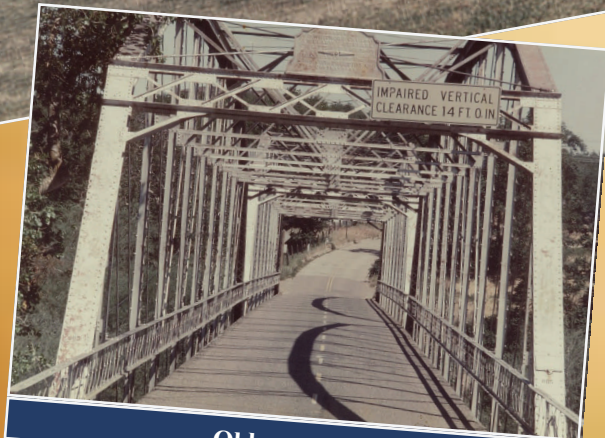
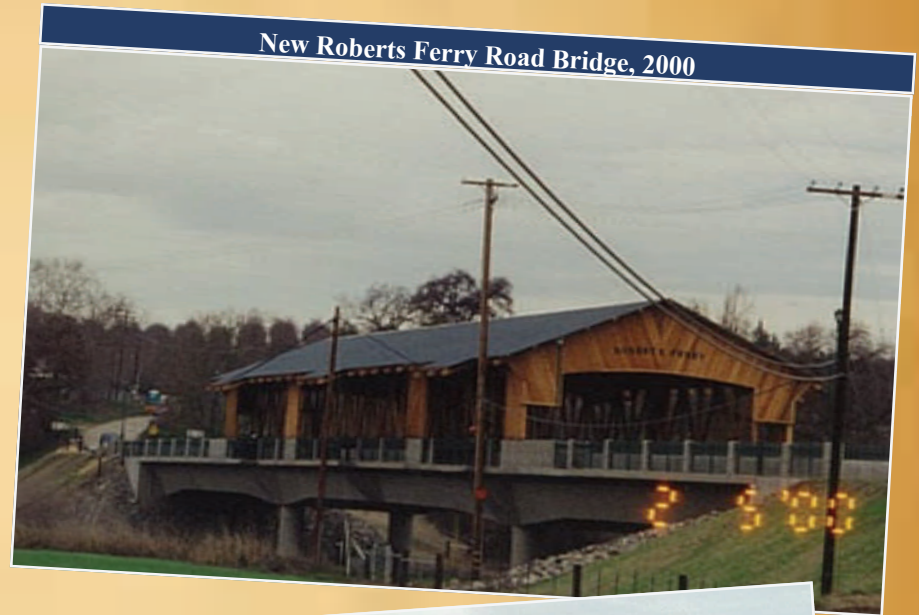
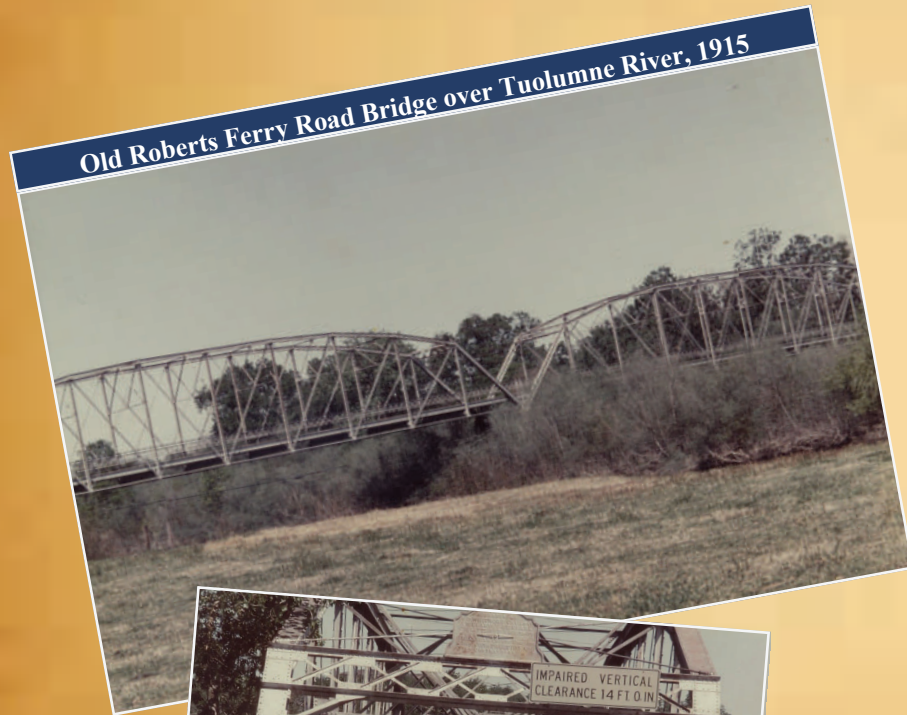


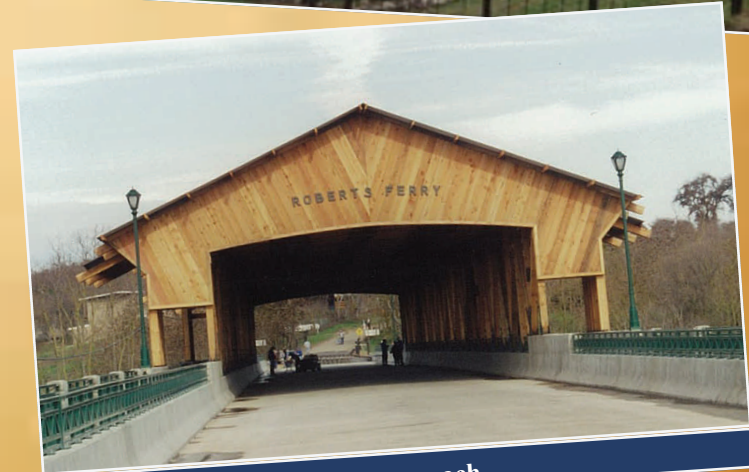
Stanislaus County Department of Public Works

2011 Annual Report

Then and Now



Old approach



New approach

Our Mission:

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

Our Vision:

Strive to be the leading Public Works Department through innovative stewardship of infrastructure and environment.



Engineering Services Division

Design



David A. Leamon, PE, Senior Civil Engineer

In November of 1956, the voters in Stanislaus County passed a \$5-million Bridge and Highway Bond to provide local match money and funds for constructing vital transportation infrastructure. On March 17, 1958, the Board of Supervisors authorized Engineering Design to design the four following bridge projects:

- Albers over Dry Creek
- Las Palmas over the San Joaquin River
- Carpenter over the Tuolumne River
- Geer-Albers over the Tuolumne River

The Geer-Albers project, including the bridge, was at the time the largest project in the County. It included 2.1 miles of new road and a new bridge across the Tuolumne River. This new river crossing and road saved 4.5 miles of travel between the cities of Oakdale and Turlock.

Today, Engineering Design is working on a seismic retrofit for the Geer Road Bridge, to bring the bridge up to current seismic standards, based on the knowledge and

experience of seismic events in the last 50 years. In 2010, 13,200 cars per day utilized this important transportation corridor. Once the seismic retrofit is complete pending environmental review, we anticipate that the bridge will be able to serve the public for another 50 years.

The Design Section provides oversight and design services for road and bridge improvement projects as defined in the Capital Improvement Program. The services include developing design plans that incorporate the County's standard specifications and meet state and federal funding requirements.

Likewise, the Design Section addresses the environmental, utility and right of way coordination of a project through to construction documents that consist of plans,

specifications, and an engineer's estimate. The construction documents are presented to the Board of Supervisors for approval to bid; the project is awarded, and then tracked for progress through construction.

This Section also provides project consultant selection, and design and construction oversight services to other County Departments such as Environmental Resources, Parks, and the Redevelopment Agency.



Engineering Services Division

Design (continued)

Additionally, we are responsible for securing, administering, and overseeing all the Federal and State funds that make it possible to continue the delivery of projects and replace our heavy equipment and road fleet to maintain compliance with the regional high emissions pollution control in the Central Valley.

We also assist Disadvantage Business Enterprises (DBE) to participate during our contract procurement process and set federally mandated DBE goals in all of our projects.

