

Stanislaus County

Department of Public Works

2022 Annual Report



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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.

Leadership



Letter from the Director

Dear Residents of Stanislaus County, Board of Supervisors and Chief Executive Office,

It is my honor to present the 2022 Annual Report for the Stanislaus County Department of Public Works. This report highlights the achievements, challenges, and commitments that define our mission to manage and improve infrastructure while fostering a strong and connected community.

In 2022, our department responded to over 1,580 service requests, demonstrating our dedication to addressing community needs with efficiency and care. Whether it was road repairs, drainage improvements, or other vital services, our team worked diligently to ensure these requests were assessed and addressed promptly.

Key accomplishments of 2022 include:

- Road and Bridge Projects:** We completed critical construction, maintenance, and design projects, including the Crows Landing Industrial Business Park Well No. 1 and the Saint Francis Road Bridge replacement. These projects improve safety, reliability, and sustainability.

- Road Maintenance:** Our operations team successfully chip sealed 96 miles of roadway, striped hundreds of miles of centerlines and edge lines, and repaired guardrails and drainage systems across the county.

- Sustainability Initiatives:** The Pelletized Asphalt Rubber Overlay Test Section Project exemplifies our commitment to environmental stewardship, utilizing recycled materials to improve pavement performance.

Technological Advancements: Traffic engineering advancements, such as machine-learning-based safety analysis at key intersections, have reduced left-turn collisions by up to 95%, showcasing the power of innovation in creating safer roadways.

We also prioritized employee growth and retention, welcoming 16 new hires, celebrating promotions, and honoring the retirements of dedicated staff members. Our human resources team worked tirelessly to meet the challenges of the post-pandemic workforce landscape, ensuring the department remains a place of opportunity and growth.

Looking ahead, we are excited to continue modernizing infrastructure, improving connectivity, and enhancing public safety through innovative practices and community-focused projects. Together, we are building a stronger, more resilient Stanislaus County.

Thank you for your ongoing support and engagement. We look forward to serving you in the year ahead.

Sincerely,



David A. Leamon, PE, MPA

Director of Public Works and Road Commissioner

Stanislaus County

Administration

During 2022 the Public Works Department received over 1,580 requests. Many of those work orders are submitted by calling our main office where Admin Staff take down the information and submit a request online which gets assigned to our Roads Staff.

