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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

SPRING 2013

Temporary bridges mean permanent savings

By Bob Kudelka

CDOT's investment in temporary bridges is quickly paying off in a state with hundreds of bridges aged well beyond their intended lifespans.

Foreseeing the need years ago, the agency began looking into the idea to use temporary bridges, as has been done in the Army, as a way to help communities avoid detours for long periods of time as deteriorating bridges are replaced.

SCDOT used federal funds to buy two temporary bridges and state funds to buy a third, each costing about \$370,000. The high-strength galvanized steel bridges can be assembled at a site, then disassembled and



SCDOT bridge crews remove the temporary bridge from Bell Vue Drive near Society Hill on April 9, 2013. It was installed in December 2011, but contractors are now ready to build a permanent replacement.

moved to another location for reassembly.

This spring, SCDOT forces in Districts 4 and 5 disassembled a temporary bridge in Society Hill and moved it to Cherokee County. The bridge had been installed in December 2011 after the original bridge, built in the late 1950s was shut down. The temporary bridge was kept in place until the contractor was ready to start on a permanent replacement.

By having the temporary bridge, motorists avoided what would have been a 12-mile detour that would have lasted near-

See TEMPORARY page 7

SCDOT State-Owned Bridge Facts 8,387 - Total Bridges 1,628 - Total Substandard (852 - Structurally Deficient totaling 5.271 million square feet of bridge deck) (776 - Functionally Obsolete)

424 - Load Restricted

8 - Closed (with 1 under repair) 7 - Under Construction (6

(6-1-2013)



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U.S. 176 Broad River bridge replacement project



By Kati Price

he U.S. 176 bridge over the Broad River replacement project is underway in Columbia. The structure was scheduled for replacement to correct existing and potential structural deficiencies of the bridge structure. Some of the piers were experiencing cracking, movement/shifting, and scour (erosion around the bridge piers). The new structure will meet current safety standards and avoids the possibility of restricting the weight of vehicles that would have occurred if the old structure was left in place.

The old bridge was actually two structures. The first structure, a structural arch, was constructed in the 1930s. The structure was later widened using structural steel beams in the 1970s. The bridge spans over the Columbia Canal, a registered historic landmark, and the Broad River. Because it spans a historic landmark, SCDOT coordinated with SHPO (State Historic Preservation Office) throughout the project's development to ensure that the new structure was true to the feel of the old structure.

The new bridge will be concrete beams, with a facade arch on the outside of the spans, to create the feel of a structural arch. Lighting fixtures, although not on the original structures, were agreed upon by multiple agencies to enhance the look of the bridge. The railing was also carefully selected for vehicle and pedestrian safety, as well as the aesthetics of the structure.

The bridge is being constructed in two stages. Stage I is almost complete and traffic has been shifted onto that portion of the new structure. Currently, demolition of the 1930s structure is underway so the second stage of the bridge can be constructed. Foundation work for the second stage has

CODY CROUCH/THE CONNECTOR Lane Construction employees work on removing the last sections of the old Broad River Bridge in Columbia.

begun. Construction is expected to be completed in the fall of 2014.



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Editor: Stan Shealy

Photography / Layout Editor: Rob Thompson

Editorial Board: Pete Poore, Bob Kudelka, Bonnie Cramer, Tasha Crumpton, Peter Tarpley, Zoe Cook and Cody Crouch.

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PHOTOGRAPHS BY CODY CROUCH/THE CONNEC Bus and van operators from across the state competed in the annual TASC Roadeo on March 2 in Myrtle Beach. The operators maneuvered their vehicles through cones and barrels while concentrating on safety.

Transportation Association of South Carolina

Mass Transit providers meet for roadeo, awards, training



A barrel goes flying after being bumped by a 40-foot bus going through the tight space during the competition.

By Jim Frierson, Mass Transit

he Transportation Association of South Carolina's (TASC) 32nd Annual Training Event and Products Showcase got underway March 2 with the annual Mass Transit Roadeo.

A banquet and awards ceremony was held later that evening to officially recognize drivers and mechanics who placed first, sec-

ond or third in the roadeo competitions.

Also, RTAP-sponsored training sessions for drivers and mechanics were held on Saturday and Sunday.

An awards luncheon was held March 3 to recognize outstanding individuals and agencies which "have excelled in service and dedication to their organizations and communities throughout the past year."



ROB THOMPSON/THE CONNECTOR From left: Ginger Stevens, Michael Burgess, Lynn Stockman, Elijah Dinkins and Mary Mack show off awards given to their mass transit companies.

New signals aimed at improving safety

By Bob Kudelka

he SUV sat idling at the red light – the first new type of signal head installed by SCDOT in several years. When the light changed, it went from red, not to green, but to a flashing yellow arrow. A sign next to the signal head informed motorists that the flashing yellow means yield to oncoming traffic.

With the flashing yellow arrow directly

overhead, the SUV crept into the intersection then turned left when clear.

"Beautiful!" said Carol Jones, SCDOT's Traffic Signal and Systems Engineer, when hearing of the successful left turn. "That's exactly what we wanted."

On May 1, SCDOT installed the newstyle traffic signal head, commonly called a



PHOTOGRAPHS BY ROB THOMPSON/THE CONNECTOR

A motorist waits for oncoming traffic to clear before turning left at the intersection of Parklane and Farrow roads in Columbia. New flashing yellow arrow signals are being installed in South Carolina intersections.



"Flashing Yellow Arrow" (FYA), at the intersection of Farrow Road (SC 555) and Parklane Road/Carolina Research Park in Richland County.

Already common in other places such as Charlotte, these new signal

heads will be encountered by more and more motorists in South Carolina in coming months, Jones said.

The FYA left turn signal heads are designed to improve driver understanding of left-turn traffic signal displays. Jones said the goal is to improve efficiency and reduce crashes at signalized intersections.

The FYA left turn traffic signal head is designed to make it easier for drivers to perceive when to make a left turn maneuver. The traffic signal head adds a flashing yellow arrow display, which will mean left turns are permitted but drivers must use caution and yield to oncoming traffic and pedestrians by turning when clear. The flashing yellow is followed in sequence by a solid yellow arrow, which means the light is about to turn red.

"It will be a very visible indication in your lane that will give you a cue on what to do," Jones said. "So many times, as you're getting further out in the intersec-



tion waiting to turn, you have to look far to the right to see what the signal light is doing. Having this type of signal head in your left turn lane will give you better visibility on what to do and at what point. It's all about visibility, and that translates into improved safety."

Before the launch of the new signal, SCDOT's Office of Communications spread the word through traditional news releases, email and Twitter, said Director of Communications **Pete Poore**.

"It's not every day we introduce a new type of traffic signal to the

motoring public," Poore said. "We wanted to ensure that word got out and motorists were informed."

It seemed motorists were having no trouble adjusting to the new signal. Jones has visited the Richland intersection a few times to see how traffic was flowing.

"The vehicles that I saw would see it flashing and they would hesitate and then slowly, they would ease their way out and make their turn," she said. "From everything I've seen, people are cautious but they know what to do."

The new signal head will replace the "5-section cluster" (or "doghouse") style left-turn signal head at certain locations.

The new FYA signal head will also be installed in some locations where there currently is no arrow signal for left turns. In this case, the FYA will flash yellow when opposing traffic has the green light.

Approximately 10 to 15 new FYA signal heads are to be installed in the next year. Locations have not yet been finalized.

Cagney scholarship deadline Aug. 9

By Tina Kennedy ● Student n

The Jim Cagney Memorial Golf Tournament has implemented a one-time scholarship for a South Carolina Department of Transportation (SCDOT) employee or the dependent of a current or retired employee of SCDOT. A minimum of \$2,500 will be awarded to at least one individual attending or enrolled in an accredited college in an engineering, science, math or medical program. The winner(s) will be announced in November 2013, and the scholarship will be given to the college/university in the name of the recipient.

ELIGIBILITY

• Student must have a minimum cumulative GPA of 2.5 (certified transcript required).

• Student must be a current (full-time) SCDOT employee or the son, daughter, or ward of a current (full-time) or retired employee of SCDOT.

• A student who is an SCDOT employee must be enrolled in or attending an accredited college as a full-time or part-time student in an engineering, science, math or medical program.

• A student who is the dependent of a current (full-time) or retired SCDOT employee must be enrolled in or attending an accredited college as a full-time student in an engineering, science, math or medical program.

Applications are available on SCDOT's intranet page, or by calling **Tina Kenne-dy**, SCDOT Office of Support Services, at 803-737-5022. Applications must be received by August 9, 2013, to be eligible.

SCDOT holds regulatory hearings across South Carolina

By Bob Kudelka

CDOT held a series of public hearings this spring to find out what statutes or regulations may be unduly burdening businesses or industry.

Governor Nikki Haley established a Regulatory Review Task Force to evaluate the state's current regulatory burdens on businesses and to propose recommendations to relieve those burdens. As part of this review, the Task Force will evaluate reports submitted by agencies that identify current and proposed state statutes, rules, regulations, and policies that are a burden on South Carolina's economy.

In late March and early April, SCDOT held hearings in Rock Hill, Columbia, Greenville, Florence and North Charleston.

"SCDOT fully supports the initiative undertaking this review," said SCDOT Director of Communications **Pete Poore**, who oversaw the hearings. "The agency cannot operate in a vacuum. That is why we believe it's important for us to conduct these public hearings. We're encouraging public comment."

The public was encouraged not only to comment orally but they were invited to fill out comment cards or send an email to an agency address created specifically for the initiative.

Secretary of Transportation **Robert St. Onge** opened the hearing in Columbia by letting the audience members know their comments would be taken seriously.

"If we can streamline the processes and minimize the bureaucracy, we'll be happy to," St. Onge said. "It would make our jobs easier and the citizens served better."

A small crowd in the fifth-floor auditorium included members of the cycling community who had concerns about better maintained bicycle lanes and rumble strips. Rumble strips are designed to avoid run off the road crashes but can be troublesome for cyclists.

Another speaker wanted the agency to be more flexible on regulations that prohibit tree planting close to roadsides; another praised the agency's efforts to make Assembly Street more pedestrian friendly and asked that more health-conscious projects be targeted in the future.

At the Columbia hearing, St. Onge not only listened but entertained questions and explained the agency's efforts to reduce highway fatalities, use resources efficiently and respond sensitively to concerns of pedestrians and cyclists.

Ron Patton, Chief Engineer for Planning, Location and Design, also spoke with the public after the hearing to give guidance and answer additional questions.

Poore said overall the hearings went smoothly and that all comments were recorded and forwarded to the Task Force.

In all, more than 50 people

attended the hearings and 19 provided oral comments, said **Tina Kennedy**, SCDOT Agency Events Coordinator. There were

also 18 emails and three written comment cards submitted.



Detailed records were kept of the meetings and comment cards were passed out for SCDOT to respond to the public's questions.



SCDOT Chief Engineer for Planning, Location and Design Ron Patton explains SCDOT policies on bicycle lanes, rumble strips and other topics to a group of citizens at the March 29 public hearing in Columbia. Similar meetings were held in Rock Hill, Greenville, Florence and Charleston.

Jamie Fowler overcomes polio to become bodybuilder

By Lauren Talarico WLTX News

here was a less than one in 2.4 million chance that something could go wrong; however, a common childhood vaccination left a Midlands boy partially paralyzed. Now as an adult, this man has turned a tragedy into a triumph.

Several days a week you can find SCDOT's Jamie Fowler working out at Anytime Fitness in Blythewood. He can bench up to 345 pounds, stacks out the shoulder press machine, and can curl 80 pound dumbbells per arm. Needless to say, this bodybuilder's strength is impressive.

But it's the strength that you can't physically see in Fowler that is more remarkable.

"I was born healthy, normal, fine," said Fowler. "I was getting ready for my vaccinations for school; my parents had taken me to the health department."

It's there where Fowler went from being a "normal" boy to becoming a rare statistic. When Fowler was 2-years-old he contracted paralytic polio from the oral polio vaccine.

