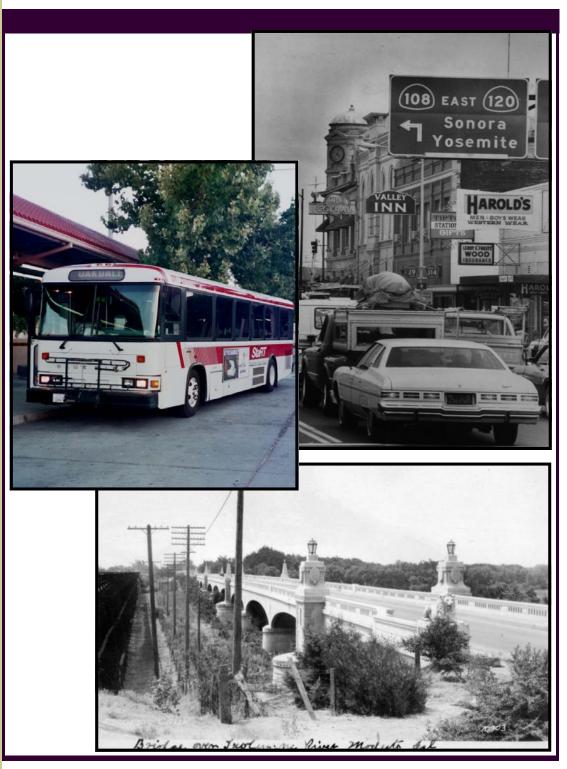


# Stanislaus County Public Works Annual Report 2013

#### **Inside this issue:**

Leadership, Mission, and Vision	2
Administration and Finance	3
North County Corridor	4
Roads and Bridges	8
7th Street Bridge Project	10
Transit	14
Construction Engineering	16
Geographical Information Systems (GIS)	21
Design Engineering	22
<b>Development Services</b>	25
Traffic Engineering	26
County Surveyor's Office	27
Morgan Shop	28
Training / Meetings / Events	31
<b>Board of Supervisors</b>	38
<b>Contact Information</b>	39



## Public Works

Matt Machado, PE, LS Director

Colt Esenwein, PE Deputy Director

Diane Haugh Assistant Director/Business & Finance

Chris Brady, PE Senior Civil Engineer/Road Operations &

Construction Engineering

David Leamon, PE Senior Civil Engineer/Development Services &

**Traffic Engineering** 

Peou Khiek Geographical Information Systems Manager

Randy Avants Road Operations Manager

Mel Eslinger Shop Manager Eunice Lovi Transit Manager

## Mission

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

## Vision

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

#### Administration Division

The Administration Division provides divisional support in all areas of the Public Works Department with more focus in the areas of clerical and finance. Clerical support is provided in the areas of board agenda items, maintaining and organizing lead staff, human resources and other ongoing daily needs necessary for the smooth running of the department. Financial support is provided by the way of budgeting, payroll processing, accounts payables and receivables.

#### **Finance**

The Finance Division is responsible for accounting, budgeting, contracting, lighting districts, accounts payable, accounts receivable, purchasing, and payroll for all divisions. The employees in Finance ensure that the Department is following all County financial policies and safeguarding public funds.

The Finance Division has five full-time staff overseeing Public Works \$55 million budget. They perform the day to day functions that keep the department running smoothly.

This year there were over 3,000 time cards (1,500 paychecks) processed for the Roads division, and approximately 2,340 timecards (1,170 paychecks) from Administration, Engineering, Shop, and Transit.

Also, there were 165 street light repair requests in the Government Outreach (GO) system that were taken care of.

## Clerica1

The Administrative Support Division provides clerical support to other Public Works' divisions. Their role includes the preparation of Board agenda items, human resources, training records maintenance, safety program strategic planning, first point of contact by greeting lobby customers and answering phones, processing mail, and a variety of other miscellaneous, but highly necessary tasks that ensure the Department operates smoothly.

In the past year these individuals:

Processed 88 Board Agenda items

Conducted recruitments and processed new employees' packets

Maintained office supplies inventory.

Coordinated janitorial and building maintenance services

Logged and followed up on 1,157 customer comments and/or concerns through Stanislaus County's Customer Response Management System.

## **North County Corridor (NCC)**

# **Studies Prior to NCC:**

- •SR108 Management Team assembled in 2001
- •Project Study Report initiated in 2002 by Caltrans and Stan COG
- •Seven corridor alternatives were studied
- •No decision made, effort was stopped prior to completion



#### Background:

- •Feasibility Study completed – January 2008
- •Programming documents (Project Study Report/Project Development Support) Spring 2008
- •Joint Powers Authority formed – Spring 2008
- •Project Approval & Environmental Document contract executed Summer 2008
- •Route Adoption completed May 2010

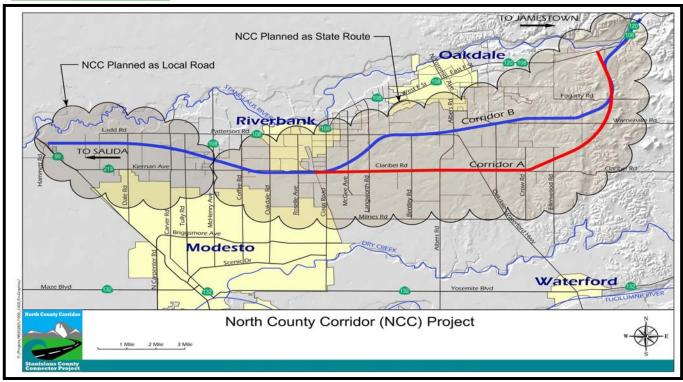
- •Notice of Intent / Notice of Preparation for current effort issued – August 2010
- •Scope revised Summer 2013

