NDOT NEWS

NEVADA DOT

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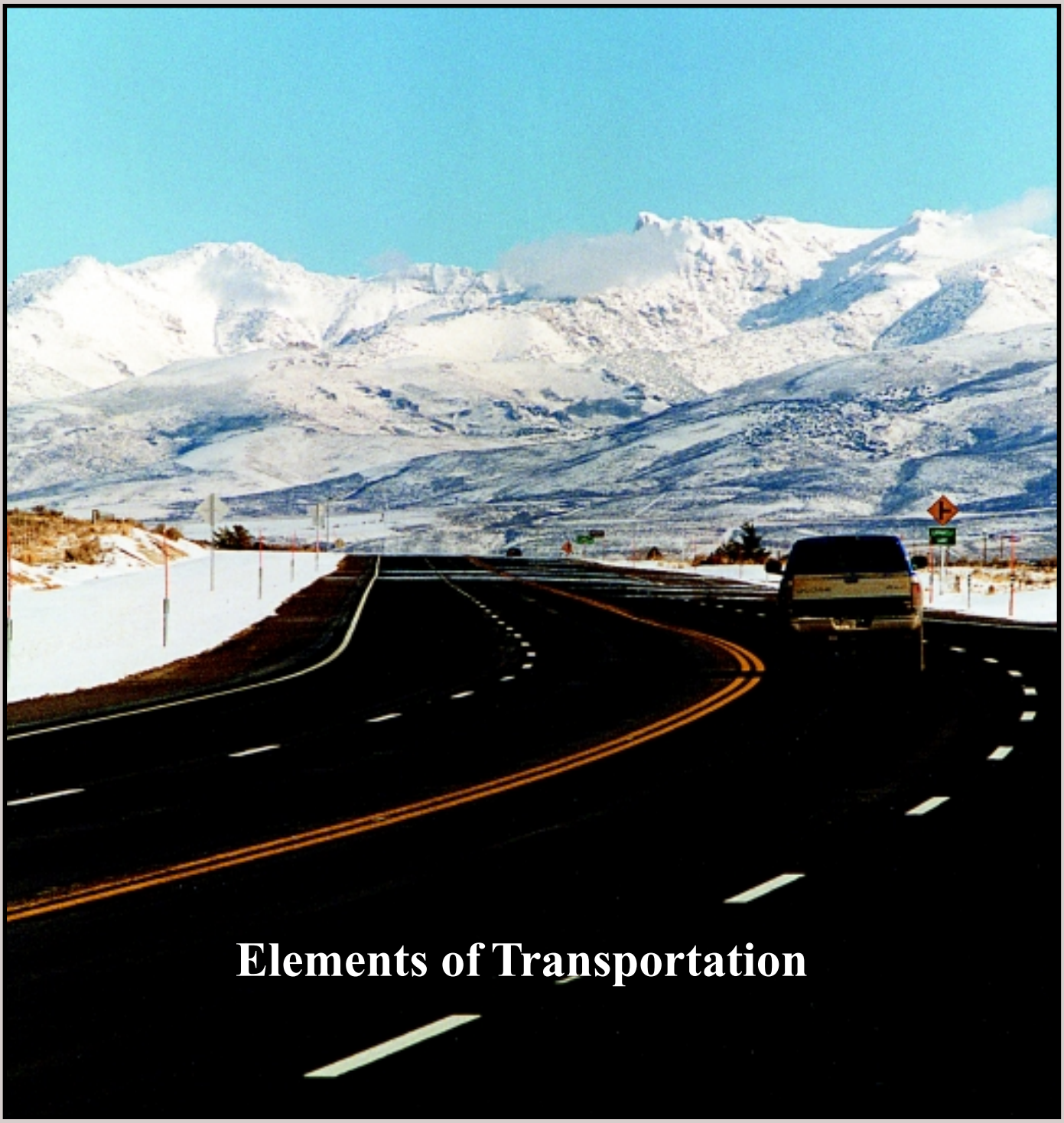

Elements of Transportation

The Director's Corner

30 Years of Success

Tom Stephens, P.E. , Director

Eleven students received completion certificates for the last class of the Engineer in Training Program conducted by the Nevada Department of Transportation. The graduating students included NDOT employees Brad Durski and Rick Bosch, Reno Construction; Claire Provan, Glenn Petrenko, Rod Schilling, Peter Aiyuk, Bill Ezell and Joselio Ramirez, Roadway Design; Jason Frey, Equipment Division. State Department of Conservation and Natural Resources' Art Gravenstein and Carson City Public Works employee Rory Hogan.

The course of instruction was initiated more than 30 years ago by the Nevada State Highway Department to give good employees the opportunity to advance their knowledge of engineering to the point where they would be able to pass the state's engineer in training and professional engineer examinations and thus become licensed professional engineers. Over the years, hundreds of NDOT employees have completed the two and a half year course of study and many have gone on to key positions in the department. Some of the more notable graduates include former NDOT Director Garth Dull, former Washoe County Regional Transportation Commission Director Jerry Hall and former Assistant Director for Engineering Mike McFall. Current key engineering managers who took the course include Location Division Chief Ben Grissom, Assistant Design Division Chief Frank Csiga and Assistant District III Engineer Kevin Lee.

The instruction team for the last class was headed by Russ Law and included John Koster, Troy Martin, Steve Merrill and Claire Provan.

Instructors for the program are drawn from the ranks of engineers in the department. Former instructors included Assistant Director for Engineering Susan Martinovich, Assistant Director for Operations Ruedy Edgington, District II Engineer Rick Nelson, Chief Bridge Engineer Bill Crawford, Assistant Chief Bridge Engineers Todd Stefonowicz and Marc Grunert, Bridge Engineer Bernie Ponte, Specification Engineer Robert Kvam and Resident Engineer Dave Titzel.

