



SACRAMENTO REGION Coordinated Rural Opportunities Plan

March 2024

Sacramento Region Profile





Introduction

The Coordinated Rural Opportunities Plan (CROP) is funded by the Department of Conservation’s Sustainable Agricultural Lands Conservation (SALC) Program and is a joint effort between the Sacramento Area Council of Governments (SACOG) and Valley Vision. CROP is the next phase of SACOG’s groundbreaking [Rural-Urban Connections Strategy](#) (RUCS) to enhance rural economies and the natural assets that drive them across the six-county Sacramento region: El Dorado, Placer, Sacramento, Sutter, Yolo, and

Yuba counties. CROP includes a comprehensive profile of each county that identifies priority areas for infrastructure investments and programs to strengthen the region’s food and agricultural cluster, along with this Regional Profile which summarizes key highlights from the county profiles, along with examples of innovative models that can be leveraged across the region for shared solutions, and potential resources to meet vital infrastructure needs.

CROP provides county and regional leaders the opportunity to address infrastructure investment challenges and collectively come together on solutions, including policies and investments, that will support the region’s agricultural sustainability and long-term economic health and resiliency. CROP has defined food and agriculture infrastructure as a physical investment in four interrelated areas: water, land use and housing, transportation and broadband, and food system and governance.



This infrastructure does one or more of the following:

FOOD SYSTEM INFRASTRUCTURE



Improves the efficiency, sustainability, and productivity of the local food system



Increases and access to nutritious, local, and seasonal foods in historically disinvested communities



Supports the viability of agriculture, addresses climate challenges, and helps preserve valuable farmlands



Creates new jobs, supports food and ag-related businesses, spurs innovation, and provides economic opportunities

Agriculture is deeply rooted in the rich history of the Sacramento region and contributes to its unique and special identity. As America’s Farm to Fork Capital, the Sacramento region provides \$2.2 billion in direct farm gate value, with the food and agricultural economy valued at more than \$12 billion.¹ The food and agriculture cluster consists of crop production, packaging and processing, distribution, support activities, and related operations and industries. Additional economic impact is added through UC Davis,

a research and innovation powerhouse ranked number one nationally in agriculture and forestry and number two globally; in ecosystem services; and agritourism. Although the agricultural sector is one of the region’s leading industries and a core foundation of the regional economic strategy, infrastructure challenges must be addressed to enhance the region’s competitive advantage and advance sustainable food production and supply chains statewide, nationally, and beyond.

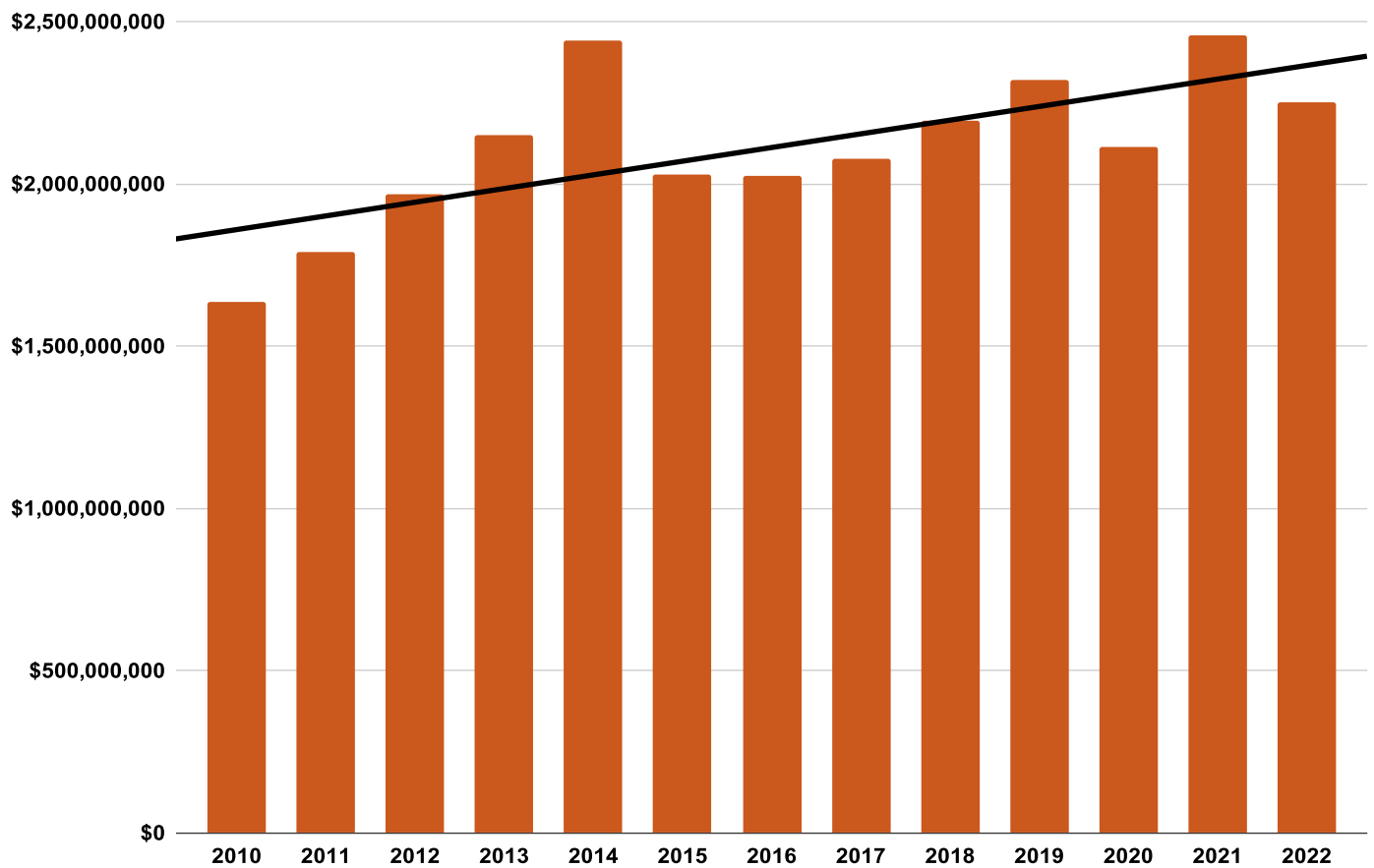
¹ 2021 Sacramento Region Food System Action Plan. (2021)

Figure 1 shows the trends in the region’s total farm gate value from 2010 through 2022. Even with the conversion of significant acres of prime agricultural lands over the years to urban and other uses and other factors such as global trade markets, the value of crops and livestock has increased since 2010. With the region’s Mediterranean climate, water availability, rich soils, skilled producers, and other assets, overall farm gate value is generated from a rich diversity of high-quality crops and products, as shown in the summary of each county’s top five commodities. However, recent

trends in farm gate value reflect the variability of conditions facing farmers, ranchers, and food producers, including global market conditions and the increasing volatility of weather-related events, such as freezes, drought, floods, fires, and extreme heat. The devastating impacts of these events underscore the need for infrastructure to address climate risk and increase the resiliency of agriculture and the region’s food system overall, as well as for the health and safety of the community and critical natural resources.

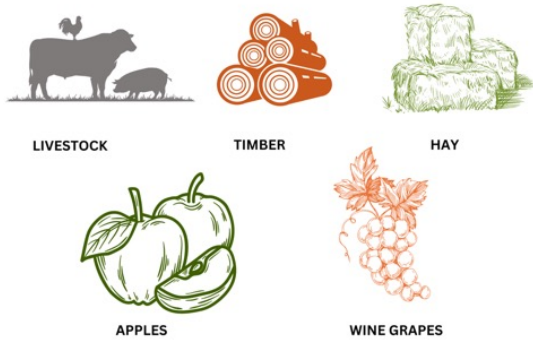
Figure 1

Sacramento Region Total Farm Gate Value From 2010-2022



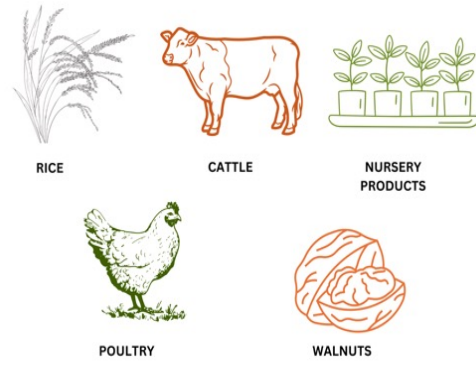
Source: 2010-2022 County Crop Reports

El Dorado County's Top 5 Commodities



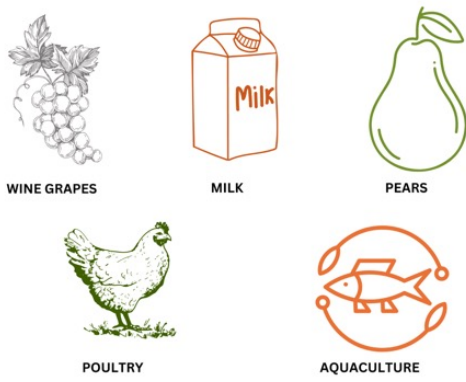
El Dorado's top 5 commodities are valued at \$38,465,872. Total Agriculture Production is valued at \$48,800,000.