# Deficiencies and Concerns:

- •High percent of truck traffic on local roads
- •Existing state highway through downtown Riverbank and Oakdale
- •Accident rate is 35% higher than State average
- •Several at grade railroad crossings

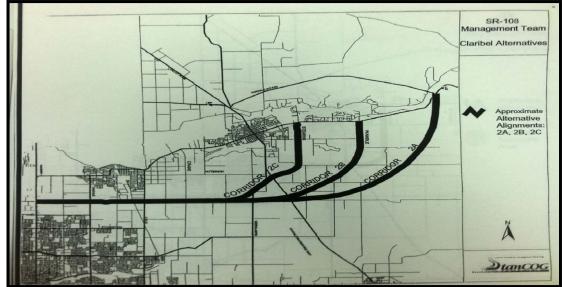
# Benefits of East-West Expressway/Freeway

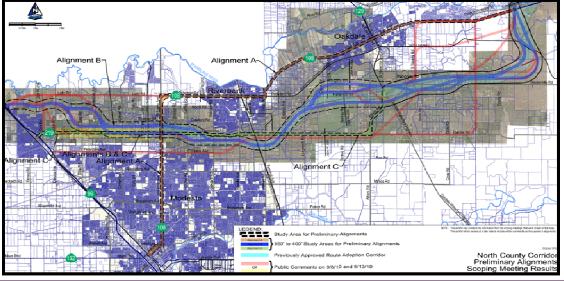
- •Improved interregional circulation network
- •Improved access to and around cities of Modesto, Riverbank and Oakdale
- •Reduced traffic congestion and improved travel times
- •Improved goods movement
- •Accommodate projected growth
- •Enhance traffic safety



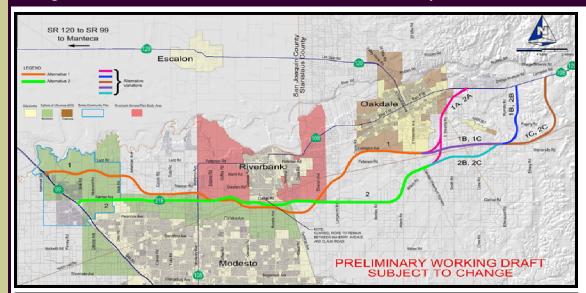


Alternatives Identified Prior to NCC JPA

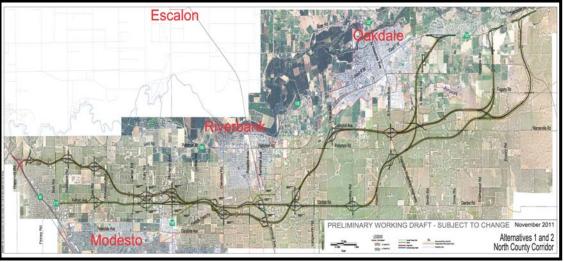




**Conceptual Alternatives** 



#### Screened Alternatives



Environmental Study Limits

## **Project Development**

- •Alternate C has been removed from consideration for technical reasons. These reasons are covered in a memo from Caltrans dated June 20, 2012. This is posted on our Stanislaus County Public Works website. The highlight of this memo is that Alternate C provided considerably less traffic congestion relief than Alternate A and Alternate C had more environmental habitat area of concerns than either Alternate A or Alternate B.
- •United States Fish & Wildlife (USFW) memo, dated June 4, 2012, determined that our environmental protocol surveys from this past winter and spring would not be accepted. Due to less than normal rainfall all surveys would have be re-done.

# Concurrent Efforts West of McHenry and Just East of McHenry

- •SR219 Widening (Sisk Road to McHenry Avenue) This is a joint effort between Caltrans and our region. The scope of the project is to widen the roadway to a 4 lane divided roadway with right of way to expand to 6 lanes in the future.
- •SR219 / SR99 Interchange Reconstruction
- •Claribel Widening (McHenry Avenue to Oakdale Road) –The scope of the project is to widen the roadway to a 4 lane divided roadway with right of way to expand to 6 lanes in the future.

#### **Scope Modification**

- •Our primary mission has always been to identify and construct a replacement facility for SR108 through the communities of Riverbank and Oakdale. West of McHenry Avenue had been an effort to identify a future alignment for long range planning.
- •Currently working with Caltrans to re-scope the project to identify the logical termini of the NCC at McHenry Avenue. This will eliminate alternatives west of McHenry Avenue.



#### **Cost Estimate Evolution**

- •Original scope from SR99 to SR120 in its ultimate build was estimated at \$1.2 billion. A primary factor of this large cost was the assumption of full freeway standards and interchanges at  $\sim$ 1 mile spacing.
- •Phase 1 build segment, which was from McHenry to SR120 at the full freeway / interchange ultimate configuration was estimated at \$400 million.
- •Current re-scope effort will have a cost estimate of \$300 million.