Authorized Federal Funding

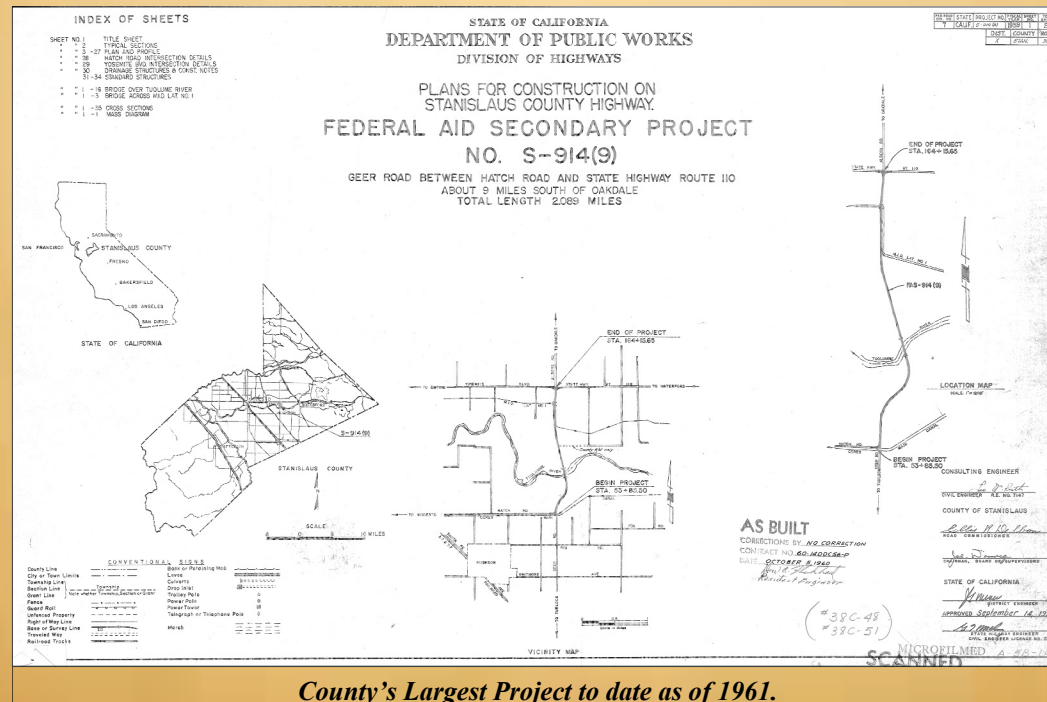
In 2011, the Department received \$7,001,668 in authorized federal funding. Authorized funds include the following:

- ✦ Regional Surface Transportation Program (RSTP) Funds:
 - RSTP Phase “D” Overlay Project—received \$3,357,500 for Construction Phase to resurface approximately 20 miles of county roads.

✦ Highway Bridge Program Funds:

- Geer Road Bridge Seismic Retrofit Project - received additional funding of \$119,515 for preliminary engineering (PE) Phase.
- Tim Bell Road Bridge Replacement Project—received funding of \$575,000 for PE Phase.
- Gilbert Road over TID Ceres Main Canal Replacement Project—received funding of \$150,000 for PE Phase.
- Cooperstown Road over Gallup Creek Bridge Replacement Project—received funding of \$290,000 for PE Phase.

- Shiells Road over CCID Main Canal Replacement Project—received funding of \$225,000 for PE Phase.
- St. Francis Road over MID Ceres Main Canal Replacement Project—received funding of \$200,000 for PE Phase.
- Cooperstown Road over Rydberg Creek Bridge Replacement Project—received funding of \$225,000 for PE Phase.
- Santa Fe Road Bridge Replacement Project - received funding of \$725,946 for PE Phase.
- Tegner Road over TID Lateral #5 Bridge Replacement Project—received funding of \$87,500 for PE Phase.



County's Largest Project to date as of 1961.

✦ Highway Safety Improvement Program Funds:

- Hatch Road, Crows Landing Road Intersection Signal Upgrade—received \$374,633 for Construction Phase to replace outdated traffic signals.
- Tim Bell Road Guardrail Replacement Project—received \$13,469 for construction materials to replace 250 feet of metal beam guardrail.
- Geer Road, Whitmore, and Santa Fe Avenue Project - received construction funding of \$491,490 to cape/seal streets.

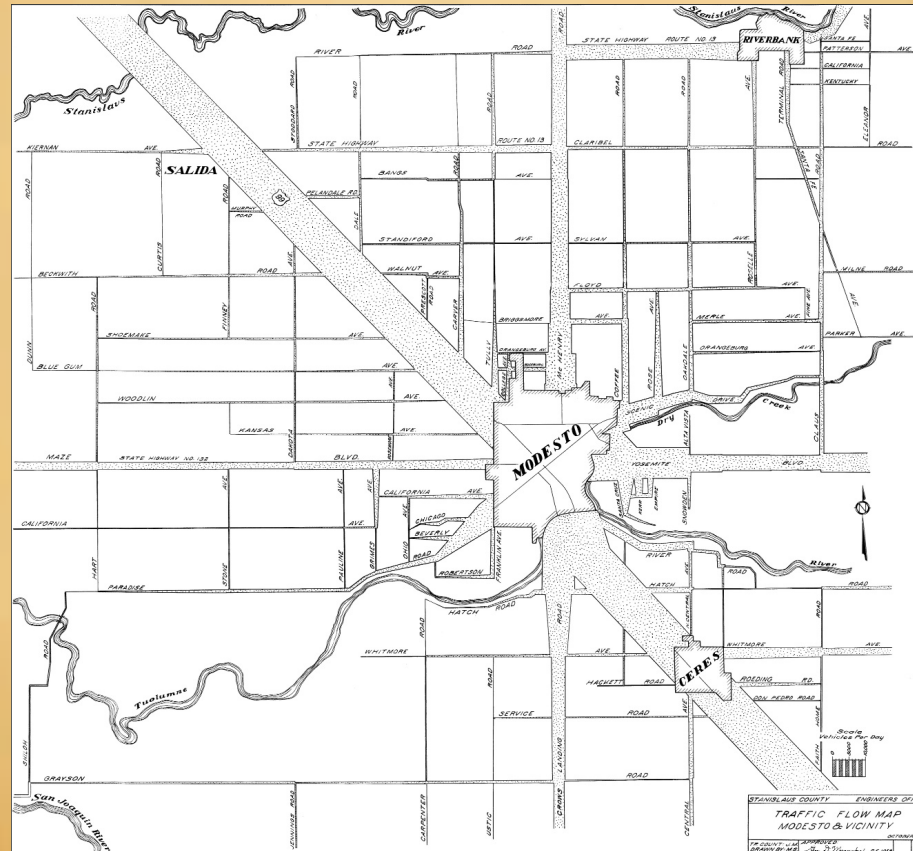
Design Section (continued)

- Claribel Road at Coffee Road Intersection Project— received funding of \$350,000 for PE Phase.
- Claribel Road at BNSF Railroad Crossing and Terminal Avenue Project—received construction funding of \$18,456.
- Central Avenue and E. Taylor Intersection Project— received funding of \$85,000 for PE Phase.
- Keyes Road, Paradise Road, Central Avenue, and Grayson Road Project— received construction funding of \$3,800,000 for Roadway Resurfacing Phase D.
- Carpenter Road at Robertson Road and Beverly Drive Intersection Signal Upgrade – received \$1,534,250 for Construction Phase to replace outdated traffic signals.
- Cape/seal various roads Project — received construction funding of \$4,798,052 to cape/seal streets.
- South Ninth Street/Latimer Avenue intersection southbound left turn lane extension – received \$9,000 for PE Phase.

- Claribel Road/Burlington Northern Santa Fe Railroad crossing improvements – received \$4,500 for PE Phase.
- Central Avenue approaching from north and south, North Taylor Road, road realignment - received \$76,500 funding for the PE Phase.

- ✦ Construction, Mitigation & Air Quality:
 - Purchase of heavy equipment to replace high pollutant vehicles—received \$790,000 for a fully funded project.
- ✦ American Recovery and Reinvestment Act (ARRA) funds:

- Carpenter Road at Robertson Road and Carpenter Road at Beverly Drive Intersections Signalization Project – received \$1,366,675 for Construction Phase with no local match required.
 - ARRA 2009 Cape Seal Project – received \$5,028,742 to provide a chip and slurry seal on approximately 55 miles of federal-aid eligible roads with no local match required.
 - ARRA Hughson SOI Cape Seal Project—received \$610,770 to provide a chip and slurry seal on approximately 5.4 miles of federal-aid eligible roads with no local match required.



Traffic Map produced by Design in 1949. As an example, Highway 99 traffic was approximately 12,000 cars per day and has increased roughly 8 times more today...

Engineering Services Division

Construction



Chris Brady, PE, Senior Civil Engineer

Construction:

In February of 1961, Stanislaus County Public Works accepted and opened the Carpenter Road Bridge over the Tuolumne River. The project consisted of 0.8 miles of new road construction between Hatch Road and Paradise Road, including the 650-foot reinforced concrete box girder bridge that spans the Tuolumne River. The County originally constructed this project for \$420,000. Today, this bridge is co-owned by the County and the City of Modesto.

In the spring of 2012, with the cooperation of County Public Works, the City of Modesto awarded a construction contract to seismically retrofit and widen this bridge, for approximately \$8.2 million.

In October of 1960, Stanislaus County Public Works accepted and opened the Geer Road

Bridge over the Tuolumne River. The project consisted of 2.1 miles of new road construction and a 656-foot reinforced concrete box girder bridge that spans the Tuolumne River. The County originally constructed this project for \$513,000. The Public Works Department is scheduled to construct a seismic retrofit of the Geer Road Bridge in the spring of 2013 for approximately \$2 million.

