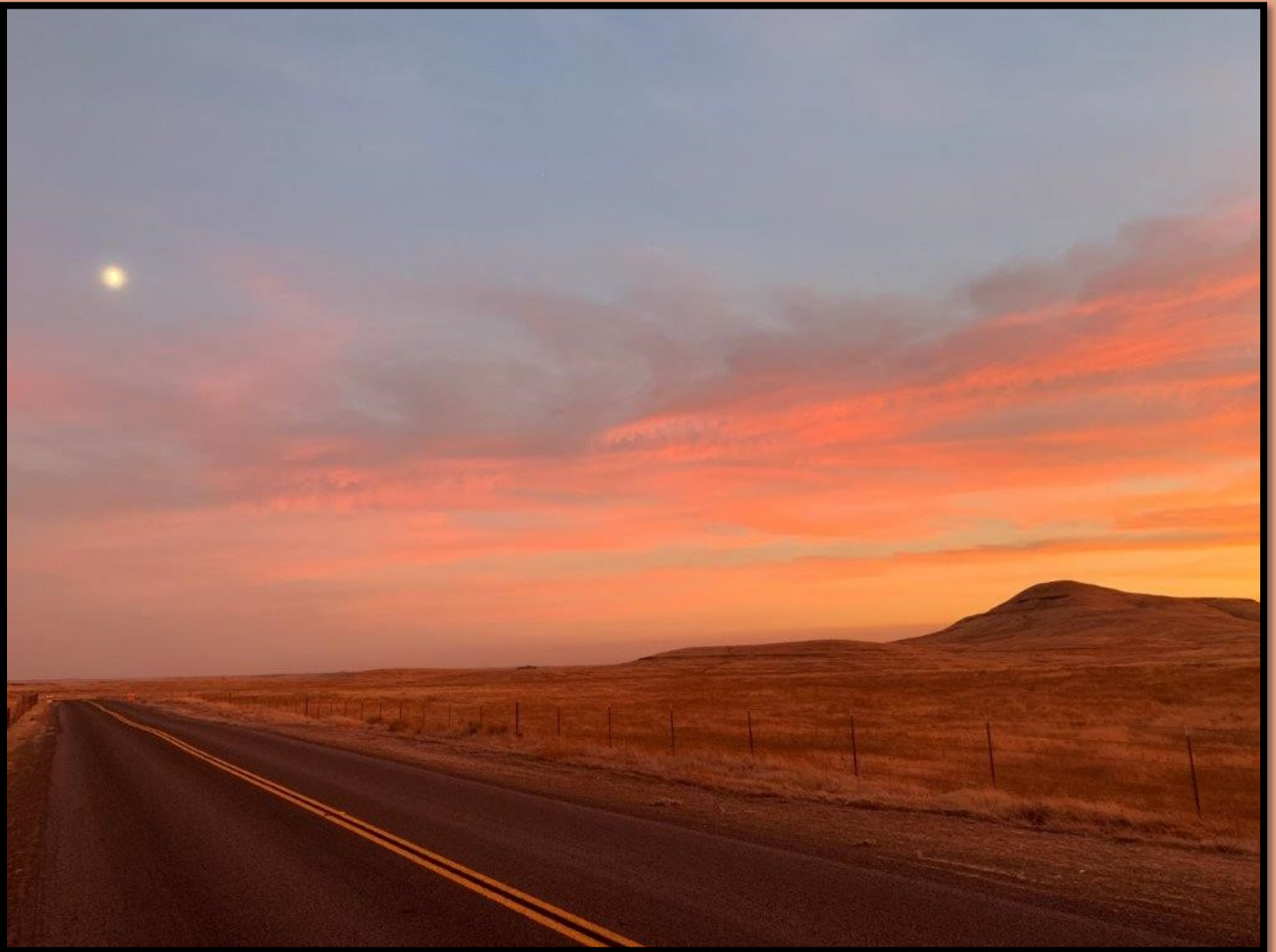


Stanislaus County Department of Public Works

Annual Report



2021

Table of Contents

Mission Vision Leadership	3
Letter from the Director	4
Finance	5
Administration	6
Human Resources	7
Development Services	8
Stormwater	9
Morgan Shop	10
Construction	12
Design	20
Roads and Bridges	22
Traffic Engineering	28
Survey	29
Board of Supervisors	30
Contact Information	31

Mission:

Manage and improve infrastructure through safe and efficient use of resources and assets for the benefit of our Community.

Vision:

Building Community through efficient stewardship of infrastructure and environment.



Dave Leamon,
Director



Chris Brady,
Deputy Director
Design, Survey,
Fleet Management



Collin Yerzy,
Deputy Director
Construction,
Administration,
Operations



Frederic Clark,
Deputy Director
Development
Services, Traffic



Tate Hoffman,
Morgan Shop
Manager



Tracie Madison,
Senior Business
Manager

2021 was the second year of the COVID-19 pandemic, unfortunately America passed the 800,000 deaths due to COVID that year. The Dixie Fire burned almost 1,000,000 acres in Butte, Plumas, Shasta, Tehama, and Lassen Counties impacting air quality as far as New York City. California was in a severe drought and 2021 was the second driest year on record. By the end of 2021, all 58 counties in California were in drought. Who would have thought in 2021 that by the end of the 2022-2023 water season a wet winter would end the drought and fill the reservoirs?

Public Works continued with our essential work throughout this year of the pandemic, filling potholes, fixing roads, processing permits, building bridges, striping roads, designing projects, fixing heavy equipment, responding to traffic concerns, maintaining storm drainage facilities, billing projects and everything else Public Works does every year.

Public Works made substantial progress and milestones on two important bridges, one in District 1 and 2, Hickman Road Bridge over the Tuolumne River, and in District 5 Crows Landing Road Bridge over the San Joaquin River. Hickman Road Bridge was opened to the public in November 2021, which is a key transportation connection in East Stanislaus County connecting the City of Waterford with the Town of Hickman and providing a new safe, reliable and resilient, north-south connector. Crows Landing Road Bridge saw major construction in 2021 with foundation work well under way that year.

I am proud of all the good work that the employees of Stanislaus County Public Works contributed to getting done so that travelling in Stanislaus County was safer and easier than the year before. I want to thank the Board of Supervisors for their continued support for the mission of Public Works of *Delivering Efficient Public Services and Community Infrastructure* for the benefit of our residents and businesses.