#### **Outreach Summary**

- •Print Media 2010-2012 (Modesto Bee, Oakdale Leader, Riverbank News, Sacramento Bee)
- •Community Focus Group Meetings 2010-2012 7 meetings
- •Oakdale City Council 7/5/11
- •Farm Bureau 8/2/11
- •Oakdale Rotary 11/16/11
- •Oakdale Realtors Association 11/17/11
- •Stanislaus Union Schools 11/17/11
- •Elks Lodge 1/10/12
- •Oakdale Traffic Commission 1/20/12
- •Stearns Area Meeting—8/12, 9/12
- •Oakdale City Council 10/1/12
- •Modesto Chamber of Commerce (LU&TC) 10/14/12
- •Modesto Chamber of Commerce—6/5/13

#### **Current Contract Status**

- •Jacobs Engineering change in team and environmental consultant
- •Request for Quotes (RFQ) to select a new team
- •New contract with Drake Haglan and Associates

#### Schedule

- •Administrative Draft July 2014
- •Draft Document Winter 2014/2015
- •Final Decision Document Summer / Fall 2015

## **Roads and Bridges**

The Road Operations
Division has been busy
this summer and fall.
From grading and paving,
bridge repair and street
light maintenance to
centerline striping and
traffic sign maintenance.

This year, Public Works was successful in obtaining additional funding for continued overlay projects. In addition to the pre-determined overlay roads scheduled for 2013, additional funding was obtained from PG&E for detour routes to allow them access for gas line replacement in county roadways. This enabled

us to overlay an additional 4.2 miles of roadway. Segments of Faith Home Road, Roeding Road, Tully Road and Berkeley Avenue.

With private contributions for specific overlay requests we continued paving at the end of our chip seal program. Paving into December we have recently completed paving, shoulder backing and centerline striping on Charles Street in Hughson area, Sperry Road in Denair area and Quincy Road in Denair/Turlock area, for a total of 21/4 miles.

By performing in-house all facets of the job including preparation, shoulder backing, paving and centerline striping, allowed us to begin work immediately in order to complete these roads before winter.

In addition to road overlay projects, the Road crew "chip sealed" an additional 75 miles of roadway to increase our road resurfacing program. Next year, our chip seal program will increase to 100 miles.



Sperry Road (Before)

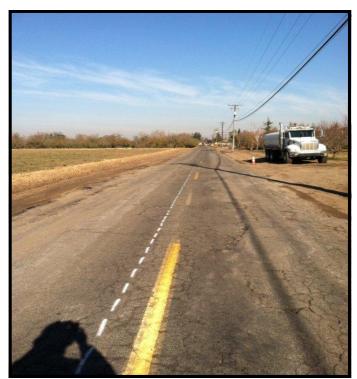
"...when you build a road you're doing more than building a road - you're building the future development of your city..."

Richard Lamm,
Co-Director of the Institute for Public Policy Studies at the University of Denver.



Sperry Road (After)

Quincy Road (Before and After)





"America's highways, roads, and bridges, are an indispensable part of our lives. They link one end of our nation to the other. We use them each and every day, for every conceivable purpose." Christopher Dodd, American politician and Director of the Motion Picture Association of America.







Claus Road

#### 7th Street Bridge Project

Seventh Street Bridge was built in 1916 and carries an important two-lane urban road over the Tuolumne River and surrounding flood plain. The bridge is eligible for inclusion in the National Register of Historic Places and is considered to be a significant structure.

The bridge is a historic and unique structure type called a "Canticrete" arch bridge. It is composed of steel trusses encased in concrete arches with mid-span joints. Typically located in every other span consists of 14 spans that are attached to concrete abutments and piers supported on pile foundations. The structure is about 35-feet wide and 1,165-feet long and is

located about 1/2 mile east of Highway 99.

Rehabilitation and retrofit or replacement of the structure is necessary for the following reasons. First, the bridge is classified as structurally deficient and has a sufficiency rating of 2 out of a possible 100 rating. There are a multitude of structural elements that exhibit areas of significant cracking and concrete spalling with some exposed reinforcement or structural steel, including the barrier railing and sidewalks, joint headers between cantilevers, deck soffit, floor beams, arches, pier curtain walls, and abutments. Second, the inventory

and operating ratings for the bridge are 6.5 tons and 11 tons, while the structure is posted for 4 tons. These load ratings are well below modern highway vehicular loadings and thus, no trucks are allowed on the bridge. Third, there are differential vertical defections at mid-span cantilever joints up to 3-inches in magnitude, suggesting overstressing of the steel truss has occurred. Last, the structure does not satisfy the required freeboard criteria, scour issues have occurred in the past along the river piers, there remains the potential for structural instability after a flood event, and the bridge is classified as scour critical.



Aerial view of Seventh Street Bridge. This is the site of the Davis and Maze Ferry

#### **Project Description**

The bridge is currently defined as structurally deficient with a load restriction of 4 tons and is in poor condition. Consequently, rehabilitation and retrofit or replacement of the bridge is necessary and currently being investigated as part of this joint project between the County of Stanislaus and the City of Modesto. The purpose of the project is to enhance seismic safety



Figure 4

and vehicular load capability, improve vehicular and pedestrian safety, and reduce congestion. Previous and continuing study efforts supporting this project include preliminary environmental studies, preliminary hydraulics and scour analyses, preliminary foundations investigations, a historical property survey report, and structural rehabilitation/retrofit and replacement strategy reports.

#### **Existing Conditions - Roadway**

Seventh Street is classified as an on-system, urban, minor arterial and provides access over the Tuolumne River and surrounding flood plain between downtown Modesto and local farms, ranches, and residences located in the southern region of the city. Traffic counts performed by Fehr and Peers in 2012 indicated that the average daily traffic (ADT) along the roadway over the bridge is about 15,900 vehicles per day. According to the Caltrans inspection report dated October 13, 2011, closure of 7th Street to traffic over the bridge necessitates an approximate 1-mile long detour along 9th Street. Based on the short roadway detour length, closure of 7th Street in the vicinity of the bridge to facilitate rehabilitation and retrofit or replacement of the structure is feasible.