The Construction Division oversees all construction related elements of the Public Works Department projects.

Through contract administration and construction inspection, it is the goal of the Resident Engineer to ensure that the project is built according to the plans, specifications, and on budget. In doing so, the Resident Engineer assures the public that projects are

completed to meet the County's standards.

The Resident Engineer also processes any changes to project plans through the Board of Supervisors for approval.

The Construction Division also provides construction contract administration services to other Stanislaus County departments such as Parks and Recreation, Environmental Resources, and the Planning & Redevelopment Agency.



Engineering Services Division

Construction (continued)

2011 Accomplishments

Hatch Road at Crows Landing Road Traffic Signal Upgrade
2011 Slurry Seal Project
Hatch Road PFF Channelization Project, Phase 1-B
RSTP Overlay Program C
South 9th Street at Latimer Project
Heron Point Boat Launching Facility Project
BNSF Railroad Crossing at Various Roads

2012 Forecasted Projects

Geer Road Bridge (over Tuolumne River) Seismic Retrofit
Hatch Road @ Santa Fe Avenue Traffic Signals
Howard Road Bike Path
RSTP Overlay Phase D
Las Palmas Avenue @ Elm Avenue Traffic Signal / Las Palmas Avenue @ Sycamore Avenue Traffic Signal
Broadway @ Union Pacific Railroad Sidewalk Improvements



2011 Project Summaries

Hatch Road at Crows Landing Road Traffic Signal Upgrade

Improvements: Traffic Signal Upgrade,
Replacement of Raised Concrete Medians,
New Curb & Gutter, Asphalt Pavement,
and Pavement Delineation

Cost: \$482,203

Start Date: July 2011

Completion Date: October 2011

Contractor: Granite Construction
Company

Resident Engineer/Construction

Inspector: Mark Hamblin



Hatch Road PFF Channelization Project, Phase 1-B

Improvements: Installation of Left Turn
Lanes and a through lane on Hatch Road

Cost: \$1,257,461

Start Date: June 2011

Completion Date: September 2011

Contractor: Granite Construction

Resident Engineer/Construction

Inspector: Don Hamaguchi / Peter Song



2011 Project Summaries

2011 Slurry Seal Project (Before & After)

2011 Slurry Seal Project

Improvements: Slurry Seal and Pavement Delineation.

Cost: \$444,912

Start Date: September 2011

Completion Date: November 2011

Contractor: Bond Blacktop Inc.

Resident Engineer/Construction

Inspector: Paul Saini



RSTP Overlay Program C

Improvements: Asphalt Overlay, Shoulder Backing, and Pavement Delineation.

Cost: \$1,931,036

Start Date: September 2011

Completion Date: December 2011

Contractor: Teichert Construction

Resident Engineer/Construction

Inspector: Bryan Voyles

RSTP Overlay Program C (Before & After)



2011 Project Summaries

South 9th Street at Latimer Project

Improvements: Extending the Existing Left Turn Lane, Constructing New Median, and Installing Pavement Delineation.

Cost: \$100,559

Start Date: March 2011

Completion Date: April 2011

Contractor: George Reed, Inc.

Resident Engineer/Construction Inspector:
Mark Hamblin

South 9th Street at Latimer Project (Before & After)



Heron Point Boat Launching Facility Project

Improvements: Demolition of Existing One-Lane Ramp, Construction of New Two-Lane Boat Ramp, New Parking Area, Two-Unit Restroom, Storm Drainage Facilities, Kiosk Message Board, Installation of Boarding Float, Fish-Cleaning Station, Sewer System, Water Distribution System, and Electrical & Lighting System.

Cost: \$1,083,141

Start Date: January 2011

Completion Date: August 2011

Contractor: Ross F. Carroll, Inc.

Resident Engineer/Construction Inspector:
Bryan Voyles / Jose Ramirez

Heron Point Boat Launching Facility Project (Before & After)



2011 Project Summaries

BNSF Railroad Crossing at Various Roads

Improvements: Installation of New Signs, Asphalt Concrete Dike, Pre-Manufactured Raised Median Curb, and Pavement Delineation.

Cost: \$160,361

Start Date: July 2011

Completion Date: October 2011

Contractor: Tom Mayo Construction Inc.

Resident Engineer/Construction

Inspector: Peter Song / Jose Ramirez

BNSF Railroad Crossing at Various Roads (Before & After)



Claribel Road at BNSF Railroad Crossing Improvements

Improvements: Installation of New Signs, Pre-Manufactured Raised Median Curb, and Pavement Delineation.

Cost: \$21,400

Start Date: December 2011

Completion Date: December 2011

Contractor: Farwest Safety Inc.

Resident Engineer/Construction

Inspector: Peter Song

Claribel Road at BNSF Railroad Crossing Improvements



Engineering Services Division

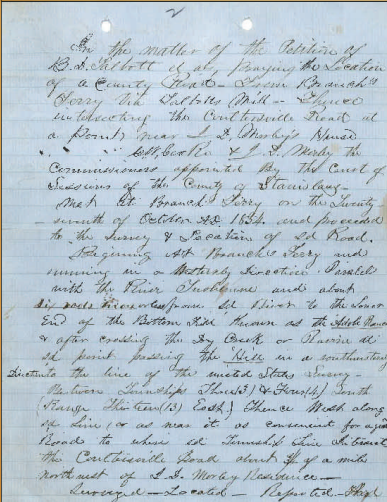
County Surveyors Office



Matt Machado, PE, Director

California was established as a State in 1849 and Stanislaus County was established in 1854 from a portion of Tuolumne County with later additions from San Joaquin and Santa Clara Counties. California is a part of the Land Ordinance of 1785, better known as the Rectangular System of Surveys. This system created the existing Townships that control the surveys within Stanislaus County.

Picture #1



Page 1 of Road Petition

Lieutenant George Derby of the U.S. Topographical Engineers conducted the first known survey of what is now Stanislaus County. Four years later in 1854, the County was commissioned to be surveyed and sectionalized

by surveying parties under the charge of Surveyor-in-Chief Schmidt of San Francisco. There are 59 different Townships that lie within Stanislaus County having an area of approximately 1,667 square miles or 1,067,000 acres. The County also consists of four Mexican Land Grant Ranchos.

In 1854, the same year the Court of Sessions, the County's first legislative body, approved and accepted Road Petition #002 (Picture #1) as the first public road, effectively starting the County's Public Works system. The petition described a portion of what is now Lake Road from Banche's Ferry on the Tuolumne River to Morley's house, the location of Morley's house is now in the Turlock Reservoir.

The office of County Surveyor functions with the Department of Public Works operating within the ordinances of Stanislaus County and mandated state laws.

A few of the state law functions we are mandated to perform include:

- Survey any lands divided by county lines. (Gov. Code 27552)
- The County Surveyor shall copy, plat trace each map filed for record on the Office of the County Recorder and is ex officio deputy recorder for the county for such purposes (Gov. Code 27556)

- The County Surveyor shall make such surveys of county roads and perform such other engineering work as the Board of Supervisors directs. (Gov. Code 27562)

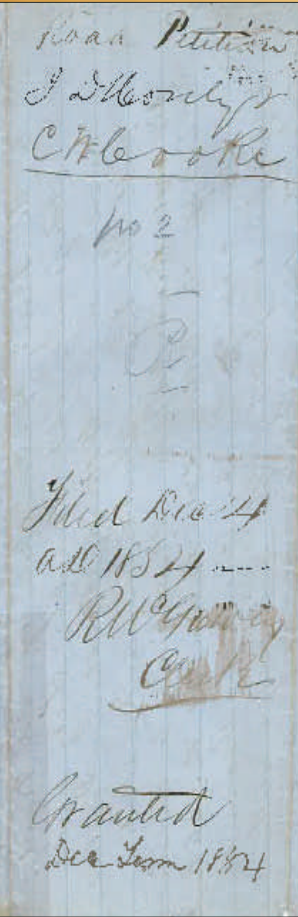
County Surveyor's Office

- Field Services: County surveys, survey monument preservation, data gathering, right-of-way establishment & staking, and field inspections
- Internal indexing of benchmarks, certificates of correction, corner records, deeds & easements
- External indexing (via county web site): Records of survey, county surveys, subdivision maps, and parcel maps
- Map checking and recording



County Surveyors Office (continued)

- Legal description writing, verification and recording
- Drafting services
- Road Abandonments
- Certificates of Compliance



Excerpt from Page 2 of first Road Petition.

In addition, the County Surveyor's Office is a public resource, providing survey information and assistance to the public on a daily basis.

2011 Accomplishments

- Maintained and preserved the G.L.O. (General Land Office) cadastral monuments.
- 42 maps submitted for checking and recording.
- Eight legal descriptions verified for LAFCO annexation and reorganizations.
- 30 Lot Line Adjustments processed for the Planning Department.
- Five Lot Mergers processed for the Planning Department.
- Ten Certificates of Compliance processed.