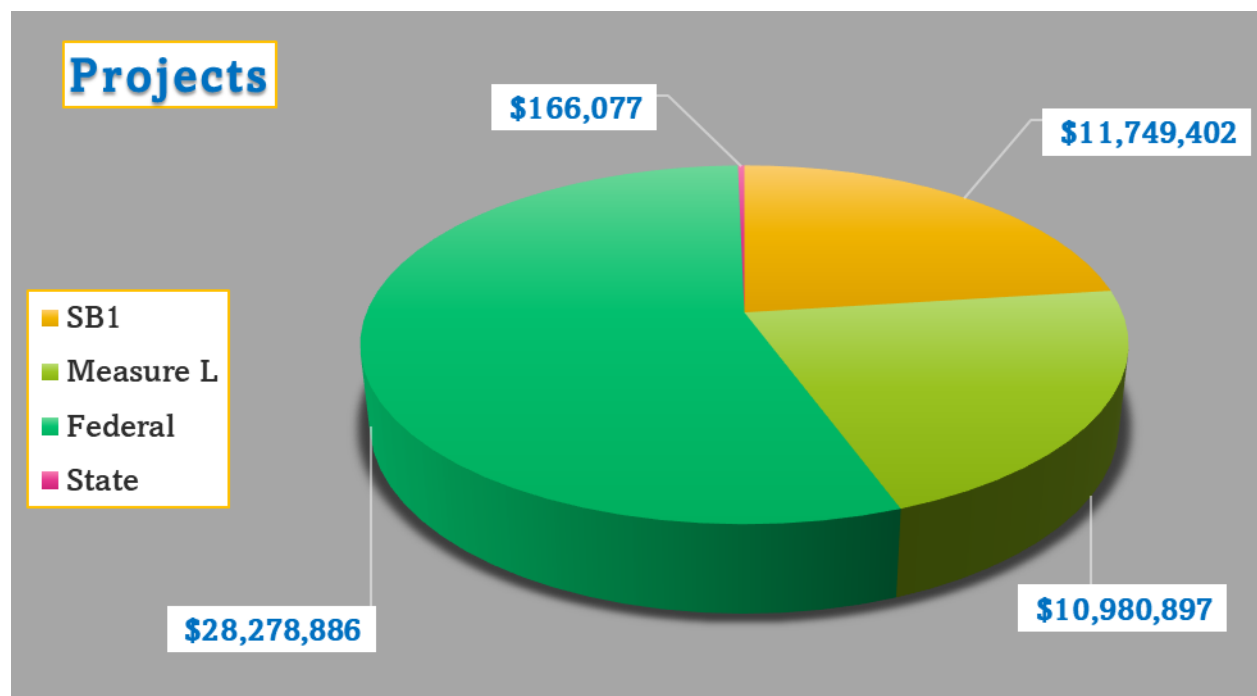
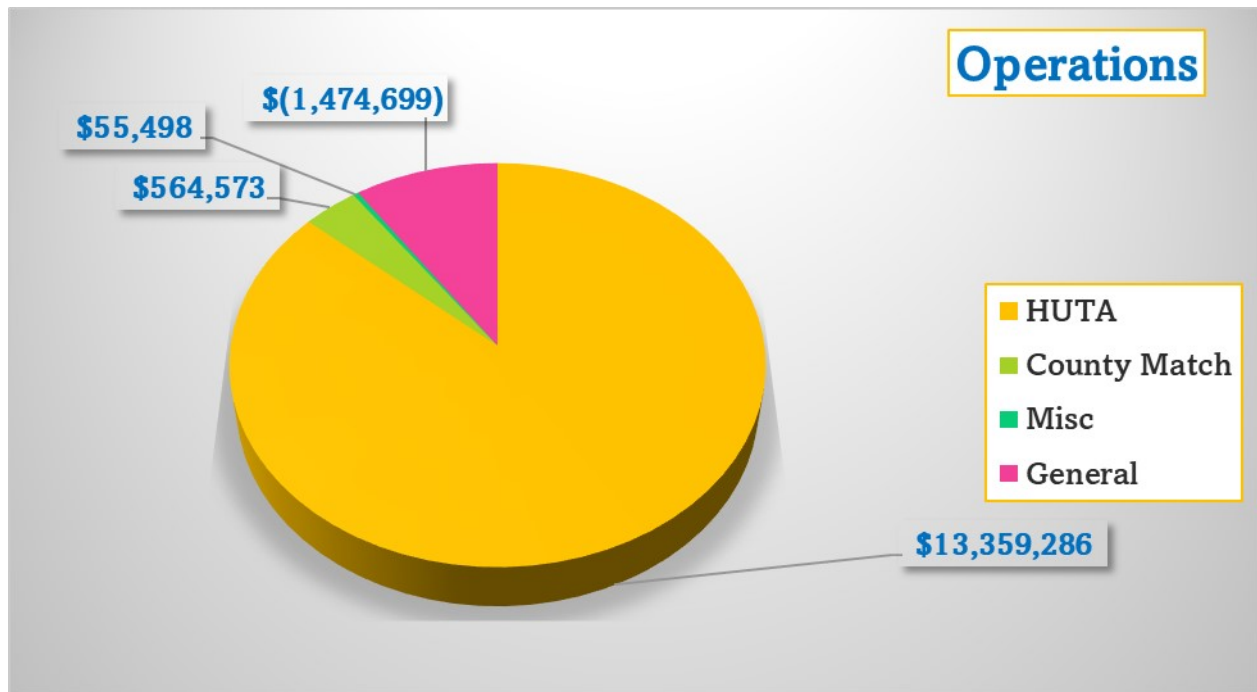
Most requests are assessed or repaired within 10 business days. If the Request requires a larger-scale repair, then it gets added to a future schedule (depending on type of repair, weather conditions, budget, etc.). Road repairs will be done at the soonest possible time.

