustained market demand for walkable locations with urban amenities. In Downtown/Midtown alone, there are over 1,300 units slated to deliver in the next few years. The PSA also has a major mixed-use development currently under construction, which will grow its total inventory of Class A units by nearly a third in the near term. 3675 T St., a 5-story mixed-use project slated to open summer 2019, will represent a new product type for the PSA. The performance of this project, which is located just half a mile north from UCDH, will be an important forerunner for Aggie Square, in terms of the types of amenities to include and the rental rates to target.

Source: ESRI Business Analyst, CoStar, Downtown Sacramento Partnership Annual Report



There are no condo buildings within the primary study area, and a small number of buildings in Downtown/Midtown.



Downtown/Midtown has a small market for for-sale multifamily product, trending towards lofts and smaller condo buildings, such as Whiskey Hill Lofts, 2117 S St., and 2020 H, which are selling at the highest rates in the market. Units at the planned Residences at the Sawyer – 45 luxury condos on top of a Kimpton Hotel overlooking the Golden 1 Arena – have been selling for over \$1 million, and represent the highest in luxury multifamily product available in Sacramento. Developers note the difficulty of delivering condos in Sacramento due to high construction and insurance costs that require sale prices out of reach for the majority of would-be-buyers.



Gross Absorption Test | HR&A developed a residential demand model to determine and size Aggie Square's ability to capture residential churn.

Catchment Area

HR&A defined the residential catchment area as the Primary

Study Area. This catchment area is the geography from within which relocating households (moving to or within the area) could possibly be drawn to new multifamily housing included as part of Aggie Square.

Eligible Households

HR&A then determined the number of these households that would be "in the market" for new housing in the Primary Study Area each year because they meet the following characteristics:

- Meet income requirements for new multifamily housing;
- Moved within the past year;
 1. Attracted to the Area
 2. Within the Area
- Are renters (for apartment analysis) or owners (for condo analysis)

3

Capture Rate

Finally, HR&A compared the number of households potentially "in the market" for new housing against the size of recent multifamily projects in order to assess the portion of the market an individual new development would need to capture in order to fully absorb in a reasonable timeframe of one-year.

Essentially, the analysis presents a "gut check" on whether, given the size of the market and what is known about competitive supply dynamics, the product is likely to be market feasible.

Gross Absorption Test – Rental | Aggie Square would need a 22% capture rate of total rental residential churn to absorb a 200-unit building today.

Rental Demand (\$1,700 average rent per unit)					
Age of Householder	Household Income Bracket \$70K+	Renter Portion	Turnover Rate	Households Annually "In the Market" for a Rental Unit	
<25	163	90%	26%	39	
25-34	1,714*	80%	26%	362	
35-44	1,292	50%	26%	169	
45-64	2,346	43%	26%	267	
<u>65+</u>	<u>839</u>	36%	26%	<u>79</u>	
Total	6,353			914	

914 Households in market for housing annually

22% capture rate needed to absorb 200 units today

*To account for UCDH medical students, residents and fellows, this analysis included 50% of households aged 25-34 making below \$70,000, to represent the portion of these populations likely willing to consider living in residential included at Aggie Square despite the income threshold.

The biggest demand for rental comes from those aged 25-34, a cohort which likely includes the bulk of UCDH students. These students, residents, and fellows represent the prime target audience for residential at Aggie Square – a captive audience that values proximity to work. On top of targeting UCDH students, residential at Aggie Square that offers urban amenities and walkable destinations will appeal to residents across the City who value an urban lifestyle. While a 22% capture rate is feasible, Aggie Square will likely to need to attract additional residents not currently considering the PSA as a residential destination. However, given time to build Aggie Square's reputation and visibility, it is realistic to think this new destination will appeal to a broader swath of Sacramento residents beyond the PSA.

Source: UC Davis Health, HR&A



Gross Absorption Test – For Sale | Given likely complications in delivering forsale product and the small market, Aggie Square should focus on apartments.

For-Sale Demand (\$543,000 average purchase price)					
Age of Householder	Household Income Bracket \$111K+	Owner Portion	Turnover Rate	Households Annualy "In the Market" for a For-Sale Unit	
<25	34	10%	9%	0	
25-34	276	20%	9%	5	
35-44	427	50%	9%	19	
45-64	792	57%	9%	39	
<u>65+</u>	207	64%	9%	<u>12</u>	
Total	1,735			74	

74 Households

Meet income threshold; in market for housing annually

27% capture rate needed to absorb 20 units today

The demand for for-sale multifamily housing in the PSA is much smaller. The highest demand comes from those aged 45-64, with much lower demand from those aged 25-34. It is unlikely that UCDH students, residents, and fellows will be interested in purchasing a condo while in school, so Aggie Square should focus on delivering rental units to appeal to this key captive audience. The site would need to capture 27% of existing demand to absorb 20 units today. With UCDH surrounded by single-family neighborhoods where home prices typically range from \$150,000 to \$400,000, it will be difficult for Aggie Square to deliver competitive for-sale product. Additionally, It will be more complicated for the University to use a ground-lease model for for-sale residential product. Residential product at Aggie Square should therefore concentrate on rental product, rather than for-sale condos, to best meet demand and preferences in the primary study area.

Gross Absorption Test | Given projected growth and high demand for rental housing, Aggie Square could reasonably absorb several hundred units in the future.

Demand Projection to 2027		
	Total For Rent	
Total Residential Rental Demand	Demand	
Total Residential Demand (2.7% CAGR, 2017-2027)	11,545	
Unit Delivery Options through 2027	For Rent	Implied Capture - Ren
	200	1.7%
	300	2.6%
	400	3.5%
	500	4.3%
	600	5.2%

- Meet Income Requirements or are UCDH students, residents, fellows likely to be interested in Aggie Square
- In market for housing between 2017-2027 (assuming 2.7% CAGR in the primary study area)

5.2% capture of residential demand to absorb 600 units delivered in phases over the next ten years.

To absorb 600 new rental units over the next ten years, Aggie Square would need to capture just 5.2% of rental demand in the primary study area. With only two new multifamily buildings in the pipeline, there is not much current competition for multifamily deliveries. 600 residential units could be provided in three to four phases of development in increments of 150 to 200 units, which would not overwhelm the local market. Aggie Square would be delivering a new product to the market, tailored to meet the needs and locational preferences of UCDH students, residents, and fellows, which will likely make it a competitive offering.

Key Residential Findings and Implications for Future Development

STRONG POPULATION GROWTH

Sacramento is a fast growing city, and this growth trajectory is projected to continue in the foreseeable future, with the PSA gaining new residents. The majority of multifamily residents in both Downtown/Midtown and the PSA occupy rental units.

GROWING PREFERENCE FOR MIXED-USE

The transformation of Downtown/Midtown will continue in the future, with several mixed-use apartment buildings coming on line in the to meet demand. The PSA will get its first mixed-use building with the delivery of the underconstruction 3675 T St. project.