Once the polio virus passed through his body, Fowler was left with a paralyzed right leg, unable to grow with the rest of his body. "I grew up with a walker learning how to walk. And then the older I got I had to wear the brace on my leg and then I had to wear the built up shoe."

The oral vaccine that gave Fowler Paralytic Polio is no longer distributed in the United States, but paralysis was a known side effect.

Dr. Hance Oliver with Providence Family Medicine Lexington explains.

"It was always known that there was a chance of contracting paralytic polio from the oral poliovirus yet we still used it," said Oliver. "One of the reasons we used it was because the benefits outweighed the small risk factor."

So small, in fact, that only one out of every 2.4 million people developed this form of polio. Of course, that number isn't small to Fowler.

"When I was about 13-years-



PHOTOGRAPHS BY ROB THOMPSON/THE CONNECTOR Jamie Fowler has been lifting weights on and off since high school, but got serious 3 years ago and has competed in state and national events for 2 years.

old my back and my hip had deteriorated so bad that I had been put in a wheelchair," Fowler remembers. "That was probably my lowest point. I remember in school, my mom had to take me to school and the van door opening and the wheelchair gate out and here I was, a kid in school, at the right age where you want to like girls and try to be impressive and this and that, and here I was... the kid in the class or the kid in school rolling around in a wheelchair."

Fowler spent two and a half years in a Shriners Hospital where he had a bone breaking surgery, filling bone that he lacked with stainless steel and learning how to walk again.

As a child, he was made fun of, something Fowler still remembers today. "You have people, who don't have the proper upbringing, or they don't have God in their heart and there are just downright mean people out there."

However, a bit of perspective helped him grow stronger physically and mentally.

"I just thought I had it bad, but when you're in that hospital you'll see some things that will change your life forever."

Fowler's life did change.

Although he walks with a predominate limp and qualifies for a disabled parking pass, Fowler does not accept the term 'handicapped' and refuses any special treatment. "I do not think of myself as handicapped. I do not look at myself as handicapped!"

Even with Fowler's fighting spirit and positive attitude, he did still suffer from side effects from his condition. Something he thought that weight training and cardiovascular exercise could help. So, he started working out with his friend and body builder, Gabe Miles.

"He started coming in the evenings," said Miles, "and I didn't know how it was going to be... what he was going to be able to do, what he wasn't going to be able to do. But he came and he never missed a beat!"

Miles was so impressed that he convinced Fowler to compete in the South Carolina National Physique Committee competition where he finished in the top ten, then the North Carolina NPC where he came in 2nd.

"First time I walked on stage with all those bright lights it was such an adrenaline rush!" Fowler remembers. "So from there on I've been hooked ever since."





Fowler is the SCDOT Utility Coordinator and Local Public Agency Manager for District 4.

When he was younger Fowler's motivation was often based on fitting in. Now, his motivation is based on his family and motivating others.

"I have a wife and a beautiful little girl of my own, I look at the things that I do and I want my daughter to be proud of her father." "I have so many people that will come over and they'll just want to talk to you and say, 'hey can I get a picture with you?' I say 'thank you' and they'll tell me about a situation with their children. Maybe that's what my purpose is... to motivate people. If I can do it, you can do it. That's for sure!"

Call Jamie Fowler a "meat head" if you want to, just make sure the words "motivated" and "inspiring" closely follow. JamieLifting "To this day doctors tell me I should be walking with a cane but ehh, it's alright. I'll just walk with a limp, no problem."

"It's been a struggle but I feel like it's built character and made me who I am today."

The oral polio vaccine that infected Fowler has not been used in the United States since 2000 when a safer form was approved.

Today polio has been eliminated from the US and the entire Western Hemisphere although it is still a threat in some countries.

Editor's note: Fowler competed in a state competition May 4 and came in third overall and second in his age division. Great job, Jamie Fowler!

See the WLTX news story at: http://www.youtube.com/watch?v=IC7a1OG7T7A

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ly a year and a half.

"If you look at it in terms of user costs, if we had kept the bridge closed the detour would have been an added cost to the public," said **Lee Floyd**, State Bridge Maintenance Engineer. "It turned out to be a tremendous benefit to the public."

Figuring fuel costs of cars and trucks, Floyd said it did not take very long for the bridge on Bell Vue Drive to "pay for itself" by avoiding a detour. Local traffic primarily uses the bridge between Chesterfield County and Darlington County.

"It's working great," Floyd said of the temporary bridge project. "That's what it's intended to be: It's intended to be taken down and re-used many, many times over."

A second temporary bridge is in place southeast of Chesterfield on secondary 20, where the Teal's Mill Bridge had been closed because of its deteriorating timber and steel. Its piers were so old that engineers speculated they were from the horse and buggy travel days.

SCDOT's third temporary bridge is slated to be installed in North Myrtle Beach once a permitting process is completed, Floyd said.

This spring, workers in Districts 4 and 5 were busy tackling the unusual job of disassembling the temporary bridge at Society Hill. Employees are used to building bridges, but taking them down is something new.

"It's Tinker Toys - only a lot bigger and a lot more difficult," said **Timmy Strickland**, of the District 5 Bridge Crew.

On the second day of the job, Strickland and his co-workers had just spent close to three hours working to get the first span freed from the temporary bridge. The first one was tough because it was built so tightly that they had to dig into the road to wedge it free.

Workers tethered a section of the 10,000-pound beam to a crane that placed it upon an awaiting flatbed trailer ready to take it to Cherokee County. The job looked somewhat dangerous, with employees relaying hand signals to



Bridge crews load pieces of the temporary bridge in Society Hill to transport it to the new location in Gaffney on April 9.

the crane operator as they held onto the span and guided it slowly to the truck bed.

"Everybody has to work together, like the fingers on a hand," Strickland said. "If you don't we're going to get in trouble. In a blink of an eye, a lot can go on. But the rigging is checked, and we stress safety. That's the main thing - everybody wants to go home."

Strickland said the job of taking down the bridge was easier than he expected. Once the first beam came free, it was just a matter of removing the other 11.

Another challenge was keeping track of each part, and making sure no bolts accidentally dropped into the stream below. The high-strength galvanized bolts must be special ordered and cannot be found at the local hardware store.

"We have a magnet just in case, but you do not want to get the magnet and play in the water to pick the bolts out of it," Strickland said.

Edmond Garner, of the District 5 Bridge Crew, said: "It was a new experience putting it in and it's a new experience taking it out. It's a whole lot easier taking it out, though. Everybody's chipping in, working together. Working together works!"

The first time he saw the temporary bridge pieces brought to Society Hill in 2011, Garner was a little skeptical. But Garner got to know this bridge better than most. After he helped assemble it, Garner inspected it regularly during its time in operation.

"It's stronger than I thought it would be," Garner said. "This project has been exciting."

The District 5 employees who disassembled the temporary bridge in Society Hill were supervised by **Jason Thompson** and included (Crew 575.20) **Le**- roy McElveen, Jr., Timmy L. Strickland, John H. Johnson, Henry McGill, Brian K. Houston, Henry L. Williams and Roger D. Barr. (Crew 575.30) Edmond Garner, Alexander Bethea, Sr., Michael Armfield, Donnie McDowell, Colon Dudley, Jr., John L. Quick Jr., and Lynn Jackson. DEA of District 5 is Dennis Townsend.

Overseeing the project for District 4 was **Perry Crocker**. The 1217 Bridge crew based in Chester County was involved in the removal of the structure and the reassembly in Cherokee County. They are **William I. McBrayer**, **William D. Stuart, Richard H. Hunter, Amanda C. Molina** and **Daniel M. Dickerson**. The 1318 crew based in Chesterfield worked on structure removal and assisted in assembly and loading of materials to the Cherokee site. They are **Steven R. Gainey** and **Elliott D. Sellers**. District 4 DEA is **John McCarter**.

After hauling the temporary bridge from Society Hill, workers reassembled it on S-11-301 (Baker Road) approximately 4.2 miles southwest of the City of Gaffney in Cherokee County. During SCDOT's routine safety inspection of this structure on Nov. 15, 2012, additional deterioration to the concrete precast "T" beams was discovered that required the bridge to be closed.

The temporary bridge in Cherokee County has an added benefit because Floyd said maintenance forces have to replace another bridge nearby.

"If the bridge had remained closed it would have made the detour even worse," Floyd said. "Not only does it reestablish that connectivity; it provides a detour when Maintenance shuts down the other bridge for replacement."



ROB THOMPSON/THE CONNECTOR

Neil Peeler and Amanda Molina of the Chester Bridge Crew install steel decking on the relocated temporary bridge on Baker Road on April 30.



The reassembled temporary bridge on Baker Road was opened to traffic on May 23, 2013.

Maintenance Foremen article Part II "Anything that needs to be done"

By Bob Kudelka

aintenance foremen at SCDOT have been called the "backbone" of the agency.

They take on the tough jobs, must excel in leadership and machinery skills, be versatile and cannot be afraid of getting their hands dirty.

"Without a doubt, the level of responsibility is very high, making sure their employees wear protective gear, stay safe and go home at night," said **David Cook**, State Maintenance Engineer.

This article is the final installment of a two-part series begun last issue to focus on a sampling of foremen from each Engineering District at SCDOT.

Tina Walker

If you need help from the Sign Foreman, the Asphalt Foreman or the Inmate Foreman in Lee County, you just have to ask one person.

Tina Walker, a 17-year SC-DOT veteran, is foreman of crews that handle all three tasks.

That means Walker and her crews are charged with filling potholes along the county's 630 miles of roads; repairing and installing thousands of signs; and supervising an inmate crew that picks up litter and cuts weeds.

"She's versatile and handles all three (tasks) very well," said Lee County Resident Maintenance Engineer **Wayne Keeys**. "She is very conscientious about her job and doing it correctly. We're lucky to have her."

Her crew includes **Sean Mor**row (sign and asphalt crews), **James Scarborough** and **Bobby Pearson** (asphalt crew) and **Charles Scarborough** (inmate crew). In the past, the crews have been larger, but like many other county offices, Lee Maintenance has dealt with cutbacks in manpower.

Walker began with SCDOT as a supply clerk and rose through the ranks to her current position six years ago.



Lee County Maintenance Foreman Tina Walker straightens and tightens a sign on U.S. 15 in Lee County. Walker supervises the sign and asphalt crew at Lee Maintenance.

It's a job that rarely finds her indoors, even on rainy days when she cleans storm drains and checks for water accumulating on roads.

The asphalt part of her job involves filling potholes, paving shoulders or minor leveling jobs, she said. Normally, until recently she only had one crewman. Still, she takes an active role in the work.

"I get out and help shovel it, rake it, whatever needs to be done," Walker said. "On a good day you can shovel two to three tons of asphalt. It's a steady job - you will always have something to patch."

Other days, Walker and her crew spend repairing signs or making sure they're not blocked by bushes or trees. "In a good day, we can do 30 to 40 signs in an eight-hour day," she said.

Walker also supervises an employee who uses two to five inmates from Wateree Correctional Institution to pick up litter, weed or help with patching.

"They mind their manners and do what they're asked to do," Walker said of the inmate workers. Despite the varied tasks and working shorthanded, Walker said enjoys her job and her crews.

"We rely on each other a lot," Walker said. "As long as we're all working together, we pretty much roll with the flow."

Her supervisory philosophy includes getting the job done without trying to stress out her employees.

"I like to laugh and joke around with my fellas," she said. "We're constantly picking on each other, and that keeps everything light. It seems to run a lot smoother.

"I have a great crew; a great group. Probably one of the best things about it is at the end of day, we're kind of family."



Charles "Junior" Porter

Charles "Junior" Porter joined SCDOT when he was just 18, starting out as a flagger on a work crew.

These days, Porter is foreman of the full depth patching crew in Pickens County, where he supervises a seven-member crew that spends its time patching deteriorated sections of roads –as large as 300 feet long.

Sometimes, you'll see Porter holding a flag just like he did 22 years ago.

"When my guys go to lunch, I'll go and flag because we can't just stop the operation and go eat lunch when we have a hole in the road," Porter said.

His attitude is to do "anything that needs to be done," and that can mean running the milling

machine, operating the paver or backhoe, and flagging. It's a philosophy that runs through the ranks in Pickens County Maintenance.