Placer County's Top 5 Commodities



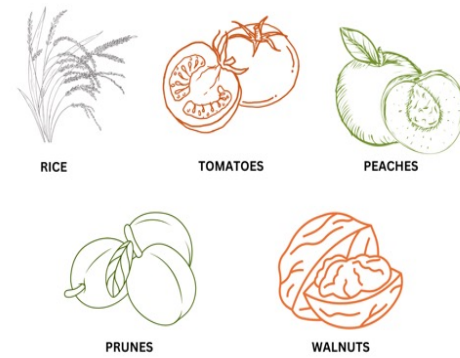
Placer's top 5 commodities are valued at \$64,762,910. Total Agriculture Production is valued at \$88,852,431.

Sacramento County's Top 5 Commodities



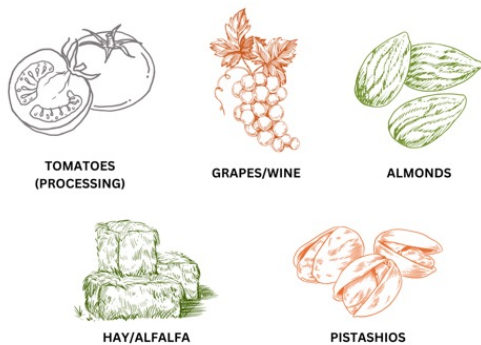
Sacramento's top 5 commodities are valued at \$401,426,000. Total Agriculture Production is valued at \$602,751,000.

Sutter County's Top 5 Commodities



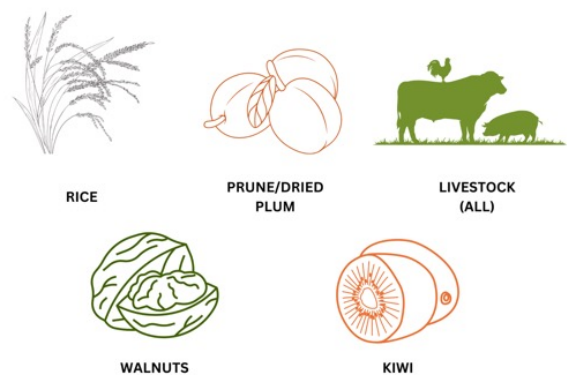
Sutter's top 5 commodities are valued at \$411,686,000. Total Agriculture Production is valued at \$568,883,000.

Yolo County's Top 5 Commodities



Yolo's top 5 commodities are valued at \$376,160,000. Total Agriculture Production is valued at \$693,548,000.

Yuba County's Top 5 Commodities



Yuba's top 5 commodities are valued at \$198,699,000. Total Agriculture Production is valued at \$246,441,480.



The following sections of the Regional Profile cover the four infrastructure areas described above. An overview of infrastructure conditions and challenges is presented in each section, along with examples of innovative infrastructure projects, investments, and policies that potentially can be scaled or replicated in one or more counties, or supported across the region for overall major system impact. More detailed information is available in the individual [county profiles](#), including specific recommendations to address priority challenges, generate needed investments and policy changes, and advance innovative solutions.

Many quantitative and qualitative data sources were used to generate the information, findings, and recommendations contained in the regional and county profiles. They included several meetings for each county with representatives of county agencies including the offices of

the Agricultural Commissioners, planning and development services, economic development, transportation, water, information technology, and sustainability; Resource Conservation Districts; Reclamation Districts; water agencies and associations; UC Cooperative Extension; County Farm Bureaus; Farmers; agritourism organizations; Land Trusts; cities; community-based organizations; and transportation planning agencies, among others. The profiles also draw on multiple individual consultations with the above representatives as well as other subject matter experts, including state agency representatives; research and review of local, county, regional, and state planning documents, strategies and assessments on the range of topics addressed in the infrastructure topic areas; and databases from SACOG and Valley Vision projects. Data sources including a bibliography of resources and those engaged throughout the project are available here: <https://bit.ly/SacRegionCROP>.



Water Infrastructure

The Sacramento Region's diverse water infrastructure systems and agricultural and working landscapes are interconnected, forming the backbone of the region's economic vitality, environmental sustainability, and community health and well-being. Sustainable management of the region's vital water resources is critical to all aspects of the region, along with the continued success and growth of the agricultural sector. Thus, important infrastructure projects that address the overall resilience of the region's water resources are included in CROP.

The region's water resources are managed through a complex system of dams, reservoirs, levees, weirs, sloughs, pumping plants, culverts, ditches, bypass channels, and groundwater basins that store and convey water from storms, snowmelt from the Sierra Nevada Mountains, and multiple major rivers, streams, and creeks. These include the Sacramento River - California's largest river which originates from headwaters near Mount Shasta and provides 31% of the state's surface water runoff, and the American River which originates high in the Sierra Nevada. The American River watershed covers over 2,100 square miles, with three main forks that flow through the Sierra Nevada foothills of El Dorado and Placer counties, converging with the Sacramento River in the city of Sacramento.

Other rivers include the Consumnes River which is the only unregulated river on the western slope of the Sierra Nevada, and thus subject to seasonal overbank flooding, and the Yuba River - a tributary of the Feather River originating in the Sierra Nevada, which ultimately drains into the Sacramento River through Yuba County. The Yuba River has a history of significant flood events. On the northwest corner of the region, Cache Creek, Yolo County's primary water source, originates north of the county, flowing south through Capay Valley and east to the Sacramento River. The Sacramento River flows into the Sacramento-San Joaquin Delta, which is the largest estuary on the West Coast, bordering both Sacramento and Yolo counties, among others. The Delta is the hub of California's water supply, providing fresh water to two-thirds of the state's population and millions of acres of farmland. The region also has several subbasins that contain significant levels of groundwater storage.



A resilient and adaptive approach to water management, combined with sustainable agricultural practices, is essential for ensuring the continued prosperity of the region in the face of the increasing frequency and impact of major storm events, prolonged droughts, and changing temperatures. The region is one of the most at-risk regions in America for catastrophic flooding, due to an aging system of levees, weirs, and bypasses along with other infrastructure needing major repairs and improvements. The increased intensity and occurrence of atmospheric river storms will put a further strain on existing infrastructure. Reducing flood risk by improving water infrastructure is critical - not only for a sustainable agricultural economy - but also for the safety and social and economic stability of the region. Improving the existing levees, bypasses, and overall water conveyance system along with other water infrastructure improvements will significantly reduce flood risk and strengthen the overall system.

The region also faces severe drought conditions which can negatively impact the delivery of water supplies, and contribute to depletion of groundwater resources. The recent drought resulted in many negative agricultural and environmental impacts, including loss of crops

and land fallowed and an increase in fire risk. As temperatures rise, the Sierras are expected to experience a shift in precipitation from snow to rain, increasing flood risk and reducing the snowpack that fills reservoirs. This is especially challenging as the region relies heavily on snowpack for water supply into the summer. Additionally, several local, state, and federal entities rely on surface water that flows through the region, including the Central Valley Project and State Water Project which export water from the south Delta. The increased severity and frequency of wildfires due to drought conditions have impacted water quality and soil absorption along with the challenge of smoke taint for crops, among many other negative impacts.

Investing in increased capacity for improved groundwater management, recharge, and conveyance will support stable water supply and availability for the region's agricultural community. Water managers in the Sacramento Region are proactive in addressing future water resource challenges and infrastructure needs to ensure that water demand and supplies are balanced and sustainable.



Innovative Water Projects in the Sacramento Region

The following projects support the region's overall water reliability and resilience.

American River Basin Study (ARBS). The 2021 American River Basin Study is a regional approach to address climate change and water supply imbalance. The ARBS is a comprehensive, basin-wide analytical framework that integrates Federal and regional planning. Initiatives included in the American River Basin Study will benefit the entire region's overall water supply by providing for the sustainable management of water resources and will contribute to increased reliability and quality of water for agricultural uses. The ARBS was developed by the Bureau of Reclamation in collaboration with six agencies throughout the region: Placer County Water Agency, City of Roseville, City of Sacramento, El Dorado County Water Agency, City of Folsom, and Regional Water Authority.

Atmospheric River Control (ARC) Spillway at New Bullards Bar. The proposed ARC Spillway will provide significant regional flood risk reduction benefits. The ARC spillway is a new spillway located at the New Bullards Bar Dam on the North Yuba River, the fifth tallest dam in the United States. The new spillway will be 31.5 feet lower than the existing spillway gates and will allow the Yuba Water Agency to release water before large storms are expected, providing additional reservoir space to capture and store peak inflows. This will also improve the management of high flows on the Lower Yuba and Feather Rivers, which will reduce the strain on the levees. The combination of new spillway infrastructure and operational enhancements will provide significant flood risk reduction benefits for the region.

Yuba Water Agency's Lower Yuba River Accord. The Lower Yuba River Accord was created in 2008 and is a collaborative effort to balance the needs of water users with the protection of the Lower Yuba River's ecosystem. The Accord is composed of a diverse set of stakeholders including environmental organizations, water agencies, and governmental entities. This partnership resolved decades of controversy around instream flow requirements for the Lower Yuba River and can be a model for settlement agreements for diverse groups that have water management, ecosystem restoration, flood control, recreation, and water quality goals.