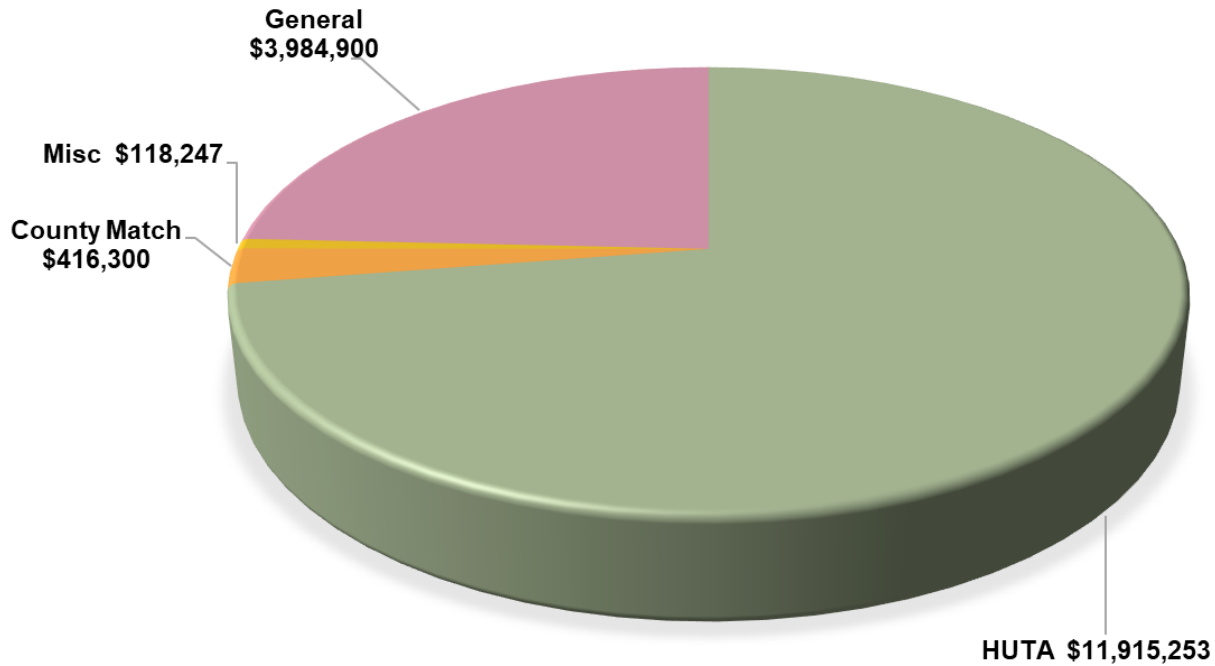
Respectfully submitted,

David A. Leamon, PE, MPA

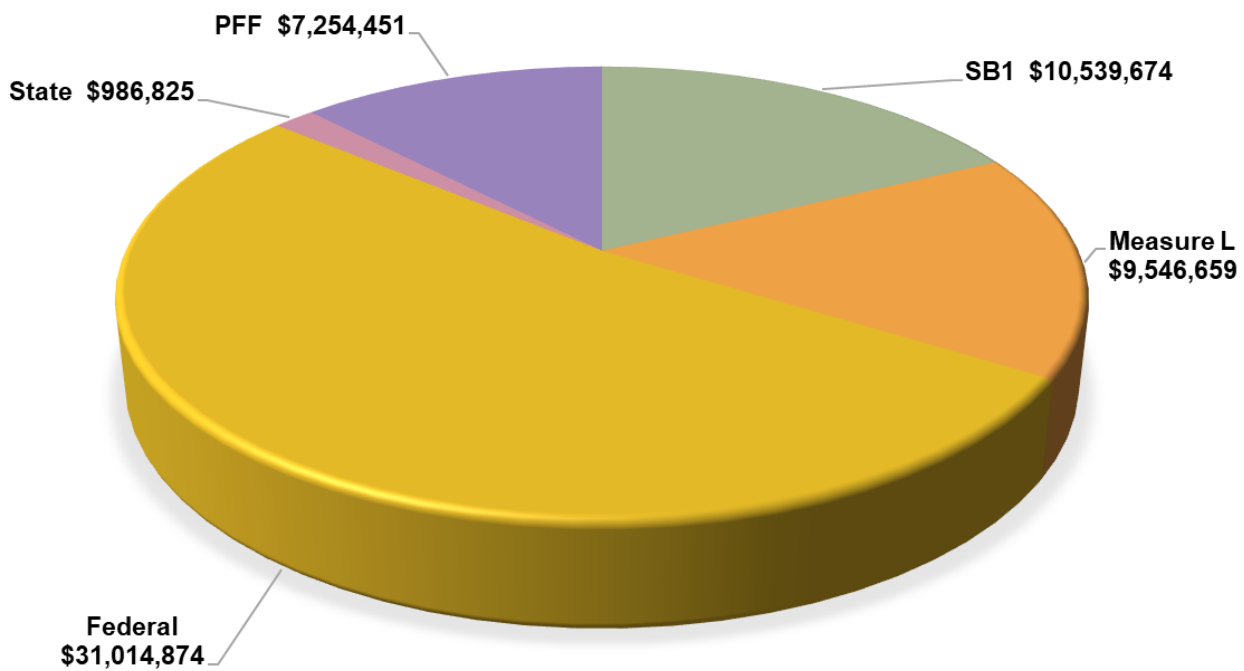
Public Works Director and Road Commissioner