The course is ending because of a change in Nevada law in the 1999 session of the Legislature that will require graduation from an accredited university in order to become a licensed professional engineer starting in 2010. Since it requires about six years to become licensed after completion of the EIT course, there will be no more classes after 2001.

The program has been a valuable asset to the department with many good graduates. I congratulate the students and thank the instructors. I realize the change in the law will eliminate this avenue for becoming a licensed engineer. College graduation is a good indicator of ability in a professional field, but it is not the only indicator and this is amply demonstrated by the success of the graduates of NDOT's EIT program.

Director Tom Stephens conveys the department's appreciation to Engineer in Training Instructors Claire Provan and Steve Merrill, Design Division; and Russ Law, Operations Analysis, who taught students in the final graduating class.

Hoover Dam Bypass Project Management Team Wins National Recognition for Partnering

Two prestigious national awards have honored the team that produced environmental clearance for a bypass of Hoover Dam that includes a new bridge over the Colorado River. Known as the Hoover Dam Bypass Project Management Team, representatives from multiple agencies have partnered on the project since 1989, delivering the Environmental Impact Statement and subsequently the essential Record of Decision in March 2001.

The United States Secretary of Transportation's Team Award from U.S. Secretary of Transportation Norman Mineta was presented in November along with the Federal Highway Administrator's Spirit of Excellence Award.

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"Each year the secretary and the administrator recognize significant team efforts that reflect on partnership and coordination to accomplish important activities," said Larry Smith, division engineer for FHWA's Central Federal Highway Division in Colorado.

NDOT Bridge Division Chief Bill Crawford and former project manager Tom Greco served on the team that delivered the project. They share the award with the Arizona Department of Transportation, Lake Mead National Recreation Area, Lower Colorado Dam Facilities the FHWA Central Federal Lands Highway Division and FHWA Division Administrators John Price in Carson City and Robert Hollis in Phoenix. Other team members recognized included the Western Area Power Administration Desert Southwest Region, the Bureau of Reclamation and environmental consultants CH2MHill.

Since 1965 the BOR sought solutions to safety and transportation issues facing Hoover Dam National Historic Landmark. Operated by the BOR, the dam and the highway are wholly located within the boundaries of the National Park Service, Lake Mead National Recreation Area. The BOR led the environmental process until 1993 and the Central Federal Lands took over in 1997. That year, the governors of Arizona and Nevada and their congressional delegates appealed to the secretary to reinitiate the project.

The multi-agency project management team had four major objectives:

- Complete a high-quality National Environmental Protection Act process for the project
- Maintain the project schedule and budget
- Maintain effective interagency partnering
- Assure effective public involvement

Complicating the lengthy process were significant historic and prehistoric issues along with environmental and traffic concerns, differing community viewpoints and changing legal requirements.

"The FHWA did a good job in managing this project to a record of decision. It's an engineering challenge," said Crawford. "You have rugged terrain, a major river crossing, construction adjacent to an historic landmark. It has to be compatible."

The project is also the first to comply with new regulations that give a greater voice to Native American tribes, a prototype for future projects.

"We have reviewed the materials prepared by the government to government consultation on the Hoover Dam Bypass Project and concur that consultation was held in an exemplary manner," said Stan Rice, president of the Yavapai Prescott Indian Tribe.

With about half of the necessary funding already identified, the project is now in final design by a consultant group that includes HDR, TY Lin and Sverdrup engineering firms.

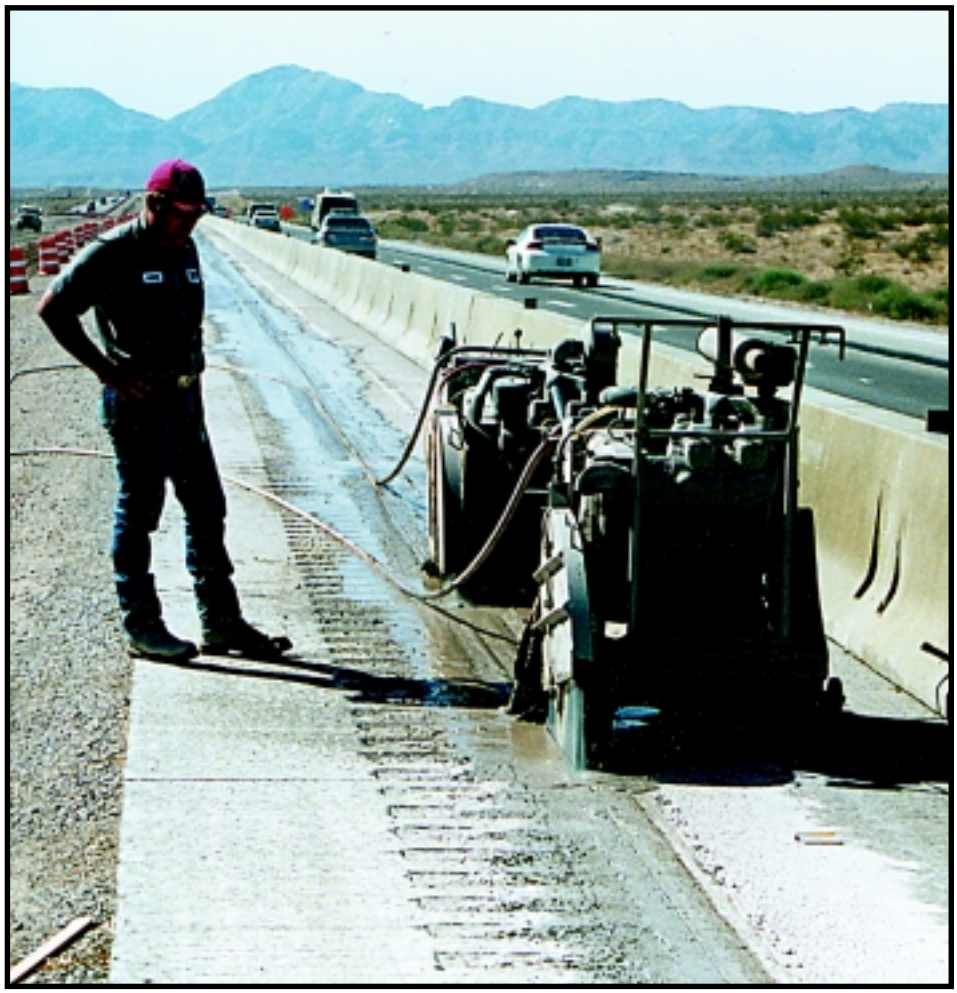
With at least 13 years invested in the environmental process, the project was originally proposed to open to traffic by 2007 but partners continue to look for opportunities to accelerate completion to 2005, Crawford said.