The following projects are specifically targeted for agricultural water uses.

Harvest Water is a new project through the Regional Sanitation District (Regional SAN, now Sac Sewer) and will provide reliable, high-quality recycled water to agricultural lands and existing habitats in southern Sacramento County in place of groundwater. Funded in part by a \$291.8 million Proposition 1 grant from the California Water Commission, Harvest Water is California's largest agricultural water recycling project and is expected to produce 16.3 billion gallons of water per year, which can supply 16,000 acres of agricultural land.

Groundwater Recharge at the Omuchumme-Hartnell Water District (OHWD). OHWD is working with several universities, including the University of California Davis, to study how fast and effective recharging aquifers can happen when flooding agricultural fields, such as vineyards. Increasing water levels in the Consumnes River Basin will reduce the pumping cost for customers; the higher the water level in the basin, the less energy it takes to pump the water, and the more efficient the pumps become. Instead of building new pipelines or canals to deliver surface water, OHWD is using the underground water basin to store and transport water which will benefit agriculture in southern Sacramento County.



Land Use and Housing

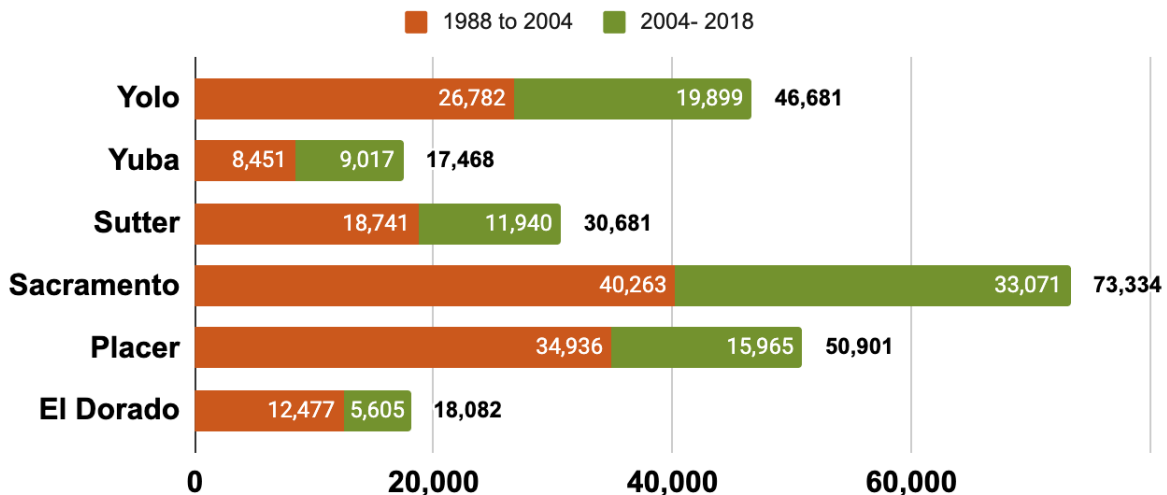
All counties in the Sacramento Region have commitments to agriculture expressed through their general plans and policies. Despite supportive policies, ordinances, and practices, agricultural land in the region is at threat of being developed into urban and residential uses as population growth and development pressures increase, including to meet regional housing needs. Conservation programs such as the Williamson Act and agriculture conservation easements are effective mechanisms to support the preservation of agricultural land; however, many counties in the region do not have adequate resources to purchase the land when it comes up for sale. This often leads to farmland conversion

into residential, commercial, and industrial uses. The rezoning of land for residential use and the increasing construction of homes near agricultural operations have an impact on both the quality of life for residents and the agricultural practices of farmers, such as planting, fertilizing, and harvesting. Other factors contributing to agricultural land conversion include aging farm owners; rising land values; water availability, quality and costs; regulatory compliance; and economic and market conditions affecting the industry.

Figure 2 shows the conversion of agriculture-zoned land in the region to housing and other uses from the two time periods of 1988 through

Figure 2

Loss of Agriculture Zoned Land by County in Acres (1988-2018, Sacramento Region)



Source: Department of Conservation, Farmland Mapping and Monitoring Program

2004 (16 years, from the beginning of the dataset to the adoption of the regional smart growth Blueprint vision) and 2004 to 2018 (14 years covering from Blueprint adoption to the most recent data available). A total of more than 237,000 acres was converted over the entire time period, with the largest amount converted in Sacramento County (31% of the total), followed by Placer County (21.5%) and Yolo County (20%). The average annual number of acres converted was 8,853 acres between 1988 and 2004, and 6,821 acres between 2004 and 2018. The slowing of agricultural conversion since 2004's Blueprint adoption is a testament to the numerous policies in place at the local level in support of food production, though also of a slowing housing market relative to the pre-recession years. The region continues to lose thousands of acres of agricultural land each year, threatening the viability of the region's food system. More recent data is not yet available; however, the issue of recent pressure for land use conversion was cited by several of the CROP project participants in

meetings and consultations. While many of the region's counties have urban growth boundaries, Yuba County's Valley Growth Boundary and Rural Community Boundary have proven to be an effective strategy to protect natural resources and prime farmland from urban growth pressures, especially on the Valley floor.

To mitigate planned development and preserve open space, several counties have enacted habitat conservation plans. The plans are critical for habitat conservation; however, they do not guarantee the preservation of agricultural land or indicate the ecosystem services and economic value, including through agritourism, that farming and ranching provide to the community. There must be a concerted effort by counties to empower land trusts to partner with developers to create conservation easements specific to agriculture. The establishment of conservation easements that combine the preservation of agricultural uses, habitat values, and open space on the same property should be enacted where feasible.

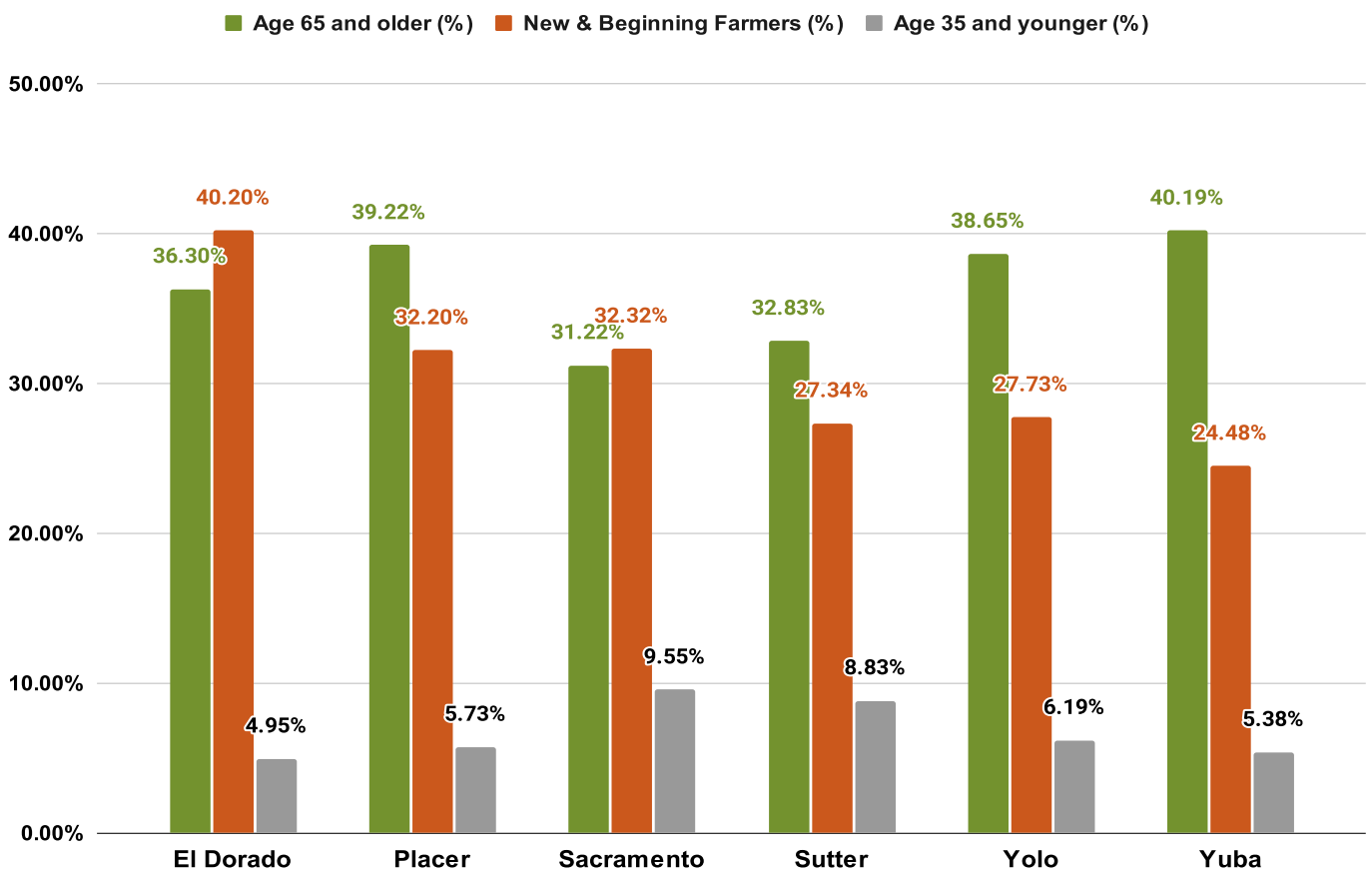


For agriculture to remain viable as a regional economic driver, land must be protected and accessible for the next generation of farmers, ranchers, and food producers. As is the case nationally, the region’s agricultural workforce is aging. Overall, the average age of growers in the U.S. was almost 58 years old in 2023. While the 2023 Census of Agriculture is not yet available at a local level, the region follows the national trends.