RME **Steven Henderson** is "just like us, too, and if we're out there and it's a shorthanded situation or emergency, he'll grab a shovel just like we do," Porter said.

Henderson said of Porter, "He's a very valuable employee and a hard worker. He'll do anything at hand that needs to be done. We have 742 miles to maintain in Pickens County, and it's probably like everywhere in the state in that our road conditions have really deteriorated."

Porter attributed his strong work ethic to his parents.

"I was raised to work," he said. "Daddy always did; momma always did."

Porter first worked in a textile mill but got laid off, so he joined SCDOT.

He praises the work of his tight-knit crew, which in turn gave him emotional support when his mother passed away recently. Crew members include Carlos Sams, Pat Bradley, Don Hendrix, Doug Wise, Stan Meece, and Ed Grant.

"In Pickens County, we've got the finest group of people there is," he said. "I can't speak for any other county. Here, good management starts with the RME and goes down the line...we try to hire good people and 99 percent of the time, that happens."

The full-depth patching crew tackles roads that are too far gone for just pothole patching. They use a motorgrader to dig holes in the road and then add new asphalt.

"Every day the weather permits, I'm digging a hole somewhere and fixing it," Porter said. When it rains, he and the RME plan which roads to tackle next.

"We just have to stay on top of it," Porter said. "It's like everywhere else; we have to keep working and working, patching where you can patch or digging them out."

Continued on next page



Charles Porter Jr., standing on the lowboy, supervises the Pickens Maintenance resurfacing crew. The crew is, from left, Pat Bradley, Doug Wise, Don Hendrix, Stan Meece, Carlos Sams and Ed Grant.



Gary Ramsey

The next time you see an SC-DOT backhoe or dump truck in action, think for a minute about the employees who made sure it's running smoothly.

The mechanics back at the maintenance shop stay busy making sure the agency's equipment, from heavy machinery to chain saws, is kept in working order.

"Their job is just as important as the guys out on the road, cleaning the ditches, repairing the bridges," said **Steve Ellis**, Resident Maintenance Engineer in Cherokee County. "If their equipment is not repaired properly, they can't get their jobs done – and it can jeopardize their safety as well."

In Cherokee County, that responsibility falls on Maintenance Shop Foreman **Gary Ramsey**, a 23-year veteran of the agency.

Ramsey said his crew of mechanics stays busy maintaining machinery and a fleet of 53 vehicles. The county's backhoes are more than 15 years old; tractors are 12 to 14 years old; motorgraders at least 10 and the newest dump truck is a 2006 model.

"We do preventive maintenance, every 200 hours," Ramsey said. "We keep them up pretty good so there are no major breakdowns. Most of the problems are small."

As for repairs, Ramsey said his crew has to prioritize.

"If they've got a big job going and need the equipment, that's what comes first," Ramsey said. "I hate to have roads close down so we have to keep the equipment running to keep them open."

Ramsey's crew of mechanics includes Jay Davis, Lester Parris and Scott Bratton; and parts clerk Leslie Brown.

"This is a good and experienced group," Ramsey said. "They like to keep things organized and clean. "We're proud of the shop," Ramsey said. "We've got probably one of the cleanest shops in the state. We keep the floor clean and everything organized. That keeps the mechanics happy, and everybody works better in a clean environment."

Ramsey, 70, joined SCDOT after working as a service manager at a car dealership.

SCDOT has become like family, he said.

"I love my job," Ramsey said. "We can see what we've accomplished. We see a piece of equipment broken down and get it working and back on the job."

Herbert Brown

When **Herbert Brown**'s crew is on the job in Colleton County, they have to be on the lookout for much more than motorists in their work zone.

Their heavy machinery has names such as "Tiger Cat," with blades as large as 4 feet in diameter, which cut tree limbs and shoot debris a few hundred feet away.

"They aren't as dangerous as the old mowers," said Brown, who began with SCDOT 25 years ago. "The main thing is you still have to focus on what you're doing, while flaggers need to keep an eye on traffic."



Gary Ramsey, second from left, is the shop foreman at Cherokee Maintenance. Shown with him, from left, is: Scott Bratton, Leslie Brown and Lester Parris. Not pictured: Jay Davis.



Colleton Vegetation Crew Foreman Herbert Brown checks the air filter on a tractor as part of an equipment inspection at the Colleton Maintenance Shop.

Brown is foreman of the vegetation crew in Colleton County. The eight-person crew trims tree branches that have grown in the right-of-way, interfering with the

Continued on next page

road and line of sight for motorists.

"Mr. Brown sets the standard for foremen in Colleton County," said **Adam Bishop**, the county's Resident Maintenance Engineer. "He possesses an ideal blend of qualities that help him to be a great foreman: excellent leadership ability, great communication skills, strong work ethic, patience and the willingness to be a wonderful mentor."

"He's just solid," Bishop said. "With his crew, he really takes care of those guys. They're welltrained and he's taken them under his wing to develop them. He's got a lot of good leaders on the crew now."

Brown's crew is the first to tell

you he keeps them busy, but he is always there with support.

"He's a very good foreman," said crew member **Matthew Goodwin**. "Anything he can do out in the field to keep us rolling, he does. He's a guy who gives you great instruction, and then he wants you to make progress. It's been a learning experience for me, dealing with the bigger tractors."

Brown said respect is important in leading a crew.

"You have to have respect for your guys," he said. "If you want them to do something, ask them in a nice way. They do good work; they're dependable."

Brown said he enjoys his role at the agency. Even though his

main job is vegetation, his crew will fill potholes or whatever else is needed to maintain the county's 1,100 miles of state roads.

"I love being outdoors," he said. "And you learn a lot. When I first came here, I couldn't use a backhoe or a motorgrader."

> The Colleton Vegetation Crew is, from left: Henry North, Louis Jenkins, Foreman Herbert Brown, Jonathon Brown and Ronneal Haynes. Not shown: LaShonda Singleton, Matthew Goodwin and Coleman Sams.



Maintenance Foremen Districts 1, 3, 4 and 6

DISTRICT 1

Henry Long Charles Davenport James Catoe Emmie Truesdale Lewis Bass Dee Michaelsen Herbert Brisbon Jr. Jonathan Thompson Jr. Christopher Team Frank Thomas Larry Johnson Tina Walker Jimmy Miles Joseph Tidwell Willie Caldwell Johnny Moses Duane Wood James Rollison Teresa Tucker David Weed Michael Hardeman Clifford Haltiwanger John Amaker David Gunter Marshall Jackson Barbara Jeffcoat Troy Sloan Jr. Willie Pontoon Robert Lorick Christopher Burgess Daniel Burgess Joel Watts Theresa Belton **Timothy Stone** Henry Cunningham Marion Hood

Ernestin Golston-Anderson James Hubbard Daniel Speaks Jr. Andrew Rowe Jr. Jerry Hubbard Kenneth Lee Westover Brown Jr. Bobby Randall Sr. Samuel Spann Christopher Phillips Christopher Geter Hayward Wilson Alphonso Chestnut **Ronnie Benenhaley** James Wells Charles Wells Nathaniel Peterson Eddie Isaac **Richard Boatwright** Raymond Rast Jr. James Strickland

DISTRICT 3

Howard Harden Jamie Gambrell Roger McCall Daniel Floyd Robert Redding Clift Gary Betty Ward Lawrence Armstrong Joey Holmes Michael Thompson Sammy Kiser Jr. Joseph Cannon Robert Massie Jack Miracle **Dallas Mullinax** Green Franklin **Timothy Honea Donald Baker** Ronald Lee **Russell Moore** James Harvey Dean Thrift **Timothy McAlister** Lonnie Cobb **Cindy Ballenger** Larry Hendrix **Ronald Burgess** Charles Simmons Robert Galbreath Sean Kyle **Rickey** James Ronald Duncan Charles Porter Jr. Charles Reynolds Jr. Brian Rhymer Howard Garland Danny West Thomas Johnson **Richard McClennen** James Burnett Luther Lawter **Billy Brown** Alvis Lawson **Ricky Horne** David Dodd Lawrence Calvert David Black

DISTRICT 4

Ricky Horne Gary Ramsey Charles Wilson Timothy Mullinax Timothy Smith

Todd Jackson Bobby Lawter Charles Chapman Dennis Moore Harry Clayton Jr. Edward Ferrell Jeffery Stroud Mack Young Jonathan Lucas William Bell **Richard Teigue** William McBrayer William Stuart Sam Collins Jr. **Michael Mills** Billy Williams Sr. James Hodge Randy Jordan Frankie Ammons Jerry Shaw Robert Hancock Jr. Matthew Lisenby James Lewis Steven Gainey Keith Ward James Huey **Billy Neely Roger Pearson** Tommy Sawyer Jr. Robert Davis Sr. James Cammon Dwiaht Turner James W. Powers James B. Powers Joel Powers Larry Hodge Edward Blackmon Bryan Baker Jason Childers Michael Turner **Ronald Garner**

Jason Arrowood Terry Greene Minnie Jones Claude Lawson Melvin Brown Mickey Deal William Elkins Antoine Davis James Austin Jr. David Kelley Lewis Brazell Richard Gore James Thomason Jeremy Shrewsberry William McAbee

DISTRICT 6

James Breland Reuben Alston **Curtis Ferguson** Leroy Morgan Sr. Jeffrey Riley David Mixson **Clarence Cummings Daniel Wells** Terry Falkowski Claude Sexton David Crocker Henry Bailey Jr. Joseph Reid Jr. Arnold Harvey **Richard Singletary** Alonzo Chatman Thomas Cox Joey Harris Richard Stroble Jr. William Claxton Jr. Dale Green William Schwartz Jerod Edwards Fred Rouse

Frank Heyward Stanley Perry Bryant Wilder Joseph Jones Charles Murdaugh Jr. Silas Craven Jr. Marion Shecut Matthew Sanford Sr. Ervin Long Herbert Brown Thomas Daniels Christopher McKinnon Sr. David Pollard Sr. Walter Smith David Douty Stephen Simpson Joseph Gokey **Ricky Kizer** James Bradley Allen Colson Jr. Isaac Green Donnie Orr David Daring III Yasma Bolden Reginald Strobhart Thomas Dodd James Wade Joseph Goethe Jonathan Antley Rex Ford John Galloway Herbert Harrison Joseph Maxwell Richard Hutson John Mitchum Samuel Moyd Timothy Pinckney Edward Aleem Kenneth Burgess James Howard

SCAPA recognizes top projects

Three SCDOT projects were recognized by the South Carolina Asphalt Pavement Association during their annual meeting Jan. 31 at the Columbia Metropolitan Convention Center.





123 Project - Clemson - Seneca District 3 and King Asphalt Inc. were recognized for the U.S. 123 Project between Clemson and Seneca. From left are: Zach Michaels, Chris Cook, Danny Michaels, Mike Crenshaw, Laura Kline, Doug Limbaugh, Rebecca Campbell, Greg Heyward and Dennis Garber.



I-26 Open Grade Friction Coarse - Dorchester County District 6 and Banks Construction were recognized for the I-26 Open Grade Friction Coarse used in Ďorchester County. From left are: Chris Hernandez, Brian Jones, Randy Funderburg, Reid Banks, Rick Crocker, Chris Key, Jason Ellis, Tim Henderson, Trenton Gruber, Linda Shaw and Behling Guess.



Rehabilitation of Highway 39 - Aiken District 7 and Satterfield Construction were recognized for the Rehabilitation of Highway 39 in Aiken. From left are: Richard Jackson, Bill Britt, Larry Paysinger, Jeffery Taylor, Allen Oxendine, Jeff Terry, Jim Porth, Gene Sartain and Scott Bledsoe.

SCDOT partners with Highway Patrol's In-Service Training

By Pete Poore

CDOT and the SC Department of Public Safety were reorganized into two separate agencies by the General Assembly in 1994. But throughout the years since, both agencies have continued to work together on safety issues where engineering and enforcement go hand-in-hand.

One example of that cooperation started in the summer of 2012 when Colonel Michael Oliver of the Highway Patrol decided that state troopers should be aware of all of the technology SCDOT has available for traffic management and reducing congestion.