"We have reviewed the materials prepared by the government to government consultation on the Hoover Dam Bypass Project and concur that consultation was held in an exemplary manner."

Stan Rice, president of the Yavapai Prescott Indian Tribe.

Interstate 15 Gets $22.5 million New Lease on Life

On the southwest side of Las Vegas, Interstate 15 is the front gate to fun for weekend tourists making their trek from Southern California to the neon metropolis. The trip home is about to get a lot easier thanks to a $22.5 million project to widen the southbound lanes for 20 miles from the state line to the Sloan exit and a smaller northbound stretch.



Neil Kumar's Crew 915 began work in August on the project designed by PBS&J under Project Management's Kathleen Weaver. Before they are finished, Resident Engineer Kumar's 16-person crew will invest a year and a half of their days, nights and weekends in delivering a new and safer highway.

Good traffic control is the key for a project of this magnitude and sensitivity. Specifications dictate that contractor Las Vegas Paving will maintain traffic almost around the clock, with few exceptions. For Crew 915, that makes the job considerably tougher.

"We try to make sure everything is perfect. With it being so dark out there, everything is magnified," said Steve Jackson, responsible for traffic control on the crew. Many miles out of town, the crew finds themselves on a darker and more desolate road than most, though they are no strangers to desert nights.

Besides looking out for their own safety, Kumar's crew keeps motorists' and contractor's well being at the top of their priority list every day.

'We are watching very carefully, looking for potential safety issues, public issues," said Kumar, of the evaluation of contractor's plans. "We give the go ahead when we feel they will accommodate everyone, and it is a good course of action. We don't direct, but we do intervene if necessary."

During the project, traffic will be shifted to the outside, with two lanes open to traffic except occasionally when a night construction task will temporarily close one lane overnight. Since there will be no right shoulder, unpaved emergency turnouts are constructed every two miles.

The project is designed in three segments, about seven miles each, set for completion in April, July and November 2002.

A very good working relationship with the contractor helps everyone involved, Kumar said.

"They're a really good contractor, good at handling situations. If there is anything needed to do the job, they comply right away," said Albert Austria, who along with Jennifer Manubay, oversees materials testing and quality control.

"They let us know what they are doing ahead of time," said Thomas Sanders. "That's a real plus." For Sanders, a day's work often means inspecting truck after truck of concrete barriers built off site and delivered to the project. Each must be perfect, without blemish, before it becomes part of the highway's median. It is a job in which he takes well-deserved pride.

"I enjoy it," said Sanders, who worked 16 years in the District I Lab before joining Construction. "Working with this crew is the best part of the job."

Kumar could not agree more.

"We've got a good crew here. They care for the department and like their job. I'm

happy with their performance."

"Inspecting, removal of existing concrete, placement of new material, extension of reinforced boxes and the Jean bridge structure are some of the tasks of Tommy Burroughs, Bill Heilman, Scott Ramsay and the other members of this crew, under the knowledgeable and heedful eyes of Assistant Resident Engineer John Kimber, who has more than 47 years with NDOT," Kumar said. "Joan Ives keeps all the project documents straight."

The Place to Be

Assistant Resident engineer Will Young joined the team just in time for the job. "This is the place to be. It's great down here," he said. Formerly a roadbed engineer from the Materials Lab in Carson City, Young also served in Design, bringing a different perspective and understanding of plans and special provisions.

Precision and perfection are the strengths of Crew 915.

"Neil digs in and understands," said Assistant District I Engineer for Construction Gus Michaels.

The crew keeps up on training to do the job well. "That way we know we have taken care of the job," Kumar said.