As shown in Figure 3, more than a third of farmers in the region were 65 and older and less than 10% were age 35 and younger, according to the 2017 U.S. Census of Agriculture. The high price of and lack of available land for new, beginning and younger farmers and ranchers, plus the pressures from development, could jeopardize the region’s future agricultural production and economy.

Figure 3

Age Cohorts of Farmers and Ranchers in the Sacramento Region



Source: 2017 USDA Census of Agriculture

In addition to programs that support land access for small, beginning, women, and Black, Indigenous, and other People of Color (BIPOC) farmers, housing for farm workers and other workers who support the region's food system is a critical need and an ongoing challenge, especially given increasing costs of housing for workers and regulatory barriers for farm owners and housing developers. Policies and ordinances that protect agricultural land from conversion to residential uses, especially low-density "ranchettes" where housing is not related to agricultural production, often make it challenging to provide housing for agricultural workers on farm sites. El Dorado County has approved Title 25, Farmworker Housing Grant Program (FWHG), in Grizzly Flats to support this type of housing. Other counties

should consider this program, which is the only state funding source dedicated solely to the production of permanently affordable housing for families in the agricultural industry.

Lodging accommodations to support agritourism are also needed in rural areas. The availability of such lodging would encourage more destination-type visits as opposed to day trips, increasing revenues for farmers, ranchers, and food producers who must often rely on non-farm sources of income; providing more Transient Occupancy Tax (TOT) revenues to support county tourism industries and infrastructure; and could help in reducing traffic impacts, especially for high volume day trip locations such as Apple Hill in El Dorado County.



Innovative Land Use/Housing Projects in the Sacramento Region

Placer County Agricultural Plan. The Placer County Economic Development Department successfully partnered on a Department of Conservation Sustainable Agricultural Lands (SALC) grant with Placer County's Agriculture Department to create an addendum to the County's General Plan that is focused specifically on agriculture and will include land use preservation policies, ecosystem services, housing, and economic development that support the viability and preservation of agriculture in the County. This level of collaboration ensures the considerations supporting the agricultural community are integrated into planning at many levels.

Montna Farms. Sutter County's Montna Farms was the state's first conservation easement on rice lands and is a model for the region's rice fields. Montna Farms has about 2,000 acres under the easement, which provides habitat for waterfowl and shorebirds for migration, wintering, or breeding. This innovative project showcases the value of mutual benefit partnerships between the agricultural industry, environmental organizations and public agencies, as demonstrated by the collaboration of the California Rice Commission, rice farmers, Ducks Unlimited, the California Department of Fish and Game, and the Nature Conservancy, among others.

Center for Land-Based Learning Farmer Programs. The Center for Land-Based Learning in Yolo County has several programs that support both land access and skills development for new and beginning farmers and for upskilling existing farm workers. These include the Farm Academy for beginning farmer training; the Beginning Farm and Ranch Management Apprenticeship Program to develop skilled farm managers; a business farm incubator that provides access to land, infrastructure and training; and an urban agriculture program in the city of West Sacramento.





Transportation & Broadband Infrastructure

Transportation

Rural portions of the region - home to the majority of agricultural production - face a pressing challenge in maintaining and modernizing the transportation system. Rural areas have a disproportionate share of road miles compared to population, yet local transportation funding is often tied to population-derived revenues. In other words, rural and agricultural communities need to maintain a wider transportation network while counting on a smaller pool of the local tax base. Further compounding the challenge, many rural roads fall outside of the federal aid system that establishes eligibility for most regional, state, and federal transportation funding programs.

Yet rural roads serve as the connective tissue of the agricultural economy, both as critical farm-to-market routes - getting product to market - including value-added processing, packaging, and distribution facilities in urban areas, as well as by enabling agritourism activities that bring further revenue to farms and ranches and support rural economies. In this role, rural roads accommodate daily agricultural trucks, agritourism visitors, and, as the region continues to grow and change, more commuter vehicles and other users such as active modes. The weight of agricultural machinery

and commodity trucks in particular is a major contributor to rural road wear and tear, as more heavy vehicles have a disproportionately high effect on roadway conditions.

Rural roads also face a series of challenges relating to safety, including evacuation from flooding or wildfire. Rural roads in agricultural areas are often lined by canals, drainage ditches, or other water conveyances, limiting options for the safe shoulders needed given the variety of roadway users. Different users moving at different speeds (such as farm tractor and visiting ag-tourist) create the potential for collisions, exacerbated by the lack of shoulder recovery space. Thus, in addition to basic maintenance investments, there is a clear need for modernizing roadways into rural 'Complete Streets' designed for the expanded range of users of these rural facilities, including improved access and alternatives for pedestrians and cyclists as well as for farm workers. Policymakers have to weigh these rural maintenance and modernization benefits with other needs such as expanded road capacity (not just in suburban or urban but also rural areas) or other mobility solutions competing for the same limited transportation revenues.

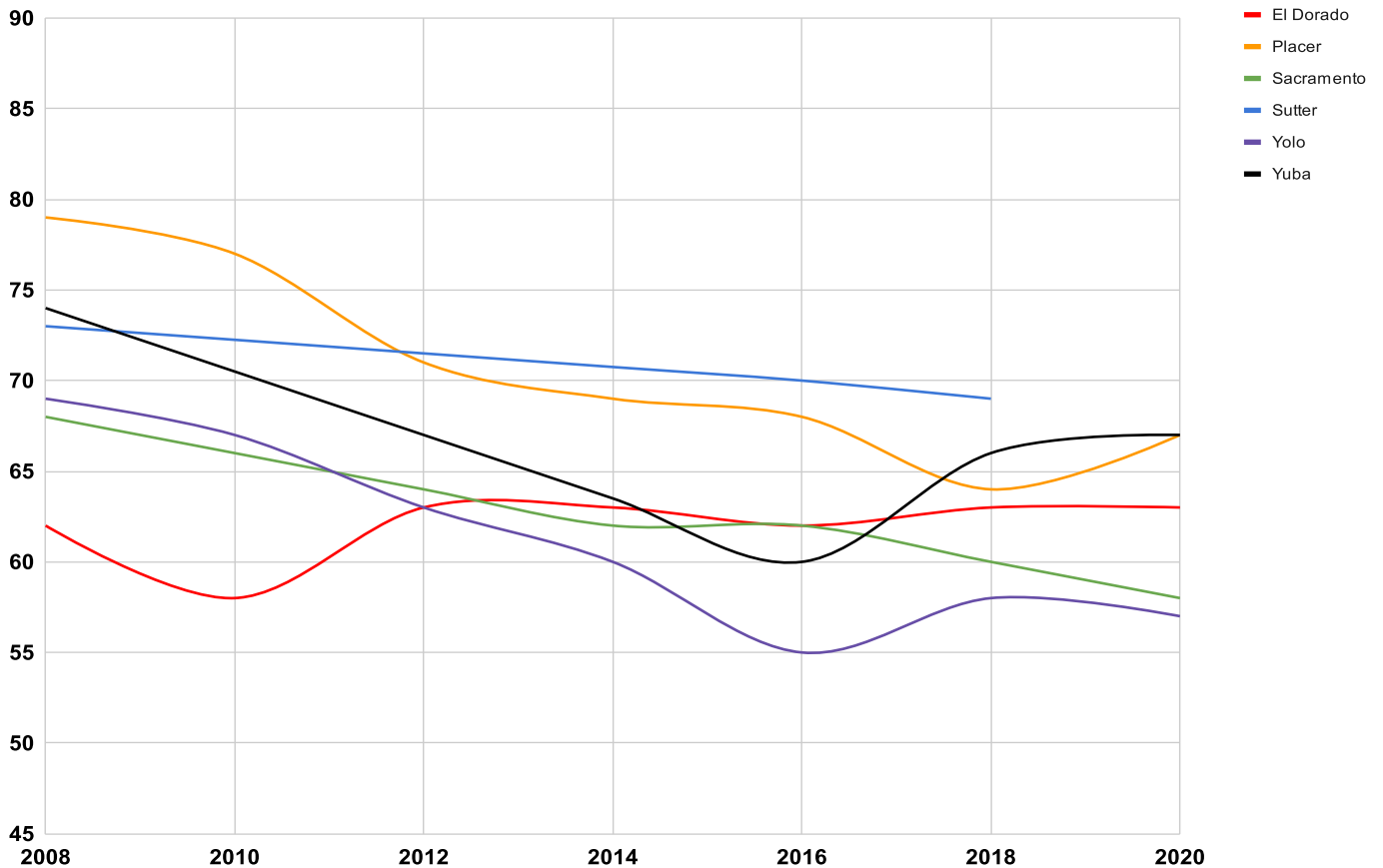
Given these challenges and conflicting needs, it is no surprise that rural roads in the region are deteriorating. Funding approaches in the rural and agricultural areas across the region face tradeoffs between balancing maintenance needs, modernizing the transportation network to account for new users of the system, and expanding or providing new ways for people to move around. Figure 4 shows trends in the Pavement Condition Index (PCI) for each county from 2008 to 2020 (except for Sutter County which is through 2018). The PCI is a rating scale used to tell the relative condition of a road, using a 1 to 100 rating scale:

| PCI RATING | PCI SCORE |
|------------|-----------|
| excellent | 85 to 100 |
| good | 70 to 84 |
| at-risk | 50 to 69 |
| poor | 25 to 49 |

Every county's PCI is worse in 2018/2020 than in 2008, and although Placer and Yuba counties' PCI improved in the past few years, the entire region falls into the at-risk category. The longer maintenance is deferred the more costly the needed improvements, which in turn exacerbates the funding shortfall.