- Various boundary descriptions reviewed and processed with G.I.S. for:
 - a) Modesto Irrigation Districts
 - b) Stanislaus County Board of Supervisors
 - c) Stanislaus County Department of Education
 - d) Stanislaus County Fire Districts
 - e) Turlock Irrigation District.
- Integrated Survey Maps & Corner Records into G.I.S. for public access.
- Two Topographic Surveys completed for Engineering Design Department.
- Monument Preservation completed for Schedule "C" Overlay Project for Roads Department.
- Index archived documents to the Department's internal index system.



K & E Geological Survey Alidade (Model 5093A), circa 1950's

2012 Goals

- Complete the Record of Survey for the Empire Redevelopment Project.
- Upgrade the County Monument Preservation Fund by establishing a better criteria for fund use.
- Upgrade the survey equipment.
- Monument Preservation for Schedule D Overlay Project for Roads Department .

- Continue indexing archived documents to the Department's G.I.S. web site.
- Continue Indexing archived documents to the Department's internal index.
- Update the Survey ordinances to streamline and clarify our processes.
 - ◊ Provide training and experience for the Survey members in the various areas of the surveying discipline.



Larry Fontana with Leica Total Station (Model TCRA1103+), circa 2012



Leica GPS Rover Unit (Model 1200 Series) in front of County Survey Truck #1111, circa 2012

Road Operations Division



Gary Hayward, Manager/Road Superintendent

2011 Accomplishments

The Road Department reassigned an employee to work as an underground service locator (USA). His other duties are to place and retrieve the traffic counters for the average daily traffic count survey.

The Roads Team worked cooperatively on paving projects with the City of Modesto, sign fabrication and installations with Caltrans and the Cities of Riverbank, Modesto, and Turlock.

The Paving Team worked with the Public Works Construction and Design Teams to complete the roadway preparation work for the Regional Surface Transportation Program and American Recovery Reinvestment Act (ARRA) resurfacing projects.

The Traffic Team completed 650 miles of pavement striping and 50 miles of conventional chip seal, on schedule.

The Roads Team skip paved several bad sections of roadway at various locations, repaired guardrails, decking, approaches, signage, removed underbrush and trees as noted on the Caltrans Bridge Inspection Reports as well as repaired a cattle crossing on the Del Puerto Canyon Road.

Two employees completed training classes to become the Department's in-house Electrical Team. The formation of the Electrical Team results in a considerable cost savings by reducing work orders sent to outside agencies and improving response times.

The reassignment of a Road Supervisor and his team to concentrate on storm drainage basins and pump station maintenance proved to be beneficial with the consistent monitoring of the billing and expenditures in the Community Service Areas and the Westley Triangle Landscape and Lighting District.

The lift stations in various locations have been better maintained and repaired with:

- Updated manual float systems to electronic systems.
- Rebuilt or replaced aging pumps.
- Upgraded electrical service.



Road Operations (continued)

The drainage basins in various locations have been better maintained and repaired with:

- Consistent weed abatement practices.
- Improvement made to fences and retaining walls.

The Road Department now maintains the Westley Triangle Landscape and Lighting District, at a lower cost, and with a quicker response time.

2012 Goals

The Bridge Team will continue to partner on pipe replacement/repairs with the Central California, Turlock, West Side, and Patterson Irrigation Districts.

The Paving Team will continue to work with the Public Works Construction and Design Teams to complete the roadway preparation work for the Regional Surface Transportation Program and American Recovery Reinvestment Act (ARRA) resurfacing projects.

The Traffic Team has scheduled 750 miles of pavement striping.

The Roads Team:

- Has scheduled 50 miles of conventional chip seal.

- Will skip pave several bad sections of roadway at various locations.
- Will continue providing the maintenance at the Westley Triangle landscape area.

Public Works will support the eight Municipal Advisory Committees.

Public Works will continue the Adopt-A-Road program in the communities of Hickman, Waterford, Salida, Denair, Knights Ferry and Diablo Grande and Keyes by cleaning litter from the road shoulders.



The Roads Department will support the Public Works Construction and Design Teams by: Completing road surface repairs prior to the

RSTP Cape Seal contract, shoulder grading, drainage pipe replacement, storm drain installation, tree maintenance and skip paving.

The Roads Team will continue with:

- Daily weed abatement activities, weed spraying and mowing.
- Daily pothole patching.
- Daily sign maintenance and sign fabrication.
- Painting traffic legends.
- An aggressive shoulder maintenance program.
 - Repairing defects found listed on the Bridge Reports.

I was talking with a former employee the other day, one that retired in the 1990's. When he started working for the Road and Bridge Division in the 1960's, there were 120 Road workers—60 were in the construction crew building roads, and 60 were maintaining the roads and bridges, much as we do today. Presently, there are 56 employees in the Road and Bridge Division maintaining road surfaces, shoulders, signage, striping, drainage, and trees. Street light maintenance and street sweeping have since been added as regular duties for the crews, something unfathomable back then.

Road Operations (continued)

The Patterson Ranch Company was established in 1908. The company built an irrigation system and divided Patterson's Ranch into small parcels to sell to the colonists. The town was laid out by Thomas



Patterson in 1910 in a Spanish Plaza style. A stately reminder of Thomas Patterson's interest in beautifying the community is a three-mile avenue of palm trees leading from the San Joaquin River into town. Though some of the palms are in the City of Patterson there are many that are maintained by the Stanislaus County Road and Bridge Division.

1600 miles of roadway in Stanislaus County gives our teams an opportunity to mow a lot of weeds. As late as the 1990's, this was done

with a mower attachment on a tractor with an open cab. Exposed to the elements, the dust from the mowing of the roadside weeds was quite a nuisance for the operators and a boiling pot for allergies. Today, the operator sits in an enclosed air conditioned cab with fingertip controls.

Knights Ferry is home to California's largest covered bridge. Legend has it that in 1854 Captain Ulysses S. Grant drew the plans for the first bridge located in Knights Ferry, but it was never constructed. Everything purchased to build the bridge was sold to David

Locke in 1856 and he immediately began to work on getting it constructed; it was completed in 1857.

Unfortunately, a disastrous flood in 1862 swept the bridge away; a new covered bridge was built in 1863, it remained in service until 1981. On November 12, 1884, the county purchased the

bridge from the owners for \$7,000. In 1981, county engineers spotted cracks in the support structures and the bridge was closed to vehicular traffic on June 2, 1981. The Sacramento District Corps of Engineers received the title to the Knights Ferry Covered Bridge on April 18, 1985.

It is true that we maintain roads in the areas that dinosaurs once roamed.

In 1936, 18-year-old Allan Bennison was a kid on a second hand bike who collected rocks.



While collecting rocks in Del Puerto Canyon he found some bones. The bones turned out to be the first dinosaur discovered in California. They were the vertebrae and hindquarters of a Hadrosaur, a 2-story-tall

duckbilled dinosaur that gathered in massive herds more than 65 million years ago. Del Puerto Canyon road is maintained by the Stanislaus County Road and Bridge Division.

Morgan Shop Division



Mel Eslinger, Manager

The Morgan Shop is an Internal Service Fund (ISF) operation that provides vehicles and equipment to many divisions within the County Public Works Department (PW), the most frequent users being the Road and Bridge Divisions. Any divisions utilizing our vehicles and equipment pay rental fees for their usage.

In addition, the Morgan Shop assists other County Departments in the research and procurement of new vehicles and equipment for their facilities as well as provide vehicle and equipment maintenance services.

Furthermore, the Morgan Shop has a fueling station available to County Departments and local jurisdictions, which provides compressed natural gas (CNG), as well as unleaded and diesel fuels.



Shop's 2011 Self Propelled Broom

Morgan Shop History

During the fiscal year 1957-1958, the Road Department completed and occupied the new Administration and Shop Buildings located on the 16-acre corporation yard site at 1716 Morgan Road, Modesto.

- Morgan Shop has been located at 1716 Morgan Road for over 50 years.
- The average price of unleaded fuel in 1963 was \$0.30 a gallon. Today it is \$4.19 a gallon.
- Morgan Shop originally started as a mechanic and blacksmith shop.
- The Public Works heavy equipment shop leased equipment to the Turlock Mosquito Abatement District in 1954. Today, they provide maintenance service to Turlock Mosquito Abatement District's vehicles.
- Before the County purchased 1716 Morgan Road, the property was known as the 99 Modesto Stadium (Speedway) and contained a quarter mile oval track parallel to the Southern Pacific Railroad Tracks.
- In 1985 Public Works Morgan Shop purchased a water truck for an estimated \$58,300. In 2011, Public Works Morgan Shop purchased a water truck for an estimated \$146,000.



Public Works Scenic Shop, circa 1968.



Morgan Shop Division (continued)



Hey, that 'Pit' looks familiar!
Wish we still had the old truck.