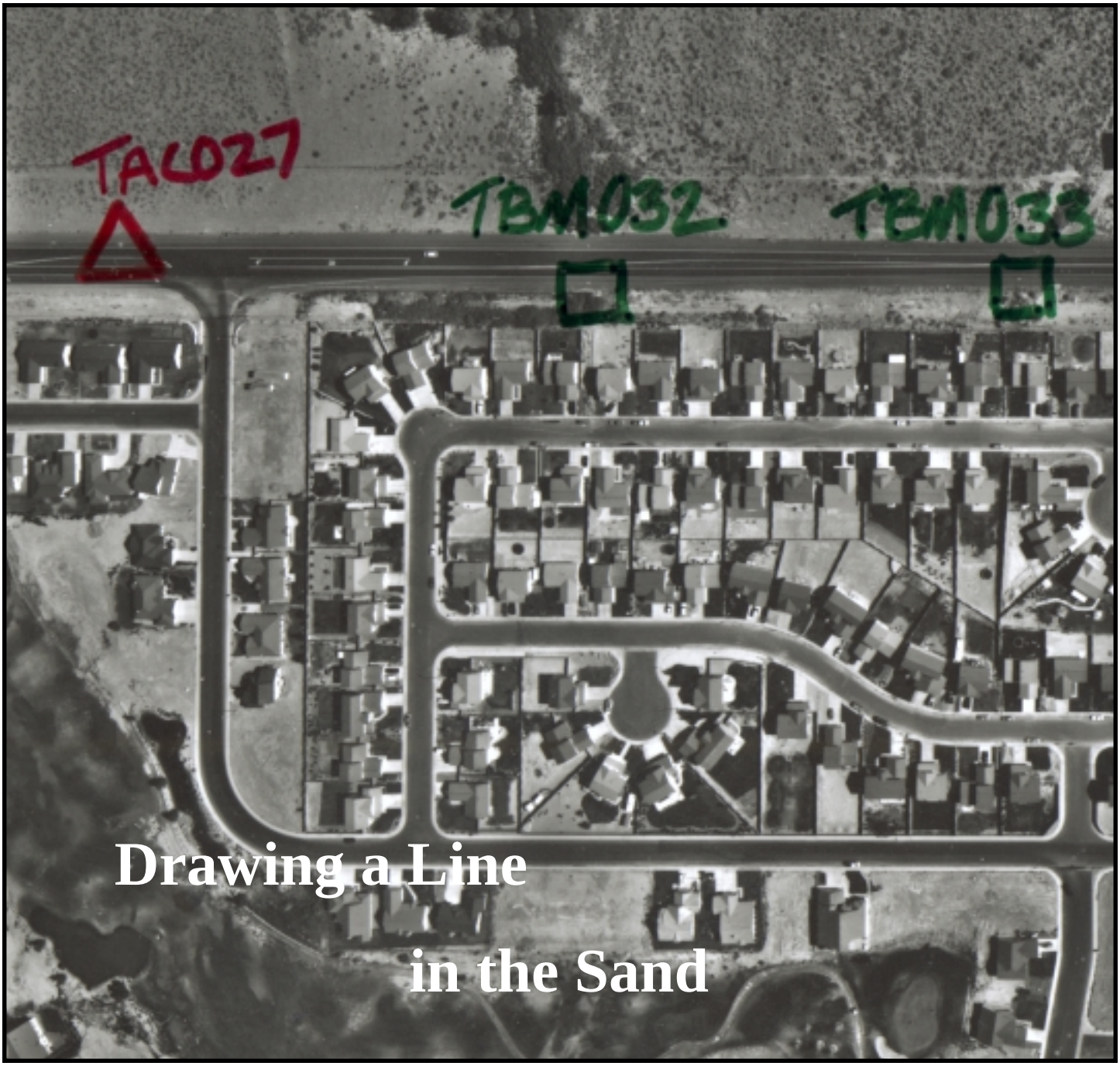
They can also take confidence from the relationships they have built with adjacent property owners, casinos dependent on access.

"We invited the casinos at Primm and Jean to meetings. We keep them informed of how this will affect them. They call when they see good work done," said Kumar.

But more than just having no complaints, Kumar said he considers their issues.

"Our job is always challenging. That's when I like it most. No day is an easy day. It's always different. That's the nature of this job."

Top left: Concrete cracking begins with a saw making a clean cut to protect remaining concrete.
Bottom left:, Resident Engineer Neil Kumar and Albert Austria confer on progress.
Top right: Thomas Sanders inspects concrete for barrier rails on the 20-mile project. Bottom right: Tommy Burroughs and Lyn Wayerski follow equipment that hammers old concrete, breaking it into pieces before new lanes can be added.



Drawing a Line in the Sand

Photogrammetry Helps Projects Find Their Places

Before most transportation projects see the light of day, they begin in the dark corners of Photogrammetry, where aerial photographs are transformed into maps that become blueprints for change.

From there, Photogrammetry assesses the lay of the land for purposes that might include right of way, hydraulics or environmental issues. They create a picture in time.

"Our job is to map the area requested and provide an engineering quality, topographic map to the user," said Photogrammetry Chief Carol DeMar, who has been with NDOT for 24 years.

"The area to be mapped is first surveyed and pre-marked. Imagery then flies the photo mission and processes the film for us," she said. "The primary purpose for Photogrammetry is to generate three dimensional spatial data about the topography, physical features and land use within an area of concern to NDOT."

Among their products are ortho photos, a picture that represents what a person would see looking straight down from an infinite distance above. An ortho photo depicts a single image, a strip or a block of images with all the

From left: Photogrammetrists Monte Lee, Betty Andrews, Terry Beauchamp Carol DeMar, Ron Sanders and Bryan Harris have keen eyes for the lay of the land.

distortion due to camera geometry, terrain relief and features removed.

Rectifying the photographs is the job of photogrammetrists Brian Harris, Monte Lee, Ron Saunders, Beth Andrews and Terry Beauchamp, along with DeMar.

Facing two large computer screens at once, photogrammetrists work in a dark room to reduce the glare that interferes with the detailed images they manipulate into maps. They graphically represent the exact physical features of a place or region on a map, both vertically and horizontally, with pinpoint accuracy.

Among their products are ortho photos, a picture that represents what a person would see looking straight down from an infinite distance above.