Figure 4

Sacramento Region Pavement Condition Index



Source: SACOG analysis of California Statewide Local Streets and Roads Needs Assessment

There are no easy fixes for the pressing maintenance and modernization needs of the region's rural roads. CROP stakeholders have elevated several themes that can serve as a starting point for solutions moving forward. First, there is a need to better showcase the role rural modernization projects play in meeting the performance criteria prioritized by state/federal discretionary transportation funding programs. For example, rural modernization projects:

- Enhance farm-to-market routes (many funding programs include an economic prosperity outcome).
- Serve an important role in flood or wildfire evacuation, which is made more pressing by a changing climate (safety and resiliency likewise are common criteria).
- Keep agricultural lands and rural economies viable, which can help reduce vehicle miles traveled by alleviating pressures to expand the urban footprint (VMT and/or greenhouse gas reduction is a third criteria).

Project participants throughout the region continue to make the case for rural modernization projects. Sutter County, for example, has mapped periodic and chronic flooding of rural and ag-related roadways, while Yuba County has tied rural maintenance projects to acres of farmland served and/or processing and other value-adding activity. The region stands to benefit by scaling up these efforts by prioritizing an initial set of roadway facilities as key farm-to-market routes in need of modernization benefits. Such a designation could help unlock larger discretionary funding programs where rural projects tend to not apply (out of concern they do not meet stated performance criteria).

Securing discretionary state/federal transportation funding to modernize the network serving the region's agricultural sector is vital, in that local transportation revenues will come under further strain as the maintenance backlog increases and local funding decreases - as vehicles become more efficient, they will consume less gas, leading to less revenue derived from the sale of gasoline. Yuba County's efforts to frontload local maintenance projects are an example of decisive steps to address the existing maintenance backlog; the region could benefit from similar efforts to prioritize a state of good repair.

Finally, project participants continue to explore innovative mobility solutions for rural complete streets, as expansion projects are proving to be cost-prohibitive. Rural roads have more limited options compared to their suburban and urban peers (e.g., often not high enough travel volumes to make transit viable, while distances between destinations are too long for micro-mobility). Emerging agritourism clusters may be best poised to incorporate new mobility options upfront like shuttles or even expanded multi-use trail access as a way to accommodate more visitors without overburdening a rural transportation network, while expanded lodging options also need to be part of the solution. Apple Hill provides a formative and somewhat cautionary example for other subregions aiming to expand agritourism: the area is a major economic driver for El Dorado County (see the section below on governance) yet has struggled to find the right fix to the major disruptions such as congestion caused by the influx of visitors each fall. Local stakeholders feel a previous pilot for day trips did not succeed in mitigating congestion, but a new 'Stay and Play' shuttle funded by the El Dorado Air District and designed by Visit El Dorado aims to reduce trips by encouraging group transportation and overnight stays.

Innovative Transportation Projects in the Sacramento Region

Accelerated Rural Road Rehabilitation: Yuba County worked with the Yuba Water Agency to borrow against future transportation revenues to fix 70 miles of roads in one summer. The effort helped bring more of the county's rural road network into a state of good repair, saving money in the long run by avoiding costly future reconstruction needs from failed roadways.

Feather River Blvd Farm to Market Project: This rural maintenance project, also in Yuba County, serves the primary transportation route serving 7,500 acres of prime farmland plus nearly 500 agricultural employees (split between farmworkers and processing/packaging workers). The project can serve as a model for communicating rural performance criteria in discretionary competitive transportation programs that seek to fund projects with clear economic and environmental performance outcomes.

Broadband

There is a persistent, long-term, and well-documented lack of broadband infrastructure connectivity in the region's rural areas and agricultural communities. Broadband is a critical enabling technology for competitive business operations and global trade; adoption of agrifood technologies - especially those generated by UC Davis and regional technology entrepreneurs - to better manage resources such as water and energy, reduce chemical inputs, and address workforce shortages; for mandated reporting; for health and safety, including for emergency preparedness and recovery such as from wildfires and floods, and also for on-farm health issues such as from accidents; and for forest resilience. The strong need for improved broadband and also cell phone coverage was raised in every county.

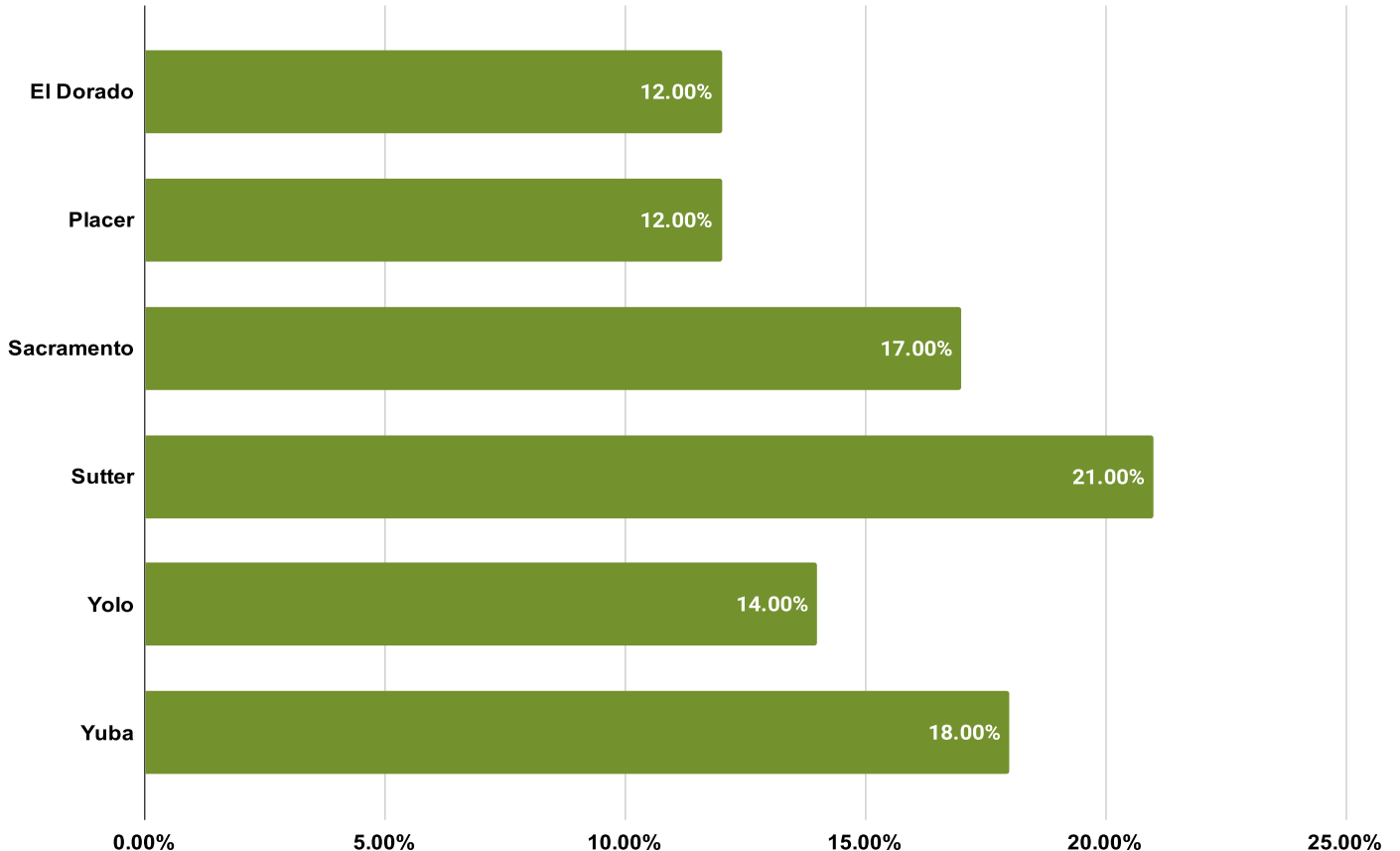


Figure 5 shows the percentage of farms that were reported to lack access to the Internet in 2017. The levels of poor access ranged from 12% of farms in El Dorado and Placer counties, to 21% in Sutter County, with Yuba and Sacramento counties close behind at 18% and 17% respectively. While the percentage lacking access may have decreased since 2017, it is known from other assessments conducted by the Connected Capital Area Broadband Consortium and the Gold Country Connect Consortium (the CPUC-funded Consortia that cover the region’s six counties) and the counties, as well as reported by farmers themselves, that there is still a significant number of unserved and underserved areas throughout the region, hampered by a lack of competition from Internet Service Providers (ISPs), low speeds in served areas, high costs, and lack of reliability.