Shop's 2001 CNG Striper

2011 Accomplishments

- ✦ Enhanced accident prevention training for Roads personnel on heavy equipment operating procedures by purchasing training programs specialized for type of equipment.
- ✦ Continued to maintain and repair the storm drain pump stations and generators for local CSA (Community Service Areas) and other Departments.
- ✦ Upgraded old float and pump stations from manual to electronically controlled systems.
- ✦ Continued to maintain and comply with new and existing Air Resources Board Regulations on all affected equipment.
- ✦ Provided Shop technicians with electrical training and requirements related to equipment.
- ✦ Purchased alternative fueled vehicles to include 2 water trucks, 1 2-axle truck, 3 dump trucks, 1 forklift, 2 sign trucks, 3 loaders, 2 graders, 1 backhoe, and 1 street sweeper.
- ✦ Purchased and installed 1 diesel particulate filter for an on-road vehicle to upgrade older engine.
- ✦ Purchased and implemented the use of cleaner burning bio-diesel fuel as an alternative fuel source for the benefit of the environment.
- ✦ Created and implemented a Spill Prevention Control Counter Measure.
- ✦ Installed a third 4,000 gallon diesel tank and converted a 20,000 gallon diesel tank for bio-diesel compatibility.

2012 Forecasted Projects

- ✦ Continue to enhance accident prevention training for road personnel on heavy equipment operating procedures by providing on-site training by factory personnel.
 - ✦ Continue to maintain and repair the storm drain pump stations and generators to prevent flood conditions.
 - ✦ Upgrade old float and pump stations from manual to electronically controlled systems for maximum efficiency in controlling flooding conditions.
 - ✦ Continue to maintain and comply with new and existing Air Resources Board Regulations on all affected equipment.
 - ✦ Provide Shop technicians ASE (Automotive Service Excellence) certification and compliance training.
 - ✦ Purchase alternative fuel vehicles to include 1 patch truck, 1 flatbed, 1 chip spreader, 1 utility tractor, and 3 roadside mowers.
 - ✦ Auction surplus equipment that does not meet emissions standards.
 - ✦ Evaluate and reduce inventory of equipment to minimize operating expenses.
 - ✦ Upgrade Public Works radios to meet Federal Communications Commission (FCC) narrow-banding compliance of reducing 25 khz down to 12.5 khz.
 - ✦ Conduct a Spill Prevention Control Counter Measure departmental training.
- Research and analyze benefits of using synthetic lubricants.

SCHEDULE OF EXPENDITURES FOR ACQUISITION OF NEW EQUIPMENT Fiscal Year Ended June 30, 1958 County of Stanislaus

Description	Amount
Caterpillar Motor Grader	\$16,244.40
Dozer and Ripper	28,386.12
Caterpillar Motor Grader	15,744.40
Lincoln Welder D.C.	1,358.24
Concrete Mixer	600.00
Four (4) G.M.C. 2½ Ton Trucks	12,480.00



Shop's 1976 Striper

Transit Division



Brad Christian, Manager

The Public Works Transit Division oversees the operation of Stanislaus Regional Transit

(“StaRT”), the County’s intercity public transportation system.

- StaRT operates thirteen different services, providing fixed route, deviated fixed route and demand response transportation to eighteen cities and communities and



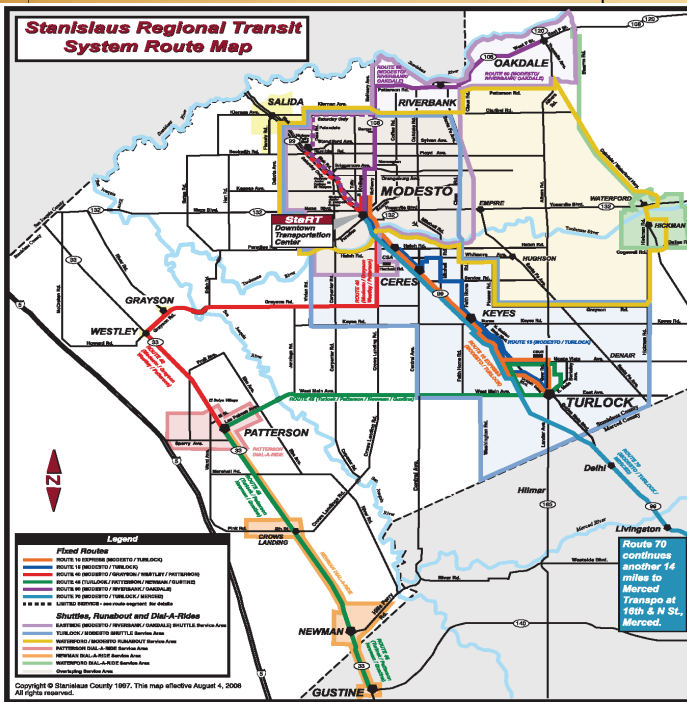
a) The average household spends 18 cents of every dollar on transportation, and

94% of this goes to buying, maintaining, and operating cars, the largest expenditure after housing.

b) Investment in the public transportation industry creates and supports over 1.9 million public and private sector jobs and is a

\$55 billion a year industry.

- FY 2011/2012 Transit Division budget is \$4,877,761 (\$3,745,957 operations and \$1,131,804 capital costs).



Medivan non-emergency medical transportation to Bay Area medical facilities.

• The Transit Division, through Memorandums of Understanding, operates Dial-a-Ride services for the cities of Newman, Patterson, and Waterford.

• StaRT provides service to four public colleges, many private colleges and numerous training programs with its services. public colleges, many private colleges and numerous training programs with its services.

• Did you know that according to the American Public Transit Association:



Transit Division (continued)



- 4) **Federal Funds -**
 - a. Federal Transit Administration (FTA) 5311- Federal non-urbanized area grant.
 - b. American Recovery & Reinvestment Act (ARRA) funds.

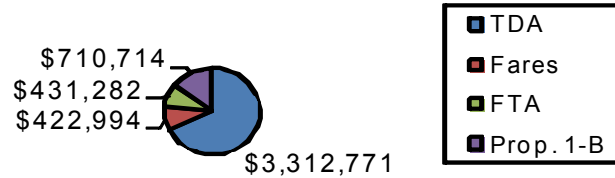
- StaRT ridership increased 25.61% over the last five years.



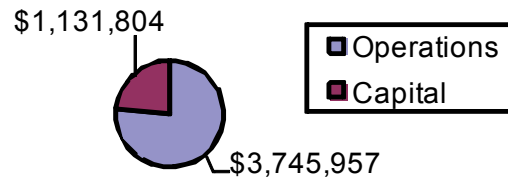
The funding sources are:

- 1) **Fare Revenues collected from services.**
- 2) **State Funds –** Transportation Development Act Funds that consist of:
 - a. LTF – Transportation Development Act Local Transportation Funds - Derived from a quarter cent of the state sales tax.
 - b. STAF – Transportation Development Act State Transit Assistance Funds – Derived from excise and sales tax on diesel and gasoline fuels.
- 3) **Proposition 1-B (Public Transportation Modernization, Improvement Act, PTMISEA) Transit Funds.**

Transit Division Budget - Revenues



Transit Division Budget - Expenses



- FY 10/11, StaRT buses carried 22,094 bikes on its routes. An 8.19% increase from FY 09/10.



- In calendar year 2011, StaRT staff participated in over 30 public information events.

Administration and Finance Divisions



Diane Haugh, Assistant Director

Administration & Finance:

Stanislaus County's Department of Public Works was created by Board Order on June 26, 1961. The decision was predicated on a 1956 Grand Jury suggestion which was followed by an analysis by the Chief Administrative Office. The newly created Department combined the Road Department, Engineering Department (which included the Surveyor), Parks Department (including Grounds Building Department) and the County Garage. A newly created Director of Public Works was given oversight of the department. At the time, the salary range for the Director's position was \$1,050-\$1,250 per month. Previous to this action, in 1957, the Road Department was expanded by converting the Surveyor and County Engineer office into a division of Engineering and Design.

Subsequent years saw the addition of the Local Transit, Geographic Information Systems

(GIS), Geer and Fink Road Landfills and Development Services (Building Permits) to the Department of Public Works. In December of 2006, the Board approved the realignment of the Public Works Department. At that time the Department of Environmental Resources was given oversight of the Landfills and Development Services was moved under the auspices of the Planning Department. This transformed the Public Works Department to an organization solely focused on transportation.

A report from 1957 states: "The entire scope of "public works" activity requires 18% of the county's workforce of 1171 and 26% of the total budget of \$21,009,101." This is quite a difference from the current numbers of 3% of the county's workforce and 6% of the total budget of \$891,127,103 (FY11/12). Total staffing during this period (1961-2011) in the Engineering, Road Operations and Morgan Shop divisions decreased from to 119 to 92.

Administration Division

The Administration Division provides support to the remaining divisions within Public Works. The two main

areas are clerical and financial. Clerical support is in the areas of board agenda items, human resources and other ongoing daily needs necessary for the smooth running of the department. Financial support is provided by way of budgeting, payroll processing, accounts payables and receivables.