Mike Bowman, a member of the SCDOT Traffic Management Center staff in Columbia, was assigned to make presentations at the Highway Patrol in-service training sessions around the state. Prior to joining the staff at SCDOT, Bowman spent 30 years in law enforcement. He retired from the Highway Patrol with the rank of Lieutenant in 2008.

Bowman began the first of 42 sessions in August of 2012. The last of the training sessions concluded in early June. He presented all of the Intelligent Traffic Systems (ITS) and SHEP components SCDOT could offer the troopers to help them do their jobs. Among the tools he discussed was the network of SCDOT traffic cameras. "These cameras can be used to manage traffic congestion. locate pedestrians and 'wrong-way drivers' on interstate highways, as well as monitor traffic flow during hurricane evacuations," Bowman told the troopers gathered at a session in Columbia in May.

Other items discussed were the permanently fixed and portable message boards used to warn drivers of incidents up ahead, AMBER alerts and other emergency messages. He explained how the Highway Advisory Radios (HAR) are used in tandem with the message boards because the HAR system can broadcast messages up to 45 seconds and provide more information than the message boards can display.

Rumble strips reduce road departure crashes

By Pete Poore

CDOT began a safety campaign in 2009 to reduce run-off-the-road crashes by paving shoulders and installing rumble strips where possible. The reason? At that time, the numbers were alarming.

54% of all highway

a vehicle running off the

080.

fatalities in South Carolina between 2004-2008 involved

In 2009, SCDOT had installed or had awarded projects to install rumble strips on four-lane divided highways and on primary and secondary roads. The goal was to install 600 miles of rumble strips on interstates and 1,000 miles on primary routes.

Fast forward to 2013; SCDOT has put rumble strips in place on over 4,000 miles on high prior-

ity roads where road departures frequently occur. The death toll for single vehicle road departure crashes still stands at 54% of all fatalities. However, since rumble strips have been installed beginning in 2009, the number of total run-off-the road crashes has decreased by 100 (460 to 359).

2,794 people

died in these crashes

SCDOT research indicates that one of the most cost effective traffic control devices to reduce road departure crashes is rumble strips. Rumble strips are either raised or grooved patterns in the pavement. SCDOT also uses raised thermoplastic pavement markings. Both are designed to vibrate the tires allowing the driver to regain attention to the road. In 2009, SCDOT estimated that a run-off-the-road crash occurred in the state every 30 minutes on average and one person died in those crashes every day.

> nerat-3211120)-Inta Custom Intern ALL TRANSFORMER the second second second は、「ないない」を見ていた。 27 AL 19234 1934 1971 1971 **以往他们在**这些问题的问题。 AT AN ON A STORE AND A P **这些对于**对他们的这些话。这是他们 South an end of the later. ANOT THE REAL OF Company and the second 利用的自己的行用。但是 and the second second

SPORTS SCDOT Softball Tournament

The 30th Annual SCDOT Softball Tournament was held April 27, 2013, in Pelion. Six teams competed in a double elimination tournament. Trophies were awarded to the first, second and third place teams. Stan Roof was awarded the Most Valuable Player trophy and the Spirit/Sportsmanship trophy went to the Anderson team.



PHOTOGRAPHS BY CODY CROUCH/THE CONNECTOF **Traffic and Planning - First Place** Front row, from left: Lyle Davis, Michael Dennis, David Cook, Josh Meetze, Kellan Monroe, Andy Wicker. Back row, from left: Brett McCuthan, "Rock" Kneece, Chris Lybarker, Darrin Player, Johnavon Legette, Shawn Salley, Stan Roof.



Lexington High Wrestling SCDOT Assistant Chief Engineer

SCDOT Assistant Chief Engineer Brian Keys, right, poses with his sons, Brice (left) and Brennan (center), after their Lexington High School Wrestling Team won the 4-A State wrestling title on Feb. 9, 2013.



DEAN HUMPHREY/GRAND JUNCTION (COLO.) SENTINEL



ROB THOMPSON/THE CONNECTO

SMC Champ

Collin Steagall, son of State Road Construction Engineer Todd Steagall is a member of the Spartanburg Methodist College (SMC) Baseball team. SMC participated in the 2013 Junior College World Series in Colorado. This photo shows Colin Steagall rounding the bases after hitting a home run against Neosho County (Kansas) Jr. College on May 28. SMC advanced to the Final Four. The National Championship was won by Central Alabama.



Patrol Supply - Second Place Front row, from left: Randy Heddy, Chris Grannis, Stacey Craig, John Furgess, Damon Tillman, Ty Galloway. Back row, from left: Calvin Johnson, Travis Glover, Wendell Walker, Ronnie Collins, William Jacobs.



Holy City Rollers - Charleston - Third Place Front row, from left: Mickey Queen, Al Hooper, Joe Winfield, Joel Smith, Eric Smith, Mark Johnson, Lance Langdale. Back row, from left: Ryan Ross, David Jeffcoat, Adam Bishop, Jackie Robinson, Kelcey Bradley, Jared Fralix, Robert Ruddy.

Here is a sampling of SCDOT employees who

On the run..

participate in foot races in Columbia. TOP LEFT: Mike Barbee, Stuart Timmons and Philp Sandel at the Columbia Marathon. TOP RIGHT: Jose Valdivieso, Shobhit Suvarna, Maceo

Morris and Charles Burton pose before the USMC Ultimate Challenge Mud Run. BOTTOM RIGHT: From left, Ikesha Jennings, Luke Gibson, and Charlene Smith after the USMC Ultimate Challenge Mud Run. BOTTOM LEFT: Jennifer Necker and Sherry Barton ran in the Color Run. NOT PICTURED: Dianne Janicki and Pete Poore who managed to run by the photographer!





PHOTOGRAPHS BY ROB THOMPSON/THE CONNECTOR

PROMOTIONS

Valerie Wooten, from associate geodetic technician to senior geodetic technician in the Office of Materials & Research.

William Gideon, from trades specialist II to trades specialist III, in Spartanburg Maintenance.

Ronald Riley, from trades specialist II to trades specialist III, in Beaufort Maintenance

Johnny Mundy, from trades specialist II to trades specialist III, in Lexington Maintenance.

Jeffery Setzer, from trades specialist II to trades specialist III, in McCormick Maintenance.

Joshua Williams, from trades specialist II to trades specialist III, in Calhoun Maintenance.

Steven Wright, from trades specialist II to trades specialist III, in Lancaster Mainenance.

Anton Haynes, from trades specialist II to trades specialist III, in District 4 Office.

Carlos Jackson, from trades specialist III to trades specialist IV in Richland Maintenance.

William Fulton, from trades specialist II to trades specialist III, District 5 Bridge Maintenance.

Michael Peeler, from trades specialist II to trades specialist III, in Greenwood Maintenance.

Michael Boatwright, from trades specialist III to trades specialist IV, Marion Maintenance.

Brett McCutchan, from engineer/associate engineer I to engineer/associate engineer II, District 1 office.

Timothy Stoddard, from associate geodetic technician to senior geodetic technician, Laurens Construction.

Robert Coker, from associate geodetic technician to senior geodetic technician, District 1 engineering.

Siobhan Gordon, from program assistant to program coordinator, Planning and Environmental.

Brett Branham, from trades specialist II to trades specialist III from trades specialist II to trades specialist III, in Fairfield Maintenance.

Adrienne Sanders, from administrative specialist II to right of way agent 1, Right of Way, Central District.

Anthony Matthews, from mechanic III to trades specialist V, Newberry Maintenance.

Michael Fowler, from mechanic III to rades specialist V, Pickens Maintenance.

John Carmichael, from mechanic III to trades specialist V, Dillon Maintenance.

Brooke Andrews, from administrative specialist I to human resources specialist, District 2.

Deborah Berry, from OSHA officer II

to OSHA officer III, Safety.

Charles Mount, from trades specialist II to trades specialist III, in Orangeburg Maintenance.

Chad Stephens, from trades specialist II to trades specialist III, in Union Maintenance.

William Branham, from senior geodetic technician to chief geodetic technician, Lexington Construction.

Christopher Kelly, from engineer/associate engineer II to engineer/associate engineer III, Construction.

Lawrence Calvert, from trades specialist V to trades manager, District 3 Maintenance.

Brandon Clark, from assistant geodetic technician to associate geodetic technician, Materials and Research.

Mitchell Carter, from engineer/associate engineer II to program manager 1, in Dillon Maintenance.

Jester Burton, from engineer/associate engineer I to engineer/associate engineer II, Preconstruction Support.

Kara Akins, from assistant geodetic technician to associate geodetic technician, Florence Surveys.

Jeremy Weeks, from assistant geodetic technician to associate geodetic technician, Lexington Surveys.

engineer 1 to engineer/associate engineer III, Dillon Construction.

to administrative coordinator, Safety.

Erica McDonald. from administrative specialist II to administrative assistant, Construction.

Donovan Vedad, from assistant geodetic technician to associate geodetic technician, Charleston Bridge Construction.

Lokesh Patel, from engineer/associate engineer I to engineer/associate engineer II, regional production group 1- Lowcountry.

Alla Liventseva, from engineer/associate engineer 1 to engineer/associate engineer II, District 3 office.

Elizabeth Huff, from accountant/fiscal analyst II to accountant/fiscal analyst III, regional production group 2, PeeDee.

Jeffrey Craver, from archaeologist II to program coordinator II, environmental administrator.

Brian Rister, from associate geodetic technician to information resource consultant I, pre-construction support.

Joy Powell, from administrative assistant to administrative coordinator I, office of Chief Internal Auditor.

James Zarpentine, from incident responder I to incident responder II, director of traffic engineering.

Justin Dodgen, from trades specialist III to trades specialist IV, in Greenwood Maintenance.

Frederick Mullins, from trades specialist II to trades specialist III, in Florence Maintenance.

Preston Cooper, from trades specialist II to trades specialist III, in Florence Maintenance.

Barney Patterson, from trades specialist II to assistant geodetic technician, Orangeburg Construction.

Charles Scarborough, from trades specialist II to trades specialist III, Lee Maintenance

Johnny Plair, from trades specialist II to trades specialist III, in Edgefield Maintenance

Robert Pfaff, from trades specialist III to trades specialist IV, in Richland Maintenance.

David Syphrett, from mechanic II to mechanic III, in Dorchester Maintenance.

Harry Hampton, from trades specialist II to trades specialist III, in Williamsburg Maintenance.

Amy Cook, from engineer/associate engineer I to engineer/associate engineer II, in Sumter Construction.

Herbert Fedder, from right of way agent III to program manager I, right of way, Greenville District.

Matthew Johnson, from trades specialist II to trades specialist III, in Pickens Maintenance.

Dominic Ford, from trades specialist Allen Ward, from engineer/associate II to trades specialist III, in Dillon Maintenance.

Robert Burdette, from trades specialist Sandra Wright, from program assistant IV to trades specialist V, in District 4 Traffic Signals.

> Michael Humphries, from engineer/ associate engineer II to engineer/associate engineer II, regional production group 4 -Upstate.

Jerome Burns, from trades specialist II to trades specialist III, in Fairfield Mainte-

TMC from page 11

Other tools included SHEP, where the responders can assist troopers with safer traffic control related to an incident. This allows faster clearance of the vehicles and gets traffic flow back to normal. Bowman told the troopers at the Columbia session that for every minute a lane is closed, five minutes are required to get traffic moving again.

The newest form of technology is the INRIX system, which is a GPS-based system. One of its functions is to detect traffic speeds. This is a valuable service in "dark areas" where no cameras are available on interstates that are monitored by the five SCDOT traffic management centers.

Now that Bowman has completed the 42 sessions for 1,000 state troopers, he is

nance

Henry Johnson, from trades specialist II to trades specialist III, in Williamsburg Maintenance.

Thomas Dorn, engineer/associate engineer II to engineer/associate engineer III. in Saluda Construction.

Michael Hudson, from mechanic III to trades specialist V, in Lexington Maintenance.

Franklin Bowick, from trades specialist III to trades specialist IV, in McCormick Maintenance.