In addition to the Public Works related calls received, the Department receives several calls for other departments and Agencies within Stanislaus County. We strive to provide excellent customer service and do our best to connect each customer to the right Department. Below is a snapshot of the top 7 work orders Public Works received in 2022.



Finance

Stanislaus County Public Works Department Revenues



Human Resources



Every year brings it's own challenges, 2022 proved that to be true as organizations encountered many challenges while trying to fill vacant positions, not only filling positions, but retaining staff as well. Many organizations, including Stanislaus County continued trying to recover from the ripple effects of COVID-19 and from what has been nicknamed "The Great Resignation" of 2021 thereafter.

Among the many reasons employees choose to resign, the following have been noted: better pay and benefits; a change of pace; the option to work remotely; and more family time.

Despite the challenges, Public Works' Human Resources (HR) Staff remained focused on trying to fill the Department's vacancies and recruited **16 New Hires** throughout the 2022 Calendar Year.

The Department takes pride in encouraging staff growth and development and through that process there were **10 Promotions**.

Many employees have been at Public Works for a majority of their time working for Stanislaus County, if not in it's entirety. And after that long rewarding career, many have had the opportunity to retire and know their hard work and dedication is never forgotten. There were **2** employees that retired during 2022, Scott Waddell after 31 years and Federico Arroyo after 19 years of service..

Service Awards 2022:

5 Years: Bianca Rodriguez, Frederic Clark, Elena Locarnini, Deborah Hawkins

10 Years: Jonathan Freeman, Casey Roberts

15 Years: Joe Lomeli, Steuart Holt, Joe Melo, Bill Martins, Isaias Angel, Arcelia Garcia

20 Years: Keith Wilcox, Anthony Ramirez, Jason McCormick, Elliott Lea, James Sanchez, Juan Maldonado

25 Years: Darren Teeples, Jorge Molina

30 Years: Roger Nelson

Thank you for your service!

[Stanislaus Employment Opportunities - Stanislaus County](#)



Roads and Bridges - Construction

Crows Landing Industrial Business Park (CLIBP) Well No.1 Project

Project improvements include: Conduct well drilling and construction of what will be known as CLIBP Well No.1, perform well rehabilitation of the existing Crows Landing Community Service District (CLCSD) Well No.4 that currently has operational issues and install a pressure reducing inter-tie with the CLCSD system. Installation of at-grade storage tanks at the southeast corner of the CLIBP, custom piping to meet the maximum daily water distribution demand plus the required fire flow for the CLCSD and CLIBP, de-sand the CLCSD's existing Well No.4 to improve flow rates.

Purpose: To provide a new water supply and distribution system specifically to serve the CLIBP which will inter-tie with the CLCSD system. The inter-tie would provide emergency fire support and add much-needed redundancy and resilience to the existing system.

Funding: The Stanislaus County Board of Supervisors assigned \$22.9 million from the General Fund in the 2018-2019 Adopted Final Budget to support development of the CLIBP. The construction phase of this project will require the use of a portion of the remaining General Fund assignment for the CLIBP. Currently, there is \$14.8 million remaining in the assignment.



Crows Landing Industrial Business Park (CLIBP) Well No.1 Project



Del Puerto Canyon Road

Project improvements include: Place chip seal over the existing pavement followed by newly painted striping.

Purpose: To preserve the existing pavement and improve the road surface and prolong the life of the County Road network.

Funding: This project is funded with Road Maintenance and Rehabilitation Account (RMRA) Funds.



Measure L - Airport Sidewalk

Project improvements include: Construction of detached at-grade sidewalks; Class I, Class III and Class IV bicycle facilities; 3.5-inch high speed cushion raised bicycle crossings; high-visible sidewalk crosswalks; curb bulb-outs for pedestrian/bicycle crossings; lighting along Class I bicycle path; and various other miscellaneous bike and ped facility improvements.

Purpose: To enhance local connectivity and improve safety for school children and other members of the public within the Airport Neighborhood Community.

