

A Message from the Commissioner

Hello Team!

I can't believe that fall has arrived. This is a very busy time for us. The weather is still warm enough for us to continue construction and maintenance work on our roads, but we're also planning and thinking about Winter Operations.

In preparation for Winter Ops, INDOT's annual Maintenance Conference is currently taking place, with more than 120 employees attending. The three-day conference includes a host of topics, one of which is Winter Operations.

Our mechanics have already done a great job to prepare our snow and ice removal equipment, and bumper-to-bumper inspections will ensure that we're all ready to go. Additionally, we have ramped up our hiring fairs for full-time and seasonal employees in preparation for Winter Operations. Career fairs already have taken place at various INDOT locations.

So, you see, fall is a very busy time for all of us. But it's never too busy to take the time to appreciate those around us. When I travel the state or roam Central Office, I see our employees taking INDOT's Core 4 Values to heart. Remembering to put our Core 4 Values into practice separates us from many other state agencies.

And if you know of a qualified individual who would like to join our INDOT team, please point them to the [State of Indiana Job Bank](#).

Thank you for all that you do!

Take care,

A handwritten signature in black ink, appearing to be the name "Joe".

Some Things Are as Simple as Black and White

There are no shades of gray on a resurfacing project of a high-volume highway in the Crawfordsville District. Everything is black and white.

In a rarity for INDOT, traditional hot mix asphalt (HMA) and concrete are being used for lane pavement in the same project — the eight-mile resurfacing of U.S. 52 from South 30th Street in Lafayette to East Tippecanoe County Road 900 South, approximately seven miles southeast of Lafayette. The four-mile northern section of the project is being resurfaced with asphalt. The four-mile southern portion is concrete work.

HMA is black, and concrete is white. The twain shall meet when the project is finished early this fall.

“It was a joint decision between our district’s Capital Program Management and Construction divisions during project development to use both materials,” said Crawfordsville District Area Engineer Erik Seef. “Typically, projects aren’t split between different pavement types, but in this case, it made perfect sense.”

Thin concrete overlay, sometimes called white topping, is a relatively new process at INDOT. The practice involves milling down some of the existing asphalt or composite roadway and then installing a new — but thin — concrete overlay, which measures between 4 and 6 inches thick (conventional pavement thickness is more than 6 inches).



Until this U.S. 52 project and one other current project, thin concrete overlays had not been used in the Crawfordsville District. Personnel had to keep in mind that thin concrete overlays must be installed in a continuous concrete pour, and then control joints must be saw-cut into 5½-by-6-foot squares. The concrete must cure before vehicles can be driven on the roadway.

“As our district had not undertaken a thin concrete overlay, the maintenance of traffic (MOT) was an unknown,” said Seef. “The northern portion of the project is near the Tippecanoe Mall and in a dense urban section. It was deemed too risky to place the concrete there due

At the southern portion of the U.S. 52 project, new asphalt proves to be a marked contrast to new concrete; new asphalt will be installed and abut new concrete at the northern interface by early October.

to unknowns in MOT, such as how quickly vehicles can cross it and if it should be opened for tractor-trailers. These issues could have major impacts to company delivery schedules. By using HMA in the northern section, we could guarantee that the roadway could be opened within hours upon cooling after the placement of HMA.”

The U.S. 52 project, which also includes patching, began in April. The color contrast between new concrete and new asphalt could be seen immediately at the southern juncture, where a short section of new asphalt was added to tie the existing asphalt into the new concrete to transition the elevation difference between the two. On the northern interface of the project, the thin concrete overlay and new asphalt are to meet in late September or early October, with the overall project wrapping up soon after.

Thin concrete overlays are an ongoing learning process. Purdue University’s Indiana Local Technical Assistance Program, in conjunction with Indiana’s concrete paving industry and INDOT, hosted two one-day workshops in mid-September. The workshops, in Huntingburg and Lafayette, included field visits to project sites in progress and thin concrete overlay best practices for MOT and construction.

Seymour District HMA-Concrete Project Set

In the Seymour District, new HMA eventually will meet new concrete along U.S. 50 under two separate contracts to resurface and repair a 22-mile stretch.

HMA is being used to resurface a 17½-mile route from the Jennings-Ripley county line east to State Road 101. A 4½-inch thin concrete overlay will be installed on an 11½-mile stretch from State Road 101 to just west of Aurora.

The HMA project is to be completed by mid-November.