Stanislaus County Public Works Department Revenues

OPERATIONS



PROJECTS



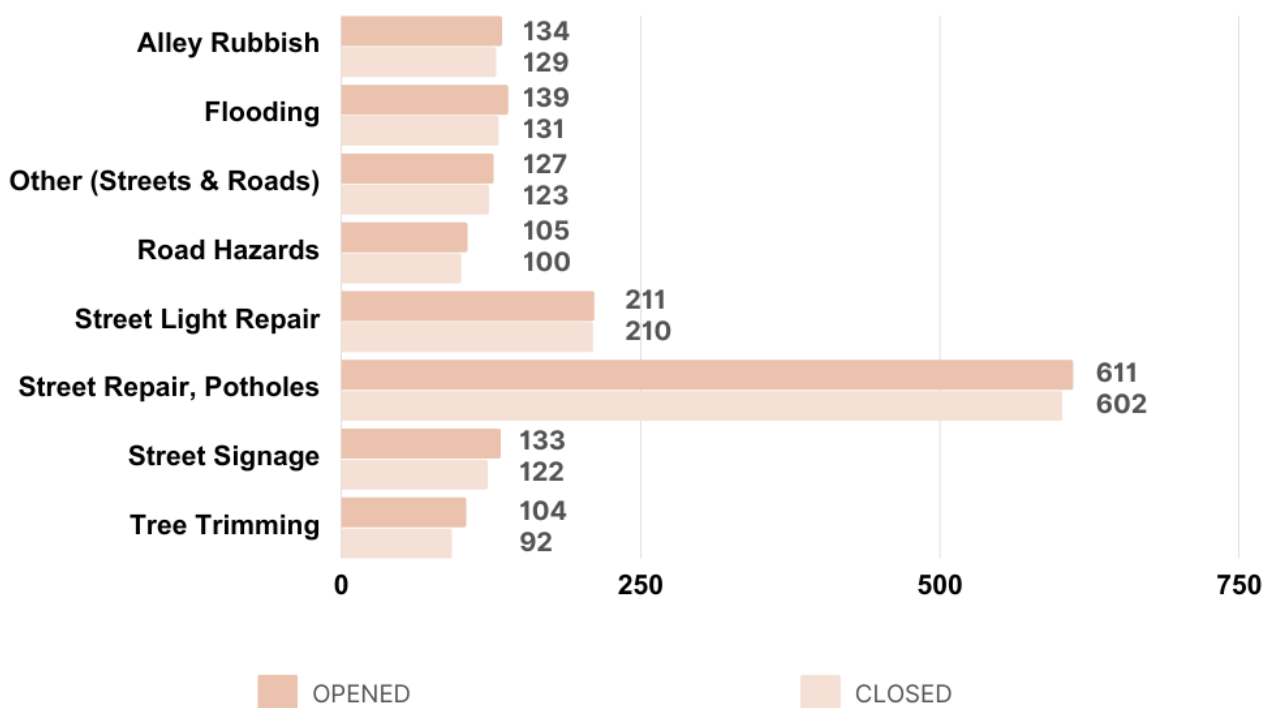
The Public Works Department has been busy this year, processing and assigning 1,818 concerns or work requests through the Government Outreach portal. Staff was able to address and close 1,770 of these requests, which is a success rate of nearly 97%.

This is a significant achievement, and it is thanks to the hard work of all Department staff. The requests that were addressed included a wide range of issues, such as flooding, traffic and street signs, encroachments, traffic striping, tree and weed control, permits for transport and oversized trucks, potholes, traffic control, street sweeping, ADA/Civil Rights, road hazards, and other streets and roads, permits, or engineering requests.

The Department is committed to providing excellent service to the Community, and this high success rate shows that they are meeting that goal. If you have a work request, please be sure to submit it through the Government Outreach portal.

Here is a snapshot of the work orders requested:

Top Eight Work Orders of 2021



Human Resources (HR) is responsible for the entire employee lifecycle of Public Works employees. This includes recruiting, onboarding, offboarding, PAF processing, evaluations, maintaining personnel files, managing employee records in PeopleSoft, managing Department of Transportation (DOT) drivers, discipline, supporting the Safety Representative, and supporting Payroll. HR also plays a role in employee development, employee relations, and policy development.

HR is committed to providing excellent service to all Public Works employees. We believe that by providing a supportive and professional environment, we can help employees reach their full potential and contribute to the Department's success.

Human Resources in Action in 2021

Human Resources (HR) was busy in 2021, with a significant number of recruitments, promotions, and retirements.

Recruitments: HR filled 12 open positions, bringing in new talent to the team.

Promotions: 13 employees were promoted, recognizing their hard work and dedication.

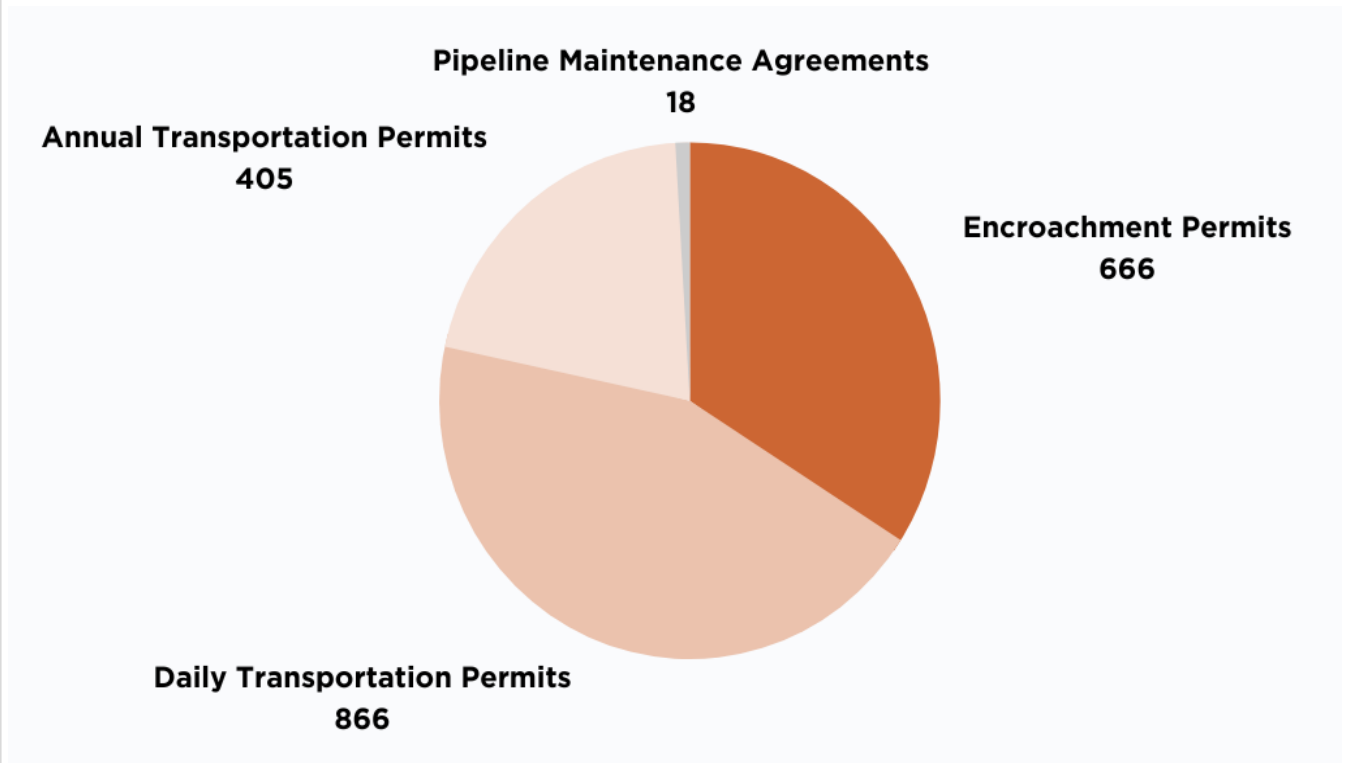
Retirements: 4 employees retired, after many years of service.

Application Screenings: HR screened over 500 applications, ensuring that the best candidates were selected for open positions.

In 2021, the Development Services Division of County Public Works issued permits for construction activities, oversized loads, and pipelines.