Finance and Support Services

The Finance section is responsible for accounting, budgeting, contracting, accounts payable, accounts receivable, purchasing, and payroll. The employees in this division ensure that the Department is following all the County's financial policies, safeguarding public funds.



Administration and Finance (continued)

The finance division has five full-time staff overseeing Public Works \$57 million budget. They perform the day to day functions that keep the department running smoothly.

A few of this year's accomplishments are:

- Invoiced Caltrans a total of \$8,135,598 (\$5,198,966 for Road Project reimbursement and \$2,936,632 for Morgan Shop Heavy Equipment reimbursement).
- Integrated the Road Cost Accounting System with the County's payroll system, eliminating redundant data entry and increasing accuracy.
- Completed and submitted the 2011 Annual Road Report to the State. The annual road report must be submitted to the State by October 1st of each year. Stanislaus County submitted the report in mid August and was among the first to do so.
- Developed and submitted budgets for Public Works' seven budget units and provided quarterly updates.
- Provided periodic financial information to department managers.

The Administrative Support section provides clerical support to other Public Works'

divisions. Support staff is located at Tenth Street Place and the Morgan Road facility. Their role includes the preparation of Board agenda items, human resources, safety program strategic planning, answering phones, processing mail, and a variety of other miscellaneous but highly necessary tasks that ensure the Department operates smoothly.

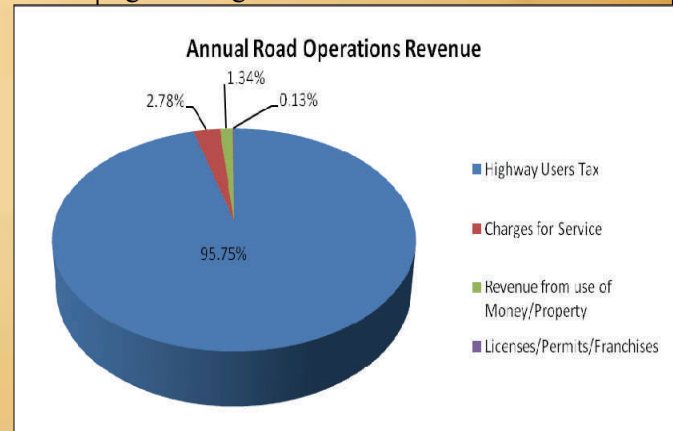
- Processed 84 Board Agenda items.
- Conducted six recruitments.
- Processed new hire packets for eight individuals.
- Logged and followed up on 669 customer comments and/or concerns through Stanislaus County's Customer Response Management System.

Road & Bridge Operations Funding

The Road Operations budget is funded primarily through the State Highway Users Tax Account (HUTA). In 2010, the State eliminated the sales tax on gasoline (proposition 42 funding) and replaced it with an additional 17.3-cent excise tax. For every gallon of motor vehicle fuel sold in California, the state collects 35.3 cents of state fuel excise tax. Of those 35.3 cents, counties receive approximately 6 cents. The apportionment to counties is based primarily on the County's share of registered vehicles and county road

mileage. A small portion (less than .3%, or 1.04 cents) is allocated based on registered vehicles, assessed property valuation, and population.

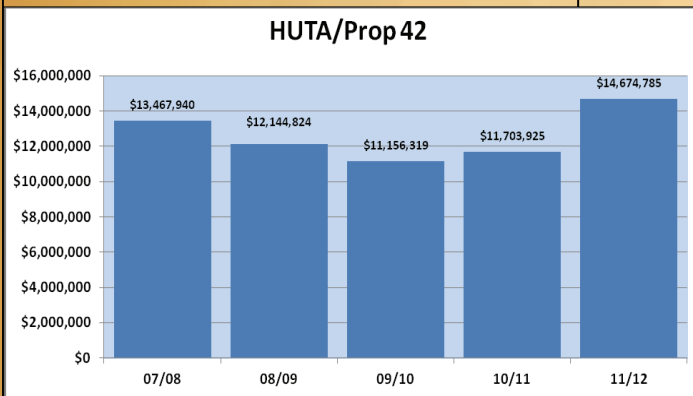
Of the total amount allocated to counties, Stanislaus County Public Works' portion is slightly less than 1.5%. Anticipated HUTA revenues for fiscal year 2011-2012 are \$14.6 million. These funds support routine maintenance and operations such as signal lights, patching, drainage basins, bridge maintenance, tree maintenance, center and edge line striping, legend painting, weed abatement, shoulder maintenance, and traffic sign and signal maintenance.



The chart above clearly demonstrates Stanislaus County's reliance on Highway Users Tax to support Road Operations and Maintenance. Nearly 96% of operations funding comes from this source.

Administration and Finance (continued)

The current allocation of Highway Users Tax (HUTA) is a combination of “old” and “new.” In 2010, the State eliminated Proposition 42 funding, replacing it with “new” HUTA. The following chart shows combined receipts of HUTA and Proposition 42 funds.



department (Road Operations, Design and Construction Engineering, Morgan Shop, Administration, and GIS) are located at 1716 Morgan Road. The Transit Section and a small development component of Engineering are located at Tenth Street Place.

Public Works has experienced a 12% reduction in staffing from Fiscal Year 2007-2008. The current economic situation combined with future projected revenue has resulted in the Department downsizing by 20 employees (14 unfunded, 6 vacant). These positions were spread across the Department.

The Department is anticipating challenges in fiscal year 2013/2014.

Prop 1B funds will be depleted resulting in a \$2.5 million reduction in revenues. To prepare for these challenges, a 4-year budget plan has been developed anticipating a 15% reduction from the 2009/2010 operating budget. This reduction will affect not only Public Works Road Operations, but Administration, Engineering, and Morgan Shop. The majority of the funding for each of these divisions is road funds.

Budget

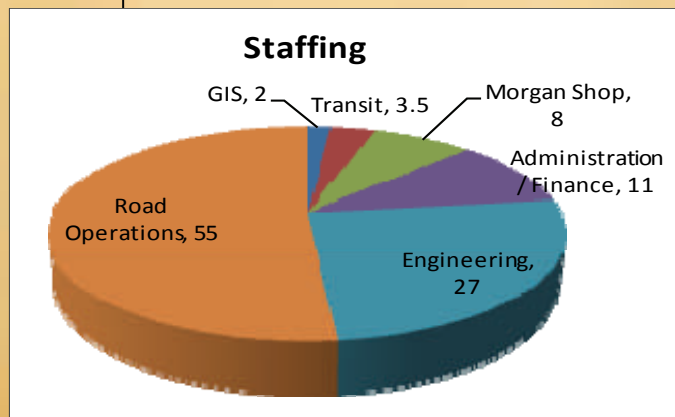
Public Works’ annual budget for Fiscal Year 2011/2012 is approximately \$57 million. As evidenced in the graph on the next page, the Road Operations and Maintenance and Road Capital Project budgets comprise nearly 72% of the total. Capital projects consist of roadway improvements such as intersection and roadway widening, traffic signals, and road resurfacing.

Public Works’ Transit division oversees the operation of Stanislaus Regional Transit (StaRT), the County’s intercity public transportation system. StaRT provides intercity service within the County and links with city transportation systems to provide coordinated transit service to 16 communities.

Public Works Staffing

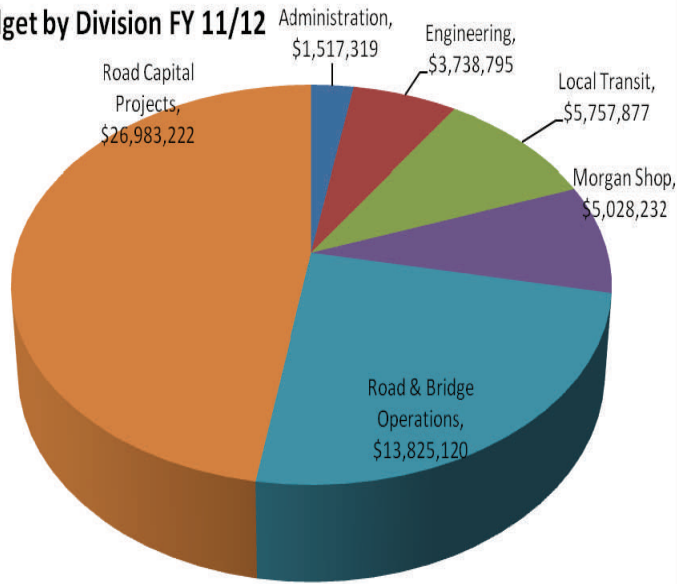
Public Works is comprised of six functional areas. These areas support Public Works’ mission to manage and improve infrastructure through safe and efficient use of resources and assets for the benefit of our citizens.

Public Works staff is housed at two locations. The majority of the



Administration & Finance (continued)

Budget by Division FY 11/12



Project Funding

The major sources of funding for major road projects are Public Facility Fees, State and Federal Grant, and Proposition 1B funds.