Funding: The Construction phase of this Project is funded with Active Transportation Program (ATP) funds in the amount of \$3,846,338 and Measure L funds from the Bike and Pedestrian category in the amount of \$365,081. As part of the ATP grant application, City of Modesto agreed to assume the responsibility for the ongoing operations and maintenance of the Project improvements.



Measure L - Airport Sidewalk



On July 24, 2018 the County applied through the California Department of Transportation (Caltrans) for the Active Transportation Program (ATP) Cycle 4 grant to fund the construction of the Project.

The County was awarded the grant on January 30, 2019.



This Project is Exempt from the California Environmental Quality Act (CEQA), under Class 1 of California Code of Regulations, Title 14, §15301 (Existing Facilities). On May 1, 2019, a Notice of Exemption was filed with the Stanislaus County Clerk-Recorder.



Phase M - Albers Road and Hickman Road Project

Project improvements include: To perform pavement surface preparation and treatment including digouts, asphalt rubber cape seal, micro surfacing, mill and overlay, shoulder backing installation, and striping on Albers Road between Claribel and Milnes Roads, and Hickman Road between South Appling Road and Whitmore Avenue.

Purpose: To surface treat the roadway to prevent water infiltration, seal cracks, and stabilize loose surface material. Maintenance of the existing pavement is needed to preserve and protect the roadway, prevent further deterioration, and extend useful life of the roadway within the project limits.

Funding: The construction phase of this project is fully funded with Surface Transportation Block Grant (STBG) funds.



Phase M - Albers Road and Hickman Road Project



Saint Francis Road Bridge over Modesto Irrigation District (MID) Canal

Project improvements include: Remove and replace a structurally deficient bridge within Stanislaus County.

Purpose: Replace the current bridge as it is deemed “Structurally Deficient” and has a sufficiency rating of 55.1 on a scale of 1 to 100 due to the following deficiencies: it lacks the structural capacity to meet current bridge design loading standards; it is 98 years old and has exceeded its design life of 50 to 75 years; it provides insufficient deck width for current geometric standards; the bridge railings do not meet current crash standards; and there is no guard railing or crash cushions at barrier corners on roadway approaches.

Funding: This project is completely funded with the Federal Highway Bridge Program (HBP) funds and toll credits.



Roads and Bridges - Design

Keyes and Morgan Road Intersection Improvement Project

Project improvements include: Upgrading the intersection to a 4-way stop within unincorporated Stanislaus County directly adjacent to the City of Ceres, widening the roadway, adding turn lanes, applying asphalt pavement, and pavement striping.

Purpose: To improve safety and traffic flow at the intersection.

Funding: The Project is fully funded with a combination of Community Development Funds and available funding from District 2's Building Community Infrastructure Fund (BCIF).

Pelletized Asphalt Rubber Overlay Test Section Project

Project improvements include: Placing asphalt pavement overlay test sections utilizing several pelletized recycled tire products that are new to California, with the following three proposed materials: PelletPAVETM, SmartMixTM and Ecorphalt. A control section of conventional asphalt would be placed as a baseline for performance observation purposes. Approximately three 900-foot long product test sections and one control section will be placed across both lanes on East Keyes Road, between Pioneer Road and Geer Road.

Purpose: To support the general mission of the California State Department of Resources Recycling and Recovery (CalRecycle) and protect California's environment and climate through the reduction, reuse and recycling of California resources. The use of recycled tires in asphalt paving, called rubberized asphalt, is one tool to accomplish this mission. Rubberized asphalt also has the benefit of improved pavement performance and longevity.

Funding: CalRecycle funded the preparation of project plans, specifications, estimate, and asphalt mix designs for this project through separate agreements with engineering firms. CalRecycle will be primarily reimbursing the County for the actual cost of the pavement overlay contract, and minimal construction administration time.



Pirrone and Sisk Road Traffic Signal Project

Project improvements include: Installing a new traffic signal, curb ramps, applying crack treatment, and pavement striping within the community of Salida in Stanislaus County.

Purpose: To improve safety and traffic flow at the intersection.