- The Encroachment Permits section issued 666 permits for construction activities in all County road rights-of-ways, bringing in \$649,029 in revenue.
- The Transportation Permits section issued 866 Daily and 405 Annual Transportation Permits, which regulated the movement of oversized loads over County roads and bridges. This regulation helps ensure vehicle safety and protects public roads and bridges, and collected \$49,586 in revenue.
- The Pipeline Maintenance Agreements section issued 18 agreements, which allow the County to monitor work or activities within County road rights-of-way by private parties. These agreements hold the owner of the pipeline responsible for any damage that may occur to the County road if the pipeline fails, and accrued \$5,350 in revenue.

In addition to these permits, Development Services also reviews and issues special event permits for parades and other activities that may block the roadways. They also review and issue permits related to land development, such as off-site improvement plans, building permit plan reviews and inspections, grading permits, rezone applications, parcel maps, staff approvals and use permits.



The State Water Resources Control Board (SWRCB) Water Quality Order NO. 2013-0001-DWQ, NPDES General Permit NO. CAS000004, Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4), General Permit, (Permit) requires Stanislaus County to undertake six minimum control measures to control stormwater. The program areas include public education and outreach, illicit discharge detection and elimination, public participation/involvement, construction site runoff control, post-construction runoff control, and pollution prevention/good housekeeping. In addition, the permit requires the MS4 to reduce its discharge of pollutants to the Maximum Extent Practicable (MEP) and perform inspections and monitoring.

Stanislaus County participates in the Delta Regional Monitoring Program (RMP) to track and document the effectiveness of beneficial use protection and restoration efforts through a coordinated monitoring program. As a member of the Delta RMP Stanislaus County has been approved by the RWQCB to discontinue specific individual monitoring requirements.

In response to the Central Valley Pyrethroid Pesticides Total Maximum Daily Load and Basin Plan Amendment (BPA; Resolution R5-2017-0057) the Central Valley Regional Water Quality Control Board (RWQCB) issued Stanislaus County an Order to Submit Technical and Monitoring Reports pursuant to California Water Code Sections 13267 and 13383 (Order). The Order allows Small Phase II MS4 permittees to waive the baseline monitoring requirement and establish a Pyrethroid Management Plan to identify a set of management practices to reduce the pyrethroid levels in discharges. On August 19, 2021, Stanislaus County submitted the Draft Pyrethroid Management Plan to the RWQCB for review and approval.

The Stormwater Program continued to oversee the Proposition 1 Disadvantaged Communities Involvement Grant from the Department of Water Resources to evaluate flood mitigation of the Dry Creek Watershed. The Phase II evaluation consists of surface water modeling and a Multiple Account Analysis (MAA) to evaluate the 11 potential flood control sites. The study primarily focuses on the technical aspects on flood control and groundwater recharge.



PUBLIC WORKS DEPARTMENT MORGAN ROAD SHOP

Morgan Shop is a full-service maintenance facility that offers bumper-to-bumper heavy and light equipment repair. The new maintenance facility is 18,037 square feet of working area, not including administration offices. Morgan Shop employs eight people: five Heavy Equipment Mechanics, one Heavy Equipment Lead Mechanic, one Parts Procuring Storekeeper, and one Staff Services Analyst. Morgan Shop provides service to most departments in the County, as well as a few surrounding cities in need of specialty equipment repairs that Morgan is known for. Morgan Shop has two service trucks for mobile repair, including portable welders for in-field fabrication work. One service truck is specifically outfitted to perform in-field preventive maintenance, including all fluid services.

Morgan Shop's parts department is the backbone of the repair business. Without parts, most repairs are not possible. Morgan Shop's storekeeper does a good job of keeping track of inventory and finding the parts that are needed. The parts house stocks 3,200 parts at a rough cost of \$300,000, not including fuel. Morgan Shop's fleet software focuses heavily on parts, and currently has 6,400 active part numbers stored for future use.

NEW EQUIPMENT 2021



Restroom trailer (for remote construction site use)



(1) One new 4x4 F150 (new Superintendents truck)



Vac-Con used to clean debris from storm drains and uncover underground pipes



Street Sweeper mechanical (used for street cleaning in CSA neighborhoods)

KEYES ROAD AT TID CERES MAIN CANAL BRIDGE

The Stanislaus County Public Works Department is moving forward with plans to replace the structurally deficient Keyes Road Bridge over Turlock Irrigation District (TID) Ceres Main Canal. The project is funded with local funds from Measure L sales tax measure and Senate Bill 1 (SB-1).

The existing bridge was constructed in 1920 and is used by an average of 5,270 vehicles per day, including 10% trucks. The bridge has delamination, spalled areas, exposed rusted rebar, cracking, abrasion, and other damage. It is no longer safe for heavy loads, that have to detour around the bridge using alternative rural routes.

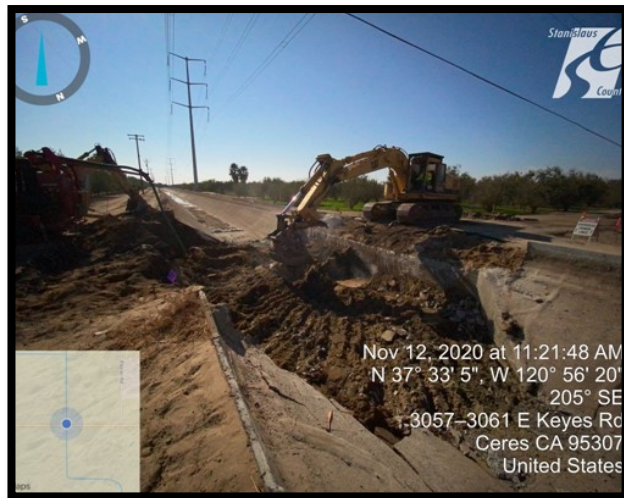
The new bridge will be a two-lane structure that meets current County and American Association of State Highway and Transportation Officials (AASHTO) standards. It will have 12-foot travel lanes and 8-foot paved shoulders in each direction.

This project is a major safety improvement for the Keyes Road corridor and will help to reduce traffic congestion. It is also a good use of local funds to improve our infrastructure and support economic development.

We appreciate your patience during construction and look forward to providing a safe and reliable bridge for years to come.



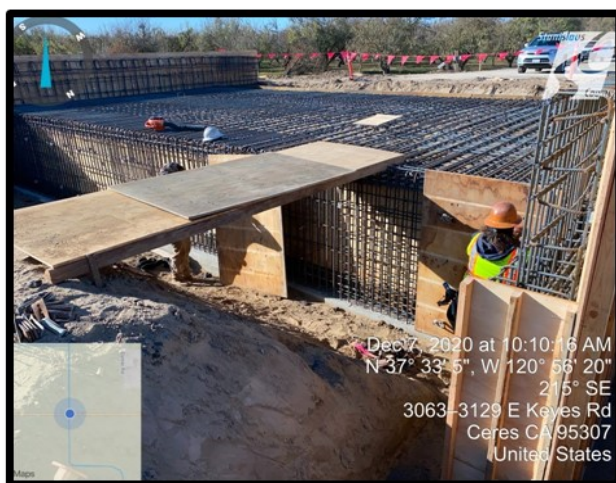
Stanislaus County workers prepping the canal for the old bridge to be demolished.



