



# “In the Works”

Striving to be the Leading Public Works  
Department Through Innovative Stewardship of  
Infrastructure and Environment

**Stanislaus County  
Public Works**

Volume 3, Issue 4  
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## The Pothole Report: Can Stanislaus County Have Better Roads?

**Submitted by Matt Machado**

An agency that spends \$1 on timely maintenance to keep a section of roadway in good condition would have to spend \$5 to restore the same road if the pavement is allowed to deteriorate to the point where major rehabilitation is necessary.

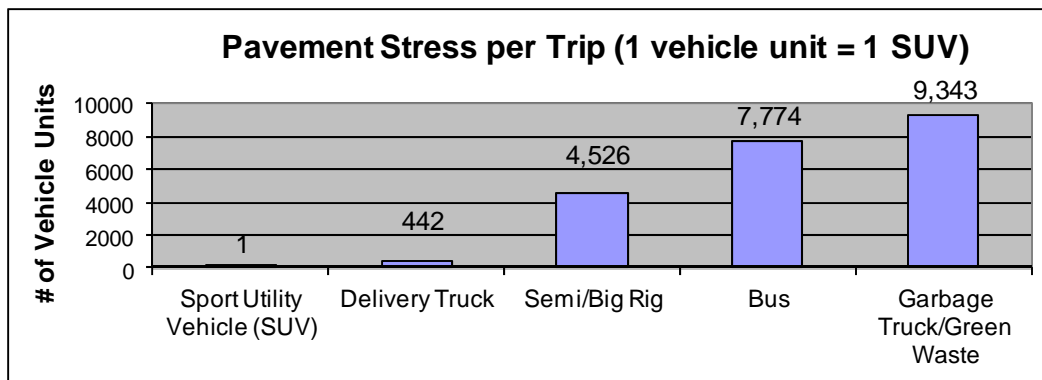
### **Pavement Preservation and Pavement Management**

Streets and roads take a beating under the weight of traffic. The first sign of distress on surface pavement is usually cracking. While cracks may not immediately affect the pavement’s ride quality, they expose the sub-base of the roadway to water leaking through the surface layer. In time, water erodes pavement strength and cracks begin to lengthen and multiply, forming networks of interconnected cracks referred to as “alligator cracking.”

At this point, the pavement is no longer able to sustain the weight of traffic and the cracked pavement disintegrates, forming depressions more familiarly known as potholes. Since potholes result from damage to the roadway’s sub-base, once they appear – regardless of whether or not they are patched – the roadway will continue to deteriorate until it reaches a failed state. Heavy vehicles such as trucks and buses put far more stress on pavement than does a passenger car. A bus exerts more than 7,000 times the stress on pavement than does a typical sport utility vehicle. And a garbage truck exerts more than 9,000 times as much stress as an SUV. Not surprisingly, cracks appear more quickly on streets with large traffic volumes and/or heavy use by trucks and buses. And these roadways need maintenance more frequently than residential streets with comparatively light vehicle traffic.

### Relative Impact of Vehicles Types on Pavement Conditions

*Source: Pavement Engineering, Inc.*



The pounding that pavement receives from trucks and buses can be especially problematic in more rural parts where many roadways have not been designed to accommodate heavy vehicles, but which are nonetheless used by growing numbers of trucks carrying goods between farms and cities.

The most cost-effective way to maintain a roadway is to address cracks in the pavement as soon as they surface. Just as regular oil changes are far less expensive than a complete engine rebuild, it is five to 10 times cheaper to properly maintain streets than to allow them to fail and then pay for the necessary rehabilitation. Deteriorating pavement carries private costs as well. A 2010 report by TRIP, a nonprofit organization that researches, evaluates and distributes technical data on highway transportation issues,

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### Ethics Quotes

Valdemar W. Setzer:

“Ethics is not definable, is not implementable, because it is not conscious; it involves not only our thinking, but also our feeling.”

### "Health & Safety Byte"

**Submitted by Keimi Espinoza**

Make your own emergency kit for your home and car. These make thoughtful gifts too! Basic kits should include nonperishable food, water, flashlights, radios, batteries, first aid supplies, medications, a blanket, and a whistle. Search the Internet to find more suggestions.