UNMET DEMAND FROM UCDH STUDENTS

With over 1,900 students, residents, and fellows who value living close to campus, stakeholders see a market gap. Most students currently rent rooms in single-family homes in the surrounding neighborhoods, but are likely to value apartments adjacent to the Medical School. HR&A's analysis indicates there will be over **11,000 new** rental households in the market for housing in the PSA over the next ten years, indicating that 600 rental units could reasonably be absorbed over a multi-year, phased buildout.

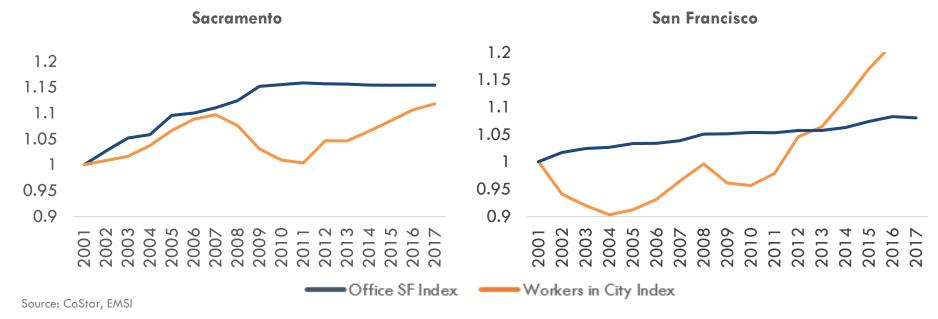
The performance of 3675 T. St. will be an important precedent for Aggie Square, particularly the rental rates it achieves. Overall, Sacramento's pipeline demonstrates a growing preference for mixed-use buildings in walkable urban enviornments, which is a trend Aggie Square will need to capitalize on.

Aggie Square should prioritize meeting preferences and needs of this key captive audience. Building a vibrant community, emphasizing wellness, and offering a sense of security and safety to students will be important ways for Aggie Square to attract UCDH students, fellows, and residents to apartment product. Demographic Overview Market Analysis Findings Residential **Office and Laboratory** Retail

The Sacramento office market is substantial. Yet the city's relatively long economic recovery has limited further new office development.

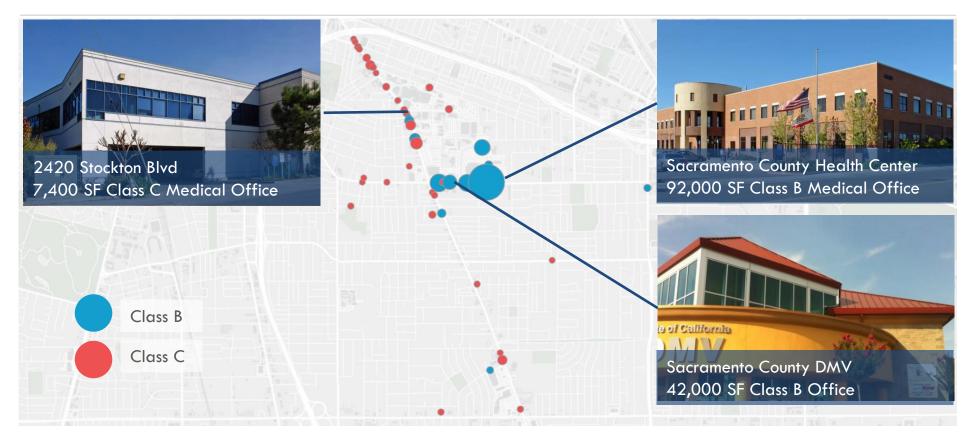
The four county Sacramento MSA contains 109 million square feet of office space, over 56% of which is located in the City of Sacramento itself. The city's office market of 58 million square feet is the fifth largest in California.

However, Sacramento has not been able to support continued office development. Sacramento had a run up in employment and office development prior to the Great Recession, yet was hit hard by the downturn. It has taken nearly ten years for Sacramento's employment base to recover to pre-recession levels, and office delivery has been stagnant during this period. In contrast, San Francisco experienced less office delivery relative to the size of its market in the run up to recession. As employment has surged in San Francisco in the past five years, office development has continued apace, with developers confident speculative deliveries will be absorbed. Continued employment growth portends that Sacramento is on the verge of being able to support new office development, but the lack of space appealing to tenants in potential growth industries leads to something of a chicken/egg problem within the market.



Development and Employment Trends

The majority of office buildings in the PSA are Class C buildings along Stockton Blvd. Larger Class B buildings on Broadway provide the bulk of space.



The Primary Study Area contains a total of 1.3 million SF of office space, made up of 931,000 square feet of Class B space and 402,000 square feet of Class C space. On average, Class C buildings total 103,000 square feet each. Given the location of UC Davis Health, 54% of all of the PSA's Class C office is medical office space.

Of the PSA's Class B space, there is 220,000 square feet of medical space. The largest single Class B properties in the **PSA are owned or leased by public entities**, including the Department of Motor Vehicles, Sacramento County Coroner, and the California Department of Justice.



The Sacramento market received substantial office product shortly before the 2008 Recession. Positive net absorption since 2014 points to market recovery.

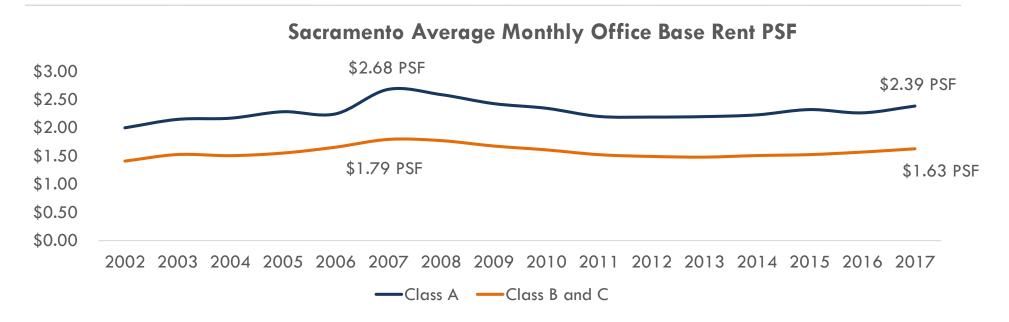


Sacramento's office market was active prior to 2010, with new Class A deliveries from 2003–2009 totaling 4.1 million square feet. The largest of these deliveries are the 560,000 square foot CalPERS building in 2005, the 445,000 square foot Bank of the West Tower in 2009, and the 366,000 square foot U.S. Bank Tower, also delivered in 2009.

After negative net absorption in 2010 and 2011, the market slowly began to recover. In 2015, net absorption reached 766,000 square feet. Despite this recent positive uptick, the market is still recovering from the build-up of space delivered just before the 2008 Recession, as evidenced by the lack of new product being delivered. As net absorption continues to be positive, the market overall is nearing a point where it can absorb new office development.



