



City of
SACRAMENTO

+

UCDAVIS

=

innovation
economic development
healthy communities
clean transportation
new partnerships
Aggie Square

In December 2017, Sacramento Mayor Darrell Steinberg and UC Davis Chancellor Gary May appointed a working group to identify opportunities for leveraging university innovation research to advance economic development in greater Sacramento. This report is the result of their work.

The working group included:

Sacramento

Barry Broome, President
Greater Sacramento Economic Council

John Dangberg, Asst. City Manager
City of Sacramento

Cassandra Jennings, President
Greater Sacramento Urban League

Louis Stewart, Chief Innovation Officer
City of Sacramento

Kirk Trost, Chief Operating Officer
Sacramento Council of Governments

UC Davis

Kelly Ratliff, Vice Chancellor
Finance, Operations & Administration

Robert Segar, Associate Vice Chancellor
Campus Planning & Environ. Stewardship

Cameron Carter, Interim Vice Chancellor
Office of Research

Rachael Goodhue, Chair
Academic Senate

Kristin Lagattuta, Vice Chair
Academic Senate

Karl Engelbach, Associate Chancellor
Chief of Staff to the Chancellor

Additional contributions were made by Denise Malvetti—City of Sacramento Economic Development, Elena Ruiz—Greater Sacramento Economic Council, Mabel Salon—UC Davis Government and Community Relations, Mark Romney—UC Davis Health and Gary Sandy—UC Davis Chancellor’s Office.

This study scan is not intended to be comprehensive and explore all types of connections among UC Davis teaching, research and public service activities and the Sacramento region. It is intended to help us ‘think outside the box’ in looking for new ways that the university’s research mission can intersect with Sacramento economic development goals. We hope this effort is the first of many such efforts to follow.

The Sacramento + UC Davis Opportunity Scan Timeline

- In February of 2017 The Regents of the University of California named Gary S. May the seventh Chancellor of the University of California, Davis.
- In April 2017, the Autonomous Transportation Open Standards initiative was launched, positioning the Sacramento region to play an increased role in setting standards around autonomy, the technology surrounding autonomy, and mobility at large.
- In April 2017, the City has adopted a Demonstration Policy, creating a foundation for creative, nimble partnerships that can improve City services, meet adopted City goals, and provide public benefit. The policy provides a framework for innovative demonstration partnerships, allowing the City to test, evaluate, and demonstrate innovative solutions. One such example of this is Verizon 5G partnership designed to bring smart city infrastructure and services to people who live, work or visit the Capitol City. Verizon expects to invest more than \$100 million to further Mayor Steinberg's vision to foster innovation and attract new companies in a tech-forward environment.
- In June 2017, Mayor Steinberg led a delegation to Atlanta to visit Dean May and tour Tech Square, a collaborative economic development venture by Georgia Tech, the City of Atlanta, public and private partners.
- In his first major address in September 2017, Chancellor May envisioned a strong partnership between UC Davis and the greater Sacramento region, naming his idea for an innovation hub 'Aggie Square'. Aggie Square will likely be included in the current effort to develop a new UC Davis Strategic Plan. "To Boldly Go" will set a tone for UC Davis moving forward with confidence and a commitment to excellence.
- In November 2017, Chancellor May established an internal group comprised of the provost, several deans, representatives from the Academic Senate, and representatives from the administration to discuss and make recommendations about the academic programs and research and translational activities that could be situated at Aggie Square.
- In November 2017, Mayor Steinberg introduced the Sacramento Urban Technology Lab (SUTL) during Global Entrepreneurship Week. Similar to Tech Square in Atlanta, the SUTL framework embodies the Triple Helix model of economic innovation where government, industry and academia collaborate to transform Sacramento into a living laboratory as a way to grow the existing base of high-wage jobs.
- In December 2017, the Sacramento City Council adopted the City's first *Electric Vehicle Strategy* with ambitious goals and targets for EV adoption. Built out of strong regional partnerships and community and industry support, the *EV Strategy* identifies existing programs and highlights near-term priorities. More than just a staff-driven initiative, Mayor Darrell Steinberg and the City Council are champions of the City's EV efforts.
- In December 2017, the Mayor and Chancellor appointed a working group to map the opportunities for collaboration among UC Davis, the City of Sacramento and others to leverage university innovation research for economic development.

Executive Summary

The concept of ‘Aggie Square’ represents a shift in philosophy, a collaborative strategy for our community as Sacramento embraces the success and potential of the University of California, Davis (UC Davis), dropping the long out-of-date idea that the university is over the causeway and somehow disconnected from the region’s future. Aggie Square elevates UC Davis’ role in the new knowledge based economy, leveraging the university to become the catalyst for economic change, creating jobs for its graduates and a brighter economic future for the community.

The UC Davis core mission is to educate students and to promote new discovery and innovation. **Aggie Square provides the opportunity to align university strengths and ambitions with the needs of the market, allowing Sacramento leaders to better support the university, sector growth and job creation, in turn creating solutions for greater prosperity across the region.** This will also create stronger connectivity within the Northern California Megaregion, creating new access points for venture capital and investments and strengthening our position within the most innovative market in the world.

The success of Aggie Square and the region hinges on the relationships, synergies and collaborations established by leadership in academia, government, industry coming together to form a triple helix. **This bond will create a stronger interface between the university and industry, increasing technology transfer and job opportunities within advanced industries.** These jobs, which generate more economic impacts and create additional downstream jobs, will provide economic opportunity for struggling residents across demographics.

Although California is the 6th largest global economy and is world renowned for innovation, economic prosperity in the capitol is not shared equitably across all communities. Aggie Square creates a timely opportunity to cohesively integrate UC Davis into the Sacramento economy. **Aggie Square creates a mission-based effort to address economic trends in the market, strengthen the impact of the university, and creates shared values and responsibility around the future prosperity of the region and UC Davis graduates.** In February 2018, the Brookings Metropolitan Policy Program released a Greater Sacramento Market Assessment, revealing economic strengths and alarming trends that require the immediate attention and action of regional leaders.

“UC Davis provides a solution to the economic trends.” ~ Brookings

As a metropolitan statistical area (MSA), Sacramento faces challenging trends:

- Ranked 67th of the 100 largest metros for growth related to jobs, output, and entrepreneurship
- Ranked 71st of the 100 largest metros for prosperity, with reference to productivity, standard of living and average wage

- Ranked 84th of the 100 largest metros for inclusion, factoring in employment rate, median wage, and relative poverty rate

Even within our own community, these trends are concentrated among specific demographics and underserved communities:

- 34% of residents in the Sacramento MSA are considered to be in ‘struggling families’, with specific demographics facing greater challenges:
 - 42% of those with only a high school diploma are described as struggling
 - 47% of Black residents and 42% of the Hispanic residents are described as struggling

These inequities will continue to worsen without a market-based, inclusive economy that is built around innovation and tradeable, export-producing sectors that can provide economic opportunity to residents across demographics, skill levels, and industries.

Further, the Sacramento MSA has less export activity than its peers, giving the region access to fewer resources and wealth within our market. This highlights the need for an increased focus on building an innovation economy that serves the needs of our community as well as export-producing sectors within the Sacramento region. Leveraging the existing strengths of UC Davis will create greater economic opportunity and have a deeper impact across the market in job creation and income levels.

The findings of the Brookings report establish the framework for the region’s Prosperity Plan, an effort across stakeholders to align resources and assets into a single economic development plan that will address these trends and shape the trajectory for the region.

“UC Davis is one of the most comprehensive teaching and research institutions in the country, producing talent, technology, and innovations that can shape the entire region.” ~ Brookings

According to the Brookings analysis, R&D services and Agriculture are among the Sacramento MSA’s highest exporting industries. These key export-producing sectors are already aligned with the strengths of UC Davis and should be targeted for investment and growth. UC Davis excels in the fields that provide the most potential for cluster growth: food and ag-tech, biological, medical and health sciences, and transportation technologies and mobility. Additional focus areas may be brought to light at the conclusion of UC Davis’ ongoing internal assessment of strengths and opportunities.

Aggie Square addresses an opportunity to expand the scale of UC Davis research, as private investment only makes up 6% of UC Davis’ overall R&D funding. And, the timing is right: as costs and congestion increase in the Bay Area, a 2014 student survey reveals Sacramento is a primary choice for UC Davis graduates. The university is in the process of updating its 2018 student survey, and we expect Sacramento to be overwhelmingly the first choice for graduates looking for a vibrant community in which to live and work.

UC Davis is a premier university that deserves support from state, local, and private leaders. The vision of Aggie Square will create incentive for additional public investment

in university efforts to increase job creation in advanced industries. As public-sector leaders craft new initiatives through measures to increase revenue for economic development strategies, this effort will provide an investment opportunity that will elevate university innovations and outputs and increase regional economic prosperity.

The following proposal for the vision of Aggie Square includes ‘opportunity scans’ of four areas within Sacramento that are likely to best suit the needs of this new initiative: 1) Downtown/Riverfront area, including West Sacramento, 2) UC Davis Health Campus in Oak Park, 3) Sacramento Center for Innovation on Highway 50, near Sacramento State University and 4) North Natomas.

Each opportunity area has been evaluated across key goals. These goals have been applied to partnership opportunity areas, which include target tradeable sectors: Life Sciences, Food Systems, Mobility, Government and Civic Tech and Arts and Communications.

In sum, this report provides: 1) an analysis of the unique assets that Sacramento can leverage for university collaboration, 2) a market-based strategy that is broader than a single site or program to increase economic potential and 3) the identification of key strengths and priorities that, with strategic investment, can create prosperity and inclusion across the market.

Aggie Square will allow Sacramento and UC Davis to collaborate and compete on a global scale by creating a shared sense of responsibility around the success of both the university and the region’s economy. **Aggie Square must play a critical role in the region’s future prosperity with the strategic integration of UC Davis expertise, talent and innovation into the region, building the market-based, inclusive economy that we need.**

¹ Brookings, “Metro Monitor,” February 2018, https://www.brookings.edu/wp-content/uploads/2018/02/2018-02_brookings-metro_metro-monitor-2018-executive-summary__final.pdf.