Though a key element of a designer's toolbox, Photogrammetry's maps are integral to other NDOT functions as well, to create and maintain transportation facilities. Aviation planners might use the maps to look for obstacles within a certain radius of general aviation airports that NDOT inspects. Hydrologists look for drainage and how it is transported. Biologists might look for wetlands and more.

The information provided is so specific that designers can calculate the quantity of rock material used on a project by comparing cross sections of a materials pit taken at the beginning and end of a project. Like comparing pictures of two different measuring cups, using digital maps can help designers see how much was used.

Looking at her own screen, DeMar has a bird's eye view of virtually all the dirt that is Nevada and she knows where it goes.

She is a little cosmic about plotting a piece of the planet.

"It has its place in the universe."

The primary purpose for Photogrammetry is to generate three dimensional spatial data about the topography, physical features and land use within an area of concern to NDOT.

Rural Renovations

In Carlin and Lamoille,

Projects Invest $4 Million

Two projects totaling $4 million were among those wrapped up this fall in rural Nevada. District III's Crew 917 oversaw completion of new access ramps for Interstate 80 at East Carlin.

In Carlin, the new eastbound off ramp and westbound on ramp complete the interchange at the town's east end, a significant improvement for economic development.

Resident Engineer Dana Plumb's crew managed the $1.5 million East Carlin full interchange improvements including concrete paving repair and bridgework along with drainage extensions at Pine Valley. Crew 917's Larry Westmoreland said the department will use a portion of the project to try some new concrete repair strategies. Consultants G.C. Wallace designed the project under the direction of Steve Merrill.

On Lamoille Highway, Larry Evans' Crew 908 widened the roadway in Elko from two to four lanes, widened shoulders, improved drainage and installed rumble strips to increase safety. Design of the $2.5 million project was under the direction of Casey Connor, Rand Pollard and consultants Carter & Burgess.

Frehner Construction served as contractor for the two jobs.

Right: The East Carlin Interchange project added an eastbound off ramp and a westbound on ramp to Interstate 80. Above: Lamoille Highway widening in Elko. Lower left: Ramps provide better access to Carlin, especially for large trucks. Below: A full view of the new additions that complete the Carlin interchange.

NDOT's Jim Pierce Wins National AASHTO President's Award For Administration

For quality innovation in transportation administration that saved NDOT millions of dollars, Jim Pierce has won one of the industry's most prestigious national awards. From the American Association of State Highway and Transportation Officials, Nevada's chief of Safety and Loss Control Division earned the President's Transportation Award given as the association's opportunity to recognize colleagues and peers who are achieving great things in the transportation field.

The award committee, comprised of the AASHTO president and the presidents of the four regional associations, faced a difficult challenge to find the best of the best.

Nominees were in competition with people from across the country. The President's Transportation Awards recognize an individual or team who has performed exemplary service furthering the transportation activities of their member department which has or potentially could have a salutary impact on transportation nationwide or on a regional basis.

Pierce won the award for administration, one of 12 categories evaluated by the panel of presidents.

Safety and Loss Control's Jim Pierce earned the AASHTO President's Award for Administration. From left: Safety's John Lubich and Diane Kelly, Pierce and Director Tom Stephens.

The award said: "As Safety and Loss Control Chief of the Nevada Department of Transportation, Jim Pierce has his hands full covering the diverse needs of a state that is both remotely rural and densely urbanized. He developed a new claims management system that benefits both the employees and the department. Combined with a concerted effort to raise awareness, teach prevention and involve employees, medical claims have dropped dramatically. Mr. Pierce took a program with high losses and higher premiums and saved more than $6 million, and his efforts have prevented injuries, saved lives and raised consciousness for safety's sake."

When Pierce decided it was time for a change, he developed a claims management system that benefits the employee and the department, working together to seek resolution. The idea paid off in a dramatic drop—a 33 percent decrease in claims costs from 1999 to 2000. Because employees are confident, they are not afraid to consult with Pierce's team. They also seek care before conditions get worse, a testimony to the faith they have in the program.

For all of the state departments, less than 8 percent of the claims account for 80 percent of the costs. In just the first four years since the claims management system went into operation, the number of NDOT claims has reduced 6.67 percent with the average claim value dropping from $5,273 to $1,592.

Transportation: Operations Analysis Studies the How and Why

In-depth analysis.

It is not something a person might expect from the 11 o'clock news, but it is exactly what elected officials and senior management depend on from NDOT's Operations Analysis Division. Headed by Russ Law, it is the division's business to protect state highways both physically and financially. When it comes to technical transportation data and fair analysis, legislators have the confidence to depend on Law's team as experts in the analysis of tax collection and distribution.

When legislators sought to find new approaches to fuel tax funding and other complex transportation financial needs, they turned to Law and his team for the in-depth analysis they depend on to make important decisions. Dyed fuel usage, supply level tax collection and the distribution of local fuel tax revenues are among the issues Law has approached with the Legislature.

"I inform people through presentations and testimony, work with lobbyists and legislators to assure fairness to the average guy on the street and I try to release the tension with a little humor," he said. Law's work has the dual result of increasing revenues with less government and producing a more user-friendly fuel tax collection system at the same time.

From left: Rick Oxoby and Dale Lindsey, Operations Analysis. Top: Russ Law.

Businesses that had previously been challenged and frustrated to deal with multiple state agencies for collection and enforcement were pleased by NDOT proposals that would ease the administrative burden on both the government and the taxpaying public.