Stanislaus County implemented a Public Facility Fee program in 1990. This program identified routes within the County that would be impacted by growth, and established a fee structure to capture the cost of that growth. Since the inception of the program, Public Facility Fees have provided funding for

amount of major road projects. These funds were used to leverage federal and state money. Federal and state grants usually require a “local match” of between 10% and 20%. The County has received their full allocation of Proposition 1B funding and these funds are no longer available beyond Fiscal Year 2012/2013.

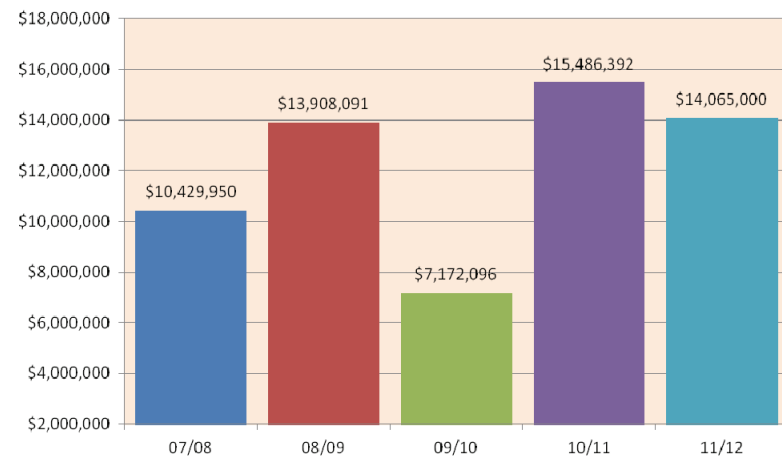
The increase in spending in fiscal year 2010-2011 was possible due to the receipt of funding from the American Recovery and Reinvestment Act (ARRA). Public Works received approximately \$7 million in ARRA funds for road projects.

The remaining Public Works’ divisions of Engineering, Morgan Shop, and Administration provide support services. Engineering provides design, construction, traffic, survey, and development support. Morgan Shop provides heavy equipment and fueling services. Their budget includes \$1 million of Congestion Mitigation and Air Quality grants for the purchase of clean air heavy-duty vehicles. Administration provides financial and administrative support to the Department.

over \$54 million in road projects. Improvements include road and intersection widening, and addition of traffic signals.

Proposition 1B provided additional resources for road operations, maintenance, and major road projects. The availability of Prop 1B funding enabled Public Works to escalate the

Capital Road Project Expenditures



Administration & Finance (continued)

Safety Division

“Then and now... If we only knew then what we know now.” Back then, it was nothing to work your 10 hour shift in the sweltering sun, jack hammering cement, breathing the dust, vibrating with every part of your body and if you weren’t sore when you went home, you didn’t work hard enough. That was the consensus of most working Americans back then. “We carried a container of about 500 salt tablets when we went out in the field,” says Wayne Sutton, acting County Surveyor who started with Stanislaus County as an Engineering Aide I about 50 years ago. Life expectancy was 65 years for a man then and is 78 years now.

Hazards have always been in the work place. Once discovered, they can be addressed by using any combination of:

- 1) Engineering controls,
- 2) Administrative measures, or
- 3) Personal Protective Equipment (PPE).

“Traffic has always been a hazard, drivers have always been distracted, it is just different distractions now than it was then,” says Mr. Sutton.



The hard hat and vest seem to be common Personal Protective Equipment worn both then and now. The vest



now has reflective strips, strategically located, to increase the visibility of the employee to any on-coming traffic (as “reflected” in the photo below of road workers in a training session.)



Mr. Sutton seems to remember the vest being worn because it had lots of pockets to put your survey essentials in and it was very convenient. “Safety was always something the team talked about and took seriously... all we had was each other. We looked out for each other...” Mr. Sutton states. Today we have regulating

agencies such as OSHA and EPA that set the minimum standards and tell us what, how, why and where we can and cannot work, but back then you just did it.



Slow for the cone zone!



Administration & Finance (continued)

July 1, 2007 Public Works implemented the “Bingo” safety incentive program. We also brought specialized training to our facility to give our employees the knowledge and expertise to complete tasks safely. As a result of the incentive, Public Works exceeded our consecutive days accident free record by 100 days in 2011. **The new record is 389 consecutive days accident free.**

We also had the lowest year for workers compensation pay outs in many years. When an employee was injured, the severity of the injury was minimal and required few or no days away from work to recuperate. Here are the stats for the number of injured employees, hours worked, number of employees, and days lost from work due to injury:

Year	# Injured	Hours Worked	# Employees	# Lost Days
2005*	14	263,614	153	234
2006*	10	248,614	150	39
2007	10	296,323	120	193
2008	7	230,351	128	7
2009	6	206,954	125	0
2010	3	188,197	124	38
2011	2	188,194	109	0

* Includes: Landfill, Development Services, & Abandoned Vehicles Abatement
Started Safety Incentive Program



Laura Janovich
 Public Works Safety Analyst Trainer

Our accident review committee meets on a regular basis to review the accidents and incidents we do encounter. The committee also meets with the involved parties to get a

first hand view of how the incident transpired and what can be done to prevent a reoccurrence of the same incident. Many of the ideas that have come from these meetings have been implemented and have improved the morale and the safety for the employees of Public Works.

The Heavy Equipment Shop has been instrumental in implementing some of the ideas such as adding lights, adjusting steps, and relocating items on the vehicles to improve safety. The Roads crew has adjusted their schedule to work when the temperatures are cooler and are continually attending training to maintain certifications. We are working safely, getting the training needed to complete the work safely, and looking out for each other.



Safety is NO accident!

Geographic Information Systems Division



Peou Khiek, Manager

Development of Stanislaus County's Geographic Information Systems (GIS) was first begun in the early 1990's using staff from Management Information Systems (MIS), the precursor of Strategic Business Technology (SBT). The system was made operational in 1996. Since that time, responsibility for the basemap, the heart of the system, has shifted to Public Works. In approximately the year 2000, financial restrictions resulted in GIS responsibilities being split/shared between departments, primarily SBT, Public Works, and Planning. This has resulted in some duplication of effort, varied development platforms, and decreased efficiency.

GIS is an information management technology that combines computer mapping and database technologies to improve the management and analysis of location base information. GIS is embedded within many information systems, in

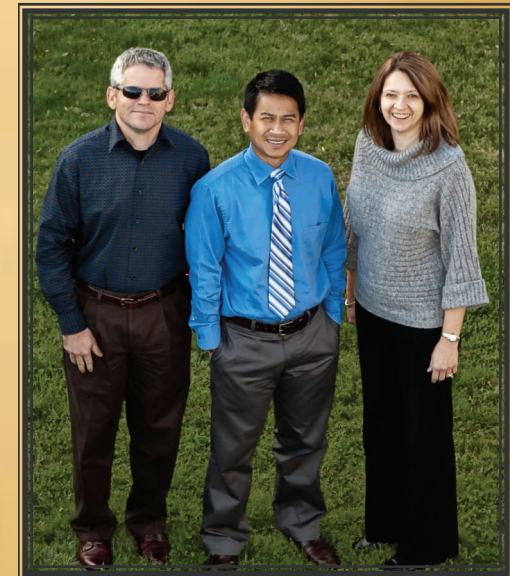
addition to traditional map oriented systems. Digital geographic information is the defining characteristic of a GIS, and is accessed by GIS software (ESRI) and applications to serve user specific needs.

In 2007, Stanislaus County's departments (SBT, Public Works, and Planning), supported the development of a centralized GIS and the consolidation of GIS services. As part of the planning, GIS staff from SBT, Public Works, and Planning were brought together to develop a "GIS Central" concept.

Establishing a GIS Central provides the groundwork to develop Stanislaus County's GIS into a dynamic tool for varied users (internal staff and the public). ArcGIS Server, version 10.1, will be implemented, providing the technology platform for maintaining centralized management of GIS data and processes. ArcSDE technology is an integrated part of ArcGIS and a core element of GIS. Its primary role is to act as the database access engine to spatial data, its associated attributes, and metadata stored within a relational database management system (RDMDS). Making GIS available on the County's intranet system (<http://gis-web-prd/stangis/public/index.jsp>) for internal users, and on the County website (<http://gis.stancounty.com/giscentral/>)

for external users provides a powerful management tool to many at minimal cost.

The Geographic Information Systems (GIS) Division is a transforming technology allowing the County to view and analyze data from a geographic perspective. It can integrate different systems to save valuable resources and streamline workflow processes. Stanislaus County Public Works staff are responsible for, but not limited to, the County's GIS basemap and layers. In addition, they also provide mapping services to other County Departments and agencies.