A thin concrete overlay was placed atop the existing asphalt base on westbound lanes of U.S. 50 in mid-September. Next spring, workers will return to the project site to “white top” the two eastbound lanes, with work expected to be completed by July.

Success of Collision Shop Is No Accident

Sterling Trucks quit being manufactured in 2009, leaving INDOT with dozens of vehicles for which parts were no longer made. The shortage of parts could have left us in a lurch if not for the sound thinking of the Seymour District Collision Shop.

“The Sterling parts have been getting very hard to come by,” said Shop Foreman Mike Jewell. “In situations where it is to our advantage, we may at times strip the good parts off Sterling trucks that need to be retired or have been wrecked before sending the vehicles to be auctioned. Then, when another Sterling needs just a part or two, we may have it on-hand to keep that Sterling on the road.”



A Sterling Truck, transferred from the Seymour District to the Crawfordsville District several years ago, is still shining today.

INDOT’s only collision shop performs body shop repairs for all of INDOT and other state agency vehicles.

“They’re a huge asset for all six districts and the rest of INDOT,” said Statewide Fleet Director Jason Kruse.

LaPorte District Fleet Manager Dan Barenie was amazed earlier this year, when the Seymour shop saved

a 2008 bucket truck that had an engine failure.

“The engine failure, combined with rusty work cabinets and front-end damage from accidents, meant that having it repaired locally wasn’t cost effective,” said Barenie. “We have older bucket trucks still in use, so it would have been a shame to lose this one.”

Discussions with Seymour District Fleet Manager Jack Monroe led to the belief that the truck could be saved at a reasonable cost.

“Seymour’s body shop completely rebuilt all the boxes on the back and painted them,” said Barenie. “They added new metal; fixed the hood, grill and bumper in the front and painted them; replaced the diesel engine with a new motor with a one-year warranty; and even fixed the cab floor and seat.”

When the bucket truck was returned to the LaPorte District, Barenie said it looked almost brand new and that most of the operators thought it was new; they couldn’t believe it was their old truck.

“We are expecting to gain seven more years out of this truck,” said Barenie. “The cost of the whole project was just under \$23,000. The cost of a new truck is about \$130,000. Thanks to Seymour, we were able to save this truck and support operations with a clean, dependable, and safe bucket truck.”

Six INDOT employees work in the shop, which includes garage bays for mechanical work, a bay for metal fabrication, and a body shop. A stockroom clerk provides parts support.

Monroe’s supervisor, Seymour District Logistics Director Clark Packer, appreciates the crew’s daily work and for thinking of ways to reduce costs and stretch tax dollars by deciding to occasionally strip Sterling Trucks parts when it makes sense.

“Our core business is not restoration,” said Packer. “We do not spend time and money breaking down vehicles, but we do repurpose used parts when it makes sense either because of cost or because of reduced part availability. It’s a balancing act of the use of new parts and repurposed parts to manage cost efficiency while still producing a good product that will function to meet our needs.”

In 2017, the shop significantly rehabilitated the base chassis of a 1990 truck-mounted drilling rig for INDOT’s Pavement Division.



“The work accomplished by the Seymour shop enabled me to not have to scrap out the truck, as it was in exceptionally poor condition because of being stored outside and uncovered,” said Pavement Director David Holtz, who added that — after the base chassis was repaired — the drilling rig manufacturer repaired the drilling rig that is mounted on the truck’s flatbed.

“The Seymour shop’s work on the automotive systems and the body — including almost entirely rebuilding the truck’s flatbed — was the key factor in deciding to repair the drilling rig assembly. I expect a minimum of five to 10 years of more service. Commercially repairing the 1990 truck might have cost \$65,000

A rebuilt chassis, rehabilitated by the Seymour shop, enabled the Pavement Division to keep this 1990 truck-mounted drilling rig.

— if it even could be done. A new truck might run \$350,000. I could not be happier about the quality of their work.”

Crawfordsville District Fleet Manager Josh Montgomery is a huge fan of the shop.

“The Seymour shop is a great resource for INDOT,” said Montgomery. “I have sent various large repairs and modification jobs to Seymour. We send all our vehicles that have accident/body damage to be repaired there. Last fiscal year, they replaced an engine in a Ford F-350 for us during snow

season when we had a surge in workload. They also modified the spray system of a tanker to spray brine during Winter Operations.”