Figure 5

Percentage of Farms That Lack Access to Internet in the Sacramento Region



Source: USDA 2017 Census of Agriculture



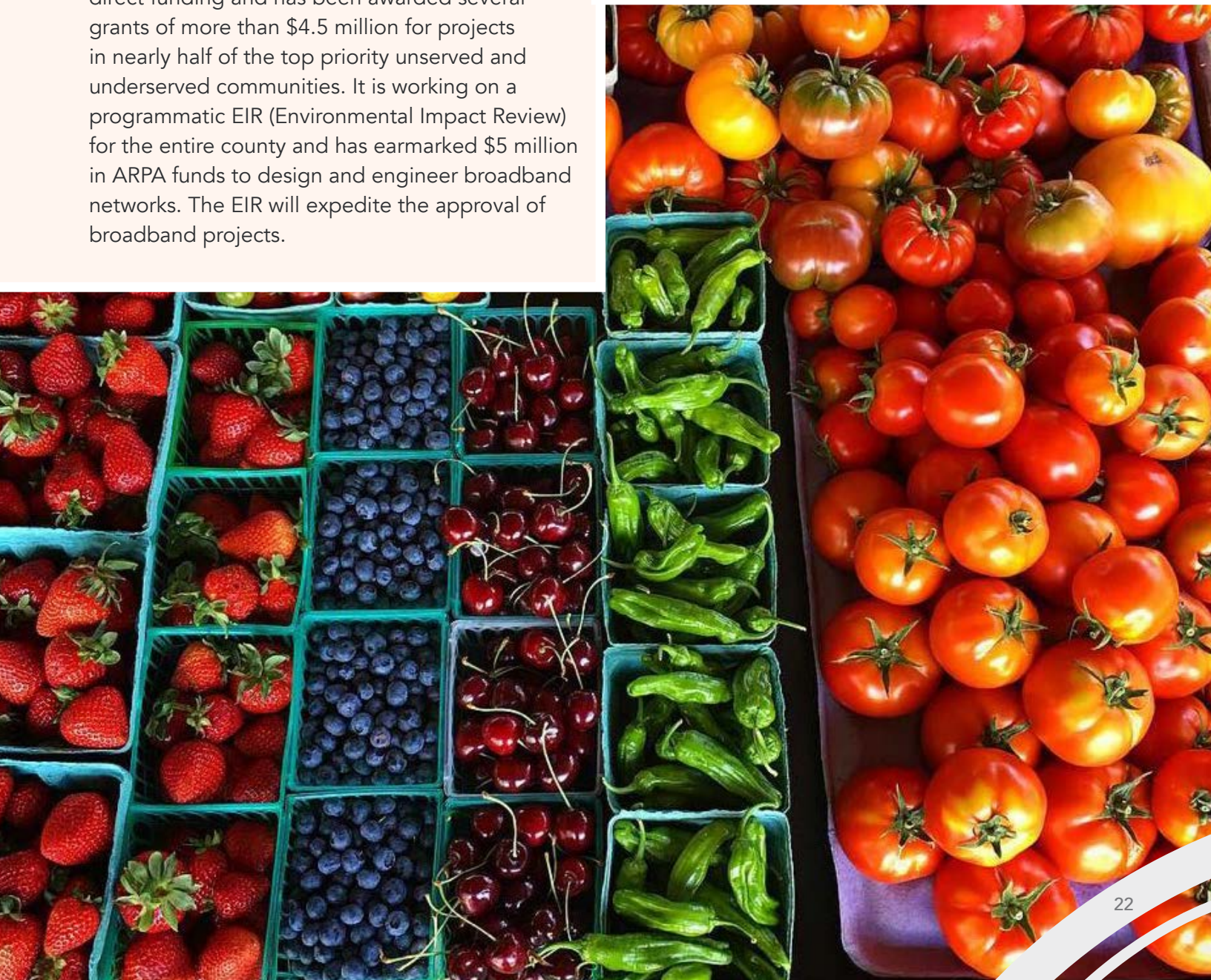
Through the historic investments being made through SB 156, California’s Broadband for All Initiative will provide billions of dollars in state and federal funding for the buildout of the State’s Middle-Mile Open-Access Network and for last-mile projects that connect unserved and underserved locations. Funding decisions are being made by the California Public Utilities Commission (CPUC) for 2 billion dollars in allocated funding - the Federal Funding Account (FFA) - to the state’s 58 counties. Submitted funding applications for these “last mile” projects totaled more than \$4.6 billion, demonstrating the strong need for additional resources. In the Sacramento region, the total allocation for the six counties was \$225 million; applications submitted to the CPUC totaled approximately \$694 million (some of the applications extended as well to areas in nearby counties). Applicants included jurisdictions, Internet Service Providers (ISPs), and the Golden State Connect Authority through the Rural County Representatives of California (RCRC), which is planning to develop open-access municipal infrastructure for its member counties - of which all but Sacramento County is a member in the region.

Unfunded FFA applications could possibly be submitted in future rounds of other infrastructure funding, including the federal funding that will be coming to the state by the end of 2024 or early 2025 through the Broadband Equity Access and Deployment (BEAD) program from the Innovation Infrastructure and Jobs Act. The State’s development of its own open-access Middle-Mile network on the state highway system will include leased, joint build, and new construction. Although most of the Middle-Mile through the region will be mostly leased, this network could still be a resource to help extend the reach for “last mile” infrastructure to priority unserved rural areas. The counties have been proactive in addressing rural infrastructure gaps in various ways. It will be important to ensure that county permitting policies and ordinances will facilitate the rapid deployment of infrastructure projects. Counties should leverage assets such as rights of way, antennas, utility poles, conduits, and other assets for the deployment of additional broadband infrastructure. Counties also should collaborate with their local transportation agencies, SACOG, and Caltrans, along with other entities such as municipal utility districts, to explore opportunities for joint use/dig-once/dig-smart transportation and broadband projects.

Innovative Broadband Projects in the Sacramento Region

El Dorado County Broadband. The County has had a proactive broadband strategy since 2017, working with consulting firm NEO Connect to complete its 2019 Broadband Strategic Plan. In 2022, the County conducted a county-wide initiative for all residents and business owners to self-report internet speeds at home, work, and places where they are connected to the internet, thus identifying areas without broadband service. The County developed a priority areas map to direct funding and has been awarded several grants of more than \$4.5 million for projects in nearly half of the top priority unserved and underserved communities. It is working on a programmatic EIR (Environmental Impact Review) for the entire county and has earmarked \$5 million in ARPA funds to design and engineer broadband networks. The EIR will expedite the approval of broadband projects.

Placer County Broadband. The County has been working for several years to bridge the Digital Divide through annual countywide surveys; assessment and mapping of gap areas; identification of project priorities; and investment in three broadband expansion projects with ISP Astound. Since 2021, more than \$35 million in funding has been allocated using collective funding including the CARES Act, American Rescue Plan (ARPA), the County, and significant ISP investment.





Food System and Governance

A prosperous, equitable, healthy-promoting, and resilient food system is vital to the health and well-being of communities, businesses, and residents across the region. As America’s “Farm to Fork Capital,” the food and agriculture cluster is an important regional economic driver. One of the core priority clusters in the region’s [Prosperity Strategy](#), food and agriculture brings strength through its strong competitive advantage nationally. The cluster’s economic impact extends far beyond the farm gate value - i.e., what directly comes off farms, ranches, and from the forests.

The overall direct economic impact of the food and agriculture cluster was estimated to be more than [\\$12 billion in 2018](#). While this analysis needs to be updated for the region, several counties, including Placer, Sutter, and Yuba, have completed Crop + reports which effectively show the broader economic impact of each county’s food system. These reports expand upon the annual county Agricultural Commissioner reports summarizing

direct farm gate value. Figure 6 below illustrates the full food system value for the three counties that have completed a Crop + report. An overall Crop + report for the entire region would show a similar economic impact of the full food system and provide updated economic data that counties can use for future funding and strategy opportunities. A regional branding strategy that promotes Sacramento region-grown produce would also strengthen the food and agriculture economy, and help connect the region’s food system across the counties.