## **Previous Investigations**

Based on an engineering study performed on the 7th Street Bridge by the Public Works Departments for the City of Modesto and Stanislaus County in March of 1976, the structure was

originally designed for an H-12 truck loading, but posted for 10 tons at the time of the study. Differential deflections between ends of cantilevers at some midspan joints became apparent in the early 1960's and increased drastically at the northern-most joint in the early 1970's. At this location, the maximum differential deflection at the time of the study was approximately 3inches. The study concluded that this phenomenon was due to overstressing of the steel truss along the cantilevered portions of the superstructure. Due to these differential deflections,

it can be inferred that the vertical shear keys initially installed between cantilevers, as shown in the original plans, are no longer functional

and must have been damaged over time. Remedial measures were later implemented at the northern-most joint by installing a steel frame consisting of W10 x 60 sections connected by gusset plates and 3-inch diameter pins and bolted to concrete footings (see

Figure 4 above). Later, shims were required due to additional differential deflection between the cantilevers. In addition, an

asphalt overlay was placed to eliminate the differential displacements at the mid-span joints along the roadway surface and the bridge was posted for 4 tons. The study also indicated that the timber piles in the river spans had been intermittently exposed based on observations by County staff.

Based on field investigation notes produced by URS Corporation in January of 2001, the floor beams exhibit areas with deep spalls that expose the wire mesh and steel truss, which have corroded as a result. The report

also notes that the bridge was designed prior to enactment of the first seismic design codes in 1918.

#### Did you Know? - Dave Leamon

It surprises me what I learn along the way while here at Public Works. The Lion Bridge also known as 7<sup>th</sup> Street Bridge was once part of US 99, the Golden State Highway. US 99, was also known as the Pacific Highway, as defined by the American Association of State Highway Officials which ran from Calexico, California at the Mexican border to Blaine,

Washington on the Canadian border.

The 7<sup>th</sup> Street Bridge was informally part of this highway from its construction in 1916 to 1927, then officially part of US 99 when California signed the Golden State Highway as US 99 in 1928. The route through Modesto, came south from Salida along 9th Street, then across the tracks at I Street, south on 7th Street over the river, then back east across the tracks at Hatch Road.

the bridge, 2049.5 feet of bridge was built and then 1,030 feet of new road built north of the bridge.

Also of interest, Modestans voted on the new bridge location, due to apparent controversy over where the new bridge should be located. The 9th Street location won by a large margin

> over the westerly route that was proposed. The dedication ceremony was held on July 4, 1933 which was attended by approximately 20,000 people and included a parade and speeches by prominent elected officials. Governor James Rolph, Jr. and two former mayors of Modesto, Sol. P. Elias and L.L. Dennett were speakers at the dedication ceremony.



The Modesto Bypass constructed in 1933, built a new 40-foot wide bridge across the Tuolumne River at 9<sup>th</sup> Street, bypassing 7<sup>th</sup> Street and the bridge. This eliminated three at-grade crossings of the Southern Pacific Railroad, at I Street, Butchertown Sub Division Crossing, and Hatch Crossing. The new 9<sup>th</sup> Street Bridge had a 30-foot wide travel way, with two 5-foot sidewalks on either side. With this construction contract, 7,269 feet of new road was built from Hatch Crossing to

#### Sources:

http://en.wikipedia.org/wiki/ U.S.\_Route\_99

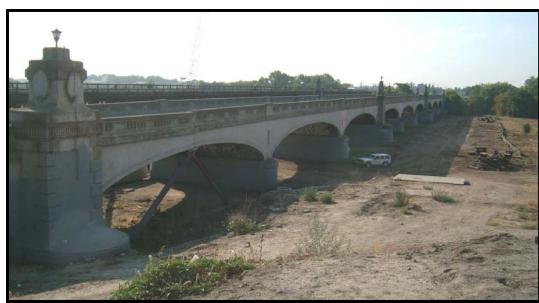
Automobile Club of Southern California, "Inland Route – Los Angeles to San Francisco-Part 5 Modesto to San Francisco and Oakland", 1920's.

California Department of Public Works, California Highways and Public Works, "*Triple Celebration Marks Official Opening of Modesto Bridge Project*", July – August 1933.

## Page 13







#### **Transit**

The year 2013 proved to be another busy year for staff in the Public Works Transit Division. The Transit Division completed a number of transit activities to enhance and improve transit services offered in the County in 2013 which included major improvements to existing transit service operated in Stanislaus County.

Changes implemented this year entailed improving ontime performance and frequency on selected fixed routes and demand response routes, enhancing running times on most fixed routes and selected demand response routes, and adjust-

ing route schedules to ensure passengers get to their destinations on time. Customer comments and suggestions received throughout the year resulted in some of the changes made in August 2013.

A review of StaRT's service data for Fiscal Year (FY) 2012-2013 indicate ridership on most routes, including those in Riverbank and Oakdale have increased.

High performing routes include a 6% gain in ridership on Route 10, 15% ridership increase on the Route 70 and Waterford Runabout, an 11% increase in transit usage on the Patterson demand responsive as well as a 6% increase

in passengers riding the Newman demand response route, and a 5% increase in the number of residents using the non-emergency transportation service for medical appointments in the Bay Area.

Overall, there were 17,000 more passengers that used StaRT for their mobility and transportation needs in FY 2012-2013 compared to the previous year. For the period ending on June 30, 2013, StaRT operated over 876,000 revenue miles, 44,716 revenue hours and generated \$496,528 in passengers' fare revenue which is \$31,530 more than the passenger fares collected in the period ending on June 30, 2012.