**Public Works is now  
160 days without a  
reportable  
accident/injury!**

## The Pothole Report

(continued from Page 1)

estimated that drivers in the San Francisco-Oakland area pay an extra \$706 in annual operating costs for each vehicle as a result of roadway conditions.

### Reduced Greenhouse Gas (GHG) Emissions

In addition to long-term cost savings, pavement preservation and pavement management strategies pay dividends by reducing the greenhouse gas emissions associated with both vehicle use and roadway construction. According to a June 2009 Caltrans report, *Prioritization of Transportation Projects for Economic Stimulus with Respect to Greenhouse Gases*, smooth pavement reduces GHG emissions by improving vehicles' fuel economy. The report also notes that more-frequent, low-cost treatments produce fewer emissions than do major rehabilitation projects made necessary by deferred maintenance. This is due to the need to produce less asphalt or other paving materials, and the need for fewer truck trips to transport materials to and from the worksite.

Pavement rehabilitation and reconstruction require large amounts of energy to acquire and process raw materials, transport materials to the construction site, apply the materials, and remove, haul away and discard old materials. Over a 20-year period, these processes combined produce an estimated 212,000 pounds of GHG emissions per lane mile of roadway. Pavement preservation treatments, by contrast, would emit about 30,100 pounds of GHGs over this time, even when done more frequently. This 20-year savings of more than 180,000 pounds of GHG emissions is equivalent to taking 15 cars off the road for a year for each lane mile that is properly maintained. And because preservation treatments keep the roadway in better condition, more motorists are able to travel at steady speeds – and fewer are required to slow down to avoid potholes – thus promoting better fuel economy and even lower GHG emissions.

\* \* \*

Source:

Bort, Joseph P. "The Pothole Report: Can the Bay Area Have Better Roads?" *Metropolitan Transportation Commission* (2011): 2-18.

## Safety Is No Accident!

Submitted by Laura Janovich

Once again we have exceeded our annual goals:

**Number of accidents not to exceed 8.....We had 2.**  
**Cost of medical only not to exceed \$5,000.....We spent \$268.52**  
**Cost of indemnity not to exceed \$75,000.....We are at ZERO!**  
**Unsafe acts and conditions are noted and corrected immediately.**

We had several employees bring unsafe acts or conditions to our attention and these were corrected immediately. Employees who brought these conditions to our attention received a safety certificate for pointing out the unsafe act or condition. The best outcome is that we are practicing safety as a part of our daily routine and we are being productive in the work place instead of being at home or in the hospital with a work related injury or illness.

Our record for consecutive days accident free remains at 389 days. We awarded 348 "Bingo" gift cards. We also played a game of "Blackout" to celebrate achieving a new record. The award for the "Blackout" game was \$200 for first place, \$150 for second place, and \$100 for third place, paid out in gift cards of the winner's choice. At our third quarter safety meeting, a continental breakfast was provided in celebration of being accident free for one year.

Working safely is achieved, it doesn't just happen. There are many risks and hazards that we are presented with daily. Through engineering controls, administration controls and personal protective equipment (PPE) those hazards and risks are minimized. Some hazards are out of our control like the motor vehicle drivers who refuse to yield to the flagger, or the distracted drivers who feel "What's for Dinner?" is a phone conversation they need to have while driving through our work zones. The department can provide us with training, PPE, equipment, support, and an incentive program but it is each and every one of us that must make that conscious decision to be safe. ***Congratulations!!***

\* \* \*

## How Do You Pronounce Stanislaus?

**Submitted by Laurie Barton**

There is a somewhat lively local debate as to the proper pronunciation of the name *Stanislaus*. Some residents pronounce it STAN-ěs-lăw, with no final *S*. This is no doubt influenced by the Spanish form *Estanislao* and further reinforced by the fact that the San Joaquin Valley was settled by immigrants from the southern states following the Civil War, and the southern dialect tends to soften all trailing consonants. Despite this, the silent final *S* has never been universal, and other ethnic and historical influences tend to argue against it.

Several towns within Stanislaus and neighboring counties along the Stanislaus River, including Turlock, Valley Home, and Ripon,

were founded and settled by immigrants from Dutch-, German-, and Danish-speaking regions where *Stanislaus* is a traditional men's given name (and like *Estanislao*, a variation of *Stanley*). The German-derived pronunciation, STAN-ĭs-löss, maintains the trailing *S* (and also puts a bit more emphasis on the second syllable).