Byron Williams, from trades specialist II to trades specialist III, in Richland Maintenance

James Holder, from trades specialist III to trades specialist IV, in York Maintenance.

Frederick McCalllum, from trades specialist II to trades specialist IV, in Spartanburg Maintenance.

Kemp Ahrens, from trades specialist II to trades specialist III, in Charleston Maintenance.

Brian Hafner, from assistant geodetic technician to associate geodetic technician , engineering district 1.

Henry Stephenson, from assistant geodetic technician to associate geodetic technician, in Sumter Construction.

Corv Alexander, from assistant geodetic technician to GIS analyst, Road Data Services.

Joseph Cosentino, from program assistant to program coordinator II, Supply and Equipment.

William Bailey, from mechanic III to trades specialist V, in District 1 bridge maintenance.

Charles Stachewicz, from mechanic I to mechanic II, in Colleton Maintenance.

George Griffin, from trades specialist It to trades specialist III, from Newberry Maintenance.

Michael Bowman explains the **INRIX system and SCDOT Traffic** Management Operations to troopers on May 13.

planning more sessions requested by local law enforcement agencies, fire departments and EMS units.



RETIREMENTS

William Hair, trades specialist II at Orangeburg Maintenance, retired April 1.

Ronald Bracey, trades specialist II at Dillon Maintenance, retired March 31.

Melba Moskal, trades specialist II at Berkeley Maintenance, retired March 15.

George Pearson, mechanic III at Fairfield Maintenance, retired April 15.

Randolph Chandler, trades specialist II at Aiken Maintenance, retired Feb. 15.

Walker Fletcher, trades specialist III in Director of Maintenance Office, retired March 12.

Gerrald Penn, trades specialist IV at Allendale Maintenance, retired April 30.

Perry Blakley, senior geodetic technician in Research and Materials, retired March 1.

Edward Weeks, engineer/ associate engineer II at Spartanburg Construction, retired March 31.

Calvin Bryan, associate geodetic technician at Jasper Construction, retired May 16.

Ervin Andrews, associate geodetic technician at Greenville Construction, retired March 15.

James Lee, security specialist II in Building Maintenance, retired April 4.

Morris Pearson, trades specialist V at District 4 Traffic Signals, retired April 10.

Donna Whitlock, administrative specialist II at Laurens Maintenance, retired May 3.

Michael Moskal, chief geodetic technician at Berkeley Maintenance, retired March 15. Julius Deese, trades specialist III at Chesterfield Maintenance, retired March 31.

Ronald Bass, trades specialist III at Lancaster Maintenance, retired March 28.

Rickey Stuckey, trades specialist III at Lee Maintenance, retired Feb. 1.

Bennie Fogle, trades specialist IV at Holly Hill Maintenance, retired Feb. 8.

Jefferson Ashby, trades specialist II at Holly Hill Maintenance, retired March 31.

Phillip Brewer, chief geodetic technician at Anderson Construction, retired March 8. Marion Carman, Program Coordinator II in the Deputy Secretary for Intermodal Freight office, retired March 28.

Angela Feaster, administrative manager II, Deputy Secretary for Finance and Administration, retired March 22.

Melissa Campbell, engineer/associate engineer IV, in Materials and Research, retired March 28.

Jean Prothro, program manager I in Right of Way-Central Division, retired March 15

Daniel Nesit, engineer/associate engineer IV in District 6 Office, retired May 9.

Larry Hartfield, associate geodetic technician, Florence Construction, April 1.

Haskell Sopshier, supply specialist III in Beaufort Maintenance, retired March 29.

James Hendricks, engineer/ associate engineer III in Pickens Construction, retired March 31.

Teresa Cody, engineer/associate engineer II in York Maintenance, retired April 1.

McArthur Woods, trades specialist II at Kershaw Maintenance, retired April 18.

Elsie Williams, building/ grounds specialist III, District 1 Office, retired March 15.

Samuel Finklea, engineer/ associate engineer II in Lexington Surveys, retired March 31.

Calvin Berry, trades specialist II in Saluda Maintenance, retired April 25.

French Bishop, communications technician in Radio Service, retired Feb. 28.

Dorothy Johnson, trades specialist IV in Williamsburg Maintenance, retired Feb. 14.

Gail Johnston, building/ grounds specialist II at Distric 4 office, retired Feb. 22.

Emily Lucas, trades specialist II in District 6 Bridge Inspection, retired Feb. 6.

Thomas Traverse, assistant geodetic technician at Dorchester Construction, retired Feb. 22.

Fredrick Griffin, trades specialist IV at Edgefield Maintenance, retired Feb. 1.

Arnold Houston, engineer/ associate engineer II at Horry 1 Maintenance, retired April 30.

John Walsh announces retirement

By Pete Poore Secretary's position.

Secretary of Transportation **Robert St. Onge** has announced that Deputy Secretary for Engineering **John V. Walsh** is retiring from SC-DOT on June 14 with over 24 years of service. Deputy Secretary Walsh was appointed to his current position on April 19, 2010 by former Secretary of Transportation H.B. "Buck" Limehouse Jr.

After earning a degree in Civil Engineering in 1988 from Clemson University, Walsh began his career at SCDOT as a bridge inspector in District 1.

In October of 1991, Walsh moved to SCDOT Headquarters as an Assistant Project Engineer in Preconstruction. He was later promoted to Project Engineer, Project Development Engineer and Deputy State Highway Engineer where he served for seven years before being appointed to the Deputy Included among his major accomplishments during his career at SCDOT is the restructuring of the Preconstruction Division completed in 2007 which streamlined the decisionmaking process and prioritization of resources handled by project teams including both Headquarters and District staff.

A second accomplishment was overcoming the challenge of creating an objective project priority process as mandated by Act 114, the SCDOT Reform Act of 2007. The major task was to establish the criteria consistent with sound engineering principles and the actual condition of each highway or bridge being considered for improvement.

Walsh also had a lead role in prioritizing projects that were funded by South Carolina's \$463 million share of the American Recovery & Reinvestment Act (ARRA) of 2009. Nearly half of the available



John V. Walsh Deputy Secretary for Engineering

funds had to be used on "shovel ready" projects that were ready for letting.

For more on John Walsh's retirement, see Secretary St. Onge's column "Viewpoints" on page 32.

DEATHS

W.R. "Bill" Culbreath, 76, former District 2 Maintenance Engineer, died Jan. 4, 2013.

Larry G. Jefferson, 59, of Sumter, a former SCDOT employee at Sumter Maintenance, died Dec. 4, 2012.

Owen J. Smith, 83, of Columbia, a former SCDOT Print Shop employee, died March 8, 2013.

James Smoake, trades specialist III at Calhoun Maintenance, died March 14, 2013.

Daniel Wade, trades specialist II at York Maintenance, died March 28, 2013.



Arnold Houston

Arnold E. Houston III, 52, of Conway, Assistant Reisdent Maintenance Engineer for Horry Maintenance, died May 6, 2013.



Howard Little

Howard Little, engineer/associate engineer II at Regional Production Group 3 – Midlands, died March 8, 2013.



Blanche Sproul

Blanche S. Sproul, 67, of Columbia, a former SCDOT Director of the Environmental section, died April 2, 2013.

SCDOT

Equipment Operators' Safety and Training Conference

By Tina Kennedy

he 2013 Equipment Operators' Safety and Training Conference was held on May 16 at the SCDOT Supply and Equipment facility located on Shop Road n Columbia

The conference, formerly known as the Equipment Operators' Roadeo, drew 66 contestants from across the state. The contestants competed n six equipment categories includng: Single Axle Dump Truck, **Fandem Axle Dump Truck, Trac**tor Truck with Lowboy Trailer, Motorgrader, Backhoe, and Tractor with Mower.

Competitors advanced to the state competition after winning similar district events. During the competition, employees were evaluated based on their ability to properly and successfully maneuver the equipment through a series of obstacle courses and equipment inspections. The competition provides skill advancement for employees whose jobs require the operation of heavy equipment: increases safety awareness levels of employees who work in work zone areas; increases employee morale and value to the Department; strengthens presence of team spirit and teamwork; and recognizes the best equipment operators within the Department in a friendly competitive atmosphere.

First and second place winners n each event will now advance to the regional competition, to be hosted in September by the Kentucky Fransportation Cabinet. The event is scheduled to be held at the Kentucky Horse Park located in Lexing-



PHOTOGRAPHS BY BOB THOMPSON/THE CONNECTOR District 6 equipment operators received the trophy for having the best overall scores.













Scott **Burgess** Lexinaton

Bryon Chambers York

Chuckley

Gurley

Florence

Bernard

Lucas

Florence

McCormick

THE CONNECTOR

to all the Equipment Operators

Justin

Coe

Greenville

Ethan

Hancock

Newberry

Chris

Maney

Anderson

Travis Dover Newberry







Beverly

Lowery

Lee

McCormick

Matt Lisenby York

Raymond

Schmuck

Anderson

David

Ramev

Oconee







Greenville

Schweinsburg

Jeff Trov Seigler Setzer



Terry Seymore Steen Anderson York



Gerome

Hayne

Cody **McAlister** Greenville



16



Ervin Green





CONGRATULATIONS

who participated in the training conference. See the list of event winners on page 18.

William Downes Orangeburg





Matthew Henderson Orangeburg



Kendall McCants

Darryl Stoudemire Calhoun



Wayne Anderson Aiken



Lawrence Armstrong Greenville



Jimmv Black Hampton



John Branham York



SPRING 2013

Corey Brown Charleston



Frederick Brown Florence

Melvin

York



17

Jeremy Brown

Bryson Marion

Ada Gardner Richland

Richard Gilliard Berkelev



Donald Hodges Hopkins Chesterfield Richland





Elliott

Fludd

Kenneth Horne Cherokee



Anthony

Fobbs

Charleston

Carlos Jackson Richland



Dominic

Ford

Dillon

Jerome Jones Dorchester



Melvin

Gale

Darlington

Jeffrev Kelley Oconee



Nathan Lance York

Veron Lingerfelt York



Brian

Celina McFadden



Danny

Nesbitt Holly Hill



Joseph Padgett Laurens



Frederick Pearson Marlboro



Terry Poole Aiken







Justin Powell Florence William Rabon Horry



Shane Williamson Lexinaton

Steve Zaretzka Darlington

Watkins Lexinaton





Clint Weaver Spartanburg

Jason White Charleston



Justin White Greenwood



Williams Anderson



Bamberg

Equipment Operators' Safety and Training Conference - Event Winners



PHOTOGRAPHS BY ROB THOMPSON/THE CONNECTOR

BACKHOE (from left) Wayne Anderson (D7 - Aiken) - First Place Steve Zaretzka (D5 - Darlington) - Second Place Raymond Schmuck (D2 - Anderson) - Third Place



MOTORGRADER (from left) Scott Burgess (D1 - Lexington) - First Place Gilliard Richard (D6 - Berkeley) - Second Place Frederick Pearson (D5 - Marlboro) - Third Place



TANDEM AXLE DUMP TRUCK (from left) Jack Miracle (D3 - Greenville) - First Place Corey Brown (D6 - Charleston) - Second Place Anthony Fobbs (D6 - Charleston) - Third Place





SINGLE AXLE DUMP TRUCK (from left) Melvin Gale (D5 - Darlington) - First Place Corey Brown (D6 - Charleston) - Second Place David Ramey (D3 - Oconee) - Third Place

TRACTOR WITH LOW BOY (from left) Terry Seymore (D2 - Anderson) - First Place Jack Miracle (D3 - Greenville) - Second Place Jeffrey Kelley (D3 - Oconee) - Third Place



TRACTOR WITH MOWER (from left) Jeff Setzer (D2 - McCormick) - First Place William Downes (D7 - Orangeburg) - Second Place Kendall McCants (D1 - Lee) - Third Place

SCDOT administrative professionals participate in training sessions

By Susan Jones Employee Development

nswering phones, handling paperwork, meeting payroll and coordinating meetings are just a few of the many tasks that SCDOT administrative professionals tackle each and every day. The role of the administrative professional has truly evolved over the past years. Gone are the days in which the "secretary" was expected to make and pour the coffee for her boss however, many of the stereotypical beliefs about their role still exists. Responding to those beliefs was one of the many items discussed at the 2012-2013 SCDOT Administrative Conference.