Montgomery said that the secret of the shop is the human element, not the equipment or tools being used.

“Mike and his crew make all the magic happen,” said Montgomery. “Mike coordinates and supervises his awesome crew to make major repairs, minor repairs, body work, painting, and modifications to all types of equipment from various districts and state agencies. They even transferred a Seymour District Sterling Truck to me a few years ago, and it’s still shining.”

Needless to say, the Seymour District Collision Shop has earned its sterling reputation.

Seymour District Equipment Mechanic Jeff Pennycuff sands an INDOT dump truck sent to the district's collision shop for repair and repaint.

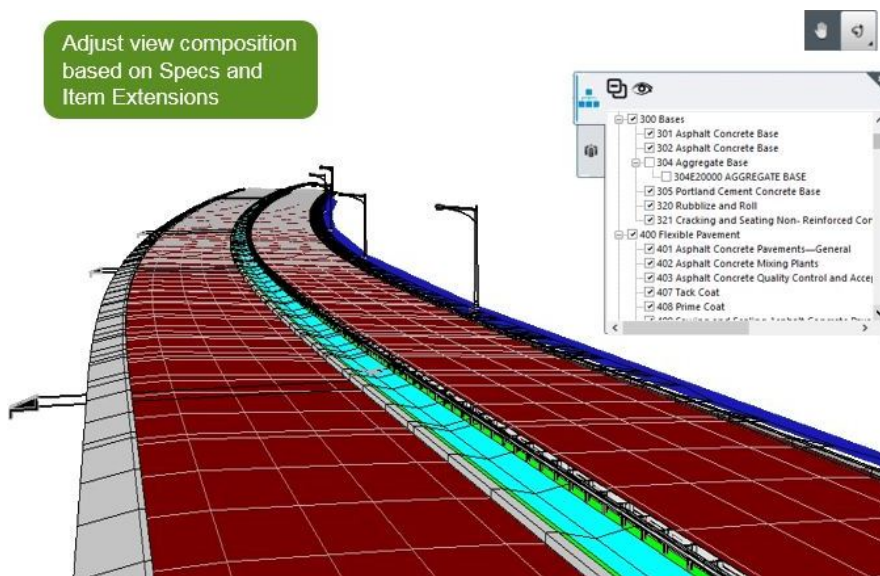


E-Construction Summit Promotes a Paperless, 3D World

3D CAD models or standard plan sets? Electronic files or boxes of paper forms?

It's obvious to most that the first choice in each of these questions is more attractive and effective. INDOT's Management Information Systems (MIS) Highway Applications Department is working with our Design and Construction Management sections to ensure that we reach those levels.

In late August, the department hosted a peer exchange as part of the Federal Highway Administration's (FHWA's) Every Day Counts e-Construction and Partnering initiative. E-Construction is the creation, review, approval, distribution, and storage of highway construction documents in a paperless environment. The two-day event enabled 32 INDOT employees representing 17 departments to learn more about four topics crucial to e-Construction. During each session, INDOT presented its best practices for each topic; more importantly, four different state departments of transportation (DOTs), considered national leaders in each topic, divulged details of their programs to move to paperless systems.



A 3D CAD model (top illustration) allows for better visualization of the design intent and is the basis for automated machine guidance in construction.

Derek Fuller (right) is one of several INDOT employees who made presentations at the peer exchange.



"The peer exchange was a great way to inform the members of a variety of departments here at INDOT about what we're working on and also to learn from the best in the nation as determined by the FHWA," said Computer-Aided Design (CAD) Support/e-Construction Specialist Derek Fuller.

MIS Highway Applications Manager Mike Jenkins kicked off the peer exchange with welcoming remarks, and then Fuller provided the group an overview of the e-Construction initiatives at INDOT.

The first topic — 3D CAD Model as Contract Document — featured Highway Design & Technical Support Director John Wright providing details about INDOT's design practices and final submittal requirements. That

was followed by a presentation from the Utah DOT, which has used 3D CAD models as the contract documents on several projects for transportation work in that state.

"This was a very timely topic for us, as INDOT's current standard is regular PDFs for design submittal of contract documents, but there is a transition to 3D CAD models for better visualization of design

intent, automated machine guidance, and construction inspection,” said Fuller. “One aspect of e-Construction is to create a document-centric approach focused on reducing paper, but we wanted to take this further by adding a data-centric approach with the transfer of data from 3D design models to construction and then onto asset management.”