During the year, the Transit Division successfully procured additional buses to replace existing vehicles in the fleet that are close to meeting their service useful life. The Board of Supervisors approved staff's request to purchase new replacement buses based on the Federal Transit Administration guidelines.

The Transit Division took delivery of five 40-foot buses in September 2013 and took delivery of a 32-foot bus in December 2013. Photographs of the new buses are shown on pages 14 and 15.

Other 2013 accomplishments include:

- Developing transit capital projects that were incorporated into the County's FY 2013-2014 Capital Improvement Plan.
- Successfully merging transit services with the Riverbank-Oakdale Transit Authority and began operation of transit services in the Cities of Riverbank and Oakdale as part of Stanislaus Regional Transit (StaRT).
- Participating in over 30 County-wide events to promote and market transit services offered throughout the County.
- Completing the Annual Transportation Development Act Audit for FY 2012-2013.

Our sincere thanks to staff in all Divisions of the Public Works Department and in other County Departments. We look forward to working with you in 2014.



"There is a place where the sidewalk ends And before the street begins, And there the grass grows soft and white, And there the sun burns crimson bright. And there the moon-bird rests from his flight to cool in the peppermint wind.

Let us leave this place where the smoke blows black And the dark street winds and bends. Past the pits where the asphalt flowers grow We shall walk with a walk that is measured and slow. And watch where the chalk -white arrows To the place where the sidewalk ends.

Yes we'll walk with a walk that is measured and slow, And we'll go where the chalk -white arrows go For the children, they mark, and the children, they know The place where the sidewalk ends." -Shel Silverstein

## **Construction Engineering**

The Construction Engineering Division manages all construction related elements of the Public Works Department capital improvement projects, which include roadway, utility, and bridge improvements.

Through contract administration and construction inspection, it is the goal of the division to ensure that each project is built according to the plans, specifications, on schedule, and within budget.

The Construction Engineering Division also provides construction contract administration services to other Stanislaus County departments, such as Parks and Recreation and the Planning Department.

#### Salida Sidewalk Improvements

**Improvements:** Concrete sidewalk removal and replacement, landscape irrigation replacement, and tree planting.

**Cost:** \$194,785.23

Start Date: October 14, 2013

Completion Date: November 26, 2013

**Contractor:** Sinclair General Engineering Construction, Inc. **Resident Engineer/Construction Inspector:** Bryan Voyles





#### **RSTP Overlay Program E**





**Improvements:** Asphalt concrete overlay, shoulder backing, and pavement delineation.

**Cost:** \$1,517,531.58 **Start Date:** June 10, 2013

**Completion Date:** August 7, 2013 **Contractor:** George Reed, Inc.

Resident Engineer/Construction Inspector: Mark Hamblin

## **Hatch Road @ Carpenter Road Traffic Signals**





**Improvements:** Pavement reconstruction, pavement delineation, traffic signal installation

Cost: Approximately \$1,090,000.00 Start Date: September 30, 2013 Completion Date: January 2014

**Contractor:** Chester Bross Construction

Resident Engineer/Construction Inspector: Peter Song

#### SR 99/SR 219 (Kiernan Avenue) Interchange

**Proposed Improvements:** Reconstruction of a storm drain pump station, reconstruction of the bridge overcrossing and off/on ramps, construction of auxiliary lanes between the Kiernan Avenue interchange and the Pelandale Avenue interchange, surface road widening, storm drain improvements, replacement of traffic signal systems at ramp intersections, and associated local road intersections.

**Bid Price:** \$24,934,986.50 **Start Date:** April 15, 2013

**Expected Completion Date:** October 2015 **Contractor:** O.C. Jones & Sons, Inc.

Resident Engineer/Construction Inspector: Bryan Voyles / Nolte Vertical Five









#### **Parklawn Neighborhood Sewer Improvements**

Improvements: Installation of sanitary sewer mains, sewer service laterals, pavement reconstruc-

tion, shoulder backing, and pavement delineation.

**Cost:** \$1,018,591.76

**Start Date:** January 28, 2013 **Completion Date:** June 18, 2013

Contractor: Mozingo Construction, Inc.

Resident Engineer/Construction Inspector: Bryan Voyles & Peter Song









#### 2013 Slurry Seal Project

**Improvements:** Slurry seal and pavement delineation.

Cost: \$260,997.24

Start Date: October 1, 2013

Completion Date: November 15, 2013

**Contractor:** California Pavement Maintenance Company

Resident Engineer/Construction Inspector: Mark Hamblin / Caltrop Corporation





#### **2014 Forecasted Projects**

- Parklawn Sewer Improvements Phase 2
- SR 99/SR 219 (Kiernan Avenue) Interchange
- 2014 Slurry Seal
- ▶ RSTP Program F Westley Rehabilitation
- ◆ RSTP Program G Keyes Road, Faith Home Road
- Hatch Road @ Santa Fe Avenue Traffic Signals
- West Main Street @ Crows Landing Road Traffic Signals
- Claribel Road Widening (from McHenry Avenue to Oakdale Road)
- Bonita Park/Empire Park Lighting
- Pete Miller Bridge Seismic Retrofit
- Geer Road Bridge Seismic Retrofit

#### **Geographical Information Systems (GIS)**

#### **Accomplishments:**

- Won the Effective Partnerships for a Stronger Community
- Moving the servers to VM Ware
- Updated ArcGIS desktop to 10.2.1
- Redistricting the Board of Supervisor's Districts based on 2010 Census
- Pavement Management System (PMS) Federal Roads
- Moving the database base from PostgreSQL to Microsoft Enterprise SQL
- Updated the interactive website to the latest Flex Viewer