Over 225 administrative professionals attended the conference sponsored by the office of



Employee Development. The morning session was conducted by Dr. Iwana Ridgill who led participants through "The OZ Principle" which focuses on "Getting Results Through Individual and Organizational Accountability." The afternoon session was conducted by **Susan Jones**. This session highlighted ways to communicate, using positive language, effective writing strategies and for participants to complete a needs assessment. Each group discussed various challenges in

their daily routines and suggested ways in which processes could be improved.

One of the most talked about challenges was SCEIS. The administrative professionals felt that additional training with SCEIS would be most beneficial. Since the conferences, **Kelley Donkle** has traveled to all the districts and provided much needed guidance/ training to the admins on SCEIS.

While there were many suggestions for future training received from the admins, the top three needs consisted of, Dealing with Conflict, Consistency with Communication and Daily Routines and Cross Training. Details concerning subject matter, delivery and scheduling are currently in the works and a plan of action, designed especially for our administrative professionals will be put into place, in the near future.

The Employee Development Office would like to thank all the employees who participated in the conferences. When asked if there were plans for another conference next year, **Polly Mc-Cutcheon**, Director of Training replied, "We certainly hope so. It is vital that we continually support the individuals who bring us the most support" said McCutcheon. The team received valuable feedback from participants with one stating, "It was great meeting and spending the day with other professionals outside of my district. It was truly a day to re-energize and to find out that I was not alone in some of the daily challenges that I encounter."



Dr. Iwana Ridgill

Susan Jones of the Employee Development Office leads an afternoon training session to a group of administrative professionals at SCDOT.

TDL Summit: Public, private sectors working together

By Bob Kudelka

St. Onge Jr. and Deputy Secretary for Intermodal and Freight Programs Doug Frate represented SCDOT at the third annual South Carolina Transportation Distribution and Logistics (TDL) Summit in March.

Also attending were Commissioner Clifton Parker, Chief of Staff **Wendy Nicholas**, Chief of Statewide Planning **Mark Pleasant** and Intermodal Programs Manager **Rick Wyatt**.

The TDL Council is an initiative of New Carolina to bring together public and private sector leaders to help South Carolina compete for jobs, investment and industry leadership for the TDL industry of South Carolina.



ROB THOMPSON/THE CONNECTOR Deputy Secretary for Intermodal and Freight Programs Doug Frate participated in the TDL Summit.

The day long summit, themed "Bridging the Gap for Tomorrow's Infrastructure," provided attendees with an in-depth look at the state's infrastructure needs, strategies and latest industry trends as well as the opportunity to celebrate industry successes and discuss the critical issues that need to be solved to move our state forward.

St. Onge and Frate presented an update on the SC Multimodal Plan, which is expected to be completed in December or January. The SC Freight Plan is on track for completion in the fall, Frate said.

SCDOT is one of three public agency members of the TDL Council.

"The idea is to bring together public and private sector interests from a variety of areas such as rail, shipping and trucking," Frate said.

SCDOT had already been conducting regional listening sessions, surveys and interviews with stakeholders as it presented its Freight Plan.

The summit, Frate said, "offered additional insight by hearing from other key partners and other interests as well."

PHOTOGRAPHS BY ROB THOMPSON/THE CONNECTOR

The Summit included a panel discussion about the Greer Inland Port and the Intermodal Container Transfer Facility (ICTF) and included Jim Newsome, CEO of the SC Ports Authority, and representatives from BMW Manufacturing Co., SC Public Railways, and Norfolk Southern. South Carolina Secretary of Commerce Bobby Hitt addressed the group, and Rebecca Brewster, President and COO of the American Transportation Research Institute, discussed the impact of the trucking industry on the supply chain.

"The transportation, distribution and logistics network in South Carolina has a major impact on our state's economic growth," said TDL Council member and Commerce Secretary Bobby Hitt.





SC Highway Engineers Conference Annual meeting shares engineering knowledge, strives for consistency and improvements

By Bob Kudelka

ore than 300 SCDOT employees attended the 2013 South Carolina Highway Engineers Conference in Columbia in March, with this year's theme, "Consistency Counts."

Consistency proved to be a common thread through many of the sessions over the two-day conference, which also drew 262 people from the private sector and local governments.

"We want to make sure we're always looking for improvement," said Deputy Secretary for Engineering John Walsh. "We would love to be able to say at the end of this conference that we improved the knowledge of what we are doing as an agency, statewide...so there is more of an understanding and consistency about what we're doing."

Conference Co-chairmen Brian Keys and Kenny Eargle said this year's conference included midlevel engineers beyond licensed Professional Engineers. A PE license requires at least four years of experience under a PE as well as passage of engineering exams.

"We broadened participation," Keys said. "John Walsh's idea was to open up it up to resident construction and maintenance engineers because a lot the discussion and presentations focused on applications in the field.

"It's not only a broader spectrum," Keys said, "but a lot of people who are in charge of implementing a lot of these ideas are in construction. Designers can put lot of things on paper and say how it could be, but employees in the field are working every day with contractors and the public need this training and information as well. This is important for their experience."

Rebecca Campbell, an Assistant Resident Construction Engineer in Oconee County, agreed with that assessment. "I think

it went r e a l l y well and I learned lot." а Campbell said as the conference concluded, adding she that got to net-

Rebecca Campbell



In his address at the conference, Secretary of Transportation Robert St. Onge said he was glad to see the high turnout, noting the attendance of several resident maintenance engineers and resident construction engineers as well as private sector representatives

"You've got some fantastic opportunities here for growth and development, and to return back to your jobs perhaps a little better prepared than when you arrived," St. Onge said.

Highlights of the program included a panel discussion led by Director of Construction Leland Colvin with participants from SCDOT as well as the private sector.

Other topics included encroachment permits/electronic submission; an update on the Customer Service Call Center; road inspections; legal information concerning right of way and access; high-profile bridge projects; ADA ramp transitions plan; rideability;

utility accommodations; work zone inspections; stormwater specifications; selection and application of asphalt mixes; movable bridges; CTC partnering for secondary success; NEPA and permits; full-depth patching; contract negotiations and procurement; Integrated Transportation Management System (ITMS); environmental compliance; design build; MAP-21.

Keys and Eargle thanked Tina Kennedy, SCDOT Agency Events Coordinator, for her help with the conference. They also thanked Dr. Jim Burati, Shaun Gaines and the staff from Clemson University's Transportation Technology Transfer Service as well as the panelists, presenters and moderators.

Presenters and panelists from SCDOT included Tony Sheppard, Mike Holden, David Cook, Stephanie Jackson-Amell, Jim Porth, David Glenn, Michele Paoleschi, Lynsee Gibson, Leland Colvin, Mark Anthony, Beacham Brooker, Ken Feaster, Brandon Wilson, Jason Thompson, Perry Crocker, Natalie Moore, Jamie Kendall, Andy Johnson, Mark Attaway, Robert Ryggs, Jason Allison, Jeffrey Ellison, Ken Collins, Will McConnell, Eric Stuckey, Machael Peterson, Mark Hunter, Herb Cooper, Billy Lybrand, Heather Robbins, Sean Connolly, Todd Steagall, Sherry Barton, Jennifer Wiggins, Russ Touchberry, Todd Anderson, Randy Williamson, Will Mc-Goldrick, Matt Lifsey, Kathryn Copeland and Mark Lester.

Moderators were Iris Neal, Charles Eleazer, Chad Hawkins, Merrill Zwanka, Michele Shepherd, Ray Vaughan, John Boylston, Tony Edwards, Alan Kozusko and Nick Rebovich.











PHOTOGRAPHS BY ROB THOMPSON/THE CONNECTOR Scenes from the 2013 South Carolina Engineers Conference











BRIEFLY SCDOT participates in STEM Expo

The Columbia Urban League hosted its third annual Youth Science, Technology, Engineering, and Math (STEM) Expo on March 21, 2013, at IT-oLogy and EdVenture Children's Museum, with an emphasis on technology. The event attracted 250 middle school students, from eight schools within Richland County and surrounding counties. The goal of the event was to encourage under-served middle school students to pursue careers in STEM professions.

A team of SCDOT engineers participated, as part of an SCDOT Technology Exhibit that featured a 3-D Visualization video, illustrating how the agency uses visual aids to communicate to the public what a project will look like once completed; a Synchro/ Vissim Traffic Modeling demonstration, illustrating traffic flow and level of service characteristics that warrant intersection improvements; and a West Point Bridge Designer demonstration, illustrating the balance of safety and economy in designing bridges.

SCDOT organizers of the event gave a special thanks to Steve Meetze, Zoe Cook, Dea Lifsey and Rodney Oldham for sharing their expertise and resources to help make the exhibit a success.

SCDOT employees who participated in the event included: Randy Young, Clint Scoville, Freedom Spradley, Russ Touchberry, Jason Byrd, Phillip Washington, Javon Chaplin and Michelle Shepherd.

Transit Awards

The National Association of Development Organizations (NADO) recognized two South Carolina Councils of Governments (COGs) with the Excellence in Regional Transportation Award. The award recognizes noteworthy projects and practices in rural and small metropolitan transportation planning, programming and service delivery. Sixteen projects from eight states were recognized for the 2013 award including:

• Lower Savannah Council of Governments – Regional Bicycle & Pedestrian Plan

• Lower Savannah Council of Governments – Resuscitation of Transit (and Senior) Services in Allendale.

 Lowcountry Council of Governments - Regional Mobility Management in the Lowcountry - From Cooperation to Consolidation.

Army names award after Rob Manning

By Todd Garlick, Chief of the Adjutant General's Corps

s Chief of the Adjutant General's Corps, it is a privilege and an honor for me to announce that the Adjutant General's Corps Regimental Association (AGCRA) National Executive Council has unanimously approved the renaming of the AGCRA Achievement Medal to the Colonel Robert L. Manning Achievement Medal.

During Colonel Rob Manning's tenure as the longest serving AG School Commandant, Chief of the Corps, and Chief, Army Bands, from 2008-2012, his energy and enthusiasm were unsurpassed in promoting the AGCRA, the importance of membership and, in particular, the use of the AGCRA Achievement Medal to recognize contributions at the Chapter level.



Rob Manning

Rob's efforts were singularly instrumental in promoting the values and lineage of the AG Corps and in recognizing worthy AGCRA members by our Chapter Presidents and senior leaders within the Association. Rob was also instrumental in bringing tangible benefits to all AGCRA members through annual scholarships, the first ever AG Corps historical print, and through promoting the work and values of our Corps.

Accordingly, the Achievement Medal has been recast as the Colonel Robert L. Manning Achievement Medal. Congratulations to Rob on this honor as he is truly deserving of this recognition for all of his contributions to the AG Corps and the Adjutant General Corps Regimental Association.

Todd Garlick Colonel, United States Army Chief of the AG Corps



This medal is awarded to all ranks of deserving soldiers and civilians in the Army's Adjutant General's Corps. So far, more than 100 have been presented and approximately 250 will be awarded each year.



Tree information available online

By Timothy Edwards Roadway Design Support

f you use an online search engine for tree information, more likely than not, it will take you to a tree nursery site. That may not be a bad thing, but there are sites that will provide you tree information without trying to sell you something.