Class A rents in the Sacramento market have yet to recover to pre-recession heights.



Prior to the 2008 recession, average Class A base rents rose to a 10-year high of \$2.68 PSF per month. After sustained negative rent growth in response to negative absorption from 2008–2013, base rents across all office product have trended upward since 2013. Average Class A base rents were \$2.39 PSF per month in 2017, while the average rent for Class B or C product was \$1.63 PSF per month. Rents will require sustained and strong annual growth to reach previous recent highs. A lack of new deliveries is likely to continue to drive rent growth as vacancy falls. Offering new office product types, such as coworking and flexible office space, has the potential to help Aggie Square drive higher rental rates.



As the State Capital, the public sector is a major component of the office market, owning more than 25% of existing Class A space.

Sacramento City, Sacramento County, and the State of California are some of the largest owners of commercial real estate in Sacramento. The public sector accounts for over 5 million square feet of Class A space, or 25% of the City's total Class A supply.

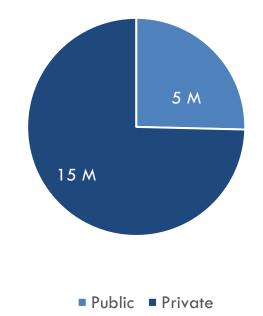
The public sector's strong involvement in the office market points to a lack of major private sector drivers in the economy. Banking and insurance are two of the primary private sectors involved in office space in the City.



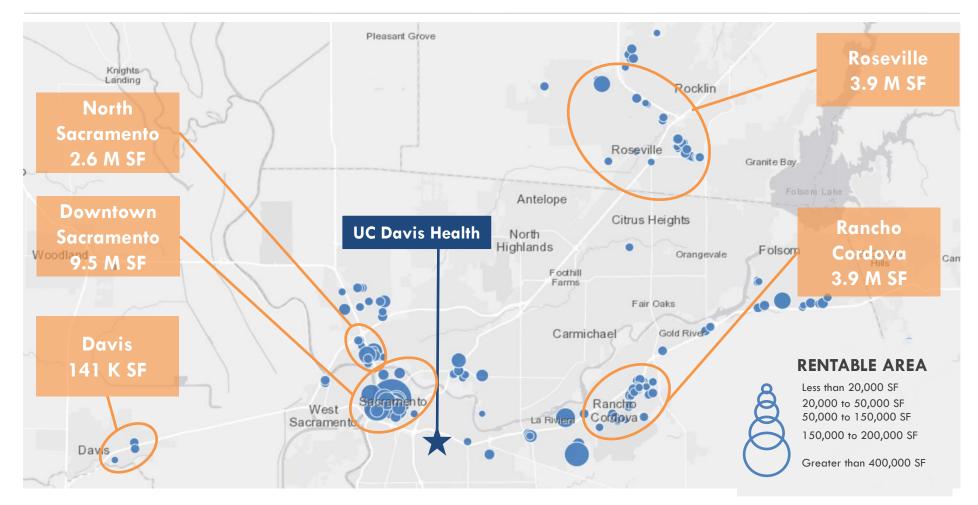
Source: CoStar



Ownership Status of Class A Space, City of Sacramento



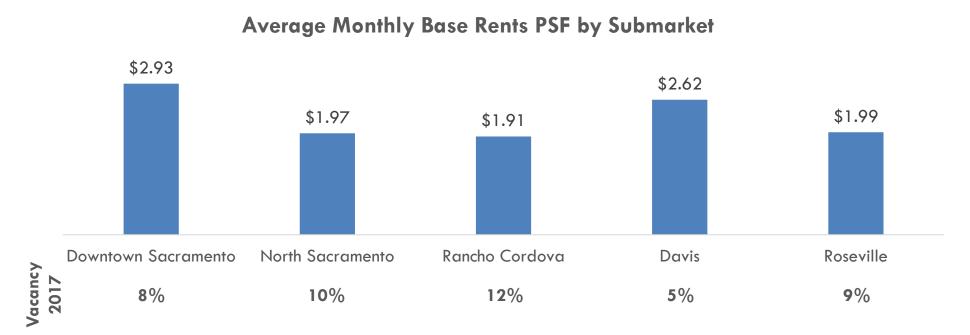
Regionally, Class A properties are spread between submarkets that will influence the viability of office product at the UC Davis Health site.



Regionally, Class A office clusters offer a variety of options for potential office tenants. The largest submarkets are Downtown Sacramento, Rancho Cordova, and Roseville. Smaller clusters in North Sacramento and Davis will also inform the competitive landscape of office space at Aggie Square. **Aggie Square will need to be positioned as a new Class A office destination with the right character and size to successfully develop Class A office space around UCDH**. Source: CoStar



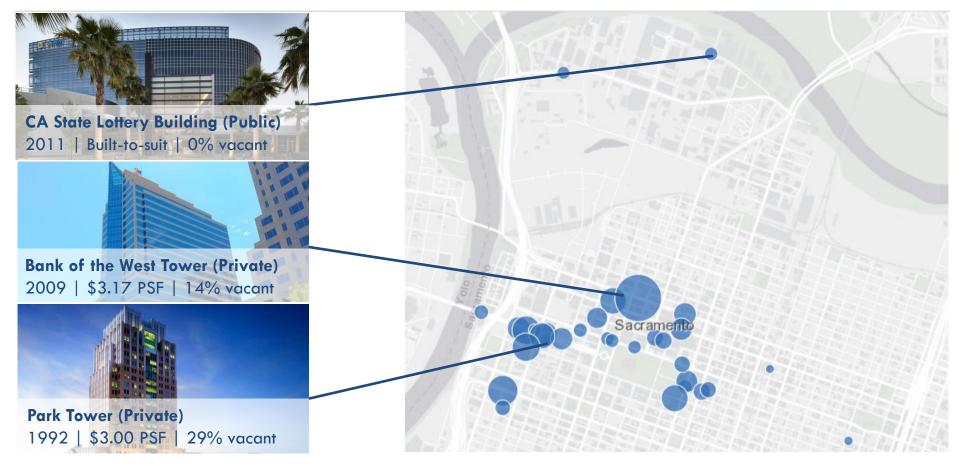
Strong connections to University programs will help Aggie Square's office space drive higher rents than those achieved in other non-Downtown submarkets.



Downtown Sacramento is the best performing cluster across the region, with average Class A base rents reaching \$2.93 PSF per month and a region-low vacancy of 8%. Other submarkets typically have seen similar base rents in the \$.190 PSF per month range, and vacancy around 9%–12%. The Davis office cluster is too small to make broad generalizations about its performance, but the limited Class A product there has rents that are second only to Downtown. Some of these submarkets, including North Sacramento, Davis, and Roseville, are more suburban in nature with surface parking except in select buildings. Aggie Square can expect to achieve a rent premium above these suburban submarkets by providing tenants with amenitized office space in immediate proximity to UCDH. This access to students, researchers, and associated institutional programming will be pivotal for a subset of innovation tenants. This positioning makes it more likely that Aggie Square will achieve rents comparable to the Davis submarket versus other non-Downtown submarkets.