At any rate, unaware of the name's complex local history, most outsiders and new residents pronounce *Stanislaus* with the final *S*, which is arguably the more phonetically intuitive method, but both pronunciations are considered acceptable.

Question.... How do **you** pronounce Stanislaus?

\* \* \*

**Photo on right:** Chief Estanislao statue that is larger than life size is installed at the Stanislaus County Court House grounds at the corner of 11th and I Streets, Modesto.



## COUNTY VOLUNTEER PROGRAM

**Submitted by Sylvia Jones**

The County's contract with the United Way for Volunteer Services ended on December 31, 2010. The County assumed responsibility for the Volunteer Program on January 1, 2011. A designated Volunteer Program Coordinator was assigned to collaborate with the Department Volunteer Coordinators (selected by each department) to set goals and action for the successful implementation of the County Volunteer Program. The program has amounted to a huge cost savings (approximately \$75,000) for the County as well as providing departments with invaluable assistance in reaching department goals. Now more than ever, volunteers have played a very important role in the County, as we all face budget cuts and economic challenges.

Public Works has had seven volunteers this year. Four were either a one-time event or short-term volunteers and three are on-going volunteers. Our volunteers have logged over 600 hours in 2011. These volunteers have assisted in several areas of Public Works including Administration, Survey, and Transit. They have completed many tasks for the department; including process changes that our full-time staff just didn't have time to get to.

On behalf of Public Works team members, I'd like to thank our volunteers for giving their time, skills, and dedication to Public Works this year. Thank you.

On-Going Volunteers:

Eileen Brasuell



Ross Campbell



Robin McDavid



One-time Event or Short-Term Volunteers: Tatem Hedgepeth, Stefany Schmidgall, Susete Sorritelli, Adam Warr

## Public Works

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### Articles by Public Works Writers

Published by Keimi Espinoza 



**Our Public Works  
2010 Annual Report is  
available at:**  
<http://www.stancounty.com/publicworks/pdf/2010-annual-report.pdf>



### Transit Info - Winter 2011

Submitted by Brad Christian

Howdy, from the Transit Corner where the wheels on the bus go round and round... Ridership continues to do very well and is up 16.72% when compared to this time last year. We've even had so much ridership on our Route 45 service from Newman to Turlock (at 5:30 a.m. no less!) that we have had to add what's called a tripper bus to carry the extra passengers. Seven of our thirteen services have had double-digit increases in ridership! To help deal with the increase in passengers, we hope to get some Proposition 1-B Transit funds to buy two more 32' buses to replace the 25' buses currently used on the impacted services.

Annette Borrelli just completed our annual State Controller's Report and Transportation Development Act (TDA) audit. We are required to do these to make sure we are in compliance in the use of our funds. Thanks Annette!

Our new Security Camera system is almost completely installed in the StART fleet and has already been useful! A driver recently ran a red light and hit our bus. Our cameras were able to show that our bus driver had a green light and the right of way. Not only does the camera system provide security to our passengers, it also helps in the case of accidents.

Our joint project with the City of Patterson is getting underway. We are adding restroom facilities in their South Park to accommodate not only our StART passengers but also to provide Patterson with facilities for events they have at the park.

Our 32' bus is on order for our Medivan service and we hope to have it around April 2012. Even though it is longer than our current bus, it has an amazing turning radius. This will be very important since it travels some pretty tight streets in the Bay Area. However, it will not be going down Lombard Street!

Enjoy the winter weather!



## United Way of Stanislaus County Living United



Submitted by Sylvia Jones

Public Works employees donated \$900 to the 2011-2012 Stanislaus County United Way Campaign. Thank you Public Works Team members for your donation in these difficult economic times. Your contribution will make a difference in our community. Approximately 99% of all dollars stay in Stanislaus County and 84% of dollars go directly to services/programs.

This year team members had an opportunity to test their knowledge of Public Works functions, community involvement, projects and other Public Works trivia for a \$2 donations. All questions were taken from the Public Works Annual Reports and Quarterly Public Works Newsletters. The contest ended in a three-way tie and the winner was chosen via a drawing with the winner receiving a trophy and 2<sup>nd</sup> and 3<sup>rd</sup> place winners awarded a ribbon. If you would like a copy of the trivia quiz to test your Public Works knowledge send your request via email to [joness@stancounty.com](mailto:joness@stancounty.com)

1<sup>st</sup> Place - David Leamon

2<sup>nd</sup> Place - Matt Machado

3<sup>rd</sup> Place - Diane Haugh

Employees making a pledge to UW were automatically entered into a drawing for a chance to win some nice prizes.