The second topic — e-Ticketing for Materials Delivery — included Construction & Materials Management Director John Leckie and Field Engineer Andrew Pangallo providing an update on INDOT’s efforts to investigate e-Ticketing for materials delivery, and a presentation by the Pennsylvania DOT on its e-Ticketing pilot projects.

“Currently, we keep paper tickets to verify that materials are delivered to jobsites,” said Leckie. “Regulations mandate that we keep these tickets for 10 years. The result is boxes and boxes of paper tickets stored at each district. A much better option is e-tickets, which are digital tickets stored on a server. Next spring, we will be doing an e-ticketing pilot study on a district project.”

The third topic — Return on Investment (ROI) of e-Construction — included tips from the Oregon DOT on how to financially make the most of e-Construction.

The final topic — ROI of 3D Models — featured the Wisconsin DOT, which has used 3D model visualization and 4D simulations since 2010 for large projects that are difficult to visualize, such as those involving a complex redesigning of an interchange. Besides contributing to higher-quality and more accurate plans, the use of 3D models reduces costs significantly for contract modification (change orders), according to the Wisconsin DOT, which makes it a practice to appoint a dedicated design liaison for such projects.

Jenkins said of the two-day conference, “Not every facet of what the other four state DOTs do applies to us, but we learned a great deal that we can carry forward as we pursue improvements at INDOT.”



Boxes in a file storage room in the Seymour District (left photo) include paper tickets of jobsite materials (right photo) that must be kept for 10 years.

Hard Work Earns District Crew High Praise

A citizen known for being critical about INDOT has changed his tune after witnessing hard work by those in the Vincennes District Chrisney Unit.

Leroy Bates, who lives near Tennyson in rural Warrick County, has routinely called INDOT's customer service team with grievances and criticisms. That changed in late August, when we responded to his concerns about a drainage issue along State Road 62 near his house.

"We went out there to install a 160-foot-long pipe," said Chrisney Unit Supervisor Jeff Muse.

Bates watched the crew like a hawk, observing them install the pipe and then cover it with dirt and grass to smooth out the ditch along the area. Bates came away so impressed that he called customer service personnel in the Vincennes District and at Central Office.

"Thank you to Jeff Muse and his crew," said Bates. "I am very proud of all of them. They worked hard for two straight days, and no one took a break or a lunch."

Bates also complimented the highway technicians.

"Special thank you to Doug Risse for extra work that was done," said Bates. "I want to recognize, as well, Randy Bingle, Randy Embry, Dakota Risse and Kenny Price. All worked as a team and gave a 200 percent effort. It is so nice to know that, working for a state agency, they are really taking care of their customers. They didn't do a good job — they did a supreme job. I really want it to be noticed."

Bates said he was a heavy equipment operator for 35 years.

"I've operated everything big and small that you can imagine, and I know what hard work and talent look like," said Bates.

"These workers have talent and they work hard. This wasn't a typical one-joint pipe and 6-inch-deep culvert under a driveway. This was eight joints — 160 feet long — and 6 feet deep. The crew members beat

their brains out for two days with no breaks, jumping in and out of the hole. When they were done, everything was impeccable. Even the grass was so perfect that I couldn't even tell there was a 6-foot-deep hole there. In my lifetime, I will never have to worry about this drainage issue again."



The Chrisney Unit, located within the Tell City Subdistrict of the Vincennes District, consists of (from left) Supervisor Jeff Muse and Highway Technicians Randy Bingle, Dakota Risse, Doug Risse, Kenny Price, Randy Embry, Ryan Shore, Jon Winkler and Larry Williams.

District Customer Service Resolution Specialist Misty McCarter and District Customer Service Assistant Kristina Taylor certainly noticed when they received Bates' phone call.

"Misty and I have talked to Mr. Bates several times for complaints," said Taylor. "We were extremely proud to get this phone call. Mr. Bates said he knows that INDOT doesn't always get phone calls with good comments, and that they're normally complaints, so he really wanted to express his supreme satisfaction."

Excerpts of the phone call were printed and hung at the Chrisney Unit for the workers to see.

Take the INDOT News Quiz



The *Inside INDOT* news quiz tests your ability to recall the major points of this month's articles. How well did you read the September newsletter? Play along to find out. [Take the quiz.](#)

From WashTennKyNevDOT to INDOT?