Most people cannot remember the characteristics of the crape myrtle hybrids, but if you visit this Clemson Extension link, you will find everything you ever wanted to know about the 40 or so crape myrtles hybrids commonly available. The link is as follows: http:// www.clemson.edu/extension/ hgic/plants/landscape/trees/ hgic1023.html

Speaking of Clemson Extension, their Home & Garden Information Center (HGIC) provides research-based information on landscaping, gardening, plant health, household pests, lawn care, etc. That link is as follows: http://www. clemson.edu/extension/hgic/

Some tree experts use software that can provide data and pictures of trees, shrubs and ground covers; Horticopia is probably the best known source of this information. However, Horticopia is nice enough to put some of this information on their web site; the link is as follows: http://www. horticopia.com/hortpix/

A similar website is provided by the United States Department of Agriculture (USDA) at the Natural Resources Conservation Service. They have posted Fact Sheets & Plant Guides by a partnership of the National Plant Data Team and the Plant Materials Program. Fact Sheets provide brief descriptions of a plant, its uses, and cultural recommendations. Plant Guides are similar but more extensive. Fact Sheets and Plant Guides are available in either Adobe® Acrobat® Portable Document Format (pdf) or Microsoft Word (doc). That link is as follows: http:// plants.usda.gov/java/fact-Sheet

The North Carolina State Extension Service is similar to the Horticopia site, but it might be a little easier to find out information about a specific tree type since you can easily search using the common name of the tree. The previous two sites concentrate on the botanical name (Latin) of the plant material. The link is as follows: http://www.ces.ncsu. edu/depts/hort/consumer/ factsheets/trees-new/index. html

By far the easiest tree information web site is the University of Florida Environmental Horticulture web site, which is commonly known as the 680 Tree Fact Sheets site. Similar to the previous site, you can easily search using the botanical or common name of the tree. The only disadvantage is that the site has no photographs, only sketches. The link is as follows: http://hort.ifas. ufl.edu/database/trees/trees scientific.shtml

Speaking of photographs, both Yahoo and Google offers thousands of color photos just by entering the name of the tree into the search box.

Using these tips and links can provide copious information regarding trees.

Engineering News

Use of Real Time information for project identification and strategic implementation

By Dipak Patel

his article focuses on utilizing probe technology, a tool used to examine traffic flow and average speed data, to identify deficiencies in the highway network and by developing accurately ranked corridors. The use of this technology saves money and critical resources by providing accurate traffic information for future highway improvement projects.

Who and what is INRIX?

INRIX provides I-95 coalition members with real time travel information and is a subsidiary of Microsoft that specializes in partners with more than 400 companies in the automotive, mobile and public sector markets to collect their data. INRIX gathers data from some tens-of-billions of mobile telephones and GPS-enabled probe vehicles like taxis, airport shuttles, service delivery vans, long haul trucks, and consumer vehicles. INRIX uses virtual "traffic message channel" (TMC) location codes to define road segments. Travel time information for each TMC segment is read by the unique code of the device being tracked. The time for each segment is added together to provide the travel time for a section of roadway. Measures are taken every few seconds, 24 hours a day, 7 days a week, 52 weeks a year.

Dan Campbell SCDOT's incident management unit received the rights to use INRIX data in 2007. The initial purpose was to use this GPS-based data to calculate travel times for motorists and display them on message boards on interstates throughout the state.

The value of archived real-time data is proving its worth by providing huge cost savings through solving congestion problems by pinpointing solutions for problem areas versus miles of wholesale widening and by applying the information captured in this data into the entire spectrum of SC-DOT's planning operations.

Dipak Patel, Technical Applications Director, began using INRIX historical data in 2007 when he was developing the Interstate Corridor Management Plan for I-20 and I-26/I-126, commonly referred to as "Malfunction Junction" by motorists.

Patel wanted more accurate data than the information gathered by the traditional methods shown below in the green box.

Patel states that the "small sample" in-

troduces an inherent error from the beginning in the traditional measures and that extrapolating future year growths exponentially increases the error.

Using the historical data, Patel created a radial graph using an Excel spreadsheet to display an entire year's worth of traffic data representing the average annual speeds for each hour of the day on one page. The radial graph shows the speeds from 0-70 MPH in the middle; the different colored lines represent an hour of the day, and the circumference slices the face into various segments, which in turn represent individual sections from interchange to interchange.

The display created by Patel allows the user to overlay one year's data over the following year, or as many years for which there is data available. These comparisons can show changes in average speeds/ travel times in a pinpointed area that are either satisfactory, bear watching due to a drop in average speeds, or call for measures to relieve the problems sooner rather than later.

The problems that are identified can potentially be solved with measures that are less costly. Patel noted that typical solutions for interstate congestion include a wholesale widening of a significant section of interstate that might cost in the \$200-

Volume Measures

- o Average Annual Daily Traffic (AADT) Spot Studies
 - System Wide AADT Estimated
- o Turning Movement Counts
- · Essential For Peak Hour Information

Congestion Indices

- Congestion Index
- Developed Using Small Sample

Delay Measures

- o Delay Per Trip
- Developed Using Small Sample o Delay Per Vehicle Mile of Travel
- Developed Using Small Sample
- oTravel Time (Segments/Sections/Corridor)
- Developed Using Small Sample

Level-of-Service Measures

- oLane-miles at/of LOS "X"
- Based on AADT that gives you worst case scenario
- Does not provide a true picture of system wide operations

\$300 million range, or more. Such an answer to the problem might help; but it might also simply move the congestion problem "downstream."

Patel alluded to a situation in the Charleston, South Carolina area where significant dollars

were saved solving an interstate-highway congestion problem due to improvements made to an adjacent project. The INRIX data showed traffic speeds gradually slowing down and averaging below the speed limit on I-526. This interstate allows driv-





Got news?

Contact Dede Elmore at 803-737-7900 or email her at ElmoreDD@ scdot.org.



Dede Elmore

ers to travel to and from North Charleston. across the Cooper River to and from the town of Mount Pleasant, by-passing the downtown Charleston area. I-526 connects with I-26 in North Charleston. I-26 is a major route through South Carolina, North Carolina, and into Tennessee.

> SCDOT had a project under construction in North Charleston that would make significant improvements to two interchanges. Patel noted that the data showed a gradual increase in vehicle speeds on I-526 as construction on I-26 came to a close. Following the completion of the work on the I-26 interchanges, Patel's analysis of the data showed average vehicle speeds on I-526 increased significantly toward the speed limit.

> SCDOT's early innovative use of this data made available to the agency in 2007 took what was intended to be message board information to higher levels in all phases of project and program planning. What started out as a convenience for drivers is becoming an effective tool for gathering a larger and more accurate database while

potentially saving the taxpayers millions of dollars by applying available funding resources to more high-priority projects.

With the introduction of MAP 21 and the performance based requirements of federal funding, SCDOT is well poised to address future needs.

District 1 News

Kershaw, Lee, Lexington, Richland and Sumter counties

District Engineer:

Thad Brunson(8FAX(8

(803) 737-6660 (803) 737-6401

Oversized load travels through District 1

Got news?

Contact Teresa Jackson at: 803-737-6715 or email her at JacksonT@scdot.org

> Teresa Jackson



CODY CROUCH/THE CONNECTOR

A deaerator vessel travels along S.C. Highway 34 in Lee County on its way to the V.C. Summer Nuclear Generating Station in Jenkinsville. The vessel measures 18 feet 4 inches wide, 22 feet 8 inches tall and 235 feet 7 inches long. It weighs 941,840 pounds.

The vessel entered South Carolina at the Port of Charleston, was loaded for transport on a 16-line Goldhfer trailer (with 128 tires) and put on a barge. It was barged up the Cooper River to Lake Marion. It rolled off the barge site in Berkeley County at Eadytown on May 13 to begin its 5-day journey to Jenkinsville.

> By Janice Dixon Kershaw Maintenance

e had a real event in Camden on May 15. A very large load came through town off S.C. 34 onto York Street S28-45.

This road has a rather sharp little "S" curve in it that is posted for 15 miles per

hour. They were not in any danger of being issued a speeding ticket.

It took about 45 minutes to navigate the curve with the trailer driver getting a good work out.

The load had six support vehicles in front and behind, and Transport Police had vehicles covering the intersections with Duke Power lending manpower and other support vehicles where needed.



JANICE DIXON/KERSHAW MAINTENANCE

District 2 News

Abbeville, Anderson, Edgefield, Greenwood, Laurens, McCormick, Newberry and Saluda counties

Interim District Engineer:

Kevin McLaughlin FAX (864) 227-6971 (864) 227-6567

Walking a mile in their steel-toed boots

As a reward for their 'excellent' score on **QMT**, Chief Engineer for Operations Clem Watson and District **Engineer Administrator** Kevin McLaughlin joined Laurens Maintenance on the road for a workday. Watson, at right, and McLaughlin, at far right, were put to work on the patching crew, ran some weed eaters with the inmate crew and then finally worked in the maintenance shop doing a preventative maintenance on one of the big trucks. They were even ceremonially paid for their efforts.



Got news?

Contact Sarah McKinney at 864-227-6971 or email her at McKinneySB@scdot. org.



Sarah McKinney



District 2 Pavement Preservation Class





Serji Amirkhanian from TriCounty Technical College came to Greenwood Assembly Room to teach the Pavement Preservation Level 1 Technician Course in January. Twenty-four employees from District 2 completed the three-day certification.

Job Shadowing



Jacob McLaughlin, left, and Langton Holmes, right, students from Westview Middle School in Greenwood, learned about transportation jobs during Job Shadowing Day. McLaughlin shadowed his uncle, District 2 Engineering Administrator Kevin McLaughlin. Holmes shadowed Laurens Resident Maintenance Engineer Rob Russian, center.

District 3 News

Greenville, Oconee, Pickens and Spartanburg counties

District Engineer: Steve Gwinn (864) 241-1010 FAX (864) 241-1115

District 3 recognizes safety's importance

By Brian Harris

orkplace safety is defined by policies and procedures in place to ensure the safety and health of employees within a workplace.

The employer and employees each have their roles to ensure the work environment is safe. Employers must ensure that proper safety policies and procedures are in place, provide employees safety training, injury prevention education, safety equipment, safety inspections and provide a detailed system for injury documentation and reporting.

SCDOT District 3 has four OSHA Officers that are assigned the task of making sure District 3 maintains a safe work environment.

Workplace safety is everyone's responsibility. Employees can do their part by taking workplace safety seriously and abiding by all safety protocols and policies put in place by an



Rodney McNeace, right, is the OSHA Officer for Spartanburg Maintenance. He has been with the Department for eight years. He is also a member of the SC National Guard and has run convoy missions in Iraq in 2009-2010. Here, he discusses the Material Safety Data Sheets with Toby Masters.

organization to prevent accidents in the workplace. This is accomplished by completing mandatory safety training, performing inspections of equipment, completing any safety checklists and following all safety protocols and policies in place consistently at work.

DRA



Stanley Martin, left, discusses skid steer safety with Freddy McAlister. Martin has been the Oconee OSHA safety officer since 2007. He has been with SCDOT for 24 years.

Wofford Green supervises the district OSHA officers. He has been with SCDOT for 24 years.

Got news?

Please contact Bonita Davenport at 864-241-1010 or by emailing her at DavenporBG@scdot.org

> Bonita Davenport





Tracy Haynes, right, has been employed for six years as an OHSA safety officer in the Greenville maintenance office. Trade Specialist II Timothy Cole is at left.



Meet Laquantra Mayberry

Name: Laquantra Mayberry Title: Senior Geodetic Technician Office: Spartanburg Maintenance Started at SCDOT: 2004

aquantra Mayberry is a Senior Geodetic Tech for Spartanburg Construction. She is married and has a 10year old daughter and a 4-year son.

Mayberry is excellent in managing her time and extremely organized and is a great team player.



District 4 News

Cherokee, Chester, Chesterfield, Fairfield, Lancaster, Union and York counties

District Engineer: John McCarter FAX (803) 377-4155 (803) 581-2088



Chester Shop is 'Outstanding' The Chester Maintenance Shop recently received the Budget and Control Boards Highest rating of "outstanding." Only a few state-run repair shops receive this rating. This is Chester's second outstanding rating, the first being 2007. The facility is supervised by Tommy Clayton. The Chester Shop is made up of, from left: Scott Gaston, Butch Craig, Carolyn Branham, Chad Hare, Supervisor Tommy Clayton, Harold Boulware and Lin Moore.

Lancaster Maintenance does 'Biggest Loser' competition

ancaster Maintenance offered financial incentive to lose weight. Eleven employees took on the challenge to do just that.