Congratulations to the trivia contest and raffle winners!

Thank you Public Works Team Members for doing your part to Live United!!



### 3rd Annual Chili Cook-Off

Submitted by Sheila Nemeth

The chili cook-off this year (on November 10th) was a great success. There were four entrants, all entries tasted great. The judging was in seclusion and the proctor overseeing the judges was very strict. The winner of the Best Chili prize this year was the Design Team's own Aja Verburg. And not only did she win Best Chili, but she took the Best Hot Chili and People's Choice Chili titles too. So, she was a triple crown winner this year. Congratulations Aja!! It was a great turnout, with great food, in the company of great colleagues, and everyone left with a smile on their face and a full belly.



**Aja Verburg** won first place in all three categories.

### Staff Updates

#### New Staff:

Scott Atchinson (Senior Survey Technician) joined the Survey Division on December 10th.

*Welcome to our team!*

#### Leaving County Service:

Raymond Brad Byers (Road Maintenance Worker III) with 7 years of service.

#### New Grand-Children:

\* Diane Haugh (Assistant Director) has a new grand-son. Joshua Haugh was born on November 1st.

\* Keimi Espinoza (Confidential Assistant) has a new grand-son too! Jordan Espinoza was born on December 3rd.

\* Jeff Rufo (Senior Road Maintenance Worker) has a new grand-daughter. Anellia was born on December 14th.

*Best wishes and congratulations!*

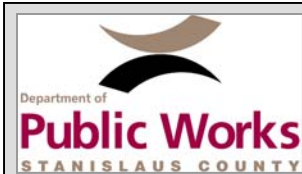


Transit Division's website is: [www.srt.org](http://www.srt.org)  
Passengers may call StART at 1-800-262-1516 for route information.

# Forecasted 2012 Public Works Projects

Location	Action
Geer Road Bridge (over Tuolumne River)	Seismically retrofit existing bridge at two piers and both abutments. (Summer 2012)
Hatch Road @ Santa Fe Avenue signalization	Improvements: widening and signalization. NOTE: Expect to start late summer, dependent on railroad schedule.
Howard Road Bike Path	Improvements: pavement widening and pavement delineation. (Spring 2012)
Paradise Road, Keyes Road, Grayson Road, and Central Avenue	RSTP Overlay Phase D - Improvements: asphalt concrete overlay, shoulder backing, and pavement delineation. (Summer 2012)
Traffic Signals: Las Palmas Avenue @ Elm Avenue, and Las Palmas Avenue @ Sycamore Avenue	Improvements: pavement widening, traffic signal and sign installation, and pavement delineation. (Spring 2012)
Broadway @ Union Pacific Railroad sidewalks	Improvements: sidewalk construction across the Union Pacific Railroad right-of-way along Broadway Avenue. (Fall 2012)

For more information,  
go to the referenced websites to view our pamphlets.



## 2012 Projects of Interest

<http://www.stancounty.com/publicworks/pdf/cip-project-flyer.pdf>

Stanislaus County Department of Public Works  
**ROADS TO SUCCESS – BRIDGES TO THE FUTURE**  
Fall 2011

**Geer Road Bridge**  
The Geer Road Bridge is a steel truss bridge that spans the Tuolumne River. It is one of the oldest bridges in Stanislaus County and is in need of significant repair work. The project involves seismically retrofitting the bridge at two piers and both abutments.

**Route 188**  
Route 188 is a major highway in Stanislaus County. The project involves widening and signalizing the road at Hatch Road and Santa Fe Avenue. This project is expected to start in late summer and is dependent on the railroad schedule.

**Highway Bridge Repair and Rehabilitation Program (HBRP)**  
The HBRP is a safety program that repairs and rehabilitates bridges in Stanislaus County. The program is funded by the State Highway Account and the State Bridge Account. The program is designed to ensure that bridges are safe and reliable for the traveling public.

**Local Bridge Repair and Rehabilitation Program (LBRP)**  
The LBRP is a program that repairs and rehabilitates bridges in Stanislaus County. The program is funded by the State Highway Account and the State Bridge Account. The program is designed to ensure that bridges are safe and reliable for the traveling public.