From left to right: Peou Khiek (GIS Manager), Diane Haugh (Assistant Director), and Aron Harris (Software Developer)

#### From the Chief Executive Office, desk of Stan Risen, Chief Executive Officer:

"The Stanislaus County Effective Partnership Recognition Committee, comprised of Supervisor Dick Monteith, Jeff Reed (Keyes MAC), Tish Foley (City of Modesto), and Bob Zoslocki (Business/Community member) has announced the partnerships chosen this year to receive the Stanislaus County Board of Supervisors' Effective Partnership Recognition. The Community Services Agency (CSA) has been chosen in the category recognizing partnerships with non-governmental agencies / organizations and Public Works – Geographic Information System (GIS) has been chosen in the inter-governmental partnership agency."

"...Public Works (GIS) – the formation of GIS Central was approved by the Board of Supervisors in March 2008. The vision was to develop the County's GIS system into a dynamic tool that would provide useful information to other County departments, cities, and the general public. The GIS internet site provides a wealth of information and enables other organizations and the community at large to access information on land parcels, recorded maps, bridge weight loads, and more. GIS Central provides services to the cities of Modesto, Newman, Turlock, Ceres, and Oakdale. The availability of GIS e-government services extends to citizens outside of government operations as well. By providing access to a single system, redundancy has been eliminated and efficiency and customer satisfaction have increased.

Congratulations to both partnerships, we commend your outstanding achievements."

## Design Engineering: Hatch Road / Carpenter Road Intersection Project

#### **PURPOSE**

The primary purpose of this project is to improve air quality by reducing greenhouse gas emissions from automobile traffic at the project location. The project will also improve safety, capacity, and efficiency at the intersection in an effort to maximize traffic flow throughout the system to accommodate existing traffic congestion conditions and meet capacity requirements for future growth, improvements.

#### **NEED**

The need for the project was determined through analyses conducted by the County to prioritize traffic. An Engineering and Traffic Capacity Analysis was completed as well as air quality calculations to determine the amount of pollution that could be reduced by signalizing this intersection. This project scored well and is a CMAQ Cost-Effective at \$3.58/kg/day pollution reduction.

#### **OBJECTIVE**

Upgrade existing intersection from a four way stop sign to a signalized intersection.



#### ADDITIONAL INFORMATION

The intersection is located in Stanislaus County south of Modesto, and west of Ceres. The main purpose of this project is to enhance regional air quality by installing a traffic signal at project intersection. Once installed, the traffic signal will provide for more efficient traffic flow through the

intersection. Thus reducing emissions from automobile traffic at that intersection. The project will further improve operations at the intersection by adding left turn pockets. The geometrics for this project will be determined by use of the Caltrans Highway Design Manual and County Standard plates.







#### PROJECT SCOPE

- Construction of traffic signals at the intersection of West Hatch Road at South Carpenter Road
- Widening the individual legs of the intersection in all directions by installing dedicated left turn and right turn lanes to improve traffic flow through the intersection, thereby reducing air pollution
- Incorporating the existing pavement section into the widening, including the relocation of the crown in specific sections if necessary and reinforcing the pavement where required
- Providing the roadway alignment and geometry to utility companies with facilities within the Project limits, such as utility poles, irrigation facilities, and other private facilities to be relocated if necessary to accommodate the signal and widening improvements

## Hatch Road / Carpenter Road Intersection Project



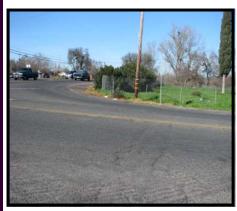






















## **Design Engineering (Continued)**

#### Salida Sidewalk Repair

The project involves removal and replacement of damaged sidewalks and overgrown street trees, along Pirrone Road in Salida. It is a project that Public Works is providing design and construction services for the Parks Department.









## Frank Raines Off Highway Vehicle (OHV) Park – Water Systems Improvements

The project involves constructing a water filtration system to provide clean drinking water at the OHV park and campgrounds. It is a project that Public Works is providing design and construction services for the Parks Department. This project is still under construction.











## **Design Engineering—Development Services**

Annual Transportation Permits Issued: 287

Daily Transportation Permits: 840

Encroachment Permits: 230

PG&E Encroachment Permits: 100

Non-PG&E: 130

Pipeline Maintenance Agreements: 14

10 off-site plans were approved

3 rezones were processed

8 use permits were processed

5 parcel maps were processed

5 staff approvals were processed

Assisted with multiple building permits

Updated the 2014 Standards and Specifications we are awaiting final approval and adoption

Started the Airport Neighborhood Urban Greening Storm Drain Master Plan Study

Hired a consultant to help draft and implement the startup of the new 2013 NPDES MS Phase II Storm Water 5 Year Management Program

Started and completed a 10-mile PG&E permit along Whitmore/Santa Fe/Geer Road along with various other locations in the County for the PG&E gas replacement and upgrade projects



#### **Traffic Engineering**

Traffic Engineering provides support for the Design, Construction, and Development Services divisions. They control traffic operations such as traffic signal timing, signs, and striping, and Traffic also determines roadway zoning for no parking and reduced speed limits. Traffic Engineering works directly with Capital Improvement Project development such as Congestion Mitigation Air Quality

(CMAQ), Highway Safety Improvement Program (HSIP), State Transportation Improvement Program (STIP), etc. and provides reviews of traffic impacts for proposed developments and projects. Another function of the Traffic Engineering division is to consult with citizens regarding their traffic concerns to help maintain a safe and effective community.