Each member of the group paid \$30 to participate in the program

bringing the payout to \$330. To make it more challenging the group decided to have two payouts 60/40, so the top two candidates would win. Participants will weigh in every Monday for 12 weeks. As of May 13, the total weight lost is 145.3 pounds. The payouts will be based on percentage. The program will end May 28. The result proves that paying people to lose weight works!

Winners will be announced in next edition of The Connector.

Got news?

Contact Edward Moore with your ideas at 803-377-4155 or by emailing him at MooreEO@ scdot.org



Edward Moore

Pearson retires after 35 years



Morris Pearson Traffic Signal Technician with the District 4 Signal Shop retired on April 11 after 35 years of service. He plans to spend his retirement relaxing at his cabin on Lake Wateree. Members of the District 4 Signal Shop are, from left: David Gaskey, Supervisor Mitch McBrayer, Morris Pearson, Jeff Burdette and Brian Clack.

William Strikeleather receives 40-year service certificate

Everything Trucks



SHEP Responder Ernest Rodrigues participated in the Everything Trucks event at the annual Come-See-Me festival in Rock Hill. He answered questions and handed out information on the SHEP program. The event showcased over 30 different types of trucks ranging from garbage trucks to ambulances to UPS trucks. The Come-See-Me festival is the largest all volunteer festival in South Carolina and attracts over 125,000 participants and visitors each year.



William Stikeleather, right, of York Construction received his 40 year certificate on Feb. 22 from York Resident Construction Engineer John Huskins.

Michael

Miller

District 5 News

Darlington, Dillon, Florence, Georgetown, Horry, Marion, Marlboro and Williamsburg counties

District Engineer: Dennis Townsend (843) 661-4710 FAX (843) 661-4704

2013 District 5 Equipment Operators' Event

5

2







Meet District 5 Paint Crew



The District 5 Paint Crew, based in Horry County, manages the DOT painting throughout the district. Pictured: Travis Godwin. Frederick Stevenson, Jerrod Todd and **Donald Samuel. Not** pictured: Wesley Shaw

Got news?

Contact Michael Miller at 843-661-4710 or by emailing him at MillerMW@scdot.org







1 - Backhoe 1st: Steve Zaretzka (left); 2nd: Justin Powell

2 - Motor Grader 1st: Frederick Pearson (right); 2nd: Steve Zaretzka

3 - Tractor Mower 1st: Dominic Ford (right); 2nd: Jeremy Bryson

4 - Single Axle Truck 1st: Melvin Gale (left); 2nd: Chuckley Gurley

5 - Tandem Axle Truck 1st: W. Rabon (right); 2nd: Melvin Gale

6 - Lowboy Truck 1st: F. Brown (right); 2nd: B. Lucas

1

District 6 News

Beaufort, Berkeley, Charleston, Colleton, Dorchester and Jasper counties

District Engineer: Robert Clark FAX

(843) 740-1665 (843) 740-1663

Berkeley Maintenace renovates old DMV facility, enjoys new office

Berkeley Maintenance employees are enjoying their new office at the old Moncks Corner DMV building.

Berkeley Maintenance was previously housed in a double-wide mobile home and is now in a newly renovated brick building. The renovations were completed by the District Six Capital Improvement Team. Master carpenters Robert Barfield and Mike Hogan, along with the help of some Berkeley Maintenance employees did an amazing job giving this building new life. Great job everyone!



New SCDOT Berkeley Maintenance Facility

Got news?

Contact Angelia Savage at : 843-740-1667 ext. 116 or by emailing her at SavageAD@ scdot.org



Angelia Savage

Dorchester Construction project wins asphalt award

he SC Asphalt Pavement Association recently recognized Dorchester Construction with a Quality Pavement Award at the South Carolina Asphlat Pavement Association (SCAPA) Winter Conference.

The award was for an open graded friction replacement project on I-26.

The project had a total of 33.09 total miles in the eastbound and westbound lanes.

This project came in under budget thanks to the hard work and oversight of RCE **Behling Guess**, Project Manager **Linda Shaw** and Inspector **Trenton Gruber**.



District 7 News

Aiken, Allendale, Bamberg, Barnwell, Calhoun, Clarendon, Hampton and Orangeburg counties

District Engineer: Jo Ann Woodrum (803) 531-6850 FAX (803) 531-6854

District 7 celebrates employee appreciation week

CDOT celebrated Employee appreciation week May 5-10. Throughout District 7 Residents showed their appreciation for the great job District 7 employees do in building and maintaining Interstates, highways and roads throughout the district's eight counties.

The District 7 District Engineering Adminis-

trator Jo Ann Woodrum said "I want to thank all the District 7 employees for their individual and collective contributions to making our roads and bridges safe for the traveling public. It is a tribute to these dedicated employees that they are able to do so much work with our limited resources. Thanks again for all that you do!"



Contact Jeff Graham at: 803-531-6850 or by emailing him at GrahamJP@scdot.org

Jeff

Graham





Bamberg employees photos adorn an appreciation poster.

ABOVE: RME Loraine Williams and Allendale maintenance employees pose for a photo during appreciation week.

RIGHT: Hampton maintenance RME Jack Priester and employees pose for a photo before an appreciation lunch.

Meet Mike Davidson



ames "Mike" Davidson is the District 7 contracts manager.

He is originally from Cartersville, Ga., where he attended kindergarten thru 12th Grade. Mike graduated from Cass High School in 1988. After high school, He attended the Georgia Institute of Technology (Georgia Tech) where he graduated in 1993 with a Bachelor of Civil Engineering Degree. In 1994, he began a career with a civil engineering consulting firm in Atlanta. In 1998, he moved to the public sector by accepting a position with the Georgia Department of Transportation (GDOT) in the Office of Road Design. In 1999, he earned his Professional Engineering License in the state of Georgia. In 2009, Davidson accepted a position with another civil engineering consulting firm in Charleston and obtained his Professional Engineering License in South Carolina. In March 2013, he moved back to the public sector and accepted his current position with SCDOT as District 7 Contracts Manager in Orangeburg.

He resides in Goose Creek with his wife of eight years, Laralie. Together, they have 4 children, Gage (21), Brooke (18), Austin (17) and Diana (14). They also have two chihuahuas, Chi Chi and Rico.

His wife is employed by the UPS Store in

Goose Creek and is currently the Assistant Manager. Davidson and his wife enjoy walking, bowling, going to the beach, and visiting the many museums, restaurants and historical sites in downtown Charleston.

Davidson attended Georgia Tech and his wife attended the University of Georgia. Football season is an interesting time at the Davidson house, especially the Saturday after Thanksgiving when Georgia and Georgia Tech traditionally play each other.

Davidson enjoys working with all of the folks in District 7. They have made him feel welcome, and he looks forward to many happy years with SCDOT.

AASHTO Service Awards





Thad Brunson 30 Years **District 1**







25 Years

Planning

Steve Gwinn 28 Years **District 3**



Tony Sheppard 26 Years Traffic Engineering



Clem Watson 27 Years Engineering Administration



Dennis

Townsend

30 Years

Woodrum 28 Years **District 7**



Rebecca Dunn

CAUGHT DOING GOOD!

Rebecca Dunn

ershaw Maintenance's Rebecca "Becky" Dunn was recently awarded the Good Samaritan Award. She was nominated by a citizen from the town of Kershaw where she lives.

Dunn won the award because she is always helping others out, even if it takes away from something she is doing.

She is very active in her Church, First Baptist Church of Kershaw. She always helps the elderly ladies out from taking their garbage to the recycling center to picking up dead limbs in their yards. Dunn is very community oriented and believes in helping others whenever possible.

She has been assisting a friend of hers

who is recovering from a broken ankle, cooking and cleaning for her and even rounding up her escaped livestock and repairing the fence where they escaped. She has also been caring for the lady's husband, who is suffering from dementia.

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She is also a high school volleyball referee and travels the state refereeing games.

She is very people-oriented and never met a stranger. She jogs three miles every day and recently completed a 62 mile bike ride.

She started with SCDOT on February 18, 2008, with the sign crew. She loves training others and helping out any way she can.

She is a pleasure to be around and just a great asset to SCDOT, especially Kershaw Maintenance.

CAUGHT DOING GOOD!

Ernest Jones

rnest Jones of SCDOT's Building Maintenance Office was recently presented the Silver Beaver Award from Indian Waters Council of the Boy Scouts of America.

The Silver Beaver is the council-level distinguished service award of the Boy Scouts of America. It is given to adult leaders who have made an impact on the lives of youth through service given to the council. It is given for hard work, self-sacrifice, dedication and many years of service. It is given to those who do not actively seek it.

In the narrative from the awards ceremony, the Council said: Ernest Jones learned what it truly meant to be a good Scout early-on in life, and he has served as a living example of integrity and service for youth and adults alike. He earned the Eagle Scout Award in 1957 from Troop 177 in Brunswick, Ga., shortly before he went on to serve his county in the armed forces. Scouting's preparation allowed him to advance to the rank of Sergeant Major in the U.S. Army. Through his life, Ernest worked with the Cub Scouts. Ernest and his wife, Esther, served as Den Leaders in Fort Benning, Ga. He served as

a Scoutmaster in Hawaii. Ernest ensured that his family was aware of the morals of the Boy Scouts and he included them in every aspect of their lives.

Upon his retirement from the military, at a time when many begin to sit back and enjoy life's golden years, Ernest dedicated the rest of his life to encouraging and inspiring his family and community through hard work and service to others. He started at the local troop level, but after seeing a great need, he answered the call to become more active with others, including serving as District Commissioner for the Three Rivers District.

Highly revered in Scouting and throughout our community for his friendly, humble demeanor and genuine compassion for others, he has provided countless hours of selfless service to the young people of Columbia. He has directly led or assisted in the establishment and development of nearly every Cub Scout Pack and Boy Scout Troop in the Three Rivers District over the last several years.

Ernest's legacy continues with two sons having participated in the Cub Scouts and now a grandson in the Boy Scouts, and the hope for future grandchildren and great-grandchildren following suit.



ROB THOMPSON/THE CONNECTOR

Ernest Jones displays the certificate and medal awarded to him by the Boy Scouts of America.



ROB THOMPSON/THE CONNECTOR

VIEWPOINTS

By Robert J. St. Onge Jr. Secretary of Transportation

The summer is upon us as evidenced by our beautiful state in full bloom, the end of school, the onslaught of beach and vacation travelers, and the midpoint pause in our two year legislative cycle. Allow me to start this edition by relating to you how encouraged I have been that the Governor, the Legislature, and our partner civic groups in unison recognize that our highway infrastructure needs additional investment. They may have different opinions about how to get there but their enthusiastic debates over fixing our roads and bridges has been uplifting. Important decisions like these take time but the momentum is clearly evident. Many thanks to the Governor, to the General Assembly (especially the committees that have worked so hard this year on our behalf), to the SC Chamber of Commerce, to SCFOR, and all the other groups pulling in the harness to get us additional funding. I predict success in the not so distant future.

Summer is also the height of our construction and maintenance season. While that's good news we are reminded that the 100 deadliest days of the year are from Memorial Day to Labor Day while you and our contractors and consultants are out there fixing our roads and bridges. Production is important but safety is paramount. Leaders, especially foremen, must make honest risk assessments and take appropriate steps to mitigate identified risks. Managing work zones to balance production and safety is a key leader task. While the reduction of highway deaths and serious injuries remain a focus for the state, **the safety of our employees remains JOB #1 for SCDOT.**

On that cheery note, we should be mindful that our 6-month hurricane season started on June 1. The experts tell us that this will likely be a more intense season for Atlantic Ocean hurricanes than we have seen in the last few years. We have reviewed our plans, conducted inter-agency exercises, and rehearsed on the highways. Our workers cannot properly focus on their critical roles in evacuation and recovery operations if they haven't ensured that their own families are safe. Please take the time now to review the plans for your families in case of disaster.

Lastly, I bid an SCDOT fond farewell to our Deputy Secretary for Engineering **John Walsh** who retires this month. Walsh has been a stalwart for almost three decades in this agency and his accomplishments have been numerous and significant. We will miss him as he moves to employment in the private sector. We wish him health and happiness! Thanks, John, for your service to South Carolina.

Have a great summer and be safe!