¹ Brookings analysis, 2018. University of Washington Center for Women’s Welfare, “County-Based Sufficiency Standard,” 2017.

¹ Brookings, “Export Monitor,” 2017.

¹ Brookings analysis, 2018. National Science Foundation and HERD survey data, 2016.

¹ UC Davis, 2015.

GOALS of the Sacramento + UC Davis Opportunity Scan

The working group embraced the following five goals in pursuit of a shared vision. Each opportunity area is characterized through the lens of these five goals.

1. **ADVANCE** UC Davis' mission in teaching and learning, research and discovery, and public service and patient care by enhancing Sacramento's ability to drive economic growth and job creation in advanced industries.
2. **PROMOTE** strategic partnerships for economic development in the state capital by leveraging UC Davis activities in research and innovation, furthering Sacramento as a regional and global thought leader in emerging technology development and deployment.
3. **CONTRIBUTE** to community building and community health by expanding access to Sacramento's innovation economy for all communities, businesses and individuals with an emphasis on making investments in talent development, career pipelines and opportunities for underserved communities.
4. **CONNECT** all communities with transportation enhancements between UC Davis and Sacramento in order to broaden access to Sacramento's growing knowledge-based innovation economy.
5. **LEVERAGE** Sacramento's ability to convene and facilitate dialogue among regulators, industry and academia to enhance financial partnerships across public, private and the non-profit sectors.

Partnership Opportunities

The following industries could be catalyzed by the partnership between Sacramento and UC Davis. These potential partnership opportunities build on the strengths and ambitions of the university and the region and have the potential to bring the most impact and high wage jobs in advanced industries.

1) Life Sciences

A focus on this sector could propel Sacramento to become 5th in the state for life sciences employment by surpassing both San Bernardino & Riverside Counties (10,900 jobs) and Santa Barbara & Ventura Counties (12,100 jobs). As it stands, statewide the Sacramento region is 7th in life science employment (9,000 jobs) and UC Davis sits 6th in the State for NIH funding (\$234M). UC Davis could also surpass the University of Southern California (\$254M) in funding from the National Institutes of Health (NIH) for 5th place in the State. The Sacramento region ranks 3rd in average life sciences wage at \$118,000, behind the Bay Area (\$167,300) and Santa Barbara & Ventura Counties (\$169,000), but ahead of the California statewide average of \$113,700.

Health and Life Sciences are already a major component of the Sacramento region's economy accounting for 12% of the region's gross product at \$13.9 billion. The Sacramento region already has numerous assets and leaders in these fields including: UC Davis-HM.CLAUSE Life Science Innovation Center, Bayer Co-Laborator, Area 52, UC Davis Comprehensive Cancer Center, UC Davis Transplant Center, UC Davis Medical Center, Novogene, Biomakers, Molecular Matric, Sutter Health, Kaiser Permanente, Dignity Health, California Life Sciences Association and many more not listed here.

Life sciences is identified as a key vertical market in the Sacramento Urban Technology Lab (SUTL) framework. This vertical market includes partnership potential in areas such as precision medicine, regenerative cures, health information technology, telemedicine, medical devices, biopharmaceutical manufacturing, bio-renewables, and research & development and testing laboratories.

2) Food Systems

According to Valley Vision, the Sacramento region is the center of the largest agricultural economy in the U.S. and the 9th largest globally. Sacramento is truly America's Farm to Fork Capital, feeding both the nation and the world. Beyond this authentic brand, the Food and Ag economic cluster is a major regional economic driver, generating more than \$7 billion in direct economic impact. The region has an unrivaled array of Food and Ag assets, including productive soils and farmland, favorable climate and water supply, innovative multi-generational growers and food entrepreneurs, supportive institutions and informed consumers increasingly demand locally sourced and healthy foods. UC Davis is ranked first in the nation for agriculture among

institutions of higher education and second globally for agricultural sciences, exemplifying world class research and innovation. UC Davis faculty collaborate with growers, companies and institutions around the world for a more sustainable, healthy and productive food system.

The Sacramento region is already a world leader in food systems with the following assets already in place: UC Davis College of Agricultural and Environmental Sciences, Seed Central, SensIT Ventures Inc. HM.CLAUSE Innovation Center, Bayer Crop Science Co-Laborator, Robert Mondavi Institute for Food and Wine Science, UC ANR/VINE Network, Raley's and AGR.

Food systems is identified as a key vertical market in the SUTL framework. This vertical includes such programmatic opportunity areas as Ag tech, food safety, seed research and breeding, food literacy, crop science, and more.

3) Mobility

Sacramento and UC Davis are already partnering today in the rapidly evolving area of transportation and mobility. Collaboration between the City and the UC Davis Institute for Transportation Studies (ITS) led to a successful SB 1 research proposal. The City supported UC Davis ITS' successful efforts to procure SB 1 funding to research Electric V adoption in the Sacramento. The study will analyze EV trends in Sacramento, seeking to establish a regional EV baseline. This initial study will allow for analysis of investment outcomes. Over time, UC Davis ITS will analyze the impact of electrification investments and initiatives, identifying lessons to support replication. The study is an important early partnership between UC Davis ITS and the City, demonstrating the benefit of partnering local policy leadership with UC Davis' research expertise. UC Davis ITS is also a new partner in the Plug-In Electric Vehicle (PEV) Collaborative, involving staff from the Plug-In Hybrid & Electric Vehicle (PHEV) Research Center on campus.

Sacramento has been a long-standing leader in electrification. Electrification in the Sacramento region is a collaborative enterprise with other agency and community partners, with notable initiative from the Sacramento Municipal Utilities District (SMUD), a nationally-recognized leader in innovation and the adoption of electric transportation. Sacramento has implemented a range of initiatives to deploy EV programs and infrastructure. Recent public-private partnerships also provide a foundation for future efforts.

Sacramento is uniquely poised to implement and test various programs to increase deployment of electric vehicles. The City is rapidly emerging as a test bed for EV deployments. Momentum in electrification has emerged within the region, community, and private sector. Multiple efforts are seeking to rapidly accelerate the advancement of EV deployment in Sacramento, with the potential to test strategies that can be duplicated statewide and across the nation.

In 2017, Electrify America's selected Sacramento as its first "Green City", with a planned investment of \$44 million by mid-2019 in EV infrastructure and EV mobility programs.

There is strong multi-agency collaboration among the City's regional agencies, local agencies, public electric utility company, air district, and private non-profit and industry sectors to achieve these goals. This institutional framework will help to test and adopt programs. The Sacramento Area Plug-In Electric Vehicle Collaborative (SacPEV Collaborative) is an active body incorporating local and regional agencies, the local Sacramento Area EV Owner's Association (Sac EV), and Valley Vision, a local non-profit that facilitates community-building work across the valley. The City, SMUD, Sacramento Area Council of Governments (SACOG), and the Sacramento Air Quality Management District (SMAQMD) have a strong history of innovative programs and support to advance EV usage through this partnership.

In addition to the partners listed above, the Sacramento region contains numerous other assets and leaders in mobility including: UC-Davis/Hyundai Center of Excellence in vehicle dynamic systems and control, Propel Fuels, California Fuel Cell Partnership, Highlands Power, Center for Alternative Fuels and Atmo Auto Power.

This confluence of strong political leadership and significant private investment provide a unique opportunity to test and demonstrate successful strategies to advance EV usage in various facets, from expanding public and private infrastructure, providing community education, supporting electric car share programs, increasing EV adoption in disadvantaged communities, and identifying regulatory tools to facilitate EVs in public and private development. Success in these areas promises to deliver environmental and economic benefits.

Mobility is identified as a key vertical market in the SUTL framework. This vertical includes such partnership opportunity areas as smart mobility, electric vehicles, automotive tech, autonomous vehicles, intelligent traffic management and more.

4) Government and Civic Tech

As the capital of the world's 6th largest economy, Sacramento is at the center of policy, research, development and implementation. UC Davis' world class research and innovation can have an even greater impact on guiding the future of California's policies and programs by increasing partnerships in Sacramento. Not only does a presence in Sacramento enhance partnerships at the State Capitol, but also with other State Agencies (i.e. Department of Motor Vehicles, California Air Resources Board, Department of Food and Agriculture, Department of Health and Human Services and more), trade associations, unions, lobbyists and others who are integrally involved in developing and implementing policy. Sacramento offers a connection to the rest of California that will further Davis' research and innovation beyond the region. UC Davis is at the forefront of fields such as climate change, transportation and community development that are of critical importance throughout California.

In addition to proximity to the State Capitol and an opportunity to develop research and collaborate on policy, Sacramento also offers an opportunity to test innovative new technologies. In 2017, the City of Sacramento launched a framework called the Sacramento Urban Technology Lab (SUTL) where government, academia and industry

collaborate to transform Sacramento into a research city or living laboratory. This living laboratory adds value when the city serves as a testbed for entrepreneurs, advanced technology businesses, and academic institutions to test, develop, and scale their ideas, products, and services alongside government and regulatory leaders from across the state.

Government and Civic Tech is identified as one of the key vertical markets of SUTL. This vertical includes partnership opportunities such as disaster recovery/government continuity, business intelligence & analytics, professional services, open data/data transparency, citizen engagement, cyber security, and more.