Funding: The Project will be fully funded with Development/Mitigation fees, collected for this purpose, as well as \$100,000 of District 3 Community Development funds.

Urban Pavement Preservation - Phase F Part 2 Project

Project improvements include: Reconstruction of three roads, Hosmer Avenue, Farrar Avenue, and Garner Road, within the South Modesto community and the Beard Industrial District in Stanislaus County; slurry seal pavement preservation, crack treatment, and pavement striping.

Purpose: To improve surface rideability and extend the life of the roads by replacing the existing pavement with a stronger and more durable pavement section.

Funding: The first portion of this project with improvements on Hosmer Avenue and Farrar Avenue will be fully funded with Measure L - Local Streets and Roads funds in the amount of \$2,112,325. The second portion of this project with improvements on Garner Road will be fully funded with Senate Bill 1 (SB-1) funds in the amount of \$1,200,000.



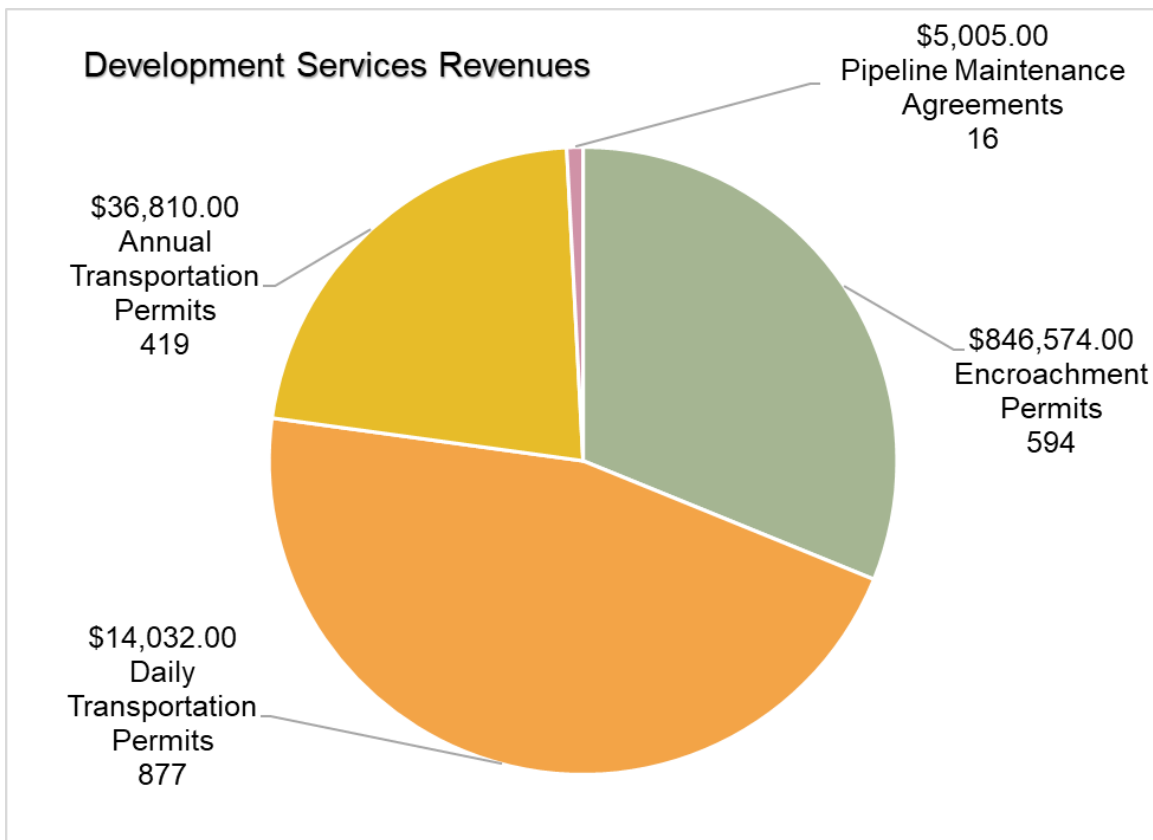
Development Services

What is the purpose of an Encroachment Permit?