Among administrative and enforcement improvements NDOT has helped to accomplish with the support of stakeholders:

- Fuel tax audits—Started with federal funding, fuel tax audits are designed to detect fuel tax evasion and promote enforcement. Although federal funding for the program has diminished, NDOT has continued to work with its own funds
- Pump to rack collection—Through the passage of AB415 in 1995, the diesel tax collection was moved from the retail pump level to the supplier level. Doing so increased diesel tax collection by $11 million annually.
- Dyed fuel enforcement—Through the passage of SB349

in 1999, Nevada began a program to enforce the prohibition of the use of dyed fuel on highways. No taxes are paid on dyed fuel. It is for off-road use only.

- Motor fuel administration and tracking—Through the passage of AB584 in 1999, the administration of the gas tax will be shifted in 2002 to the Department of Motor Vehicles, which already has the responsibility for the diesel tax administration. This change will lower administrative costs, reduce the reporting burden on suppliers and allow computer tracking of fuel transactions thus reducing errors and evasion.
- Registration checks—Changes in law increased NHP efforts to ensure Nevada vehicles are registered in this state to maximize revenue from existing registration fees and privilege taxes.

Operations Analysis also reported on a process that will serve as the basis for changing the ownership of state highways and local roads in a logical way, reducing the burden of maintenance for state highways. The study proposed potential road swaps, where local roads and state highways might be transferred consistent with the mission of each.

Within Operations Analysis, NDOT also coordinates value engineering studies, oversees Intelligent Transportation Systems for Commercial Vehicle Operations and the division coordinates the department's participation in the nationwide Long Term Pavement Performance Study. The team responds to the most pressing of financial issues while keeping an eye on the condition of the roads as well, responsible for the State Highway Preservation Report that details the condition of the highways and bridges, how to protect and improve them and how much that is expected to cost—plenty to ponder before the next Legislature begins.

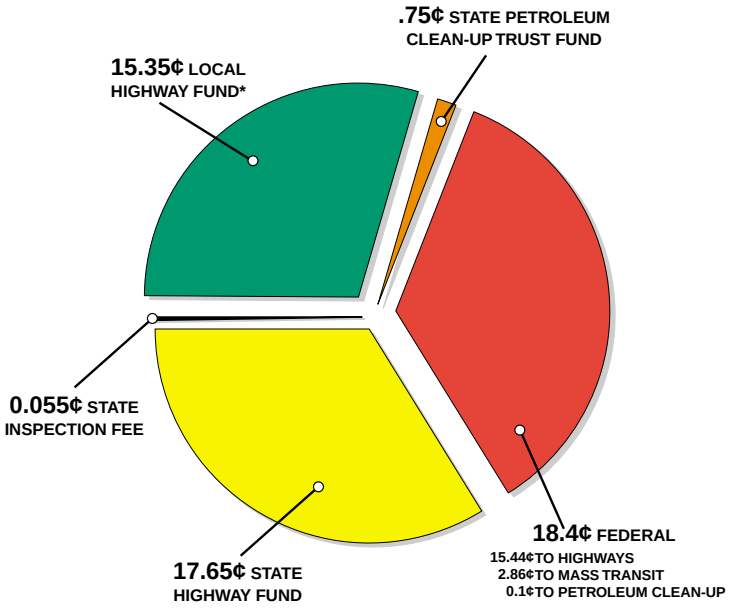
Financial Management: The People Who Find the Funding

With a $609 million executive budget, $278 million in federal dollars from more than 60 federal funding sources in addition to state gas taxes and other money, things can get a little complicated.

Figuring out who pays and who gets paid for transportation projects is among the most complex tasks at NDOT. The department depends on six meticulous people in Financial Management Division whose technical expertise keeps revenue and expenditures in balance.

Jerry Ross' team is keeping an eye on the budgets more closely than ever before as NDOT grows with the state it serves.

"Your aim is always to keep your expenses below your revenues," said Ross. Simple enough, but with a $609 million executive budget, $278 million in federal dollars from more than 60 federal funding sources in addition to state gas taxes and other money, things can get a little complicated.



TOTAL TAX = 52.21¢ PER GALLON

DISTRIBUTION OF GAS TAX PAID IN NEVADA

*Includes an optional 9 cent county gas tax administered by the local Regional Transportation Commission. The rate chosen by each county is as follows:
9 cents - Carson City, Churchill, Clark, Humboldt, Lyon, Mineral, Pershing, and Washoe
4 cents - Douglas, Elko, Esmeralda, Eureka, Lander, Lincoln, Nye, Storey, White Pine

"We're in a position to effect change and help people move their projects along. I am proud of what we can do to help with something that may initially appear undoable," Ross said. "We're facilitators, a bridge between the Legislature and the department, the department and the Federal Highway Administration."

To handle complex issues that face funding, Financial Management relies on input from other employees, sophisticated computer systems and, most importantly, instinct to balance the department's needs.

Three major segments organize the funding process. First, the executive budget, submitted to the governor and approved by the Legislature, covers everything NDOT needs from power to payroll. Cheryl Cooke runs the budget side of the house.

From the National Highway System to the Congestion Mitigation and Air Quality funds, nearly every source has a specific requirement related to it.

Next, identifying proposed projects and potential funding is managed by Jim Orsbern in the Pre-Construction Engineering Management System. Nearly everybody involved in engineering projects at NDOT recognizes the PCEMS acronym—it is the force behind project scheduling.

Each month when representatives from nearly every division gather in one place at the project status meeting, they rely on the PCEMS report. The 85-page printout chronicles an average 250 projects in the pipeline funneled by Orsbern's database.

"PCEMS is a link between divisions. We have to schedule the money we have effectively. I put it in the schedule and report on it," Orsbern said. From there, each NDOT discipline provides input on project delivery that could affect the ability to obligate funding on time.