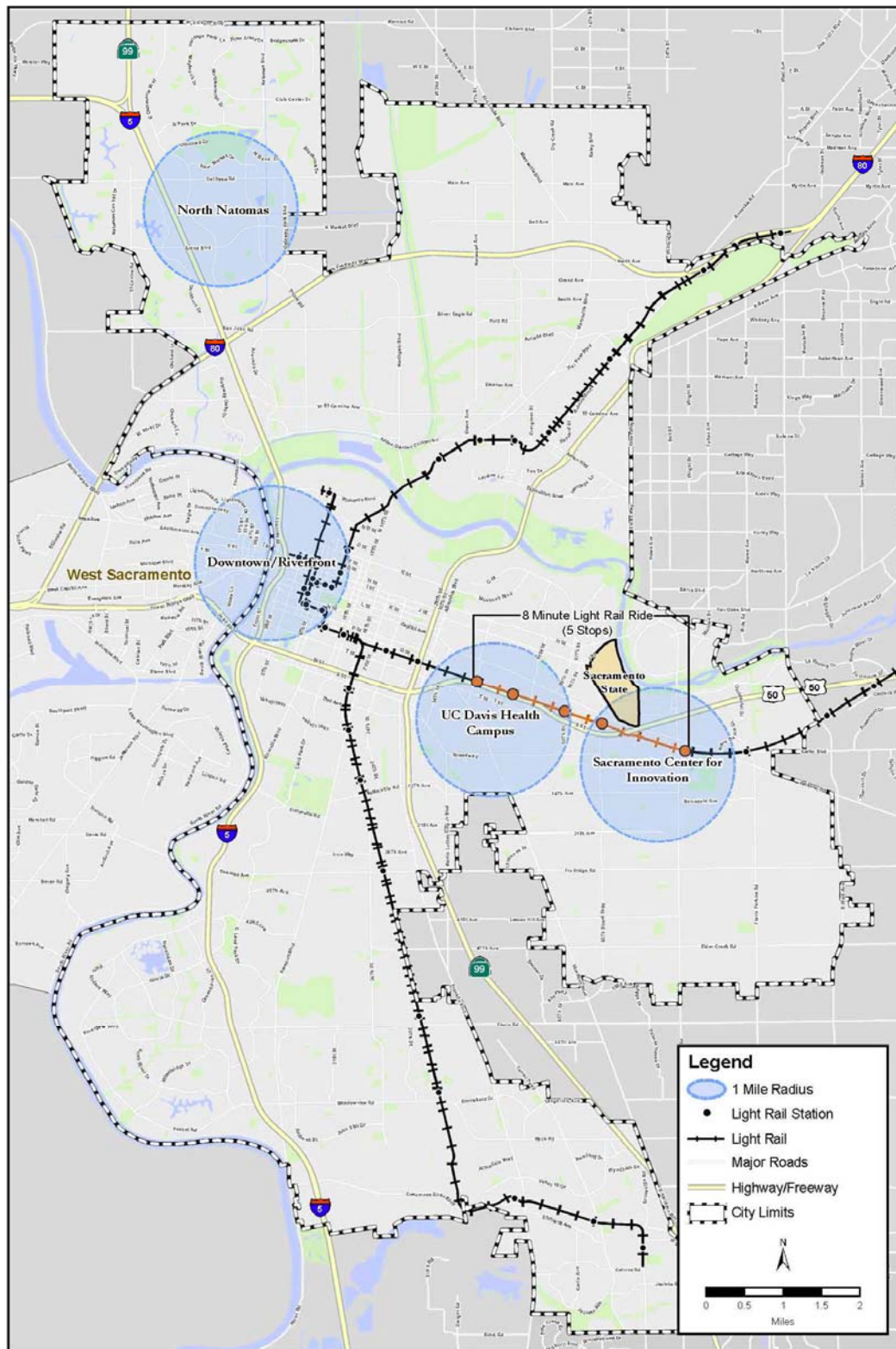
5) Arts and Communications

With the sudden surge in focus on the creative class in Sacramento, from the Natomas Charter School (Performing and Fine Arts Academy) to Wide Open Walls to the City of Sacramento's Creative Economy grant program to the recent local success of Greta Gerwig and Ryan Coogler, Sacramento is emerging as a center for arts and culture.

Sacramento has seen growth and increased interest at the intersection of art and technology, digital animation and gaming. Some assets and partners in this field in the Sacramento region include: EA Sports, Formal Sheep, 5th Planet Games, Nexcra Software, [X]Cube Labs, Auto Attack, Art Institute of California—Sacramento's B.S. in Game Art & Design and B.S. in Software Development for Creative Technologies, Sacramento State Computer Science program, Sacramento City College's Certificate in Game Design, Sierra College, American River College, Pinnacle College of Sacramento's Certificate in Music Production, Sacramento Kings, Warehouse Artist Lofts, CoWo, and The Shop by VSP.

Moreover, cross fertilization with the UC Davis campus is paying off as UC Davis professors are opening significant exhibits that are physically located in Sacramento. These exhibits at spaces such as Artspace 1616 on Del Paso Boulevard and Elliott Fouts Gallery on P Street are part of a network of galleries and museums, including the Crocker Art Museum in Sacramento and the Manetti Shrem Museum in Davis, that celebrate artists of regional and international importance.

Opportunity Areas



Four opportunity areas are analyzed for their potential to propel UC Davis research activity and attract affiliated public and private investment.

1) Downtown/Riverfront

The Downtown/Riverfront area includes the Railyards, a 244-acre urban infill project located in the heart of downtown Sacramento, as well as adjacent riverfront zones on both sides of the Sacramento River in Sacramento and West Sacramento. These locations offer the “opportunity to redefine the Sacramento region’s urban core and lifestyle.” The Railyards area is one of the largest urban infill projects in the nation. The area is served by substantial fiber bandwidth and tech infrastructure. The location is expected to generate mid-rise to high-rise development based on urban densities and land value. (Excerpted from Railyards Project Summary). The region’s transportation hub, the Sacramento Valley Station is located between The Railyards and Downtown. In addition to serving Sacramento Regional Transit, the station is also home to the nation’s 7th busiest Amtrak service with over a million riders annually. Downtown Sacramento is the cultural and employment hub of the region. A recently completed Specific Plan calls for the addition of 13,401 dwelling units and over 7 million square feet of commercial development in Downtown and Midtown. West Sacramento’s Riverfront, including the Bridge District and Washington District, are located directly across the Sacramento River from Downtown and are ready for development. Combined, the two districts are planned to have a total of 12 million square feet of mixed use development including 6,000 residential units at build out.

2) UC Davis Health Campus

The 144-acre UC Davis Health Campus in Sacramento in the Oak Park neighborhood is home to the UC Davis Medical Center, the School of Medicine, the Betty Irene Moore School of Nursing and the UC Davis Medical Group. As well, UC Davis Health is home to the only Level One Trauma Center for adult and pediatric emergencies in inland Northern California; the only Level One Children’s Hospital Surgery Center on the West Coast and one of five nationally; a National Cancer Institute Designated Comprehensive Cancer Center; a nationally recognized Medical Investigation in Neurological Disorders (MIND) Institute; a top ranked Regenerative Medicine Program with nationally recognized academic gene manufacturing practices (GMP) facilities and annual research funding of over \$285 million.

The Long Range Development Plan for the UC Davis Health Campus includes approximately 25 acres for a research and innovation district with capacity for approximately 1 million square feet of research and innovation space. Recent planning studies show an opportunity to double that amount with higher density development.

3) Sacramento Center for Innovation

The Sacramento Center for Innovation (SCI) Specific Plan envisions the redevelopment of approximately 240 acres, located seven miles east of downtown Sacramento. The plan area is immediately south of the Sacramento State (CSUS) campus and just southeast across Highway 50 from SMUD Headquarters. The SCI area is home to the largest concentration of

manufacturing companies in the northern California region. The Specific Plan provides for a Manufacturing Research and Development Zone (Sacramento State controls a 25-acre opportunity site in this zone) and a Light Industrial and Heavy Industrial Zone. The UC Davis Health campus is only 3.5 miles west of the Sacramento Center for Innovation. Existing land is mostly developed and divided into approximately 300 separate parcels with 150 property owners.

4) **North Natomas**

North Natomas is located approximately 5 miles north of Downtown Sacramento and 7 miles from Sacramento International Airport and offers development opportunity with an abundance of available land, robust infrastructure and highway access. The North Natomas Community Plan, adopted in 2015, highlights several hundred acres of undeveloped land that have been identified as opportunity sites. One example of a large site is the former home of the Sacramento Kings which sits on approximately 180 acres. North Natomas is easily accessed from two interstate highways, Interstate 5 and Business 80 and is also planned to have a future light rail extension that will also extend to the airport. With over one million square feet of commercial space currently in the entitlement phase and several hundred residential units, North Natomas has ongoing development activity, yet still offers great opportunity for large, ground-up development.

Each opportunity area is evaluated based on site readiness, housing availability and alignment with the following four goals established by the working group:

Goal 1: ADVANCE

Are there characteristics of certain Sacramento sites that will propel university research programs to be more expansive and make greater contributions to knowledge than they could in other locations? And if a site has characteristics that will propel certain research activities, does it also have characteristics that will attract faculty and students across disciplines, from both graduate and undergraduate programs?

Goal 2: PROMOTE

Are conditions present at these sites that will compel companies to invest and locate near the university-based research? Is there sufficient land? Do the urban densities and land costs match the expectations of investors in industries related to the research? Are there indications already that these types of industries are looking to invest in the greater region, specifically Sacramento? Is the proximity to UC Davis graduates and researchers a compelling draw for companies in related industries?