Key Office Submarkets: Downtown and Midtown have the highest rents in the city and the region, but have seen little recent private-led development.



Office in Downtown/Midtown garners the highest base rents in the region at above \$3.00 PSF per month, as tenants seek space in the active heart of the capital. Government, insurance, and utility companies are common tenants in Downtown Sacramento. The central business district is the historic center of regional office growth, and the site of the most recent Class A office deliveries. Vacancy for properties with the highest rents is high, with top of market Bank of the West Tower 14% vacant, and the Park Tower at nearly 30% vacant. This indicates there may be a rent ceiling even for buildings with prime Downtown and Midtown locations, and these rent levels will inform the rate achievable at Aggie Square.

Source: CoStar, Architect Magazine



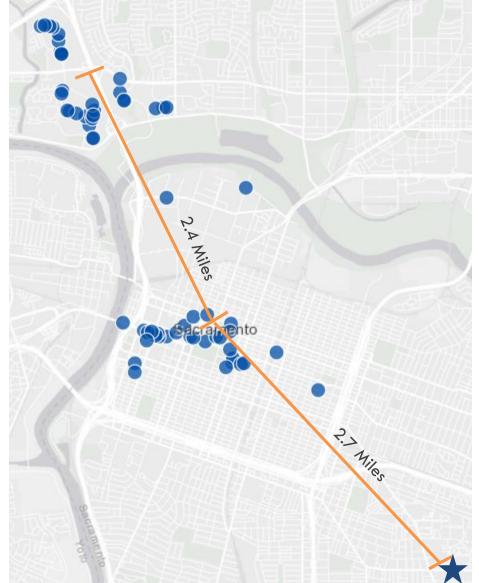
Key Office Submarkets: North Sacramento, while similarly distant from Downtown, is too suburban to be a viable comparison to Aggie Square.

North Sacramento, including the Natomas Corporate Center, the Gateway Center, and Metro Center, is separated from downtown by two physical barriers, including the American River and the Sacramento Railyards. Despite the relatively equal distance from Downtown between UCDH and the North Sacramento office cluster, important differences remain between the North Sacramento office submarket and anticipated development at Aggie Square.

The suburban office park character of the North Sacramento cluster may be limiting rent growth. North Sacramento's Class A office rents are 31% lower than those of Downtown/Midtown, averaging \$2.00 PSF per month in 2017. Dense, amenitized office product and programmatic connections to UC Davis will likely drive rent premiums for Aggie Square.



Source: CoStar, LoopNet, Rofo





Key Office Submarkets: Davis' small office market has rents second only to Downtown, a trend that could continue at Aggie Square.

The Davis submarket has rental rates nearing those of Downtown. The University Research Park (URP) recently leveraged the UC Davis brand to raise rents to \$2.42 PSF (full-service), and lowered vacancy from 29% to 2% in 2018. 260 Cousteau Place has slightly higher rents at \$2.50 PSF (full-service) and is entirely occupied by UC Davis Shared Services Center. Tenants in the food and ag sectors are attracted to URP to be near UC Davis' preeminent food and ag science programs.

The Davis submarket is encouraging for Aggie Square, as it provides a regional precedent for end users paying a premium to be near high-quality R&D talent and facilities. In Sacramento, UCDH offers a plethora of clustering opportunities for life science tenants and is positioned to successfully attract office users the way food and ag firms are attracted to Davis, a trend which is already beginning to take shape. UCDH currently has eight private firms leasing lab and office space in two of its research buildings, who pay in the range of \$2.25-\$3.50 triple net PSF (depending on cold shell vs. fully built-out space). These private tenants are primarily in the life sciences and biomedical fields, including two anchor tenants – Novogene (over 10,000 SF leased) and PETNET Solutions/Siemens & Optimal Tracers (7,000 SF leased), which together occupy over half of the leasable space available in the two UCDH research buildings. This is important precedent for Aggie Square, demonstrating that companies are willing to pay a premium for proximity to UCDH.

Keeping start-ups in the region has been a struggle for University-affiliated incubators. As companies grow, many are attracted to the Bay Area. Aggie Square has the opportunity to deliver the dynamic mix of uses and convergent research initiatives growth-stage companies are looking for, helping retain companies in Sacramento.



University Research Park 2003 | \$2.42 PSF | 2% vacant Key tenants: UC Davis, food and ag firms



260 Cousteau Place 2008 | \$2.50 PSF | 0% vacant Key tenants: UC Davis Shared Services Center

Source: CoStar, Fulcrum Properties, UC Davis Health



Laboratory space in the Sacramento region is limited, and available space is geared towards start-up stage firms.

Sacramento is not currently a hub for laboratory space, with a small footprint of both public and private lab space. There are recent small-scale efforts to incubate health and agriculture companies that require wet-lab space in the region. Aggie Square could consolidate existing entrepreneurially associated lab space on its campus. This could be foundation of a cluster of talent and discovery that larger companies looking for lab space in Northern or Central California may find value being nearby.



UC Davis-HM.CLAUSE Life Science Innovation Center

2015 | \$300/month| 2 year leases
3,100 SF office/lab
Davis location
Privately administered and publicly funded
Selection and approval through the University and HM. Clause



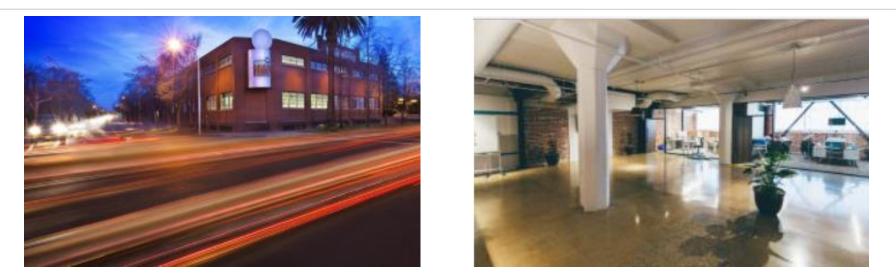
CoLaborator

2017 3,000 SF wet lab space Located at Bayer campus in West Sacramento Targeted to start-ups associated with crop sciences

Source: UC Davis, Bayer



Innovation spaces, like the Cannery, have had mixed success in attracting officehungry mid-stage companies, many of which opt to relocate to the Bay Area.