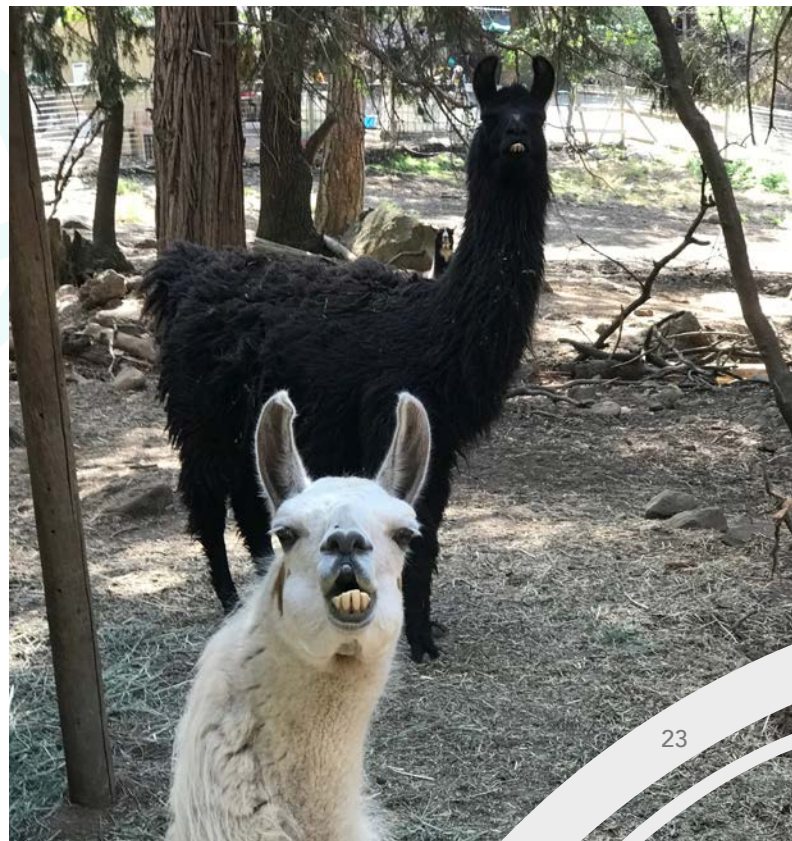
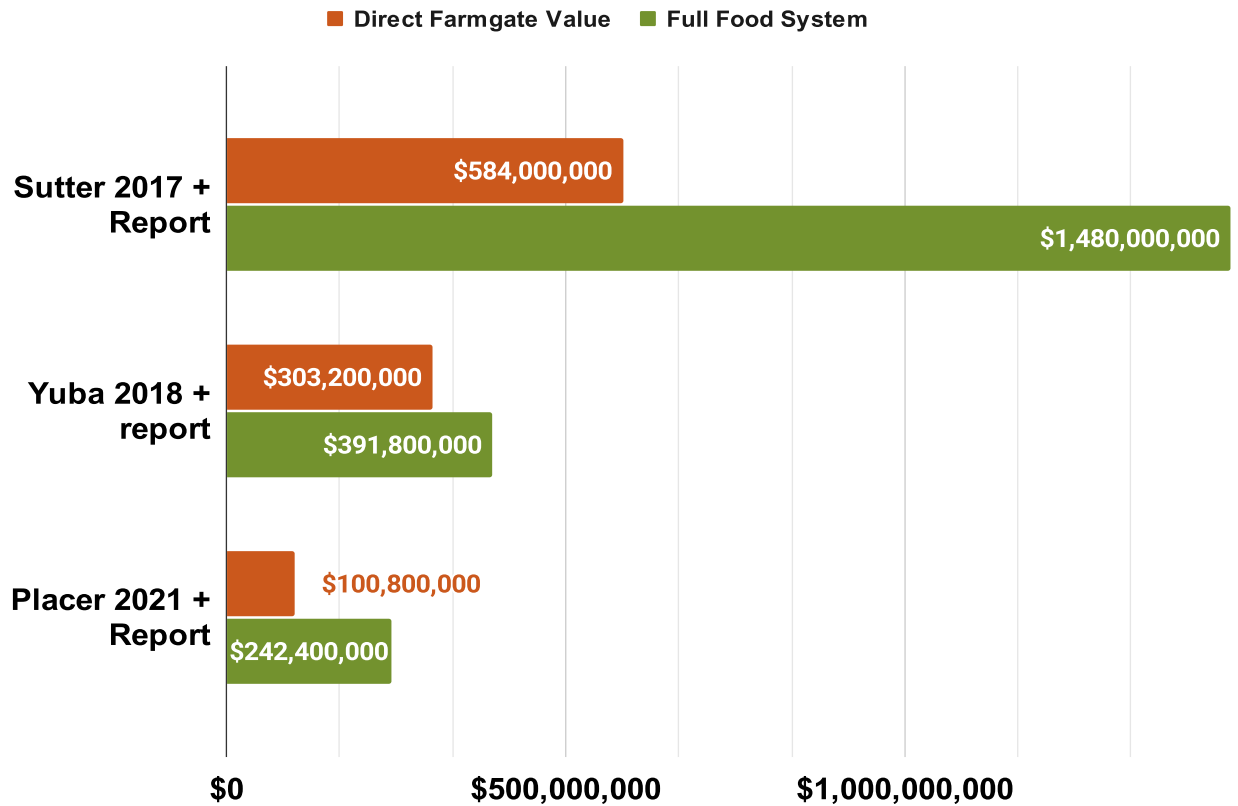


Figure 6

Farmgate Value vs Full Food System



Source: Sutter, Yuba, and Placer Crop + reports

With a wide range of natural, human, economic, and organizational assets, including UC Davis - the country's number one university in agriculture and number two globally - the region is well-positioned to accelerate the growth of an innovative food economy. In addition to expanding capabilities in developing, deploying, and exporting the region's cutting-edge agrifood technologies, a core opportunity is to leverage the purchasing power of our institutions, including schools and hospitals, for more locally sourced foods. This would strengthen the resiliency of the regional food system, including through enhancing local supply chains - the importance of which was demonstrated during the COVID-19 pandemic. In turn, this would help support the next generation of food entrepreneurs and producers by creating new market channels and increasing new business opportunities for the middle of the supply chain facilities and enterprises, such as food hubs, school central kitchens, and processing plants.

Institutional procurement of locally grown produce and products is a growing trend nationally. Local institutional purchasing is expanding across the region, with organizations like Sacramento City Unified School District (SCUSD), UC Davis Health, the Sacramento Kings through Golden 1 Arena, and others leading the way. This purchasing brings with it the potential for major economic impact. For example, SCUSD and UC Health serve over 50,000 meals a day. The effort is growing through increasing consumer demand, the support of state and federal programs such as Farm to School, and an emerging network of food hubs and distributors that serves schools, hospitals, community facilities, restaurants, and other institutions.

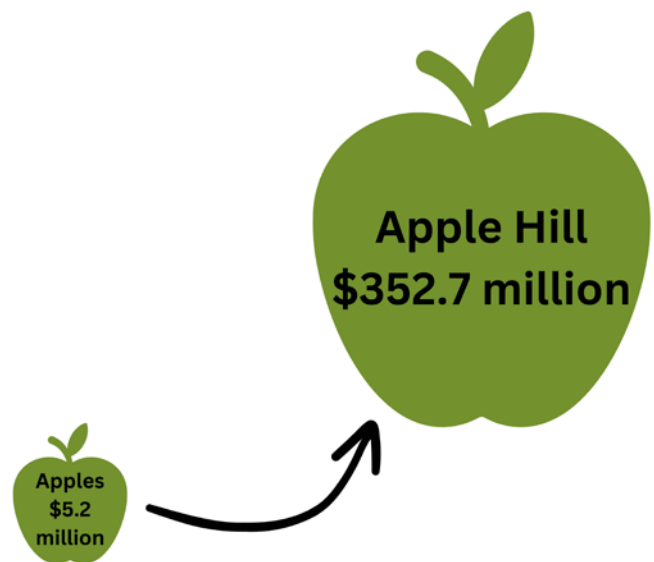
There are market and capacity gaps and structural barriers for institutional procurement. This includes procurement policies, as well as pricing and purchasing regulations that exist in connecting local food producers, especially smaller operations. Filling these gaps and overcoming barriers would provide economic opportunities for local farmers, ranchers, and food producers and would provide for greater investment of institutional purchasing power back into the regional economy. There are numerous examples of local school districts purchasing produce that is grown outside of the region rather than locally - such as apples purchased from Washington State rather than Apple Hill in El Dorado County. An organized regional institutional procurement strategy would provide direction to address systemic barriers, adapt purchasing policies, assist growers and food producers, and aggregate locally grown products, thus also increasing access to local and healthy foods.

Participants in each county identified a common need for adequate storage and processing facilities which are lacking across the region, especially for fresh produce and wine. Processing and pressing facilities are also needed for products such as livestock, olives, nuts, and timber. Currently, many producers and ranchers are forced to travel outside the region to process their products, which is costly and burdensome. Additional facilities for value-added processing would have significant beneficial economic impacts for farmers and food suppliers in the region, and would reduce vehicle miles traveled associated with the food system. These types of projects are good opportunities to be included in county and local economic development strategies. Other Initiatives such as the new [USDA Southwest Regional Food Business Center](#) are a resource for these types of projects. The Center is part of a USDA national investment to help rebuild the supply chain by supporting the development of processing facilities, incubators, food hubs, central kitchens, and other facilities that will connect farmers, ranchers, and food producers to new markets. UC ANR is the lead agency for the Center, in partnership with the California

Department of Food and Agriculture, and Valley Vision , along with many other organizations throughout Arizona, California, Nevada, and Utah.