Goal 3: CONTRIBUTE

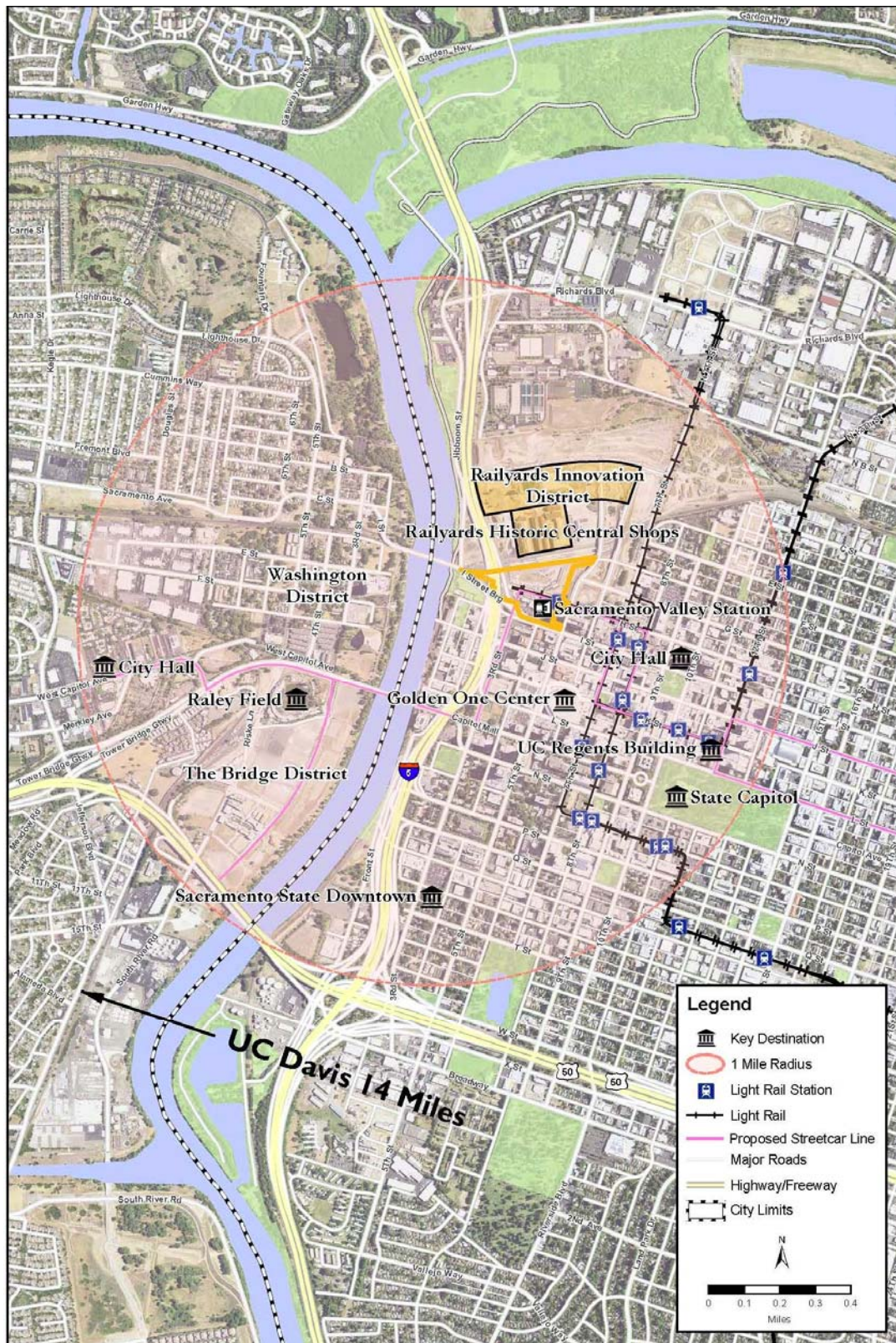
How will Sacramento and UC Davis partnerships be assets for the entire community, supporting equity and inclusion, helping to uplift areas of disinvestment and generating investment in stronger education and workforce development strategies for local residents? There should be

clearly defined connections within the immediate communities surrounding Aggie Square and intentional opportunities with the larger community, especially underserved communities.

Goal 4: CONNECT

For the Aggie Square venture to be successful, people will need to move easily between and among the Sacramento sites, between Sacramento sites and the main UC Davis campus. How good are today's transit connections between and among these sites? How will the investment in the Sacramento Valley Station at the Downtown Railyards improve connectivity across multiple modes of transportation? What other investments and technologies are needed to improve connectivity and keep Sacramento at the forefront with new modes of mobility and new transportation technologies?

Site #1: Downtown/Riverfront



Readiness

The Downtown/Riverfront opportunity area is primed for development. The cities of Sacramento and West Sacramento have undertaken planning and entitlement efforts to make the area shovel ready. The City of Sacramento adopted the Railyards Specific Plan in 2016, opening the door for some of the most intense development in the City, entitled for up to 1,100 hotel rooms, 10,000 residential units, 5 million square feet (sf) of commercial space, a 1.2 million sf medical office and hospital complex for Kaiser Permanente and a 22,000 seat Major League Soccer stadium. In April 2018, Sacramento adopted a Central City Specific Plan that plans for 13,401 dwelling units and 7,173,044 sf commercial. Similarly, The Bridge District (TBD) and Washington District in West Sacramento are shovel-ready. TBD is fully entitled for development. No additional environmental clearance, approvals, or major infrastructure improvements are needed to support up to 9 million square feet of total development.

Infrastructure

The specific plans for these opportunity areas include infrastructure analyses. On both sides of the river, there has been extensive investment in infrastructure. In the Bridge District alone, the City of West Sacramento has invested more than \$60M in public infrastructure over the past five years and in The Washington District they recently initiated a \$12M infrastructure project to update utilities and enhance the streetscape. Similarly, The Railyards has seen \$371 million in public investment to transition it from a former railyard to a mixed-use community. Another \$40 million of public investment is planned for the near future. The investments include building out a street network, bridges, tunnels, transit facilities and utilities. As a historic area, Downtown Sacramento has some of the city's older infrastructure. The City continuously invests in its infrastructure including recent major investments in Downtown's combined sewer system. The City's recently completed specific plan did a thorough analysis of utilities and infrastructure and establishes a framework to pay for necessary upgrades including the implementation of a Central City Public Facilities Finance Plan and Impact fee to ensure that funding is available for future critical infrastructure.

Housing

The Downtown/Riverfront Opportunity area is centrally located in the middle of the Sacramento region providing great access to a wide range of housing opportunities. Within a five-mile commute of the area, there are an estimated 134,000 housing units. Both the cities of Sacramento and West Sacramento are committed to adding residential units to the urban core. Combined the two cities plan for nearly 30,000 units to be added to the Downtown/Riverfront area. The adopted Specific Plans have streamlined the development of housing in the urban core leading to increased residential development in recent years. For example, with the adoption of TBD Specific Plan and investment in infrastructure, West Sacramento has added over 500 housing units, including 150 affordable units in the past few years in the immediate area.

Site #1: Downtown/Riverfront

GOAL 1: ADVANCE

This Plan area creates an opportunity to “re-establish Downtown Sacramento as the cultural, commercial and community hub for the region.” (Specific Plan, p. 4) Recent investments and plans make clear that Downtown Sacramento is evolving from a daytime employment center to a lively urban environment to work, live and celebrate the cultural richness of the City and the region. UC Davis experts already contribute in significant ways to the business of the State of California in policy and governance, from science and technology policy to immigration to environmental policy in water, energy and transportation. An increased presence for UC Davis in the Downtown/Riverfront area, proximate to the State Capitol, could put UC Davis on the forefront of shaping policy for the world’s 6th largest economy. In addition, the emerging tech and urban cultural landscape of Downtown could spark opportunities for faculty engagement in community development, regional change and other urban affairs disciplines. It should also be noted that the UC Regents owns a building at the corner of 12th and K streets, one block from the State Capitol building.

GOAL 2: PROMOTE

Downtown holds out many opportunities for growing UC Davis collaboration, particularly in areas of public policy and urban affairs. Businesses that rely increasingly on UC Davis as a source of employees may also find Downtown an increasingly attractive work/live environment for recent graduates and young professionals. Leveraging life sciences/biomedical/biotech/ag tech/advanced manufacturing research for further investment in innovation and economic development may occur more naturally in one of the other opportunity areas, but the combination of more urban, higher density sites in the Downtown/Riverfront area with larger footprint, lower density sites in nearby West Sacramento may create an attractive network for certain kinds of research and private investment.

GOAL 3: CONTRIBUTE

The Downtown/ Riverfront area encompasses a great opportunity for centralization and connectivity between Sacramento and West Sacramento and Sacramento and Yolo counties. However, any outreach or analysis would have to address the different opportunities and constraints in Sacramento and West Sacramento. In Sacramento, the Railyards or Riverfront would be a prime partnership opportunity. The Railyards is the future site for over 10,000 housing units (Including Township Nine), Kaiser Hospital, and potential location of a major soccer stadium. It is close to a re-convergence of a vibrant downtown center and would help to support development on both sides of the riverfront. Existing housing and neighborhood amenities such as schools, grocery store, and community groups are currently limited. There is an historic housing district, Alkali Flat, in very close proximity and a growing housing stock in downtown.

As interest continues to grow in the Downtown/Riverfront area, it is strongly suggested that a citywide outreach and communication strategy be developed with some clear opportunities for neighborhood engagement and benefits. Some of the stakeholders included in the engagement effort would include: Downtown Sacramento Partnership, The River District, Old Sacramento Business Association, Downtown Railyards Venture, Township Nine, Sacramento Metro Chamber of Commerce, Kaiser, Sacramento Kings, Alkali and Mansion Flats Historic Neighborhood Association, Twin Rivers Housing, River District Railyards Choice Neighborhood Initiative, Washington Park Neighborhood Improvement Group, Sacramento Housing and Redevelopment Agency/ Housing Authority, Powerhouse Science Center and Sacramento Steps Forward.