Stanislaus County workers demolishing old canal bridge.



Stanislaus County workers laying the new canal foundation for the future new bridge.



Bridge framework being built, this is used to help pour the cement that will create the new bridge base.

New Keyes Road Bridge



Stanislaus County Corporation Yard Security Wall Project

The Stanislaus County Public Works Corporation Yard is located at 1716 Morgan Road. The property is surrounded by a chain-link fence with razor wire on the top. A large portion of the exterior to the Corporation Yard abuts the Union Pacific Railroad property along the eastern side and several private warehouse properties to the south. Over the years, there have been numerous thefts of County equipment, in which, access has been gained by cutting through the chain-link fence. This vulnerability also poses a risk to County employees as these areas are secluded locations after-hours and do not lend themselves to police patrol.

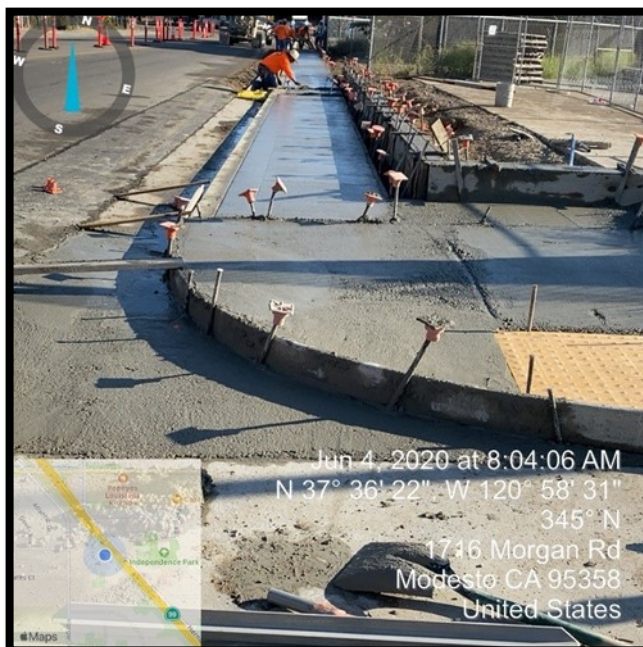
The project proposes to install a concrete masonry unit security wall along property lines of the Public Works Corporation Yard to provide a permanent deterrent to these thefts and vulnerabilities. The proposed wall will be 10-feet tall with a three-strand barbed wire array angled away from County property. The three-strand wire array is woven with circular razor wire. Vine landscaping with irrigation will be installed to discourage graffiti. The project also includes the construction of a sidewalk located along the east side of Morgan Road, from the existing northernly Corporation Yard site entrance to approximately 240 linear feet north across the County Division of Household Hazardous Waste frontage.



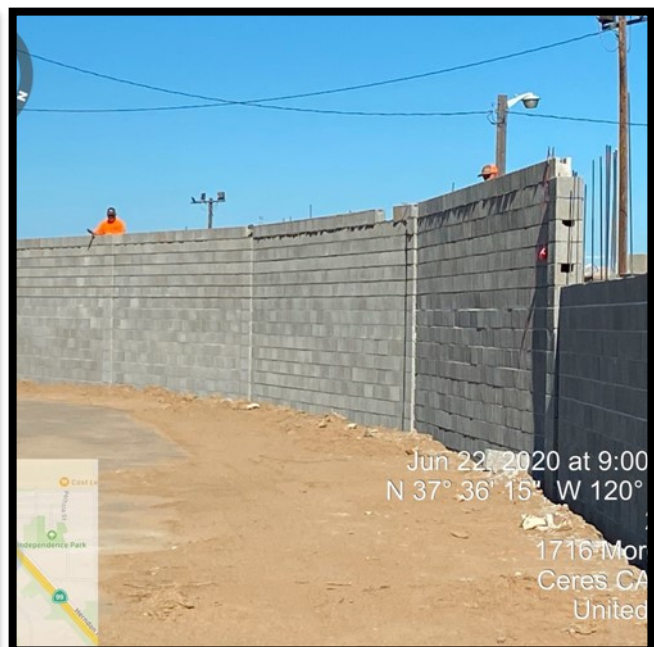
Stanislaus County workers constructing the security wall.



Security wall between Public Works and the railroad tracks



In addition to building the security wall, a new sidewalk was also built.



Almost fully completed security wall.

Amtrak Station Improvement Project

Stanislaus County and the San Joaquin Joint Powers Authority (SJJPA) planned an improvement project at the Turlock-Denair Amtrak station. The project is in response to the recent deployment of a daily roundtrip passenger service from Bakersfield to Oakland.

The Turlock-Denair Amtrak station serves the San Joaquin's passenger rail service, which serves the Central Valley from Bakersfield to Sacramento. The SJJPA has administrative responsibilities of the rail service, while Amtrak is the operator of the San Joaquin's rail service.

The planned improvements to the Turlock-Denair Amtrak station include:

- Expanding the parking capacity by 50 spaces
- Installing additional lighting
- Installing an additional security camera

The project is expected to cost \$250,000 and is scheduled to be completed in 2021. A Notice of Exemption was filed with the County Clerk on July 11, 2017, in accordance with the California Environmental Quality Act (CEQA).

The improvement project is expected to benefit Amtrak passengers and the Community by providing more parking, better lighting, and increased security. It is also expected to help to promote economic development in the region by making it easier for people to travel to and from Turlock and Denair.

We are excited to get this project underway and look forward to providing a better experience for Amtrak passengers and the community.



Stanislaus County worker prepping the old parking lot for extension.



Fresh cement curb for new additional lighting.

Dirt phase of the parking lot,
ready for asphalt.



Roller compactor being used on
the newly laid asphalt.



Completed new asphalt as well as additional security camera.

Gilbert Road Bridge over Turlock Irrigation District

The Gilbert Road Bridge over Turlock Irrigation District (TID) Ceres Main Canal is getting a major upgrade! The current bridge is functionally obsolete and needs to be replaced with a double box culvert that can accommodate local traffic and large farming equipment.

The project also includes improvements to the intersection of Gilbert Road and Hatch Road to bring it up to the current County and American Association of State Highway and Transportation Officials (AASHTO) standards. This includes wider travel lanes and shoulders.