When the Seymour District's Bill Read, Ryan Cox, Joe Middeler and Jerry Hoover get together, they represent INDOT and a whole lot more. They also exemplify WashTennKyNevDOT. Say what?

The four carry forth experiences from the departments of transportation at, respectively, Washington, Tennessee, Kentucky and Nevada while working to improve INDOT.

"We are blessed to have four distinguished employees in our district who came from other DOTs," said Seymour District Deputy Commissioner Tony McClellan. "Those experiences add great value to make our district, and INDOT as a whole, better."

Here are their stories.



Seymour District employees who came from other state DOTs include (from left) Bill Read (Washington), Ryan Cox (Tennessee), Joe Middeler (Kentucky) and Jerry Hoover (Nevada).

Bill Read, Utility and Railroad Engineer

After growing up in Union City in Randolph County and graduating from Purdue University, Read got married in 1969. One week after the wedding, the new couple headed to Washington state, where Read began working at the Washington State DOT (WSDOT).

"Oh, what an exciting time it was," said Read. "We were building the original interstate system."

Read was stationed in Ellensburg, in the middle of the state where I-90 intersects with I-82. He started out designing small structures for I-90 and its frontage roads over Snoqualmie Pass through the Cascade Mountain Range. After working in design, he moved on to a survey crew, then to construction, working on two I-90 bridges. One, at the top of Snoqualmie Pass, featured 10-by-10 cast-in-place box beams. The other bridge, west of the pass, was a 750-foot, two-span steel-girder.

Another project involved the construction inspection and staking of a 15-mile section of I-82. This project was the southern half of a then-new 30-mile section of I-82 between Ellensburg and Yakima.

“It was located in the high desert, with sagebrush and rattlesnakes,” said Read. “I worked as an inspector, doing compaction tests on the grade and concrete testing for the pavement.”

Washington has 39 counties to Indiana’s 92.

“I lived in Kittitas County, which is 100 miles wide,” said Read. “Washington has mountains, canyons and deserts, with dry weather east of the Cascades and wet weather west of it. The different terrains and weather created survey and design challenges.”

Read shakes his head. He can’t believe that was nearly 50 years ago.



Bill Read makes a presentation during a technical session at Purdue Road School in 2016.

“For surveying, we used transits, levels, chains and more to collect field information for design,” said Read. “In construction, we used laths and hubs to control the grade. To control the paving operations, we used blue tops, which were 2-by-2 wood hubs that were painted blue on top. These are much different than our methods used today.”

Read continued: “We ran survey lines through the forest and over rock slides covered with vine maple. The vine maple was so thick at times that we could clear enough to survey only 100 feet in a day. We also surveyed on forest duff, which is a collection of pine needles and cones that could be as much as 5 feet deep. That was like surveying on a waterbed. It was a lot of work, but it was great to be a part of transportation history at that time.”

Read, though, is clearly not stuck in the past.

He left WSDOT in 1972 for a long and varied career, mostly in Indiana. After a stint as a design engineer for an Ohio consulting firm, he worked for a contractor in Union City as an estimator, bidder and building designer, before performing those same duties for a larger construction company in Fort Wayne. He received his professional engineering license and started his own firm, continuing to estimate and design buildings. AECON Inc. purchased his engineering firm and hired Read as vice president of sales with some responsibility for the design and management of road and bridge projects. He then became a sales representative for an Indianapolis consulting firm, and then an engineer for the Scott County Highway Department.

INDOT hired Read in 2007. He began as the Seymour District’s design manager before taking on positions of consultant services engineer, project manager, and now utility and railroad engineer.

“The real pull for me to come to INDOT was the opportunity to help guide young engineers in the design process and in their careers,” said Read, who currently lives in Columbus, Ind. “I believe that all of my combined experiences of designing, surveying, and working in construction have given me the background to meet the challenges of dealing with the projects that INDOT works on. My sales experience has been helpful in communicating well with those I work with both inside and outside INDOT.”

Ryan Cox, Area Engineer

A native of central Kentucky, Cox received an athletic scholarship to play baseball at the University of Alabama-Huntsville, where he majored in engineering. Within six months after graduation, Cox was hired in January 2006 in the hydraulics section of the structures division at the Tennessee DOT (TDOT) headquarters in Nashville.

Among other duties, he was responsible for the hydraulic design of items such as bridges, culverts and channels that impacted midsized streams.