GOAL 4: CONNECT

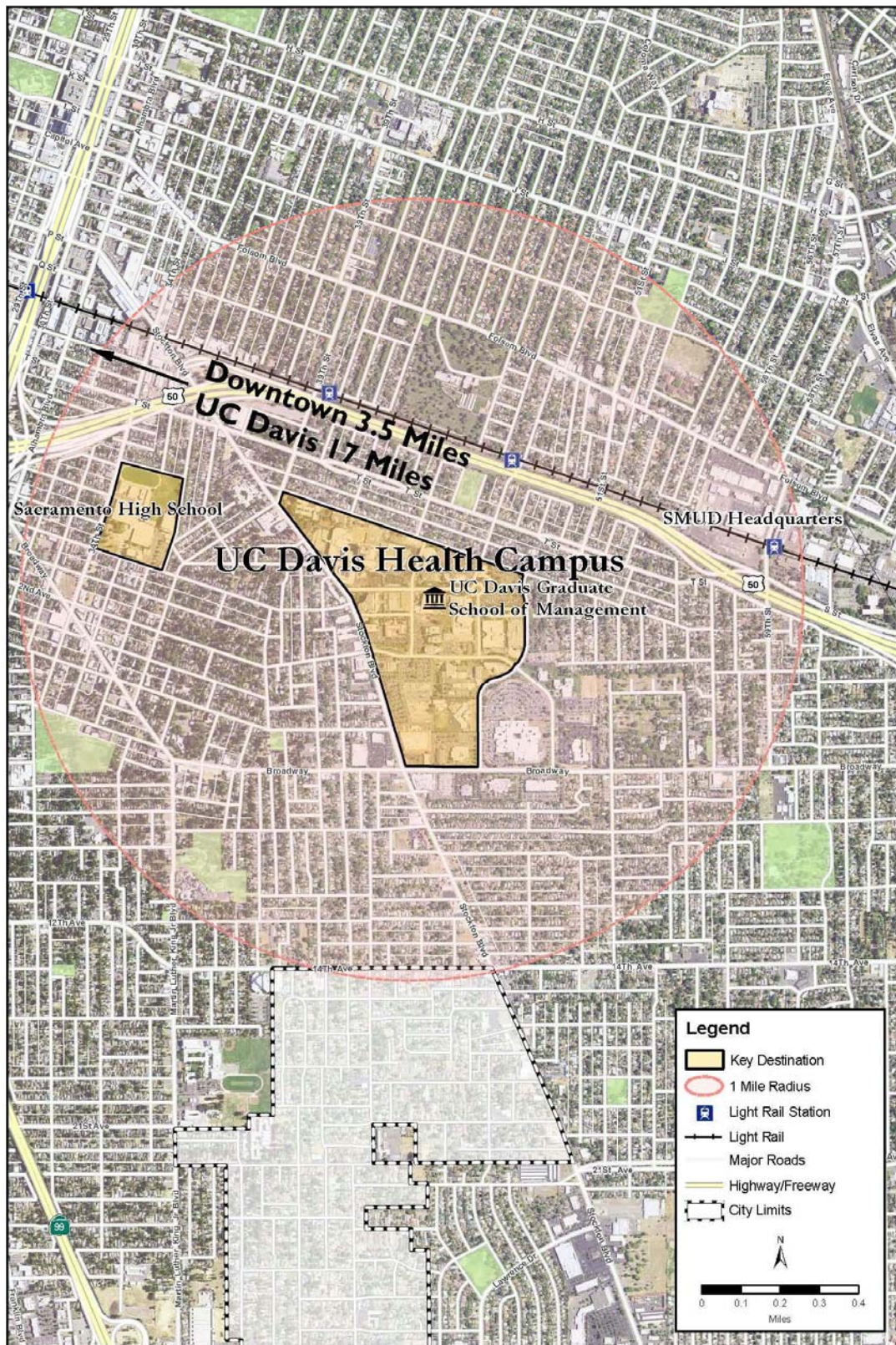
The Downtown/Riverfront/West Sacramento area is located at the confluence of all modes of transportation that serve the Sacramento region and beyond. The Sacramento Valley Station (SVS) is the focus of the Railyards Plan and the physical point of connection between the Railyards and Downtown Sacramento. The SVS is also the regional hub and transfer location for the greater Sacramento Valley transportation network. In addition to being the hub for the Sacramento region, the SVS is the nation's 7th busiest Amtrak station providing regular to connections to the Bay Area and Central California. The Capitol Corridor Amtrak line that connects Auburn to San Jose runs 15 trains each direction each weekday between Downtown Davis and the SVS. There are several ways to increase the frequency of that connection including increasing the number of Capitol Corridor trains, adding Diesel Multiple Units (DMUs) or Bus Rapid Transit (BRT). The Sacramento Valley Station is currently connected to the UC Davis Health Campus and Sacramento Center for Innovation sites by Sacramento Regional Transit's Gold light rail line and is located along the future Downtown/Riverfront Streetcar line which will connect West Sacramento to Downtown Sacramento.

In addition to being the Sacramento region's transportation hub, the Sacramento Valley Station could serve as the hub to connecting all four opportunity areas. Under a trunk model, focus would be placed on connecting the main UC Davis Campus in Davis to the SVS via rail or BRT. From the Sacramento Valley Station, light rail or shuttles could connect people directly to North Natomas, the UC Davis Health Campus and the Sacramento Center for Innovation.



Rendering of future Bridge District (West Sacramento) buildout and Downtown Sacramento

Site #2: UC Davis Health Campus in Oak Park



Readiness

UC Davis Health has undertaken a recent visioning and planning effort that has resulted in a plan to intensify research and development activity on the existing campus. The Long Range Development Plan for the UC Davis Health Campus includes approximately 25 acres for a research and innovation district with capacity for approximately 1 million square feet of research and innovation space. Recent planning studies show an opportunity to double that amount with higher density development. Some nearby privately-owned parcels may also be suitable for uses that complement an innovation community. Though private development would be subject to municipal entitlements, private development could accelerate the creation of the community and combine with university development to create an intensity of development around the UC Davis Health Campus. A concentration of activity already exists in this area which will be supplemented by further UC Davis activity combined with industry, government and community collaboration.

Infrastructure

The UC Davis Health Campus is located in the heart of Sacramento, connected by two nearby highways, 50 and 99, two nearby light rail stations (39th Street and 48th Street) and multiple bus lines. The Health Campus is served by a major north south artery, Stockton Boulevard. The site is served currently with all major utilities and all have the capacity to expand to support on-site development. As higher density development occurs, sites have been identified for additional structured parking if needed, while remaining cognizant of the emergence of autonomous vehicles and ride-sharing programs that may reduce the number of vehicles needing parking on-site.

Housing

Existing infrastructure around this site includes residential, retail and hospitality located adjacent to academic, clinical and industry office and lab space. Within a five-mile commute there are an estimated 166,000 housing units. This opportunity area is located along a commercial corridor, yet it is surrounded by many historic Sacramento neighborhoods including Oak Park, East Sacramento, Tahoe Park and Curtis Park offering diverse housing options.

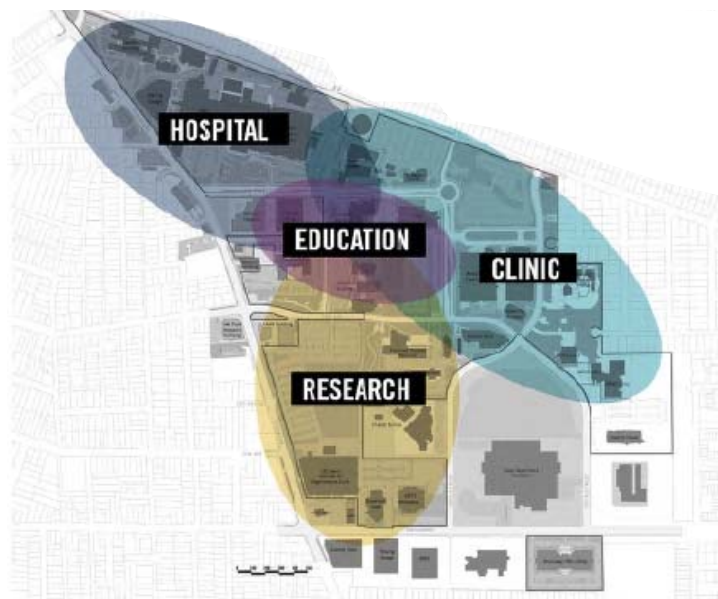
Site #2: UC Davis Health Campus in Oak Park

GOAL 1: ADVANCE

In the Sacramento region, the UC Davis Health Campus is the center of a dynamic regional health system and recognized as its innovation hub. UC Davis has an expansive 'One Health' vision that includes advancing human, animal and environmental health. The dimensions of 'One Health' include the related social sciences and humanities disciplines that intersect with medical research in search of a broader drive towards human and societal health.

The UC Davis Health Campus site is ready for activation, not just aspiration. Twenty-two of the twenty-five contiguous acres in the research and innovation zone are owned by the University of California. The remaining three acres are owned by private developers who have been very supportive and enthusiastic about partnering opportunities with UC Davis. The campus has conducted multiple studies over the past 18 months as part of an ongoing planning effort to advance a highly successful business incubator vision, with over 40 companies representing medical device, regenerative medicine, and pharmaceutical development;

The UC Davis Health Campus in Sacramento focuses its efforts into zones of activity with a strong overlap of hospital and clinical activities with education and research. Partnerships that leverage the broadest reach of the institution have a home connecting teams or individual practitioners, researchers, and students in fields including biomedicine, medical device engineering, agriculture, and veterinary medicine.



GOAL 2: PROMOTE

Over the last several years, UC Davis Health has offered many clustering opportunities for life science companies and UC Davis scientists and clinicians to work closely together to advance diagnostic, prevention and therapeutic discoveries. The UC Davis Health Campus currently has eight private companies leasing lab and office space in existing research buildings. These private tenants are primarily in the life sciences and biomedical fields and include two anchor tenants – Novogene Technologies (over 10,000 SF leased) and PETNET Solutions (Siemens) & Optimal Tracers (7,000 SF leased). Talks are underway with additional mid-to-large scale companies who have expressed strong desire to co-locate within the UC Davis Health Campus as soon as space is available.

Today's industry values connectivity to academic research and advanced technologies. They value faculty and researchers who can help solve problems. And they value students who are a source of problem solving through unique events in the community (e.g. hacking events) as well as future employees. One of the fastest growth areas for innovation centers is in healthcare and as a leading research institution, UC Davis can and will continue to attract industry that wishes to partner with the institution.