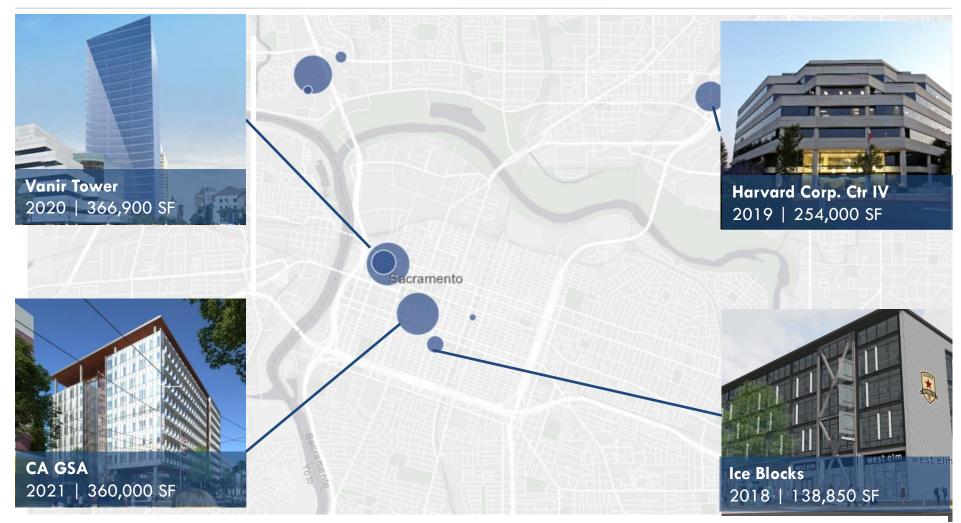
The Cannery on Alhambra, less than one mile from UCDH, is a renovated fruit and vegetable cannery and a key component of the innovation and tech ecosystem in Sacramento. **The Cannery has had difficulty in successfully incubating medical spin-off opportunities into mid-stage growth firms locally.** New firms looking for spaces continue to be attracted to the Bay Area, where the market can more easily accommodate their growth and the spaces they demand, in addition to offering larger pools of technical talent and capital. The challenges demonstrated at the Cannery include a University presence which has not been successfully leveraged to support a complimentary private tenant mix. UC Davis occupies more than 100,000 SF in the Cannery with telecoms and back office IT operations. Despite a University connection, these UC Davis tenants are **not community or research oriented, and therefore tenants are unlikely to see significant value in co-locating.**

The Cannery highlights the difficulty in fostering successful innovation office development in Sacramento. Aggie Square can learn from this experience and support successful office space by directly linking UC Davis programming to the needs of firms, and curating tenants to activate a truly convergent space at Aggie Square.

Source: Fulcrum Properties



Pipeline development is planned in major submarkets across the region. The largest deliveries are anticipated in Downtown and Midtown.



There is currently 3.2 million SF of Class A office product at various stages of development in Sacramento. The lce Blocks is nearing completion, while other proposed developments are not yet under construction and in various stages of development. As with current stock, the public sector will continue to occupy Class A office spaces for expanded public use. Source: CoStar



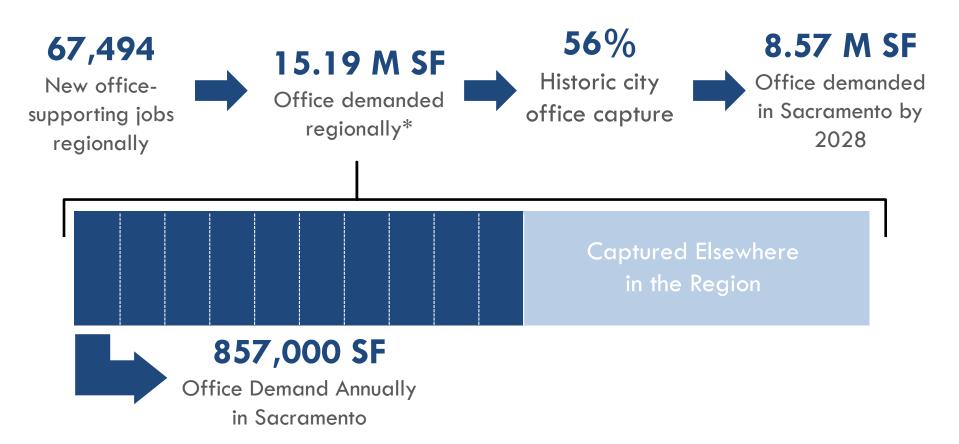
Regional employment growth in office supporting industries will generate demand for new office space.

Industry	2018 Employment	2028 Projected Employees	Net New Employees	Percent Change
Information	13,611	14,437	825	6.1%
Finance and Insurance	40,347	43,762	3,415	8.5%
Real Estate and Rental and Leasing	43,538	48,486	1,318	11.4%
Professional, Scientific, and Technical Services	66,929	72,914	5,985	8.9%
Management of Companies and Enterprises	12,734	13,603	869	6.8%
Administrative and Support	70,610	83,805	13,195	18.7%
Educational Services	18,040	19,482	1,442	8.0%
Health Care (Except Hospitals and Nursing Homes)	106,501	136,894	30,334	28.5%
Government	252,609	262,720	10,111	4.0%
TOTAL	600,903	668,398	67,494	11.2%

Projecting regional growth in office-occupying industries to 2028 yields 67,494 new potential office and lab users. Nearly 60% these employees will be in the Health Care and Government sectors, reflecting the Sacramento office market's continued reliance on the public sector and health care services to fill buildings. Professional, scientific, and technical services is projected grow at a moderate pace and remain the region's fourth largest office-using industry. This industry cluster, as well as complementary service providers like patent attorneys and marketing firms, is likely to be an appropriate fit for new office space at Aggie Square.

Source: EMSI, HR&A

Sacramento is projected to capture more than half of regional demand in office space, totaling 857,000 SF annually.



Based on Sacramento's current capture of the MSA's Class A office product, and anticipating 225 square feet of office/lab space per employee, **HR&A anticipates that Sacramento will demand 8.6 million square feet of office space by 2028**. Delivered annually, this amounts to just under 857,000 square feet of office space across all classes demanded in the city. This demand will be met by both new development, as well as absorption of existing vacant space.

*Assumes 225 SF per job Source: EMSI, HR&A Using conservative vacancy assumptions, HR&A projects there will be up to seven million SF of new office demanded in Sacramento over the next decade.



HR&A assumed that existing vacant spaces across all product classes will absorb demand down to a stabilized 7% vacancy rate. The net demand for new space, including Class A, B, and C spaces, is seven million square feet. Assuming 50% buildout of proposed pipeline development not already under construction, new product at Aggie Square will compete with these projected deliveries for initial lease-up until 2022. However, Aggie Square, positioned to leverage the strengths of UC Davis and undertake a targeted tenant programming strategy aligned with existing research strengths, will have key competitive advantages over planned pipeline product in attracting office and lab tenants.

^{*}Assumes stabilized vacancy of 7% Source: EMSI, HR&A



As a new, amenitized destination, Aggie Square could reasonably capture almost 10% of new office development in the City over ten years.