“Since I was stationed at TDOT’s central office location in the big city of Nashville, and most of my work took place within the small confines of a cubicle, I was ready for a career change of scenery,” said Cox. “Coupled with my wife being a New Albany, Ind., native and that we were accustomed to a small-town, country-like setting growing up, we decided to plant our roots in Indiana after the birth of our second child. We live out in the country in Floyd County.”

INDOT hired Cox in December 2013 as a Seymour District project engineer in construction, which allowed Cox to work outdoors more.

“Coming from the small town of Campbellsville, Ky., I have always been an avid outdoorsman, so I feel fortunate being able to spend a portion of my workdays outside the office,” said Cox, INDOT’s area engineer for Clark, Floyd, Harrison and Washington counties since August 2014.

Differences between TDOT and INDOT include the number of regions (four vs. six) and pay.

“This may come as a shock to many INDOT employees, but some DOTs, such as TDOT, are paid quite a bit less in general regarding various job classifications,” said Cox. “As an experienced professional engineer, that was a big factor in deciding to consider a position at INDOT.”

However, Cox is grateful for his time in Tennessee.

“Being involved in the earlier design phases of projects at TDOT has greatly benefited me regarding my daily construction tasks at INDOT,” said Cox. “That experience has enabled me to review projects from multiple perspectives in constructability reviews, meaning I catch more errors or make more suggested improvements to project plans and other contract documents before the project gets let.”

Cox is a fan of Major League Baseball’s Chicago Cubs and, of course, college basketball’s University of Kentucky.

“Joe Middeler and I are both from Kentucky, so we have to stick together and cheer for the Wildcats while being surrounded by Hoosier and Boilermaker fans,” said Cox.

Cox praised his coworkers by saying: “They are all hardworking, knowledgeable individuals always willing to help one another. They are the type of people who make you look forward to coming to work.”

Joe Middeler, Area Engineer

Before arriving at INDOT in May 2012, Middeler spent 12 years at the Kentucky Transportation Cabinet (KYTC) — four as a co-op student while attending the University of Louisville, where he

received bachelor's and master's degrees in civil engineering, followed by eight years as a full-time engineer.

At the KYTC, Middeler started as an engineer in training and progressed to a section engineer, which is similar to an area engineer at INDOT, except section engineers supervise maintenance, operations and construction employees instead of just construction workers.

"Because there are 12 districts in Kentucky and six here, the areas of coverage were much smaller," said Middeler. "My workload at INDOT is greater, which I enjoy because I like to keep busy. At the KYTC, I didn't really enjoy having to also supervise some maintenance and operations employees. My interest has always been in construction, so I am happy that's my role at INDOT."

Middeler was stationed at a field office in New Castle, Ky., about 45 minutes northeast of Louisville. He said his experience at the KYTC has helped him at INDOT.

"I had been involved with many different contracts and dealt with a wide variety of contractors, which was great preparation for the situation here," said Middeler.

Middeler grew up in Bedford, Ky., 12 miles south of Madison, Ind. His wife is a Hoosier native, and she did not want to live in Kentucky.

"The answer to that situation was that we live in Indiana," said Middeler. "We live in North Vernon. I have really enjoyed my time in Indiana and plan to stay. My parents still live in Bedford, Ky., about an hour away. That has been a transition, as previously I was five minutes away from them."

Jerry Hoover, Right-of-Way Services Manager

With his 10-gallon hat (worn outdoors only) and western roots, Hoover is of the belief that "once a cowboy, always a cowboy."

Hoover arrived at INDOT in June 2016 after a wildly successful and colorful past out west.

He graduated from high school in Oakdale, Calif., at age 16, bypassing college for a job as an architect/mechanical drafter for a consulting firm two hours away in Santa Rosa. He studied for his General Engineering Contractor license and started his own California construction company at age 24, specializing in the utility industry.

"We installed buried fiber cables throughout the United States, including those at the Naval Air Station Fallon, a desert training base that's home to the Naval Fighters Weapons School, also known as TOPGUN, as in the 1986 movie starring Tom Cruise," said Hoover. "While specializing in fiber optics and communications, we also constructed numerous other utilities like power, water, and gas lines."

By 1996, with business still booming, Hoover had saved enough money to sell his business and semi-retire in his mid-30s in — ironically — Fallon, Nev., the home of TOPGUN. He purchased a hay ranch in Fallon, maintaining a herd of 750 female goats and selling 4,000 meat goats per year.