Another food and agriculture asset that will benefit from increased support and focus is the region’s diverse and signature agritourism industry. Agritourism activities are an effective mechanism for direct-to-consumer purchases and help increase the economic impact and profitability of agriculture. They range from wine tasting, the Farm-to-Fork Festival in Sacramento, and numerous harvest festivals (almonds in Capay Valley, mandarins in Placer County, pears in the Delta, pumpkins in Yuba County and apples in Apple Hill, to name but a few), Christmas tree farms, dinners on the farm or on Main Street, farm stands and U-Pick operations, along with events such as concerts and weddings at wineries and farms. value of apples in El Dorado County was \$5,244,145, but the overall economic impact of Apple Hill agritourism was \$251,800,000. The wine industry in the county experiences a similar economic impact, with grapes valued at \$4,180,365 and a wine industry that provides \$352,000,000 in economic value.

Direct Farm Gate Value Vs Full Food System
Apples in El Dorado County



Source: 2022 El Dorado Crop Report

In addition to its economic impact, agritourism contributes to the region's high quality of life for residents as well as visitors. However, there are inherent challenges in the expansion of agritourism, which occurs predominantly in rural areas that lack adequate infrastructure to accommodate growth. Some of the significant challenges include traffic congestion, declining condition of rural roads, inconsistent regulations, lack of adequate tourist and lodging accommodations, and lack of sufficient broadband, and EV charging stations. For agritourism to thrive, regional leaders need a strategy and resources to address infrastructure and policy/regulatory needs.

In terms of governance issues, there are many jurisdictions, districts, agencies, and entities at the federal, state, regional, and local levels that oversee the planning, development, financing, management, and maintenance of the region's

diverse and complicated infrastructure systems. Such systems support agriculture in some way and are vital to the food system's continued health and viability. The most successful projects highlighted in the county profiles have a strong foundation rooted in collaboration, partnerships, and an innovation mindset. Continued collaboration and innovation will be critical moving forward: Agriculture is on the front line of climate risk, and the industry is facing new environmental, economic, and regulatory challenges that call for adaptation, mitigation, and readiness strategies and investments to navigate for a complex and changing future. The infrastructure investments, policies, and actions needed to ensure a viable and sustainable future for the region's food system also are critical for the overall health and well-being of the region. They are detailed in the county profiles but their impact is beyond county boundaries.



Innovative Food System and Governance Projects in the Sacramento Region

Placer County Collaboration. Placer County has a strong culture of collaboration. Supported by the mantra “One Placer” or “One Voice,” the County, cities, businesses, education institutions, water and transportation agencies, the agricultural community, and others work together to streamline communication, improve economic development, maintain Placer County’s quality of life, and provide protection for natural resources. This collaborative network plays an important role in supporting the reduction of permitting burdens and regulatory barriers for farmers, ranchers, and food producers to ensure their continued viability, ensuring that agriculture is a vital part of the county’s economy.

Biomass Projects. The region is at risk of catastrophic fires. A biomass processing facility in the region could help play a crucial role in fuel reduction by converting biomass materials such as forest residues, agricultural waste, and invasive plant species into a renewable source of energy. Such facilities would reduce the accumulation of potential wildfire fuels, provide local energy generation, and generate an additional revenue stream for farmers who sell their agricultural waste products to the facility.

Yolo Food Hub Network. To address the sudden disruption to the region’s food system from the COVID-19 pandemic - from loss of markets and jobs for growers and businesses to health threats to workers, supply chain gaps, and increased food insecurity, the Yolo County Board of Supervisors funded New Season Community Development Corporation (CDC) to develop the Yolo Food Hub facility in Esparto, the gateway to Capay Valley, to strengthen the resiliency of the food system. Starting with the retrofit of a historic 100 year-old barn into a storage, aggregation, and distribution facility - with the eventual site build-out to include processing facilities and sustainable design - the project team is working to develop a region-wide and beyond food hub network to connect local growers to local institutions. Yuba County among others has conducted a food hub study and is a potential partner in the network. The project builds on an earlier SACOG feasibility study for a hub and includes a partnership with local nonprofits and for-profits.

Yubakami Farms Together. Through the Farms Together program, Yubakami works with a dozen small and BIPOC producers in Yuba and Sutter counties to provide Yuba-Sutter Food Bank recipients with fresh produce from farms that are organically certified, or better. As part of the program, Yubakami is providing financial security for the growers by guaranteeing the purchase of their produce - no matter the quantity - and at a price that is profitable for the grower. The \$200,000 grant that Yubakami received will support six months of operation and has the potential to transform the area’s small farms if expanded. The Farms Together program was developed by the California Association of Food Banks (CAFB), Fresh Approach (FA), and the Community Alliance with Family Farmers (CAFF).





Conclusion

As noted in the above sections, the CROP county profiles contain detailed information on county-specific challenges, opportunities, models, funding sources, and innovative approaches. Recommendations were developed through the input and guidance of local and regional stakeholders, subject matter experts, and agencies; analysis of timely studies, assessments, and plans across all infrastructure categories; and assessment of data on key indicators. They are intended to assist regional leaders, decision-makers, and partners in advancing the wide range of inter-related infrastructure system investments, policies, and projects that will strengthen the long-term viability of the region's agriculture and food system and the overall health of the region's economy, precious environmental resources, and community wellbeing.

In addition to the targeted recommendations in each county profile, the CROP project will also be used to support an array of larger efforts focused on supporting the regional food system. First, the region is currently undertaking the We Prosper Together initiative, a comprehensive look at greater Sacramento's economic development and planning processes that will produce strategies embedded in the region's unique strengths that

also provide pathways for high-quality jobs in sustainable industries. Led by Valley Vision, [We Prosper Together](#) will position the region to compete for significant state funds targeted to sustainable and inclusive economic development activities, through the State's California Jobs First initiative. Preliminary work through the effort has also highlighted the central role food and agriculture play in the regional economy, demonstrating strong alignment with CROP. Notably, the models elevated through CROP give concrete examples of scalable strategies needed in We Prosper Together, while the infrastructure investments identified through CROP should be promising candidates to compete for implementation funding.

Next, the region has a long history of collaborating together with a shared voice on the annual [Capitol-to-Capitol](#) (Cap-to-Cap) program hosted by the Sacramento Metropolitan Chamber of Commerce. The effort aims to secure federal funding and resources for high-priority regional projects. CROP and its findings are supportive of the regional priorities being advanced by Cap-to-Cap issue area teams, including water, flood, wildfire, transportation, economic development, and food and agriculture, among others.

Finally, CROP’s timing is perfectly aligned to inform the [2025 Blueprint](#), the region’s next iteration of the integrated six-county transportation and land use plan that outlines a collective vision – supported by goals, policies, and investments – for a thriving and inclusive future. SACOG’s RUCS program was formed out of the original 2005 Blueprint, providing a rural complement to the regional work and elevating approaches that enhance rural economies. CROP will be the key RUCS input for this next cycle of work, building off the [set of resources](#) developed to date in the program.

The 2025 Blueprint plan will be guided by three strategic goals centered around Equity, Economy, and Environment (or the three “E’s”). CROP gives rich context, infrastructure projects, and policy recommendations within this triple-bottom-line approach:

- **Economy:** the region’s food system is an economic driver, yet is vulnerable to climate-related vulnerability and global market conditions. Enhanced food system infrastructure will help diversify market challenges, extend product life, and provide a more reliable source of inputs.
- **Equity:** more than a third of farmers in the region are 65 years older, while less than 10% are under 35. Access to land is a key issue preventing the next wave of growers and entrepreneurs from entering the food system, especially those from underserved backgrounds. The region also needs to focus on opportunities to upgrade job quality and career pathway channels in the food system, given the significant role the cluster already plays in the economy.
- **Environment:** agriculture and other working lands provide essential ecosystem services, though this role is seldom recognized. A viable food system economy also keeps agricultural land in production, alleviating pressures to convert prime ag land into urban or other uses.

As for the original Blueprint twenty years ago, RUCS provides a key rural strategy for implementing the vision, goals, and outcomes of the 2025 Blueprint. Not only will CROP be a cornerstone of that implementation activity, CROP efforts have also rekindled the networks built over the prior decade of RUCS. The report’s lead authors - SACOG and Valley Vision - commit to working with partners throughout the region to support the projects, recommendations, and models elevated through CROP. SACOG can draw on its relationships with agencies who have responsibility for much of the infrastructure need (such as local jurisdictions or water and other special districts) to increase awareness with potential funders and policymakers as well as identify potential funding resources. Valley Vision will continue advancing the economic development potential of food and agriculture projects through its role in [California Jobs First](#), the [Sacramento Region Food System Action Plan](#), [Prosperity Strategy](#), and [Southwest Regional Food Business Center](#), among others. Given the confluence of major initiatives centered on agriculture, CROP is well-positioned to carry this momentum forward into the next collaborative phase supporting the regional food system.



SCAN ME

Scan the QR code to read the County CROP profiles.



valley vision



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Pictures are courtesy of Sacramento Region Departments of Agriculture.

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