10-Year Capture Necessary to Fill Phased Class A Office Program at Aggie Square					
Total Office Program	Capture Rate, Net Absorption	Capture Rate, Gross Absorption			
300,000	4%	4%			
600,000	9%	8%			
900,000	13%	12%			
1,200,000	17%	16%			

HR&A tested potential 10-year office programs against projected net absorption and average market activity (gross absorption). As demand will be captured by some new Class B and C buildings around the City, as well as in future, currently unplanned Class A buildings in Downtown/Midtown, a realistic capture rate of new Class A development at Aggie Square is required. Smaller programs that capture less than 5% of the net total demand are unlikely to create the vibrant destination envisioned at Aggie Square. Similarly, large development programs of approaching one million square feet are unlikely to find success, as the required capture of projected regional growth would reach nearly 15%. By comparison, Downtown and Midtown has captured 48% of new Class A deliveries since 2006. Many Downtown/Midtown tenants have few connections to the University and are tied to the government functions of central Sacramento, and will continue to find value in Downtown. As a new submarket with valuable programming for the right types of innovation tenants, HR&A projects that Aggie Square can capture one fifth of the remaining 52%, or around 10% of total new office supply.

Taking into account gross absorption, using the three year average square footage associated with new office leases signed, a 600,000 square foot Class A program would require capturing 8% of the total leasing activity over the next ten years. HR&A anticipates this is reasonable expectation for a new district with dynamic anchors, institutional support, and varied amenities like those planned at Aggie Square.

Key Office Findings and Implications

UNTESTED SITE FOR OFFICE New private office product has been traditionally attracted to Downtown and Midtown. The location around UC Davis Health does not contain any existing Class A office stock.

COMPARABLE SUBMARKETS While there are few office clusters comparable to what is envisioned at Aggie Square outside of Downtown, precedents like the Davis submarket and the Cannery project may indicate potential rents achievable at Aggie Square.

FEW NEW DELIVERIES As the office market has recovered in Sacramento, there have been very few deliveries. However recent absorption and employment growth point to openings for unique office product in the coming years.

TENANT GROWTH Employment growth in government, healthcare, and professional and technical services will drive office demand, but some tenants will continue to be attracted to Downtown/Midtown Offering space that is uniquely connected to programmatic drivers at UC Davis, Aggie Square can absorb up to 600,000 SF of office and lab over 10 years. Realizing this potential will require sustained tenant recruitment efforts.

Aggie Square could likely support rents of \$2.60-\$2.75 PSF per month. A fully amenitized product in a mixed-use environment will be key to achieve this rent premium. The current rents tenants pay for lab/office space near UCDH already demonstrates the ability of the UCDH brand to drive rent premiums.

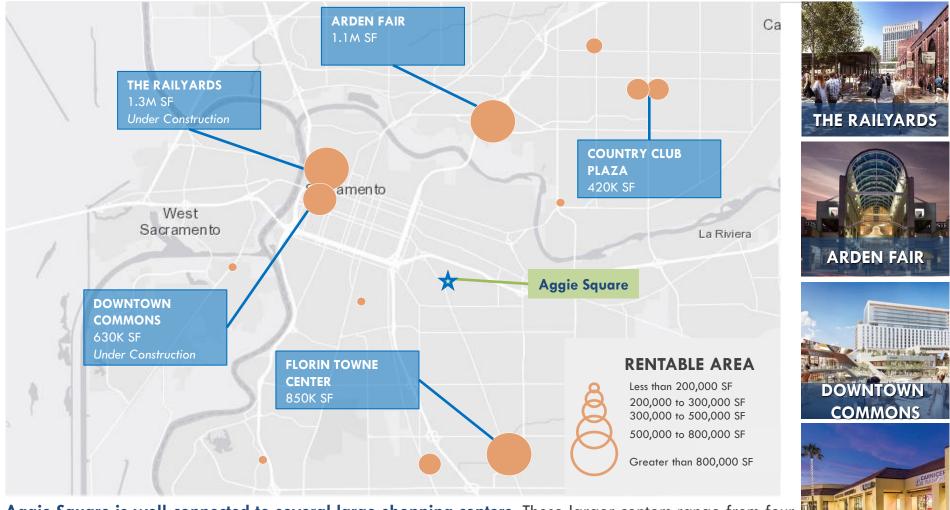
In a recovering market, Aggie Square can be a significant economic development driver for the Sacramento region by offering an attractive home to growing, mid-sized companies.

Aggie Square has the opportunity to capture **research** and professional tenants with additional programming, as well as syphon some Downtown/Midtown tenants by competing on price and offering an amenitized environment. Demographic Overview Market Analysis Findings Residential Office and Laboratory **Retail** HR&A's retail analysis considers the opportunity to attract a variety of convenience retail categories to Aggie Square.

Convenience Retail					
PAR SIDE	Grocery	Food & Beverage			
 Health & Personal Care General Merchandise Newspaper & Magazine Office Supplies 	• Grocery Stores	 Quick-Service Restaurants Full-Service Restaurants Bars 			

Potential retail programming for Aggie Square can be divided into three broad categories, falling under the general umbrella of Convenience retail. Customers are likely to frequent Convenience retail – such as pharmacies, restaurants, grocery stores, and dry cleaners – that are closest to their homes or work places. In contrast, Comparison retail includes types of offerings for which people are willing to travel further – things like apparel, electronics, or furniture stores. For the purposes of this analysis, HR&A focused on Aggie Square's ability to attract demand from residents, workers, and students in convenience retail categories. Given Aggie Square's proximity to several major retail destinations and lack of visible highway access, it is unlikely that Aggie Square will be able to compete for shoppers looking for Comparison goods.

There are several large-scale shopping centers located less than ten miles from Aggie Square, limiting the site's potential to attract destination shoppers.



Aggie Square is well-connected to several large shopping centers. These larger centers range from four to ten miles from Aggie Square, and present competition to any comparison retail offerings –it would be difficult for Aggie Square to draw comparison shoppers with many other established choices in the area.

Source: CoStar, ESRI, City of Sacramento



FLORIN TOWN

CENTER

HR&A defined the Convenience trade area to include the immediate vicinity around UCDH, as well as residents within a short drive time from the site.