To enable the County to monitor work or activities performed within, under or over the County-road rights-of-way by homeowners, private developers, contractors, utility companies and local governmental agencies. A request for a road closure or road detours also requires an Encroachment Permit.

Some examples of work requiring an Encroachment Permit may include, but are not limited to the following:

- ◆Excavations
- ◆Installation of sidewalk, driveways, curb and gutter
- ◆Monuments and surveys
- ◆Public utility installation, maintenance, and repair (i.e. AT&T, PG&E, Cable TV)
- ◆Installation of part-width or full-width street improvements
- ◆Storm drain installations and/or connections
- ◆Sanitary sewer installations and/or connections
- ◆Water services and water main installations and/or connections
- ◆Monitoring well (installation, monitoring and/or abandonment)



Morgan Shop



Assisted in acquiring equipment needed during storm events.

Picture (left) shows light towers for night work, and a large six inch pump to help minimize flooding.

Morgan shop transforms into a large safety training facility when necessary to accommodate quarterly safety events.



Assisted GSA Building Services to write specifications and order new 40 foot Bucket truck.



Procured and ordered (1) one new Mechanical Street Sweeper, used to clean streets to fulfill the requirements of our Phase 2 State Water Board permit.



Procured and ordered (2) two 4x4 F250 Crew cab pickups to be assigned to Roads Supervisors.



Procured and ordered (2) two 4x2 Super cab F250 assigned to Senior Road worker position.



Roads - Maintenance and Operations

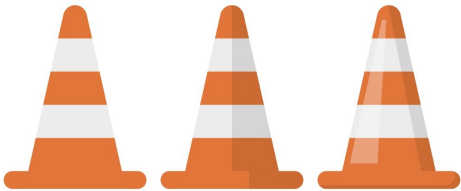
Road Operations is responsible for the maintenance of the County's road system. This involves the maintaining of roadway shoulder and pavement surfaces. Stanislaus County Public Works Roads Crew's also maintain traffic signals, signs, beacons, centerline road striping, and road related drainage facilities. They also assist other County Departments and Agencies with special road projects and emergency services.

Any road work performed has the ultimate goal in mind of Delivering Efficient Public Services and Community Infrastructure by improving the road surface and prolonging the life of the County Road network.



In 2022 Road Operations was able to accomplish the following in addition to many other requests:

- 96 miles of roadway chip sealed
- 281 miles of edge line striped
- 618 centerline miles striped
- 106 Stop Legends painted
- Repaired or replaced over 400 feet of metal beam and wood guard rails
- Installed over 45 roadside drains



Stormwater

In 2022 Staff continued to work with representatives from the California Department of Water Resources (DWR) and the Federal Emergency Management Agency (FEMA) to resolve building code variances that were noted during an inspection that was conducted in 2017. These variances need to be resolved in order for the County to participate in the Community Rating System which would provide a discount in the cost of flood insurance for properties located in flood plain areas.

Staff worked with DWR and the City of Modesto on a Draft Action Plan for the Tuolumne River Floodway Capacity Increase Study.

Staff also collaborated with the Regional Flood Management Plan group and DWR to provide comments and suggestions for the revisions to the existing Central Valley Flood Protection Plan which lead to adoption of the 2022 Central Valley Flood Protection Plan.



Documents processed through the County Surveyor's Office:

**Corner Records: 103, Records of Survey: 48, Lot Line Adjustments: 27,
Certificates of Compliance: 11, Parcel Maps: 9**

2022 was an eventful year for the County Surveyor's Office. Week after week we receive, review, and record a variety of survey related documents including Parcel Maps, Corner Records, Lot Line Adjustments and Records of Survey. Intertwined with these regular duties, we receive many interesting requests for information. Is this road public or private? Do I have one parcel or two? Can my neighbor do that? We field calls from other county departments, other public agencies, various private consulting firms and the public. It seems like everyone has a question about land use or land law or how to read a complicated property description. We try to help everyone.