Public Works has received approval from Caltrans to move forward with construction using Local Advanced Construction (AC). This means that the County will provide the initial funding for the project, and once Federal funds become available, the County will be reimbursed.

This project is a major investment in the safety and mobility of our Community. It will improve traffic flow and make it easier for farmers to get their equipment to and from their orchards. We are excited to announce the completion of the Gilbert Road Bridge this year!



County workers setting Ceres Main Canal new base



County workers laying down the foundation and concrete for the new bridge.

Newly Completed
 Gilbert Road Bridge and Canal



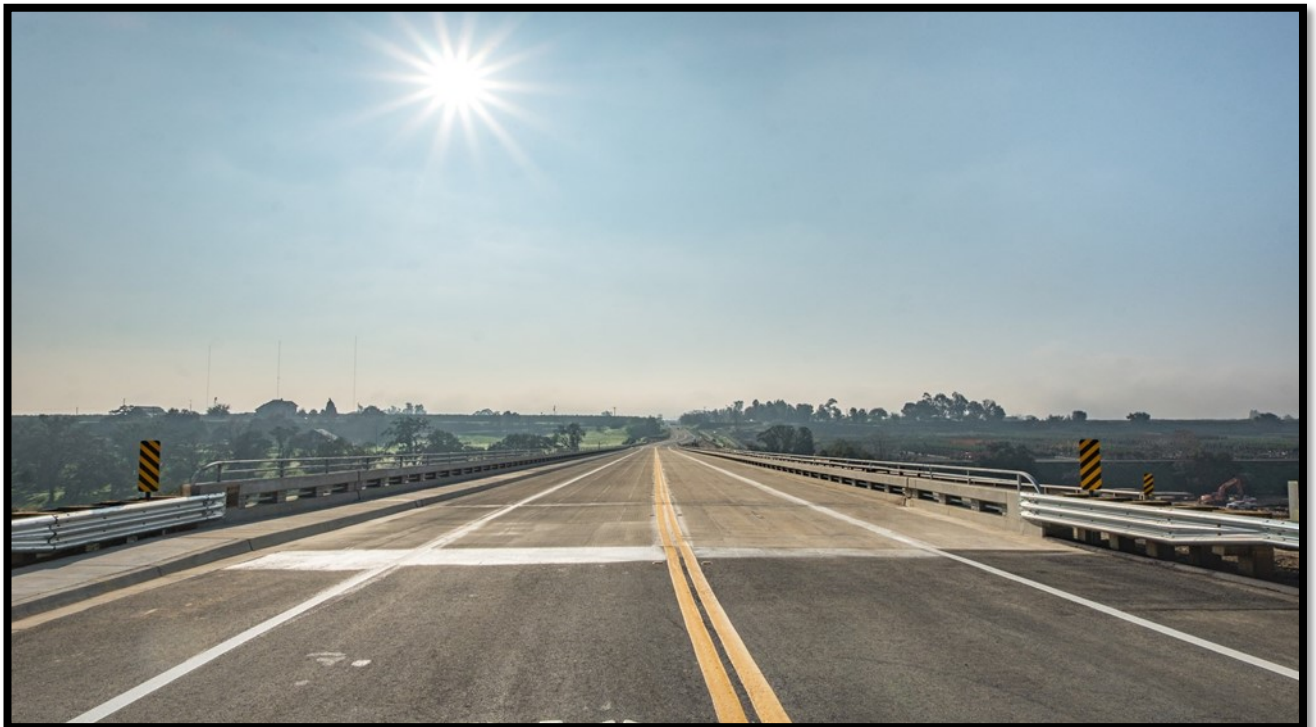
Hickman Road Bridge Replacement Project

The Stanislaus County Department of Public Works is proposing to replace the existing bridge on Hickman Road over the Tuolumne River. The bridge was constructed in 1964 and is classified as Structurally Deficient. It is also deemed “Scour Critical” and has been closed during high flow events.

The purpose of the project is to remove the existing bridge and replace it with a new bridge that is designed to current structural and geometric standards. The replacement bridge will be 750 feet-long and will have two 12-foot-wide travel lanes, two 8-foot-wide shoulders, and a 5-foot-wide sidewalk. It will be supported on a deep drilled-pile foundation to address the degradation of the Tuolumne River channel.

The replacement bridge will be constructed immediately upstream of the existing structure, to keep the existing road and bridge open to public traffic during construction. The new upstream road alignment will transition and connect back to the existing Hickman Road alignment using a design speed of 45 mph. The existing bridge will be demolished upon completion of the new bridge construction.

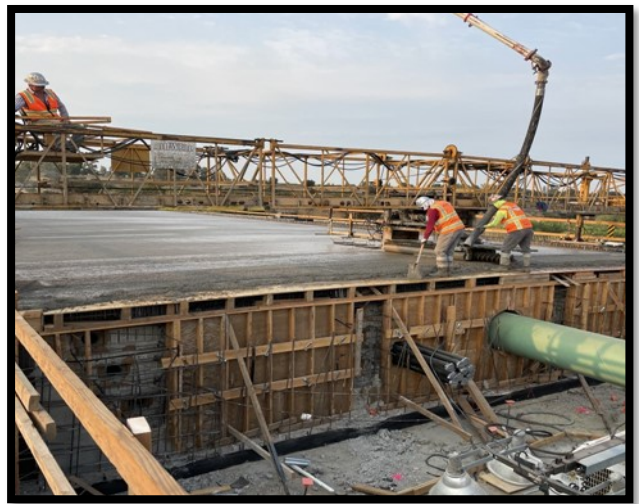
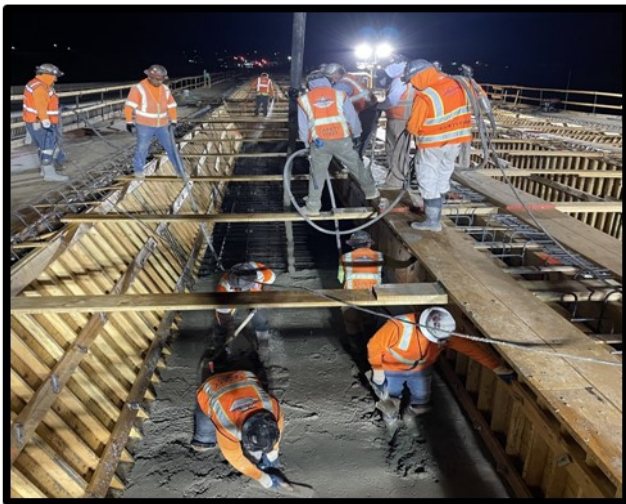
The project has been approved by the California Environmental Quality Act (CEQA).