**Bridge Inspections**  
The California Department of Transportation (Caltrans) is responsible for inspecting bridges in Stanislaus County. The program is designed to ensure that bridges are safe and reliable for the traveling public.

**Future Bridge Construction**  
The Stanislaus County Department of Public Works is planning to construct several new bridges in the future. These bridges are designed to improve the transportation network and to provide a safer and more reliable mode of transportation for the traveling public.

## 2012 Bridge Priorities

<http://www.stancounty.com/publicworks/pdf/bridge-repair-projects.pdf>

Stanislaus County Department of Public Works  
**Stanislaus County Highway Bridge Priority Projects**  
Fall 2011

**Challenge**  
Stanislaus County has an aging inventory of bridges, many of which were built in the late 1930s and 1940s. Over the last 60 years, many of these bridges have reached the end of their useful life. The California Department of Transportation (Caltrans) estimates that only 10% of bridges in California are in good condition. This means that 90% of bridges in Stanislaus County are in need of repair or replacement. The project is designed to address this challenge by repairing and rehabilitating bridges in Stanislaus County.

**Local Bridge Repair and Rehabilitation Program (LBRP)**  
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## 2012 Projected Chipseal Roads

<b>ROAD</b>	<b>FROM</b>	<b>TO</b>	<b>LENGTH (MILES)</b>
<b>EAST OF KEYES</b>			
MOUNTAIN VIEW RD	TAYLOR RD	SERVICE RD	3.0
WALNUT RD	TAYLOR RD	SERVICE RD	3.0
TULLY RD	KEYES RD	SERVICE RD	2.0
GRIFFEN RD	TAYLOR RD	SERVICE RD	3.0
PIONEER RD	KEYES RD	SERVICE RD	2.0
WASHINGTON RD	NUNES RD	SERVICE RD	2.0
REDWOOD RD	FAITH HOME RD	TEGNER RD	1.0
TEGNER RD	GRAYSON RD	SERVICE RD	1.0
GRAYSON RD	PIONEER RD	GEER RD	2.5
GRIFFEN RD	KEYES RD	GRATTON RD	1.0
		<b>SUB-TOTAL</b>	<b>20.6</b>
<b>SALIDA AREA</b>			
HAMMETT CT	HAMMETT RD	END OF THE ROAD	0.3
PIRRONE RD	HAMMETT RD	GATEWAY DR	0.4
HAMMETT RD	HAMMETT CT	BECKWITH RD	2.8
CICCARELLI RD	HAMMETT RD	TOOMES RD	0.4
KIERNAN AVE	TOOMES RD	HAMMETT RD	0.5
COVERT RD	JACKSON RD	TOOMES RD	2.0
BACON RD	TOOMES RD	GATES RD	3.5
GATES RD	BACON RD	HWY 132	3.9
JACKSON RD	BECKWITH RD	KIERNAN AVE	2.0
HALL RD	KIERNAN AVE	END OF THE ROAD	0.7
WILLIAMS RD	KIERNAN AVE	BACON RD	1.0
YRIBARREN RD	BACON RD	END OF THE ROAD	0.4
KIERNAN AVE	HAMMETT RD	WILLIAMS RD	0.5
KIERNAN AVE	WILLIAMS RD	JACKSON RD	1.0
ROSEMORE AVE	BLUE GUM AVE	HWY 132	0.8
		<b>SUB-TOTAL</b>	<b>20.2</b>
<b>SOUTH CERES AREA</b>			
HEMLOCK AVE	LAUREL AVE	INDUSTRIAL WY	0.1
SPRUCE AVE	LAUREL AVE	INDUSTRIAL WY	0.1
LARCH AVE	LAUREL AVE	INDUSTRIAL WY	0.1
TAMARACK AVE	LAUREL AVE	INDUSTRIAL WY	0.1
COLLINS RD	LAUREL AVE	INDUSTRIAL WY	0.1
MOFFET RD	DON PEDRO RD	SERVICE RD	0.2
DON PEDRO RD	COLLINS RD	MOFFET RD	0.1
		<b>SUB-TOTAL</b>	<b>0.7</b>
		<b>GRAND TOTAL</b>	<b>41.4</b>