GOAL 3: CONTRIBUTE

“UC Davis Health is nestled in the historic community called Oak Park. While once a thriving residential and town center for African Americans and Sacramento’s diverse community, Oak Park experienced years of economic disinvestment, resulting in a decline in safety, services, education and quality of life for people living in the community. After over 30 years of redevelopment, Oak Park is returning to the vibrancy it once had. Restaurants are bustling throughout the night, commercial shops are unique and supported by patrons from within and beyond the community, and improved housing stock is supporting higher property values that

are still somewhat affordable. Oak Park residents are using their improved parks, riding their bikes, walking the neighborhood and continue to be civically engaged. Gentrification is having mixed effects on the neighborhood. People of color and low-income persons are being left behind or pushed out. In addition, there are still commercial and residential areas within Oak Park and South of Oak Park that are in need of investment. Oak Park is part of the Promise Zone (federal designation). Other adjacent neighborhoods to the UC Davis Health Campus continue to be great places to live.” (Greater Sacramento Urban League)

Engagement with and inclusion of the community will be a critical component of Aggie Square. Some of the identified stakeholders in the vicinity of the UC Davis Health Campus include: University of the Pacific (UOP) McGeorge Law School, Sacramento City Unified School District, Bimbo Bakery, Oak Park Business Association, Greater Broadway partnership Business Improvement District, Oak Park Neighborhood Association, South Oak Park Neighborhood Association, Stockton Boulevard Business Association, St. Hope, Med Zone, Black Child Legacy Campaign, Greater Sacramento NAACP, California Asian Chamber of Commerce, Nehemiah Emerging Leaders Program, Women Civic Improvement Center (WCIC), WellSpace, Asian Resources Inc. (ARI), Sacramento Food & Family Services, Churches, Ephraim Williams Family Life Center, Greater Sacramento Urban League (GSUL), Schools –Father Keith B. Kinney, Oakridge, Bret Hart Elementary, Sacramento High School, American Legion, Christian Brothers, Fortune Schools, Sacramento Food & Family Services, Sacramento Observer Newspaper, Salvation Army, UCD SAYS Program and the Sacramento Housing and Redevelopment Agency.

A properly articulated innovation center embraces the community and includes the local community in the success of the center. Daily programming activates innovation communities and welcomes those who are not working directly in the site. One attribute of a highly functioning innovation community is its ability to connect the fragmented activity around a city. This convergence occurs at successful university based innovation communities.

One of the key elements of a successful innovation community is an inviting public space or gateway that connects the center with the fabric of the community. The shared edge of Stockton Blvd. provides the foundation for a new place of community connection.

GOAL 4: CONNECT

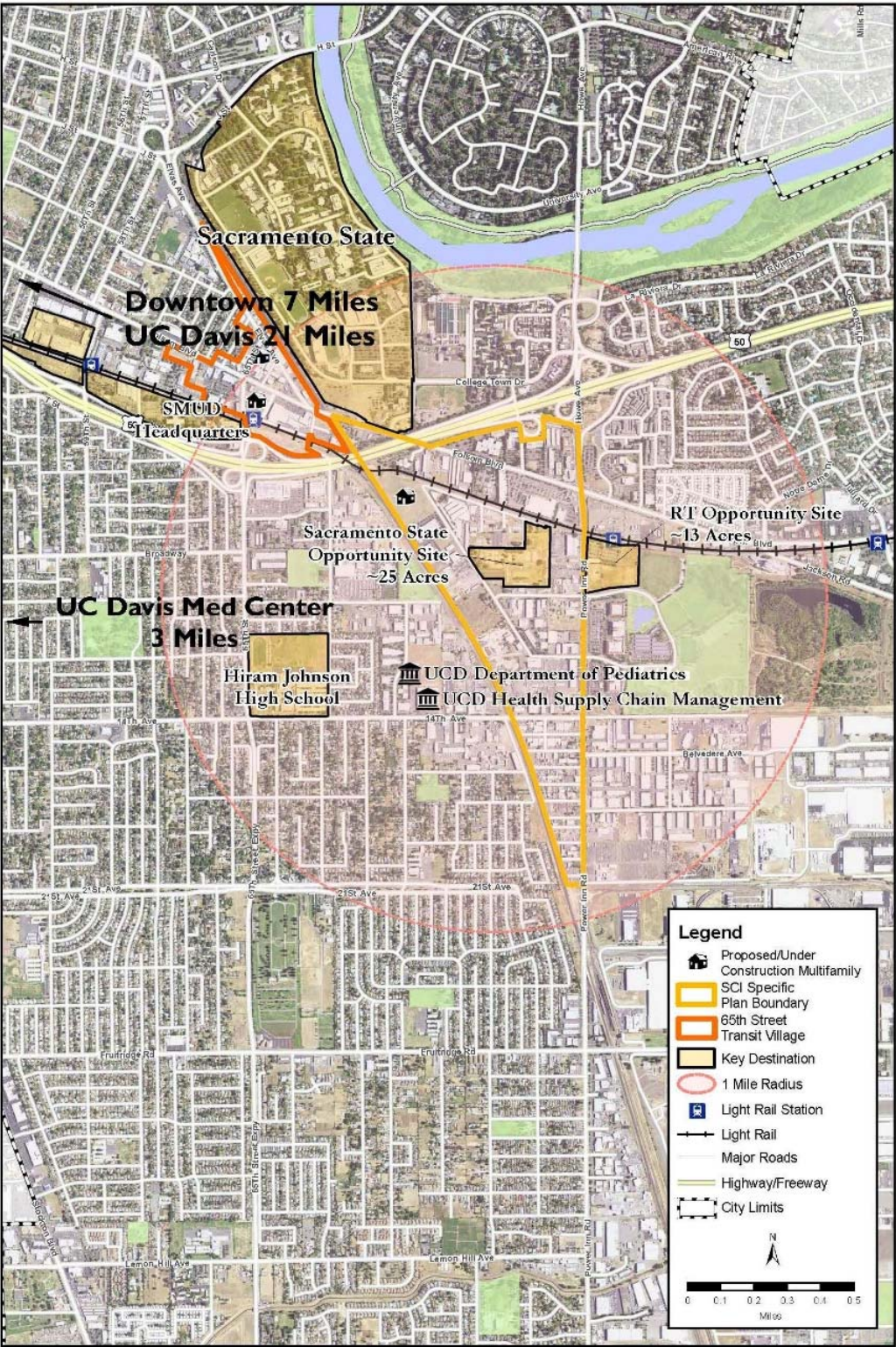
The 39th Street and 48th Street light rail stations are the closest stations to the UC Davis Health Campus, linking with downtown Sacramento and ultimately the Sacramento Valley Station. Both stations are approximately one-half mile from the campus. The same light rail line continues to 65th Street connecting the campus to Sacramento State and to Power Inn providing a direct connection to the Sacramento Center for Innovation. From the 39th Street Station to the Power Inn Road station is an 8-minute ride including five stops. The connectivity to the Sacramento Valley Station enables travel from the UC Davis Health Campus to Downtown Davis via rail making only one connection.

The UC Davis Health campus is also located along Sacramento Regional Transit’s busiest bus route, Route 51. Route 51 connects south Sacramento to Downtown Sacramento via Stockton Boulevard and Broadway. Route 51 is a critical connection to some of Sacramento’s most underserved neighborhoods. UC Davis currently runs shuttles from the main campus in Davis

to the Health Campus in Sacramento. There are currently 15 eastbound and 15 westbound trips each day connecting the two destinations. The City of Sacramento and Sacramento Regional Transit are already pursuing funding from Electrify America and state gas tax sources to assist with electrified transit between the UC Davis Health Campus, downtown Sacramento and the UC Davis main campus in Davis.

High density of people is a key element to the success of an innovation community, making walkability a major factor in bringing people together. The creation of the innovation community at the UC Davis Health Campus will enhance the walkability of the community. Simple changes to Stockton Boulevard such as median and bike/walk lanes could slow traffic and promote walkability while preserving the critical use of the north/south artery. The City currently has a pending CalTrans Sustainable Transportation Planning grant application to create a Complete Streets plan for a four mile stretch of Stockton Boulevard from Alhambra to Lemon Hill. The creation of higher density residential communities in and around the innovation community can help take cars off the streets as those residents will enjoy needed amenities as well as the walkability to their profession at either the UC Davis Health Campus or the nearby industry employers.

Site #3: Sacramento Center for Innovation



Readiness

The Sacramento Center for Innovation (SCI) Specific Plan, originally adopted in December 2013 and revised in January 2018, establishes planning and design standards for the 240 acres generally bound by U.S. Highway 50 on the north, Union Pacific rail lines on the west, Power Inn Road on the east, and the Union Pacific rail crossing at Power Inn Road at the south. The City, in partnership with Sacramento State University, the Power Inn Alliance, and SMUD prepared a specific plan for a new center for innovation and clean technology in the 65th Street area with the goal of creating an environment that fosters the exchange of technical knowledge and expertise between students, faculty and private sector business enterprises. The SCI contains the following zoning: General Commercial, Manufacturing Research and Development Zone and Light Industrial. At buildout the plan estimates a total of 650,000 sf office, 110,495 sf retail approximately one million square feet of industrial and 14,200 of public/civic uses. This study contemplates an opportunity area that expands beyond the boundaries of the SCI and includes the area surrounding 65th and Folsom. The predominant zoning in this area differs from the SCI because it is designed to meet the goals of a transit village and encourage housing. In addition to the mixed-use zoning, there is also some general commercial and light industrial. The SCI Specific Plan and the 65th Street Transit Village Plan (embedded in the Fruitridge Broadway Community Plan) establish guidelines and a framework for development in the area leading to a more streamlined development process.

Infrastructure

The SCI Specific Plan contains an analysis of existing infrastructure and identifies some key infrastructure projects. The proposed plans for each of the infrastructure elements contained in the Specific Plan provide property owners, developers and the City with a framework of improvements necessary to support future development. One high priority project identified in the Specific Plan is the extension of Ramona Avenue and water main upgrade. This approximately \$6M project broke ground in March 2018 and will create a critical connection from the SCI area to Folsom Boulevard and Sacramento State University. Another critical infrastructure project is a road diet on Folsom Boulevard that will make the road safer for pedestrians and cyclists and create a stronger, safer link from Sacramento State to the SCI area.

Housing

Although the immediate SCI area is primarily commercial, there are an estimated 156,000 housing units within a five-mile commute. With the adoption of the SCI Specific Plan and the 65th Street Transit Village Plan, the area is beginning to transition to a true transit-oriented community. In fact, there is a 750 bed student housing project with 11,000 square feet of innovation space currently under construction in the SCI plan area and two more planned residential projects at 65th Street.