New Hickman Road Bridge



Construction of the new bridge base



County workers laying fresh concrete



Hickman Bridge before and after

McHenry Avenue Widening Project to Improve Traffic Flow

The Stanislaus County Department of Public Works is proposing to widen McHenry Avenue from the intersection of Ladd Road/Patterson Road (SR 108) to the south end of the McHenry Bridge near the San Joaquin County Line between the Cities of Modesto and Escalon.

The project will widen McHenry Avenue from its current two lanes to four lanes with a dual left-turn median. This will improve the corridor to accommodate north/south interregional traffic between the Cities of Modesto and Escalon and to State Highway 108 (McHenry Avenue/ Ladd Road).

The project is expected to improve regional circulation, relieve existing traffic congestion, reduce traffic delays, accommodate future traffic, improve safety, promote non-motorized modes of transportation, and allow for goods movement and job development for existing and future development.

The recent average daily traffic counts (ADTs) on McHenry Avenue is approximately 17,000 vehicles per-day which is approaching the capacity for the existing two-lane rural roadway.

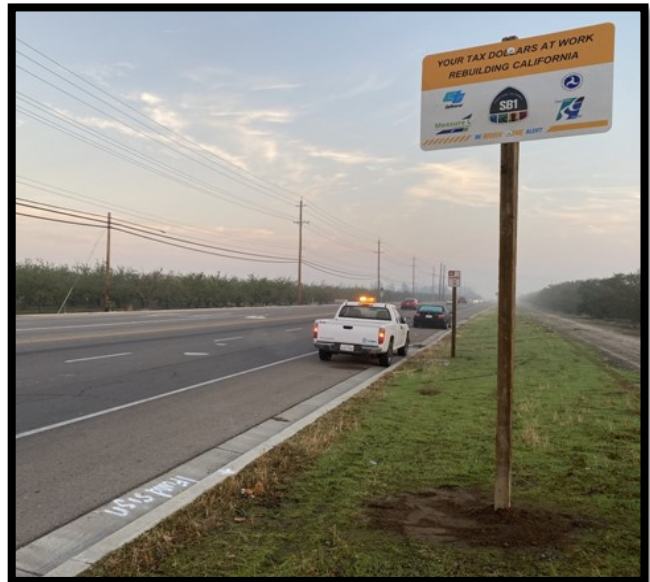
The McHenry Avenue Widening Project was identified in the Stanislaus Council of Governments (StanCOG) Measure L Expenditure Plan to receive Regional Project funds. The Stanislaus County voters approved Measure L in 2016.



Road closure of McHenry Avenue for widening



County staff working on McHenry Avenue



Concrete curb machine laying concrete mix to form a new curb for McHenry Avenue

The newly widened McHenry Avenue

Stanislaus County to Replace Curb Ramps and Improve Pavement

The Stanislaus County Department of Public Works (DPW) is proposing to replace 113 curb ramps and improve pavement in the areas of Ceres, Turlock, Crows Landing, and Salida. The \$4.2 million project is expected to begin in early 2023 and be completed by the end of the year.

The curb ramp replacement project will improve accessibility for people with disabilities by reconstructing the ramps to meet current ADA standards. The pavement improvement project will extend the life of the roads by applying multiple and various pavement treatments.

The project is funded by a combination of state and local funds. The Cities of Ceres and Turlock have approved Cost Sharing Agreements with the County to reimburse the County for the cost of the projects.

The DPW is working with the cities to minimize the impact of the construction on residents and businesses. The project is expected to cause some traffic delays, but the DPW will work to keep those delays to a minimum.

The DPW is committed to improving the safety and accessibility of the roads in Stanislaus County. This project is a significant step forward in that effort.





Crows Landing Road Bridge Replacement Project

The Stanislaus County Department of Public Works is proposing to replace the existing bridge on Crows Landing Road over the San Joaquin River. The bridge was built in 1949 and is classified as Structurally Deficient and Functionally Obsolete. It is also deemed “Vulnerable to Damage” in the event of a significant flood event.

The purpose of the project is to remove the existing bridge and replace it with a new bridge that is designed to current structural and geometric standards. The replacement bridge will be five spans long and will have two 12-foot travel lanes, a 12-foot center median/turn lane, and two 4-foot shoulders.

The project has been approved by the California Environmental Quality Act (CEQA).

The Crows Landing Road Bridge is a critical link within Stanislaus County for emergency access and must always remain open. The new bridge will improve safety and capacity within this segment of Crows Landing Road.



Drone view of Crows Landing Road Bridge



County crews working on Crows Landing Bridge

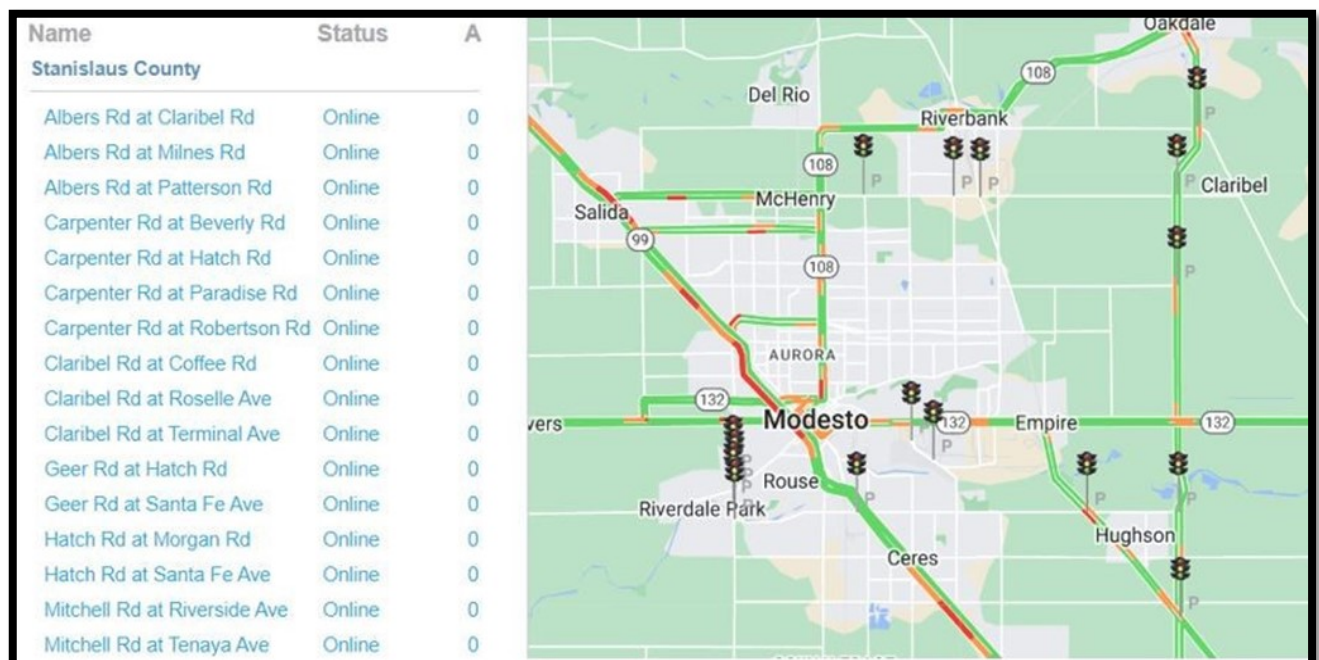


The Traffic Engineering division strives to make sure the roadway system in Stanislaus County runs safely and efficiently through use of signs, striping, infrastructure, and technology. The Traffic Engineering division also provides project support to Design and Construction Engineering. Although housed at the Morgan Road site, the Traffic team plays an integral role in the development process with the Development Services team at the 1010 10th Street office.