Source: ESRI Business Analyst

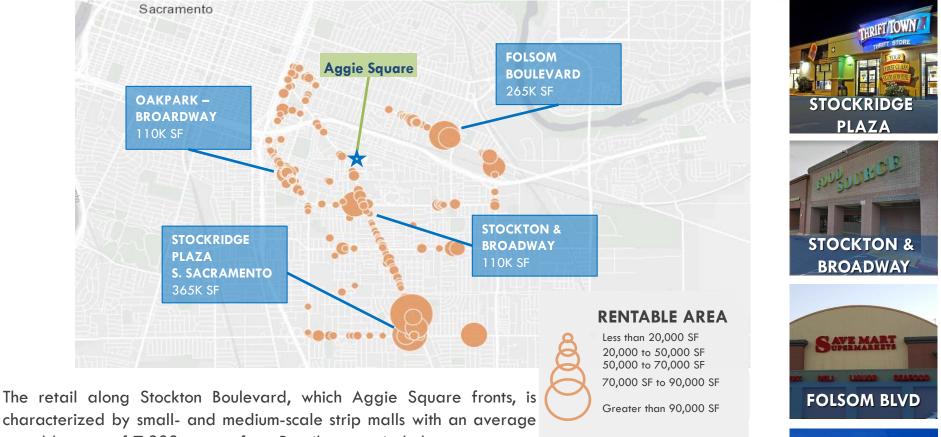
Aggie Square will occupy a prime location on UCDH's campus, surrounded by the UC Davis School of Medicine, School of Nursing, and Medical Center, and just a few miles from Downtown /Midtown Sacramento.

Workers and students at the UCDH campus and residents living within a 15-minute walk time of the Aggie Square site comprise the immediate customer base supporting potential on-site Convenience retail. The population living within a 10-minute drive time of the site makes up the Convenience trade area, representing shoppers likely to drive for everyday retail and food and beverage offerings.

- The Immediate Shopping Trade Area includes the 7,898 residents who currently live within a 15minute walk from Aggie Square, as well as current and future students, faculty, employees, and staff based at UCDH.
- The Convenience Trade Area encompasses the immediate shopping trade area and includes the 120,661 residents who live within a 10-minute drive of the site and who may be attracted to convenience retail and food and beverage offerings included at Aggie Square.



Retail located along major transit thoroughfares is the prime driver of retail activity in the neighborhoods surrounding Aggie Square.



rentable area of 7,000 square feet. Retail tenants include:

- Several tire and auto service shops.
- A handful of national fast-food chains in close proximity to UCDH, including Jack in the Box and Subway.
- A bistro located in the Courtyard Marriott, as well as a gift shop at UCDH.

Source: CoStar, ESRI, KCET



OAKPARK

BROADWAY

Arden Fair Mall is Sacramento's prime fashion and lifestyle destination, home to large department stores and national brands.



JCPenney ★MOCYŚ NORDSTROM Sears

Source: Arden Fair Mall, Fulcrum Property, Macerich

Arden Fair Mall is Sacramento's oldest and most prominent regional shopping center. The mall is home to over 165 tenants providing regional shoppers access to a wide variety of product categories. JCPenney, Macy's, Nordstrom, and Sears serve as current anchors. Arden Fair Mall features a number of non-shopping oriented amenities, including fast casual and upscale dining, salons, jewelry stores, and massage parlors. The mall also offers weekly free yoga classes, a mall walking group open to all ages, and a Kids Club that organizes events and shows for children while parents shop. These amenities help Arden Fair attract nearly nine million visitors on an annual basis.

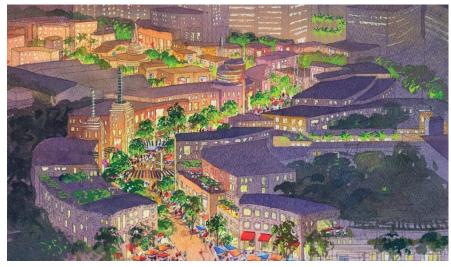
Fulcrum Property has owned Arden Fair since the early 1970s and most recently renovated the site in 1991. This renovation helped create a new identity for the mall and enabled it to retain its presence as one of the region's most dominant fashion and lifestyle destinations, in spite of changing retail preferences. Today, Arden Fair Mall retailers average \$848 in sales per square foot annually.

Arden Fair Mall is located just over five miles north of Aggie Square. With a retail destination of this size and prominence in relative proximity, it is unlikely that Aggie Square would be able to compete in terms of comparison retail offerings.



The Railyards offers a precedent hub, delivering the types of experiential retail to which Aggie Square can aspire, albeit in a much smaller quantity.





Source: City of Sacramento, Downtown Railyards Venture, LLC.

Located in the heart of downtown Sacramento, the future site of the Railyards retail destination stands on what was once the western terminus of the 1860s Transcontinental Railroad. The site is one of the nation's largest infill redevelopment projects, set to transform the retail scene Downtown and re-define Sacramento's center city.

The Railyards will include over one million square feet of retail, featuring upscale restaurants, distinctive boutique shops, and arts and entertainment galleries. While no confirmed tenants have committed to anchor the Railyards retail district, it presents a major opportunity for local shops and other niche retailers to establish a foothold Downtown and contribute to Sacramento's ongoing renaissance. This focus on amenitized, boutique offerings is increasingly the type of retail shoppers seek, and Aggie Square should strive for a similarly curated and creative, if much smaller, retail program.

The Railyards is located only four miles from Aggie Square and will likely compete with any comparison retail offerings included within Aggie Square's development program. The Railyards mixed-use destination will feature a large retail program, and given its location close to Downtown/Midtown, it will be hard for Aggie Square to compete with this prime shopping destination, in terms of attracting comparison shoppers.



Downtown Commons, anchored by the Golden One Center, also offers a shopping and lifestyle experience.





Source: Downtown Sacramento, DOCO Sacramento, JMA Ventures, LLC.

Branded as Downtown Sacramento's 'Common Ground',' Downtown Commons (DOCO) is a mixed-use joint-venture between the Sacramento Kings and JMA Ventures, LLC. DOCO offers a re-envisioned downtown shopping experience in what was formerly known as Westfield Downtown Plaza mall. Located within walking distance of the future Railyards site, DOCO's retail offerings will complement the Railyard's future up-scale boutiques, creating a walkable, experiential shopping district.

DOCO will include over 630,000 square feet of retail, anchored by national retailers including Macy's and Urban Outfitters. **The site is envisioned as downtown lifestyle center** with the Sacramento King's arena, Golden One Center, serving as a major entertainment anchor. Retail offerings are further complemented by a newly-reopened Century Theater, 24 Hour Fitness, Punch Bowl Social bowling, and upscale restaurants, to entice shoppers and create a new shopping and entertainment destination. Like the Railyards, DOCO is located only four miles from Aggie Square.

Together, DOCO and the Railyards represent the future of Downtown/Midtown retail, and this walkable district will make it difficult for a large retail program at Aggie Square to compete.



HR&A conducted a retail gap analysis to gauge the potential for Aggie Square to fill market gaps and deliver retail to meet existing and future demand.



I. IDENTIFY CUSTOMER GROUPS HR&A identified the primary customer groups who will likely make up the base of retail spending in the area: Current Residents, Current Workers, Current Students, and nearby Future Residents and Workers.