Site #3: Sacramento Center for Innovation

GOAL 1: ADVANCE

One of the guiding principles for planning the SCI is to “transform an under-utilized industrial area to create a hub for clean, green and medical technology.” (Specific Plan p.19) The Specific Plan identifies medical devices, robotics, and advanced manufacturing industries as areas of particular importance to the future vision for the SCI. In addition to Sacramento State University and SMUD’s roles in innovation and research, the Power Inn Alliance’s supports the retention and attraction of business activity in this area. The potential attraction for greater UC Davis research activity at or near the SCI site lies with the opportunity for co-locating university research with manufacturing companies in ways that could benefit both enterprises. The SCI’s opportunity for research/manufacturing co-location could be complementary to planned opportunities for co-locating biomedical research companies alongside university research labs at the UC Davis Health Campus.

GOAL 2: PROMOTE

The Power Inn Alliance represents “the largest industrial area in northern California.” (Specific Plan p.14) More than 60% of Sacramento’s manufacturing base is located in the Power Inn Alliance District. Though mostly developed, the SCI area contains scattered parcels of vacant or underutilized land, and has potential for redevelopment with research and development activity and companies that focus on advanced and precision manufacturing. One of the larger vacant parcels totaling approximately 25 acres is owned by Sacramento State University. The unique potential of the SCI lies with the opportunity for co-location of manufacturing companies with the research and development organizations (universities and companies) that drive innovation in manufacturing. The size of the SCI and the large number of various-sized parcels offers opportunities for industries that require larger, lower density footprints than would be possible at the UC Davis Health Campus or Downtown/Riverfront/West Sacramento sites.

GOAL 3: CONTRIBUTE

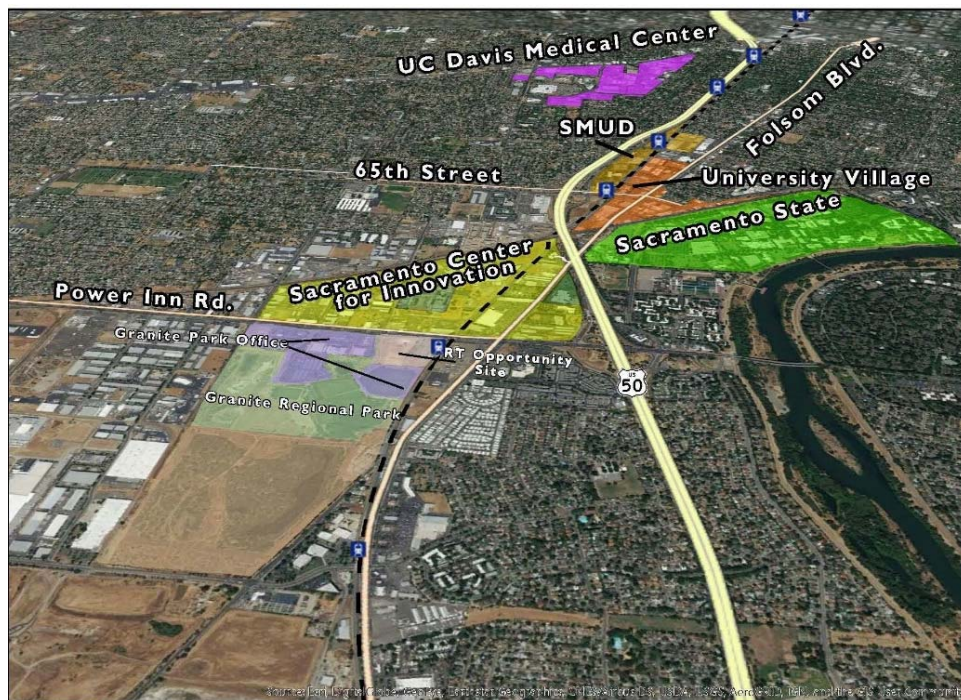
The Sacramento Center for Innovation is located in East Sacramento (Sacramento City Council District 6), across Hwy 50 from Sacramento State University, only 3.5 miles from the UC Davis Health Campus. Though primarily an industrial area, the SCI touches on the fringes of several neighborhoods within a half mile radius, including College Glen and Colonial Manor. Because the site is close to Sacramento State, there is some affordable housing in the area, mostly for students. College Glen and Colonial Manor are built out communities. To the south of the half mile radius is an older residential neighborhood called Avondale/Glen Elder which represents an opportunity to revitalize and bring jobs and opportunities to the people who live there. The development is too close to not connect.

Connecting with neighboring communities and partners is critical to community health. Some of the identified stakeholders that are proximate to the Sacramento Center for Innovation include: Avondale Glen Elder Neighborhood Association, College Glen Neighborhood Association, Colonial Manor Neighborhood Association, Hiram Johnson High School, Folsom

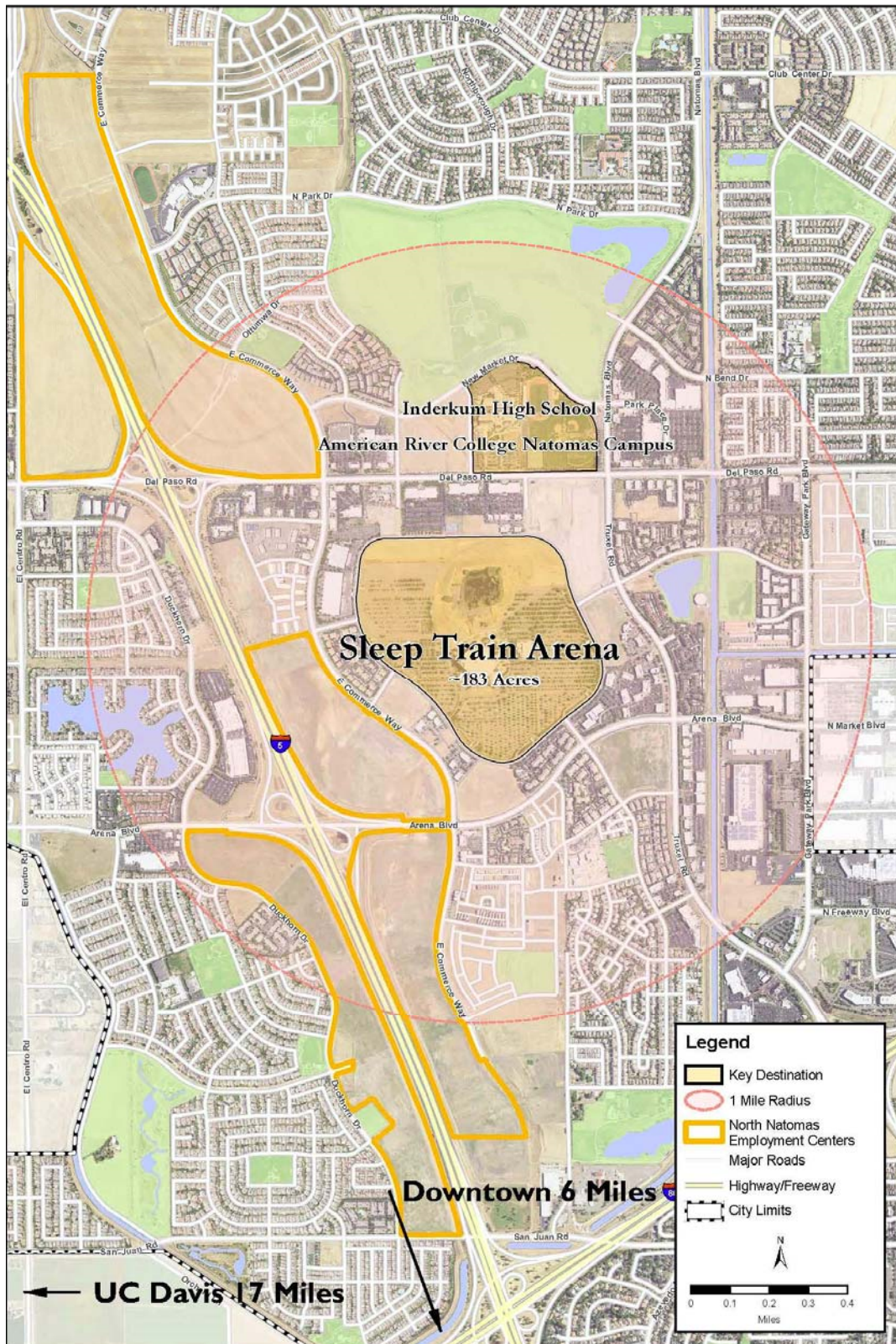
Blvd. Alliance, Health Education Council – Sacramento Association, Power Inn Alliance, GSUL, Greater Sacramento NAACP, Black Parallel School Board, La Familia, and Asian Resources, Inc.

GOAL 4: CONNECT

The SCI area is served by US Highway 50 as well as by Regional Transit’s Gold Line, a light rail line stretching from Downtown Sacramento to Folsom. Two light rail stations—the University/65th Street and Power Inn stations—are located on either side of the Specific Plan boundary. The 65th Street station also serves as a Regional Transit bus transfer station for 7 bus lines that connect to the Sacramento region. The UC Davis Health Campus is only 3.5 miles west of the SCI and also located along the Gold Line. Access between the two sites could be further improved with the addition of shuttle access. The most promising opportunities for strengthening the connections between the SCI site, Downtown Sacramento, and the UC Davis main campus in Davis will come from increasing light rail and commuter rail traffic to and from the Sacramento Valley Station in Downtown.



Site #4: North Natomas



Readiness

Although there is not a Specific Plan for North Natomas, there has been a significant amount of planning and environmental work including the development of North Natomas Community Plan, North Natomas Development Guidelines, Development Agreements and several Planned Unit Developments (PUDs). Because of Development Agreements, many of the larger vacant parcels are shovel-ready and could accommodate development in the near term. One site that offers a great opportunity, yet it is a longer term alternative because it needs entitlements, is the former home of the Sacramento Kings that sits on approximately 180 acres.

Infrastructure

As one of Sacramento's more recently developed areas, North Natomas has newer and robust infrastructure. There is also a recently amended North Natomas Finance Plan that outlines the financing structure for already constructed and future infrastructure in North Natomas.