Geographic Information Systems Division (continued)

The following are recent accomplishments by GIS Central:

1. Parcel Inquiry App.
2. County Bridges App.
3. County Road Projects App.
4. County Recorded Maps App.
5. Upgrade ArcGIS (both desktop and Server) to 10.1.
6. User Group.
7. Other cities within Stanislaus County have access to our internal website.
8. 2010 one foot resolution aerial.

2011 Accomplishments:

1. Board of Supervisors redistricting.
2. Partnerships with cities of Oakdale, Waterford, Newman, Ceres, Riverbank, Turlock.
3. GIS User Group—Quarterly meetings.
4. GIS survey website (Record of Survey, Parcel maps, Subdivision maps, corner records, county survey, certificate of correction, G.L.O. plats, and SBE maps).

5. Election Precincting update (based on new Senatorial, Assembly, and Congressional boundaries).
6. SCOE school boundaries update (based on 2010 census) .
7. Move GIS servers to VM Ware.
8. Upgrade database system from PostgreSQL 8.4 to Microsoft SQL Server Enterprise 2008.
9. Agencies within Stanislaus County now have access to the County's internal (intranet) GIS website.

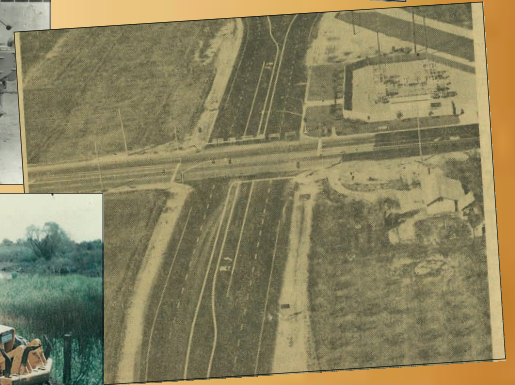
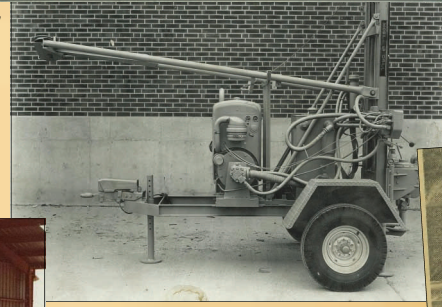
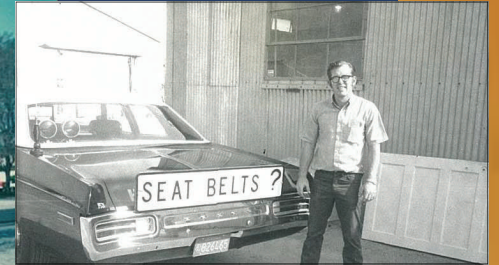
2012 Goals:

1. Continue to expand GIS collaboration with other agencies.
2. GIS Central will be the "one stop shop" for all GIS needs for Stanislaus County.
3. Obtain new aerial for Stanislaus County
4. Further enhance staff's skills in GIS (programming and software).
5. Develop GIS centric application for Pavement Management Systems (PMS) for Stanislaus County.

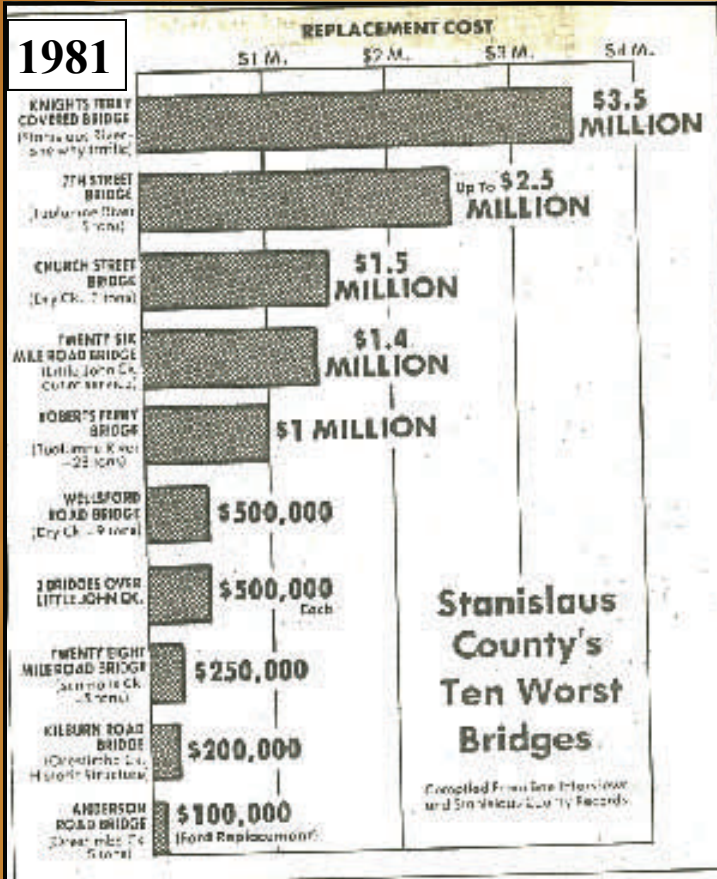


Above are two contrast pictures of the same area in Modesto (Tuolumne River between S. 7th St. and Ryder Way). The one on the left was taken in August 18, 1965 and the one on the right was taken in December 2010.


Glimpses from the Past...



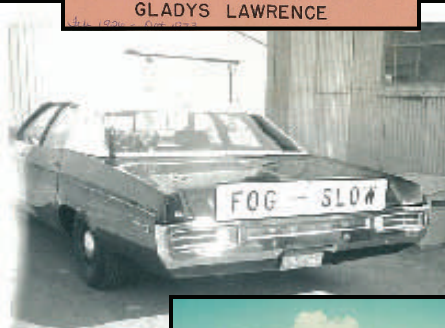
Glimpses from the Past...



STANISLAUS COUNTY'S LONGEST TERM EMPLOYEE
 47 YEARS 8 MONTHS
 WITH COUNTY SURVEYOR (PUBLIC WORKS DEPT.)




GLADYS LAWRENCE

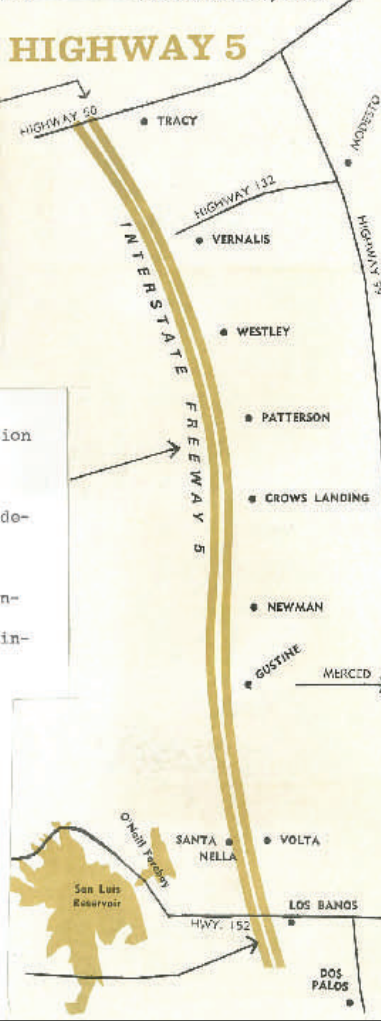


DEDICATION NOVEMBER 1, 1967

INTERSTATE HIGHWAY 5



Altamont Pass Junction of Hwys. 580 and 50



Our West Side has the distinction of having a portion of the longest stretch of Interstate Freeway ever dedicated at one time in the entire United States----Wow! It all happened just a pay day ago! It will be interesting now to watch the developments that will surely take place (like six gas stations per Interchange). We should have some traffic counts in soon from the major roads leading to and from the Freeway, which will also have an interesting story to tell.



Department of Public Works

Contact Information

Website: www.stancounty.com/publicworks

1716 Morgan Road, Modesto 95358



Administration Division	525-4130
Administration Fax	541-2505
Finance Fax	541-2511
Engineering (Design, Traffic, Construction)	525-4130
Design, Traffic Fax	541-2509
Construction Fax	541-2506
County Surveyors Office	525-4130
Fax	541-2505
Heavy Equipment Shop	525-4130
Fax	541-2512
Geographic Information Systems (GIS)	525-4130
Fax	541-2505
Road Operations	525-4130
Fax	541-2513

1010 10th Street, Suite 4200, Modesto 95354



Permits (Encroachments, Transportation)	525-4130
Fax	525-6507
Transit	525-4130
Fax	525-4332

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

Stanislaus County 2011 Board of Supervisors



William O'Brien
District 1



Vito Chiesa
District 2



Terry Withrow
District 3



Dick Monteith
District 4
(Chairman)



Jim DeMartini
District 5

STANISLAUS COUNTY SUPERVISORIAL DISTRICTS

- District 1 WILLIAM O'BRIEN
- District 2 VITO CHIESA
- District 3 TERRY WITHROW
- District 4 DICK MONTEITH
- District 5 JIM DE MARTINI