2022 also brought a few exciting changes to the department. In June, after 4 years as County Surveyor and over 20 years with the County, Larry Fontana retired from public service. That same month, the Board of Supervisors appointed Chad Johnson as the new County Surveyor. Other changes include the purchase of a new suite of Trimble field survey instruments. We now have a state-of-the-art total station and GPS rover. Most exciting of all is our new LIDAR scanner. This new equipment will shorten our time in the field, reduce our exposure to traffic and provide comprehensive topographic data to our design and engineering divisions. New equipment comes with a new learning curve and credit must go to Sr. Engineering Technician Michael Rodriguez for his diligence in getting this new system launched.

In the office, we have an eye on the future as well. We have begun writing Standard Operating Procedures for all of our unique processes and we've begun a long-term project of scanning all of our original road deeds and indexing them into the Geographic Information Systems (GIS). Survey Technician, David Hohu, who is also our Field Crew Chainman, has been an incredibly valuable asset in our efforts to move these projects forward. All in all, 2022 was a year of challenges, collaborations, and change. It was never boring and that's just the way we like it!

Chad Johnson, County Surveyor

Traffic Engineering

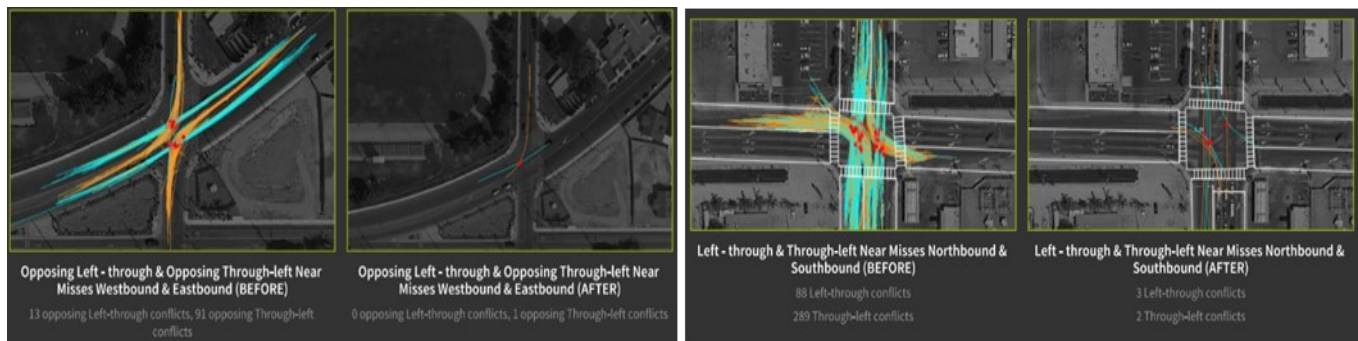
In the Traffic Engineering division, we strive to make sure that our roadway system runs safely and efficiently through use of signs, striping, infrastructure, and technology.

In 2022, we continued our focus on modernizing our traffic signal system through the use of new technologies.



Using Machine Learning for Safety Analysis

In Summer 2021, Traffic hired a consultant to study two intersections, Crows Landing Road at Hatch Road in South Modesto and Main Street at Lester Road in Denair. The consultant's system utilized multiple cameras to identify and track vehicles, bicycles, and pedestrians, and recognize near misses, speeding vehicles, and red-light runners using advanced machine learning algorithms. The consultant then made some recommendations based on the data, which were implemented in early 2022 to the signal system and an After-Study was conducted to compare metrics.



Both After-studies showed between 95%-100% reduction in left-turn vs through conflict (near-misses) during the study periods. Collision data shows that an average of 7.8 collisions per year occurred involving a left-turning vehicle prior to the modifications. The intersection now has an average of 1.00 left-turn collision per year.

Goals

This coming year, traffic engineering plans on continuing the modernization of our traffic signal system by continuing to use new and emerging technologies.