Housing

With more than 100,000 residential units within a five-mile commute, North Natomas neighborhoods provide a balance of different housing types, lot sizes and affordability to serve a broad spectrum of residents. The neighborhoods are anchored by elementary schools and parks and are connected to commercial areas by way of local streets, pedestrian paths and bikeways. North Natomas has seen a significant amount of residential growth in the past three years with the issuance of building permits for 2,258 single family units and 302 multi-family units since June 2015. Several more single and multi-family projects are in various stages of permitting that could add thousands more units to North Natomas.

Site #4: North Natomas

GOAL 1: ADVANCE

Two research and innovation programs that may be a good fit for North Natomas are mobility/transportation and the arts. North Natomas is bound by two major interstates, Interstate 5 and Business 80 and has a robust transportation network within the community. North Natomas could be a test bed for new automotive technologies given its access to major streets and freeways. One major asset in North Natomas is the Natomas Charter School Performing and Fine Arts Academy, a 6-12 school that offers a balance of rigorous academic instruction and intensive instruction in the performing and fine arts. Areas of artistic training range from drama, dance, music and the fine arts to stagecraft and computer animation.

GOAL 2: PROMOTE

The amount of vacant and available land in North Natomas creates the opportunity to build a ground up project and a unique opportunity to build a project that requires significant acreage.

GOAL 3: CONTRIBUTE

North Natomas is the major area for new construction with the City of Sacramento and is situated in the I-5 corridor close to Hwy 99 and I-80 and in a fairly new community – with retail, commercial and offices and over 60,000 people. The housing stock is fairly new with a mix of single family residences and multifamily units. There are a number of affordable housing complexes developed as part of the Mixed Income Ordinance for new growth areas. The intersections of the freeways make it very convenient to get to major economic hubs or work in Davis, Sacramento and other parts of the region. While a very diverse community, Natomas seems to be more organized around current community issues rather than long time community roots. However, the community is still very civic and community minded. The community takes pride in Movie Nights at the Park and many have been strong advocates for fire and safety to maintain and promote healthy communities. For the most part, the community embraced the Arena (probably because it was there before the housing and commercial districts), and are anxious to support a viable reuse.

The half mile radius does not encompass older neighborhoods that may still be suffering from economic disinvestment or decline. It would be important to reach beyond the half mile area and extend outreach and partnerships to South Natomas, Norwood Northgate and Del Paso Heights that are just south and east of the Sleep Train Arena. These areas are located in Sacramento Council District 2. Some of the critical stakeholders include: Natomas Unified School District, Inderkum High School, Natomas Charter School, American River College, Sacramento Public Library, Creekside Natomas Neighborhood Association, Health Education Council Sacramento Community Association, Natomas Chamber of Commerce, Natomas Community Association, Natomas Creek Community Neighborhood Watch, North Natomas Community Coalition, Regency Park Neighborhood Association, Valley View Acres Community Association, Valley View Acres Neighbors Working Together, Winter Ranch Community Alliance, Sacramento Kings, GSUL, Asian Chamber of Commerce and Greater NAACP.

GOAL 4: CONNECT

Located just five miles from Downtown Sacramento, North Natomas is easily accessed via Interstate 5 and Business 80 as well as through bus connections. The North Natomas Flyer Shuttle is the ideal transportation option for residents who commute to downtown as it runs each weekday morning and afternoon. The Flyer runs peak-period scheduled routes between North Natomas and Downtown Sacramento. The Flyer Shuttle is just one part of the local transit network, including service along Sacramento Regional Transit lines and connections to services across and beyond the Sacramento region. North Natomas is also connected to the Sacramento Valley Station via bus route 11 with more than 20 trips per day and to some of Sacramento's critical communities via bus route 13. Sacramento Regional Transit does have a plan to connect Downtown Sacramento to Sacramento International Airport by way of North Natomas although project timing is unknown.

Financial Strategies

The financial strategies for Aggie Square will include a wide range of public and private partners that reflect the multiple goals of a mixed-use innovation center. There are many examples of innovation hubs associated with major research universities with different governance and financing strategies. The multi-use nature of Aggie Square – research and innovation space, office space, housing and retail – create opportunities to leverage and engage diverse partners.

PUBLIC FUNDING OPPORTUNITIES

City of Sacramento: Sacramento has the ability to advance the goals of Aggie Square by convening and facilitating dialogue between policy makers and industry to leverage public-private partnerships.

UC Davis: As noted elsewhere in this report, the university has land and building resources that can be leveraged at the UC Davis Health Campus. And, while the university does not anticipate directly appropriating capital funds for the Aggie Square project, the university has needs for space that can be leveraged as a revenue stream in public-private partner financing for facilities in Aggie Square (the West Village neighborhood in Davis is a good example). As well, the university can demonstrate demand for faculty, staff and student housing that will strengthen the pro-forma for any housing that may be integrated into Aggie Square.

In order to elevate the university's role in the economy, net new resources must be brought to the table to avoid detracting from the UC Davis core mission. It is critical that our leaders seize the opportunity to fundamentally shift regional attitudes and actions towards the strategic integration of UC Davis into the Sacramento market.

Transportation Funds/State of California and Other Public Funds: SACOG, the City of Sacramento and UC Davis are already undertaking planning efforts to secure funding to increase transit connectivity among these opportunity sites. Across the teams there is substantial experience with public funding options for research, innovation, economic and workforce development and education. As more information develops about the site and the partnership emphases, the team will collaborate to identify funding sources. The strong partnership with the City and UC Davis will serve to strengthen applications for public funds.

Enhanced Infrastructure Finance Districts (EIFDs): In 2014, State legislation authorized the creation of new governmental entities called Enhanced Infrastructure Financing Districts (EIFDs). An EIFD is a governmental entity established by a city or a county that carries out a plan within a defined area to finance the construction or rehabilitation of a wide variety of public infrastructure and private facilities. Using tax increment, EIFDs can fund a range of infrastructure projects including roads, parking facilities, transit stations, sewage and water facilities, transit-oriented development and brownfields mitigation.

Lease Revenue Bonds: Lease Revenue bonds generally fund construction of a facility and are then repaid by the lease revenues generated by that facility.

Economic Development Administration (EDA): The EDA's mission is to lead the Federal economic development agenda by promoting innovation and competitiveness, preparing American regions for economic growth and success in the worldwide economy. Grants made under their programs will leverage regional assets to support the implementation of regional economic development strategies designed to create jobs, leverage private capital, encourage economic development, and strengthen America's ability to compete in the global marketplace.

Infrastructure and Economic Development Bank (IBank): The California Infrastructure and Economic Development Bank (IBank) is the State of California's only general purpose financing authority. The Legislature created IBank in 1994 to finance public infrastructure and private development that promote a healthy climate for jobs, contribute to a strong economy, and improve the quality of life in California communities.

PRIVATE FUNDING OPPORTUNITIES

UC Davis has tremendous strength in life sciences, health care and other programs that already attract private partners. There are already private companies seeking partnerships with UC Davis that are difficult to accommodate because of space constraints, and as the Aggie Square project proceeds, there will be many more private partners who will seek to invest and collaborate in the innovation and research goals that the partnership is advancing. As well, The Sacramento region is growing and there are housing and retail demands that can be incorporated into Aggie Square that provide opportunities for private partners to invest jointly with the university or directly build and finance complementary services and programs.

EXAMPLES FROM OTHER PARTNERSHIPS

Tech Square: The Georgia Tech Foundation played a pivotal role in the first phase of its development. The first phase of Tech Square was a \$180 million project. The vast majority of the financing (\$170 million) came from bonds and the rest from an equity investment made by the foundation and Georgia Tech. Each component—the small retail spaces, the bookstore, the College of Management, the Global Learning and Conference Center, the EDI office building, the hotel/conference center, and the parking garage—had a distinct funding mechanism based on either donations or revenue. Some of the capital components, such as the College of Management, were supported by tax-exempt bonds; others, like the hotel and bookstore, by taxable bonds. The foundation's endowment secured all bonds.

Summary of Findings

1) **Leverage a Range of Unique Assets in Sacramento**

This opportunity scan identified a range of locations where UC Davis innovation research might expand and lead to more successful collaborations with economic development activity in Sacramento. Taken together, the four opportunity areas present a range of conditions from low to high density, from downtown to outlying suburbs, from strong existing land uses to wide open possibilities. Each of these unique conditions could be attractive to different sectors of research and business. The Downtown/Riverfront/West Sacramento area, as the commercial and governmental core of the region, presents the most diverse, highest density setting of the four. The UC Davis Health Campus in Oak Park is dedicated to teaching, research and patient care and will be developed at increasingly higher densities in the future. The Sacramento Center for Innovation near Sacramento State and SMUD offers a range of small and large footprints in an area with an established manufacturing base. And the North Natomas site is a large, master-planned zone with great flexibility to envision new opportunities in the future.

2) **Take a ‘Whole Industry’ Approach: Think Bigger than a Single Site**

The diversity of UC Davis research and the diversity of geographic assets in Sacramento, taken together, create an opportunity to take a ‘whole industry’ approach to pursuing growth in strategic research and economic development sectors. No one site or opportunity area can likely provide the range of needs that any technology-based industry will require, from research to manufacturing. But collaboration among multiple public and private partners across multiple sites can position our shared community for greater success in the future.

3) **Build a Culture of Partnership.**

This planning process has highlighted an even bigger opportunity to build on current successes to deepen a culture of partnership among the City of Sacramento, UC Davis, industry and community partners. The benefits of genuine partnership will accrue to all parties.

4) **Start with Clear Strengths and Shared Priorities.**

Where the strengths of the university and the city intersect, the sum of Sacramento + UC Davis efforts can be greater than the parts. There are many areas of collaboration between UC Davis and the City that are nascent and should be nurtured. There are others that are mature but may not lead directly to economic development outcomes. All are worth further attention and exploration. But for the goals of this scan, the most promising sites are those with characteristics that will support known research activity at UC Davis in ways that will propel private industry investment and local economic growth.

5) **Start now.**