II. ESTIMATE SPENDING POTENTIAL Using multiple sources including the U.S. Census Bureau, ESRI Business Analyst, and International Council of Shopping Centers (ICSC), HR&A estimated the total spending potential of current residents, students, and employees within the Convenience Trade areas. HR&A then projected these spending patterns for new residents and employees within Aggie Square at an intermediate state of build-out.



III. DETERMINE RETAIL SUPPLY HR&A determined current retail sales in the Convenience Trade Areas by retail segment, using data from ESRI Business Analyst.



IV. UNMET SPENDING POTENTIAL Based on the interplay between existing retail sales and estimated spending potential within each of the retail categories, HR&A estimated unmet spending potential for each retail category.



V. SUPPORTABLE RETAIL SQUARE FOOTAGE To estimate the amount of retail space that could feasibly be absorbed by development at Aggie Square, HR&A leveraged metrics on retail sales per square foot to translate unmet retail spending potential into associated square footage. HR&A then applied realistic capture rates to these estimates in order to project the amount of square footage that could be supported at Aggie Square.

Demand for potential retail included at Aggie Square will come from four primary consumer groups in the Immediate Trade area.



Existing residents living within a 10 minute drive time of the Aggie Square site.

120,600 residents



Students who are attending classes at UCDH, including School of Medicine and School of Nursing

994 students

Sources: UC Davis





Current Workers

UCDH employees, including

fellows and residents, in the

immediate vicinity of UCDH

dinning or shopping during lunch hours or before/after work.

13,990 workers

New Residents and

Workers

(Mid-Point of Project)

New residents and employees

housed in residential and office

delivered as part of Aggie

Square.

450 new residents

1,333 new workers

Immediate Trade Area: Capturable Spending Potential

	Current Resident Demand	Current Worker Demand	Current UCDH Student Demand	Future Residents & Workers	Current Sales	Unmet Spending Potential	Aggie Square Capturable Spending Potential
Convenience Retail	\$24,350,000	\$27,450,000	\$850,000	\$4,000,000	\$12,980,000	\$43,670,000	\$6,550,000
Grocery Stores	\$12,570,000	\$9,410,000	\$1,150,000	\$1,610,000	\$77,690,000	\$0	\$0
Food & Beverage	\$9,480,000	\$16,760,000	\$1,920,000	\$2,140,000	\$5,600,000	\$24,170,000	\$9,670,000
Total, All Retail	\$46,400,000	\$53,620,000	\$3,920,000	\$7,750,000	\$96,270,000	\$67,840,000	\$16,220,000

The Immediate Trade Area contains an estimated total unmet spending potential of \$67.8 million in Convenience retail, with demand coming primarily from current residents and workers, as well as future residents and workers to be housed at Aggie Square. This gap is in part driven by unmet demand for food and beverage outlets, a finding borne out by conversations with stakeholders who noted the lack of dining options in close proximity to UCDH. Using reasonable capture rates to understand how much of the immediate trade area's unmet spending potential can be captured by Aggie Square, HR&A estimates that Aggie Square has the potential to capture \$16.2 million in retail spending on site from customers in the immediate trade area.

*Demand and supply totals do not add as there exists oversupply of certain subcategories (i.e. electronics, health stores) and undersupply of others Source: ESRI Business Analyst, U.S. Census Bureau, ICSC

Convenience Trade Area: Capturable Spending Potential

	Current Resident Demand	Current Worker Demand	Future Residents & Workers	Current Sales	Unmet Spending Potential	Aggie Square Capturable Spending Potential
Convenience Retail	\$353,000,000	\$130,760,000	\$5,130,000	\$177,760,000	\$311,130,000	\$4,400,000
Food & Beverage	\$138,760,000	\$79,840,000	\$2,660,000	\$215,030,000	\$6,230,000	\$510,000
Total, All Retail	\$491,760,000	\$210,600,000	\$7,790,000	\$392,790,000	\$317,360,000	\$4,910,000

The Convenience Trade Area contains an estimated total unmet spending potential of almost \$320 million in Convenience retail, with demand coming primarily from current residents and workers, as well as future residents and workers anticipated to be within the area given pipeline residential and office projects. This gap is largely driven by unmet demand for convenience retail outlets. Using reasonable capture rates to understand how much of the convenience trade area's unmet spending potential can be captured by Aggie Square, HR&A estimates that Aggie Square has the potential to capture \$4.9 million in annual retail spending from customers within the Convenience Trade Area.

*Demand and supply totals do not add as there exists oversupply of certain subcategories (i.e. electronics, health stores) and undersupply of others Source: ESRI Business Analyst, U.S. Census Bureau, ICSC



HR&A estimates that Aggie Square can support a retail program primarily positioned to offer amenities to the surrounding District.

Retail Category	Capturable Spending Potential	Supportable Square Feet at Aggie Square
Convenience Goods	\$10,950,000	30,000
Grocery	\$O	-
Food & Beverage	\$10,180,000	20,000
Total	\$21,130,000	50,000

Based on capturable retail spending potential within the immediate and convenience trade area, HR&A estimated supportable retail square footage based on industry standards and national retailers' average sales per square foot numbers. Given the presence of several large retail centers directly outside the trade area, and the site's lack of visibility from major highways, as well as developer and stakeholder sentiment that Aggie Square would not be a logical place for a significant retail center, HR&A recommends that Aggie Square support a retail program focused solely on meeting unmet demand for convenience goods, services, and food & beverage offerings. Retail should be delivered in phases, as residents and office workers establish themselves within the district.

As the number of workers and residents in and around Aggie Square grows, there will likely be further opportunities for ancillary food and beverage and retail uses that support this population and help activate buildings around the Aggie Square area. It will be key to concentrate retail along Stockton Blvd., to build a connection between UCDH and the surrounding community. Providing food and beverage offerings to cater to UCDH students, employees, and patients should also be a defining feature of Aggie Square's retail program.

Source: ESRI Business Analyst, U.S. Census Bureau, ICSC, Auburn University



Retail Program Recommendations

FOOD & BEVERAGE OUTLETS

Aggie Square can support about 20,000 square feet of brick and mortar food and beverage establishments. This program could consist of small-format 1,000-1,500 SF quick service food options included on the ground floor of lab and office buildings, as well as several 3,000-4,000 SF full service food offerings catering to residents of Aggie Square. Restaurants and bars are critical to the vibrancy of a mixeduse district, and will help activate Aggie Square after business hours.



CONVENIENCE GOODS

Convenience retail outlets, such as bookstores, pharmacies, and gift shops, positioned to meet the needs of employees, students, visitors, and patients at UCDH can be a successful component of Aggie Square. Further, **convenience retail outlets provide an important conduit for bringing surrounding community members into Aggie Square** – hosting retail space to meet every day needs (e.g. pharmacies or bodegas) can help show the neighborhood there is reason for them to visit Aggie Square.





UC Davis Health – Aggie Square

REAL ESTATE MARKET ANALYSIS

MARCH 2018