Employee Appreciation

2022 Halloween and Employee Appreciation BBQ Luncheon



Employee Appreciation

2022 Halloween and Employee Appreciation BBQ Luncheon



Board of Supervisors

District 1

Buck Condit



District 2

Vito Chiesa



District 3

Terry Withrow
Chairman



District 4

Mani Grewal



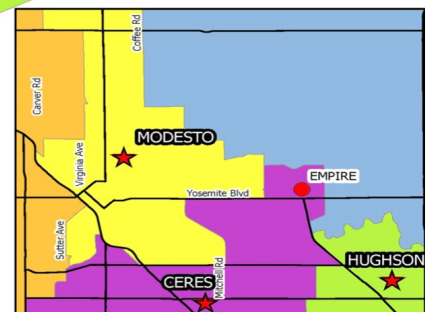
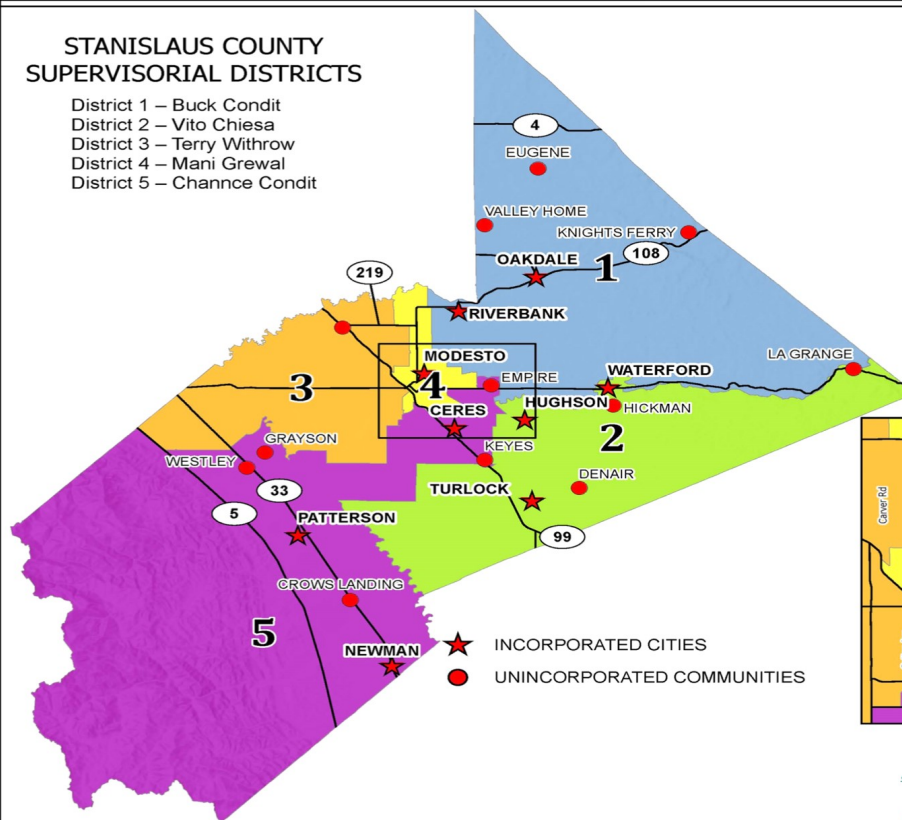
District 5

Channce Condit
Vice-Chairman



STANISLAUS COUNTY SUPERVISORIAL DISTRICTS

District 1 – Buck Condit
District 2 – Vito Chiesa
District 3 – Terry Withrow
District 4 – Mani Grewal
District 5 – Channce Condit



ENLARGEMENT

Information Technology Central
Geographic Information Services
801 11th St. Modesto, CA 95354

Contact Information



**1716 Morgan Road
Modesto, CA 95358**
(209) 525-4130 Phone
(209) 541-2505 Fax

- ◆ Administration
- ◆ Construction Engineering
- ◆ County Surveyor's Office
- ◆ Design Engineering
- ◆ Finance
- ◆ Traffic Engineering
- ◆ Morgan Shop
- ◆ Roads and Bridges

www.stancounty.com/publicworks

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

**1010 10th Street
Suite 4204
Modesto, CA 95354**
(209) 525-4130 Phone
(209) 525-6507 Fax

- ◆ Development Services
- ◆ Encroachment Permits
- ◆ Transportation Permits