In 2021, we completed the first phase of our project to improve communication with our traffic signal network. The system we deployed uses cell phone modems to transmit video feeds from existing video detection cameras to us, as well as monitor voltage and incoming line power status. The first phase included 16 locations, and we plan to have 40 locations online by 2026.

Francis Baldonado was promoted to the position of Assistant Engineer in the Traffic Engineering Division in September 2021. Francis has been with the County since April 2014. Congratulations Francis!

Danny Mauricio was promoted to the position of Assistant Engineer in the new Special Projects Division in September 2021. Danny started with the department in 2018 as an Engineering Aide while earning his degree and was hired as a Senior Engineering Technician in 2019. Danny will be missed in the traffic engineering division, but we look forward to his success in his new role.



The County Surveyor's Office is responsible for maintaining the survey system of lands in our county. This includes checking and recording parcel maps, subdivision maps, records of survey, right-of-way deeds, corner records, certificates of compliance, county surveys, and other related documents.

The County Surveyor's Office is also charged with conducting surveys as required by the Board of Supervisors and the Courts, working with the State Land Commission.

In short, the County Surveyor's Office is responsible for ensuring that the property lines in our County are accurate and up-to-date.



In 2021, the Surveyors checked:

58	Records of Survey
05	Parcel Maps
29	Lot Line Adjustments
02	Road Abandonments
08	Certificates of Compliance
15	Irrevocable Offers of Dedication
213	Corner Records

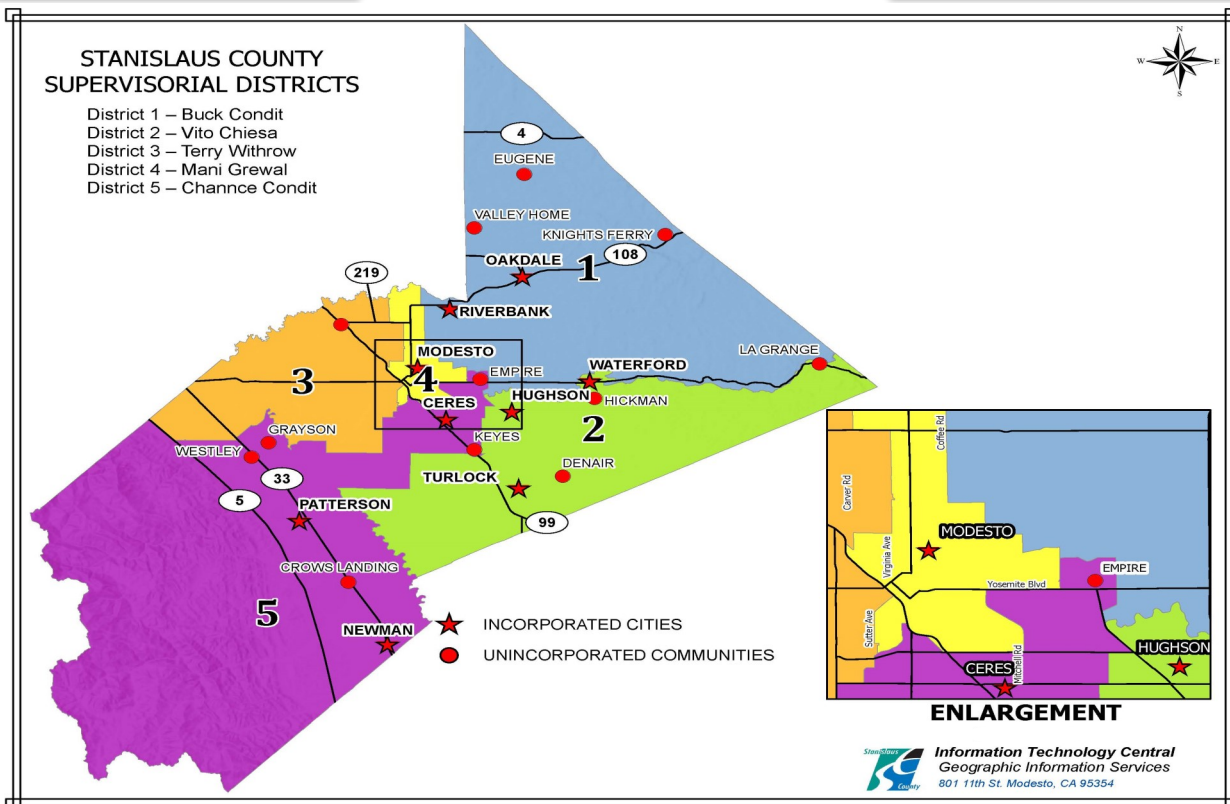
Our County survey team sets a County monument by first locating the precise point of the corner using a variety of surveying techniques. Once the point is located, the team will set a monument at that point. The type of monument used will vary depending on the location and the conditions.

Board of Supervisors



TOP ROW:
 Buck Condit, District 1
 Vito Chiesa (Chairman), District 2
 Terry Withrow (Vice Chairman),
 District 3

BOTTOM ROW:
 Mani Grewal, District 4
 Channce Condit, District 5





1716 Morgan Road, Modesto, CA 95358 | www.stancounty.com/publicworks
(209) 525-4130 | (209) 541-2505 Fax
Administration | Construction Engineering | County Surveyor's Office | Finance
Design Engineering | Traffic Engineering | Morgan Shop | Roads and Bridges



1010 10th Street, Suite 4204, Modesto, CA 95354 | www.stancounty.com/publicworks
(209) 525-4130 | (209) 525-6507 Fax
Development Services | Encroachment Permits | Transportation Permits

You may also contact us by submitting your questions or concerns online at:
www.stancounty.com/customercenter or
Stanislaus County's Assistance Hotline at 1 (877) 2Assist / 1 (877) 227-7478