Another report from Orsbern's database tracks limitations on how a particular fund can be spent. While the Legislature controls all funds regardless of their source once they are received, special strings apply to federal funds. From the National Highway System to the Congestion Mitigation and Air Quality funds, nearly every source has a specific requirement related to it. Compliance is where Norma Holland's Programming team comes in.

"You want to use all those federal dollars and you don't want to lose them," Holland said. Over the years, she and her team have become experts at meeting the complicated demands of the federal government. Their job is to comply by submitting all the documentation required, page by page, project by project and layer after layer. They program state funds too.

Working in tandem, Orsbern and Holland use their tools and talents honed over the years by instinct and intuition. They look at a project's limits, scope and cost and provide all the critical information to get funded.

Programming follows the funding for the life of the project. Sometimes even years after a project is open to traffic, complex funding issues must still be tracked and bills somehow paid.

If jobs need more money, project coordinators come to Holland to look for more funding sources.

"Together you are watching balances," said Ross, now in his 14th year in budgets for NDOT. "Too many projects for the dollars you have is a real problem. So is too few. It's a fine line to walk." That is where experience pays off and the instincts come in.

"You get a feel for the flexibility of the program."

From left: Financial Management Division's Bob Gori, Norma Holland, Jim Orsbern, Cheryl Cooke, Jerry Ross and Darlene Loff manage the budgets for NDOT.

Where and When: Local Input Guides Las Vegas Program Development

Joe Peltier, Mira Brown and Tony Letizia, Program Development, make their business meeting with the people and communities of southern Nevada to improve transportation.

For Tony Letizia, Joe Peltier and Mira Brown, a few hours in the mall can be a real learning experience.

Like their counterparts in Carson City, Kent Cooper, Leif Anderson, Michelle Gardner-Lilley, John Devaney, Coy Peacock and Terri Compton, who handle the rest of the state, the people of the Las Vegas Program Development Office are charged with being the eyes and ears of the department in southern Nevada, and sometimes they are the voice too.

They help decide when and where projects get built by getting out into the communities and learning what the region wants. Their calendars are full.

> ***"We try to figure out what we're going to do from five to 20 years and beyond and help local governments see where their shortfall will be in terms of capacity."***
>
> ***Tony Letizia***

One fall Saturday found them at a transportation fair at Meadows Mall. Though they expected concerns about the U.S. 95 widening project adjacent to the mall, they were surprised to find expressed opinions centered on Hoover Dam issues some distance away and on other local improvements. In the communities, they not only gather information, but give it as well.

"We shed light and bring attention to what we are doing to solve mobility issues. It's a learning experience for me," Letizia said.

"It's about communication," said Peltier, who serves on many local transportation committees.

"We're the liaison between cities, counties and the department," said Letizia. They are familiar faces to the local public works officials, citizen advisory boards and the Regional Transportation Commission. They build the trust of local officials and their staff by being involved with transportation issues and informing them of NDOT's current and future projects, and issues associated with each one.

"We're invited," Letizia said. With at least five to seven local meetings to attend each week, they gather input on short and long-term community transportation needs.

"Through processes, we bring projects together in our Annual Work Program and elicit local projects," he said. Those projects are then incorporated into the local Regional Transportation Improvement Program and then into the State Transportation Improvement Program delivered yearly to and adopted by the state Transportation Board.

"It's a yearly process for the 3-year and 10-year document," he said. Projects planned for the next three years make up the short-range element and after three years, the long-range element.

Gathering information, finding consensus and negotiating what goes into the STIP is the Program Development Office's main job. They connect headquarters with local governments' concerns and vice versa.

"A lot of issues they are addressing affect our own projects," Letizia said. "We try to figure out what we're going to do from five to 20 years and beyond and help local governments see where their shortfall will be in terms of capacity."

Transportation corridor studies help to set the where and when priorities for the future. The Northwest Corridor Study produced plans for the U.S. 95 widening from Martin Luther King Boulevard to Craig Road. A new study now focuses on the northeast corridor bounded by Bonanza Road on the south, Martin Luther King Boulevard on the west, Apex in the north and Hollywood Boulevard on the east. Louis Berger Group is the consultant heading the study, which includes the possible eastern leg of the Las Vegas Beltway.

Another night on the calendar might find Letizia's team at the Southwest Community Forum Town Board meeting studying the access demands for the proposed Ivanpah Airport, a new international facility in development, or anywhere else in Clark, Nye, Esmeralda and Lincoln counties where transportation is the topic.

"We'll be as helpful as we can in any way possible," Letizia said, "being a sounding board and helping to resolve transportation issues into transportation solutions."

Natural Splendor Graces Genoa

Rising to more than 7,000 feet above Genoa and the Carson Valley, the 11 miles of steep and winding Kingsbury Grade challenge Crew 227. From left: David Walmer, Roger Rodarte, Lloyd Barrett, Danny Lopez and Ed Shope do the day shift. Not pictured: Ernie Yordy.

Twelve miles south of the state capital, filled with charm, historic Genoa beckons travelers to stop on their way through the Sierra and experience the splendor of a simpler time.

Famous as the first permanent nonnative settlement in Nevada, Genoa was born in 1851 as a place for weary travelers to take rest and refuge on their way to the California Gold Rush.

Today, travelers will find no shortage of hospitality in the tiny foothill town. Many of the original farms and ranches still flourish. Their new neighbors are world-class golf courses, Victorian homes and plentiful antique stores.

At the heart of the town's only intersection, history abounds with the Genoa Courthouse Museum, the Museum at Mormon Station State Historic Park and Nevada's oldest saloon, that still serves up the spirits.