Kiernan Avenue "No Truck Parking" zoning

#### 2013 Accomplishments:

- Claribel Road Widening Traffic Signal Design
- Completed analysis for the successful STIP application for the McHenry Avenue Widening
- Received a safety grant for the installation of flashing beacons at two rural T-intersections
- Assisted design in a number of development projects





PG&E gas replacement and upgrade projects at Claus and Claribel Roads

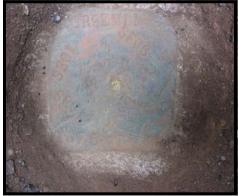
#### **County Surveyor's Office**

The County Surveyor's Office provides the following services:

- Field Services includes county surveys, monument preservation, data gathering, right-of-way establishment/staking, and field inspections
- Indexing records are indexed internally such as bench marks, deeds and easements, and subdivision maps. Records are also indexed externally (via Public Works' GIS Central website) such as records of survey, county surveys, subdivision maps, parcel maps, certificates of correction, and corner records.
- Map checking and recording
- Legal description writing, verification and recording
- Drafting services
- Right-of-way abandonments
- Certificates of Compliance



Larry Fontana is locating a survey monument in the Newman area.



This is a section corner on Faith Home Road. It is a 10"diameter concrete monument that was set in 1904. It now has a 2" iron pipe on top with a monument well at road level, and will possibly never be seen again.

#### 2013 Accomplishments

- Continue to work with Merced County on a joint survey of the County line
- Maintained and preserved the Government Land Office (GLO) cadastral monuments
- Upgraded Survey equipment
- Submitted 46 maps for checking and recording
- Verified approximately 37 legal descriptions for LAFCO and Planning Department
- Worked on 2 County Surveys
- Processed 10 Certificates of Compliance
- 16 Irrevocable Offers of Dedication descriptions written/verified/recorded
- Worked as support for County road crews to complete Projects RSTP G & H
- Added Corner Records and Tie Cards geographically to the Index on the County's G.I.S.
- Continued to electronically archive survey records
- Continued indexing archived documents to the Department's website

#### **2014 Goals**

- Complete the Stanislaus/Merced County Line Survey
- Upgrade the survey vehicle
- ♦ Upgrade GPS survey instrument
- Re-survey of Township Line between T.2 S., R.13 E. & T.3 S., R.13 E., from township stone east to S.E. corner of Section 33
- Provide training and experience for the Survey team members in the various areas of the surveying discipline

## **Morgan Shop**

Morgan Shop is an Internal Service Fund (ISF) operation that provides equipment and vehicles to other Public Works divisions, primarily the Road & Bridge Division. The user divisions pay a rental rate to Morgan Shop when using equipment and vehicles. In addition, Morgan Shop provides vehicle and equipment maintenance as requested to other County departments. Morgan

Shop also provides Compressed Natural Gas (CNG), Unleaded, Biodiesel and Diesel fueling to County departments and CNG fueling to other local jurisdictions.

Morgan Shop consists of a Manager, a Lead Equipment Mechanic, a Staff Services Analyst, and five Heavy Equipment Mechanics.

In 2013 the Shop issued 274,812 gallons of gas: 190,507 Unleaded, 5,620 Diesel, 78,685 Biodiesel, and 199,385 gallons of Compressed Natural Gas.

Additionally, the Shop purchased two electric vehicles. The Global Electric Motorcar (GEM) car helps employees get around our 15 miles of acreage where the main Public Works building is located and to local parts vendors (it can travel on 35-miles per hour speed limit roads). The Nissan Leaf gets employees to trainings, downtown, and other local areas inexpensively. These vehicles both replaced old, depleted vehicles and cost an estimated \$10 a month to run. The Nissan Leaf also replaced a vehicle that was not environmentally friendly.

We completed the process of demolishing the loading dock and bridge barn to prepare for the

new Shop. In addition, we organized and moved everything that was in Building 8 to new storage locations.



Pictured from left to right in the front row: Brett Ernest, Olivia Tanner, Roger Nelson. Back row: Eddie Soares, Phil Harley, Dave Stacy, and Rick McElligott.



2013 GEM



2013 Nissan Leaf

- Replaced and purchased three pick up trucks, one 2-axle flatbed, and one self-propelled broom which all contribute to helping the Roads Division complete projects.
- Was on site for repairs while the Roads Division chip sealed 75 miles worth of roads.
- Completed 2,011 work orders in 2013 which includes 203 roadside repairs.
- Completed the CNG (Compressed Natural Gas) rebuild of Compressor 1. (See page 30).













## Morgan Shop (Continued)



CNG Compressor 1 Parts (Before)



CNG Compressor 1 (After)









Old Shop Demolition

## **Aerial Lift Operators Training**



From left to right: Marco Valadez, Gabriel Avila, Jonny Gutierrez, Jeff Gentleman (Public Works' assistant instructor), David Rayonez, Donald Shapely, and Keith Wilcox (Public Works' instructor)









# **Quarterly Safety Meetings**



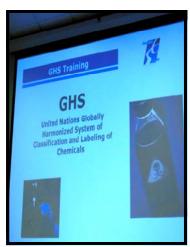
Pictured left to right: David Becker Stanislaus County Safety Officer, and JoAnn Schmidt Public Works Safety Representative











#### **Events**

#### Retirements



Laurie Barton, Deputy Director retired with 5 years



Doralee Boles, Associate Planner in Transit retired with 12 years



Gary Hayward, Road Superintendent retired with 33 years



Left to right: Diane Haugh, Gary Hayward (retiree), David Leamon, and Colt Esenwein