On the corner, the Genoa Country Store is a real treat. With colorful tablecloths and ice cream parlor chairs, crafts, candles and collectibles, it welcomes children of all ages to sit a spell.

Down the road, David Walley's Hot Springs resort offers historic hospitality and soothing mineral baths in the natural environment that also hosted Mark Twain and Ulysses S. Grant when they passed through Genoa.

By tradition, each year the town raises its revenues with the Genoa Candy Dance, a fundraising festival of handmade candies and craft sale of decadent proportions.

For Danny Lopez, maintenance supervisor for Crew 227, the thousands of guests that converge for Candy Dance mean only one thing—traffic control.

Genoa's main highway is Jacks Valley Road, State Route 206, one of seven routes the Gardnerville crew maintains—nearly every road south of Carson until it ends in California, and then some.

Come December, the warm days of Candy Dance are long gone and snow on Kingsbury Grade, S.R. 207, calls the crew into action. Eleven miles of some of the state's steepest and windiest highway leads from the Carson Valley to the casinos at Stateline. Commuters count on Lopez's crew to keep the road open.

The lodge at David Walley's Hot Springs.

"In some instances visibility is zero," said David Walmer. "You just get to know your road." It is a big job after a storm.

At the Genoa Country Store, Gail DellaVedova serves up smiles for some school-aged guests.

"Half the guys are on the mountain all the time," Lopez said. "The rest are in the valley, and they go five miles up to help." When a big storm hits, the crews are stretched to clear U.S. 395 and state routes 88, 206, 207, 756, 757 and 759, all the way to the road to the Minden Airport.

"The lakeside of Kingsbury has lots of twists and turns. We need the all-wheel drives for the extra traction," he said. When it closes, it is not for long. "We sand up and get the cars

L to r:Craig Santos, Mike Ball, Troy Hammond and Randy Anderson

In winter, motorists and wildlife share State Route 206, named both Jacks Valley and Foothill roads.

moving again. The tough part is traffic, when cars aren't chained up they spin out and get stuck." The Douglas County Sheriff and the Nevada Highway Patrol pull them out so they do not block the snowplow.

In the worst of storms, Lopez said, crews pulled out 27 cars in one night. Between six and 15 is more typical.

Working 12-hour shifts from a temporary trailer, newly placed on the valley side of the hill, there are no comforts of home for those who plow. They bring their lunch and dinner, a change of clothes for the sopping wet, snow-soaked nights and pause only moments to warm up by the trailer's space heaters. They share stories and then it is back to the road.

All operators train with and wear avalanche peepers, devices that sound off to identify a person's location. In practice, they can find a coworker in as little as 10 seconds, and as long as 18 minutes, said Lopez, who has spent his share of time on the stormy slopes.

"It's exhausting, sometimes nine and 10 days straight. It makes for a long day."

Not as bad as some he has seen. Lopez was once hit by two cars, suffering a broken leg, while stopped to assist a stranded motorist.

Before they hit the highway again, they will check in with a friend, the DTN, Data

A new park statue honors local hero Snowshoe Thompson, who carried mail across the Sierra.

Transmission Network, which calls the storms before they show. Crews said they appreciate the advance warning of storms they get from DTN.

"When you watch those storms, and you're in them, you get to know how they work. You can reference it to the DTN for the future," Lopez said. Other critical climate information comes from Washington's Northwest Weathernet.

"Most of it is a combination of what we learn and what we know," he said. When the road must close, the crew also makes use of Construction Division field crews

Brand Inspector Wally Adams is as local as they come. His family settled town in the 1800s and in the 1860s his ancestors kilned the bricks for the historic Genoa Courthouse Museum, below.

for traffic control at the ends of the road so they can concentrate on snow removal.

"I enjoy it," said Lloyd Barrett. Now on Crew 227's plow, Barrett is retired from the United States government service in Death Valley-- a far cry from the land of Lake Tahoe and the foothills of Genoa.

In Douglas County, NDOT invested:

- *$11.2 million in 2000 to widen 11 miles of U.S 395*
- *$3.5 million in 2000 on erosion control and stormwater improvements on U.S 50*
- *$1.7 million in 2000 to improve sediment basins and strom drains on U.S. 50*

Signs Trace Historic Oregon Trail Across Nevada

Interstate 80 travelers are in for a bit of a history lesson as they make their way from Humboldt Lake to the California state line.

Eighteen new logo signs mark the approximate route of the Oregon-California Trail, the main cross-country route in the mid 19th Century.

The signs were fabricated and installed by NDOT in cooperation with the Oregon-California Trails Association's Paul Sawyer, who initiated the effort. OCTA's Don Wiggins, a trail historian from Mogul, is well versed in the route that led immigrants over Donner Pass in California.

Wiggins teamed with District II Traffic Engineer Tracy Larkin-Thomason and Roadway Systems Division's Jim Epley to spot the right places to locate the signs as the trail passed to one side or the other of I-80.

From left: District II Reno Sign Shop crew's Buck Hurlbut, Rex Schuckert and Jon Chambers with trail historian Don Wiggins and a set of signs that will mark the California Trail in Nevada.

Private trail associations have placed railroad markers along the original route and provided additional information at rest areas.

Other states have also installed the logo signs, Wiggins said.

Smaller versions will be placed on other highways such as the Silver Springs branch at U.S. 50 near Fort Churchill and at Jacks Valley Road near Genoa where some travelers took a detour around the mountains of the Sierra.

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On the cover: In the 2001 construction season, NDOT completed a $2.5 million widening project for Elko's Lamoille Highway.

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