Greg Guerra, Senior Road Maintenance Worker retired with 17 years



Karin Tramel, Road Maintenance Worker III retired with 34 years



Mike Wilson, Senior Engineering Technician retired with 10 years



Calvin Xavier, Jr., Road Maintenance Worker retired with 20 years

## **Events (Continued)**



#### Kiernan Interchange Reconstruction—Groundbreaking

Dinah Bortner, Deputy District Director—Caltrans

Carlos Yamzon, Executive Director—StanCOG

Matt Machado, Director of Public Works, Stanislaus County

Terry Withrow, Supervisor District 3, Stanislaus County Board of Supervisors

Jeff Denham, Congressman

John Gunderson, Modesto City Council

David Geer, Modesto City Council

## **Cultural Awareness Week**





## **Events (Continued)**





**United Way Campaign**— This year Public Works employees donated \$1,853 to the United Way Campaign, which is over 30% increase from last year's \$1,325. Way to go!













**Operation Christmas Child**—This year's holiday project was Operation Christmas Child (OCC). OCC is a project of Samaritan's Purse and offers hope to children ranging from ages 2 to 14 from around the world.

The goal for Public Works (PW) was to complete at least 25 shoe boxes, including enough cash to cover the shipping costs. PW exceeded that goal by 9 shoe boxes! PW employees donated a total of 26 filled shoe boxes, plus donated over \$130 to complete 8 more shoe boxes, and also collected enough money to cover shipping charges for all of 34 boxes.

This was a very heartwarming experience for PW to participate in and reach so many children with gifts of hope and love.



# "Because of Public Works..." National Public Works Week, May 19-25, 2013

Since 1960, American Public Works Association (APWA) has sponsored National Public Works Week. APWA chose "Because of Public Works..." as its 2013 theme because it is about the quality of life brought to communities around the world. We are able to have clean water, safe streets and neighborhoods, efficient traffic and safe clean communities "Because of Public Works..." Our Board of Supervisors proclaimed the week of May 19th as Stanislaus County Public Works Week. We celebrated this event by having our Employee Appreciation Luncheon on May 22nd. We recognized our 2013 volunteers—Eileen Brasuell, Ross Campbell, Angelica Corona, and Michael Wilson. Lastly, service certificates were handed out to the employees listed below.

## 2013 Service Award Recipients

5 Years 10 Years Mario Acosta Keimi Espinoza Laurie Barton Michael Wilson Denis Bazyuk Rodrigo Rodriguez Chris Brady Julie Serrano Joseph Duarte Wesley Eslinger Marty Harper Steuart Holt Brett Johnsen David Leamon Andrew Malizia Sheila Nemeth Robert Rocha Jayne Sissle Photos of some service award

15 Years

Luke Blade

Tim Morris

Philip Harley

Calvin Xavier





From left to right on the bottom row are David Leamon, Wes Eslinger, Andrew Malizia, Denis Bazyuk, and Phil Harley.

recipients from left to right at the top are Chris Brady and Tim Morris.



## Page 37









Employee Appreciation Luncheon









## **Board of Supervisors**



William O'Brien District I



Chairman Vito Chiesa District 2



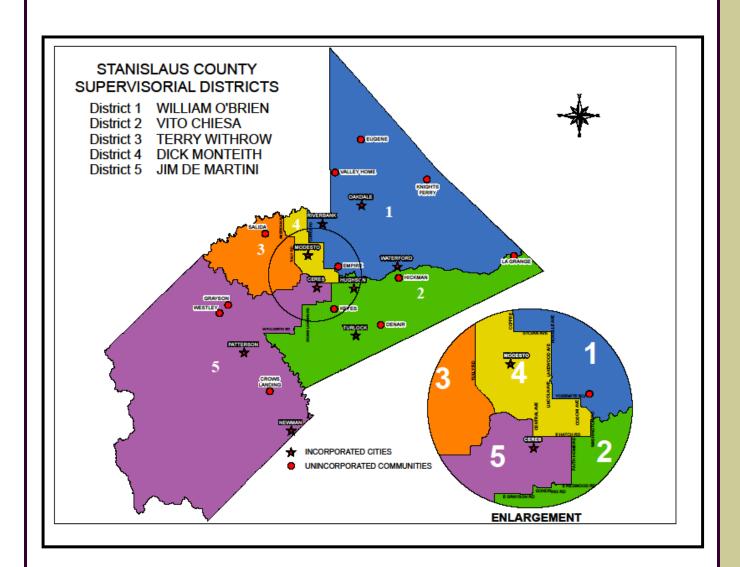
Terry Withrow District 3



Dick Monteith District 4



Vice-Chairman Jim DeMartini District 5







## 1716 Morgan Road Modesto, CA 95358

(209) 525-4130 (209) 541-2505 Fax

- **♦** Administration
- Construction Engineering
- County Surveyor's Office
- Design & Traffic Engineering
- ♦ Finance
- Geographical Information Systems
- Morgan Shop
- Road Operations

www.stancounty.com/ publicworks



## 1010 10th Street, Suite 4204 Modesto, CA 95354

(209) 525-4130 (209) 525-6507 Fax

- Development Services
- **•** Encroachment Permits
- Transportation Permits
- ♦ Transit

You may also contact us by submitting your questions or concerns online at: www.stancounty.com/customercenter or

Stanislaus County's assistance hotline at I (877) 2ASSIST / I (877) 227-7478