Because of Hoover's previous work in Fallon from 1994 to 1996, county government officials knew him well. Churchill County has the only county-owned telephone company in the United States, and officials made him an offer he couldn't refuse as the county's utility manager. About 10 years later, in 2006, the Nevada DOT (NDOT) called, appointing him as statewide right-of-way assistant chief.

"I drove about 45 minutes to Carson City, where NDOT had a 10-seat Cessna Citation jet that I'd fly in daily to job sites," said Hoover. "Nevada is a huge state, and the plane was a very viable method of transportation. We had two headquarters — one in Carson City and the other in Las Vegas."

After a 2008 divorce, he met, as Hoover describes, "the lady that God made for me, my Eve," and married her in 2016. She's from Corydon, Ind., about an hour from Seymour. The Hoosier state beckoned.

"I guess I was destined to come here," said Hoover. "I went from NDOT to INDOT, which sounds almost the same. Ironically, both offices are located on U.S. 50."

After arriving in 2016, though, Hoover had a rough transition after purchasing a ranch perched on the hills overlooking Corydon. The thickly wooded, rolling terrain of southern Indiana made him claustrophobic, as he was used to seeing the horizon for miles. Also, the humidity affected him; he suffered from heatstroke the first summer and had to learn how to acclimate to his new home state.

"We are fortunate to have Jerry on our INDOT team," said Seymour District Capital Program Management Director Chris Wahlman, Hoover's supervisor. "His past experience working in a senior leadership role for NDOT brings a fresh perspective to INDOT, and has raised the bar for our right-of-way services section.

Jerry fosters a culture that embraces innovation and takes a broader look at other DOT practices to find better ways of delivering great service and achieving results."



Jerry Hoover wears his cowboy hat outside the Seymour District administrative building.

Wahlman said Hoover's presence has affected his own professional outlook.

"We talked about the differences between NDOT and INDOT, and Jerry mentioned that out west, with Silicon Valley and the technology sector, there was a natural culture of innovation that spilled over into other areas of the economy, including government service," said Wahlman. "He noticed that in the Midwest, with our strong manufacturing base, that the manufacturing culture/way of thinking spilled over into our processes. In a way, we see this in specialized functional groups and 'silos' that we work in. We sometimes process things in a linear fashion, while tending to stick to tried-and-true methods. It really opened my eyes to some of the reasons we do what we do, and broadened my horizons on what can be possible if we look outside our organization for best practices."

The strengths of INDOT are not lost on Hoover, though. He said, "INDOT has a diverse, amazing pool of knowledge with impressive longevity."

In his spare time, Hoover enjoys hunting and house remodeling. He landed a 33-point buck in Corydon last fall with a bow and arrow in Harrison County, qualifying for the Indiana Deer Hunters Association (IDHA) Hoosier Record Buck Program.

HAWKs Come to Pedestrians' Aid

INDOT will be watching a new pedestrian crossing signal like a hawk to gauge its effectiveness, as it's only the second of its kind on our state highway system.

High-intensity Activated crossWalk (HAWK) signal heads, also called pedestrian hybrid beacons, started being installed in mid-September on State Road 45 in Bloomington. Installation is expected to be completed by November.

"HAWKs often are used to improve safety at mid-block pedestrian crossings, as vehicular traffic is required to stop when the beacon is activated, but — unlike a pedestrian crossing at a signalized intersection — they don't delay vehicular traffic when there is no demand, as the beacon is otherwise inactive," said Senior Engineer of Signals & Markings Joe Bruno. "Safety is enhanced because a HAWK allows for a controlled crossing at locations where signalization would otherwise not be provided."

Although several roadway treatments are available to address pedestrian concerns, only a few — such as HAWKs — are appropriate for conditions with wide crossings or medium-to-high roadway speeds.

The default settings for HAWKs are dark signal-head indications to vehicular traffic and a "don't walk" solid-hand indication to pedestrian traffic. Once a pedestrian pushes the crosswalk button, the HAWK displays a flashing yellow signal to vehicular traffic before turning to solid yellow, meaning that it will soon turn red. After the HAWK turns solid red, the pedestrian signal changes to a "walk" indication, enabling the pedestrian to legally begin crossing.



After the walk phase, a flashing "don't walk" phase begins with a numerical countdown. After this phase, the signal turns flashing red to vehicular traffic, meaning that vehicles need to stop but proceed through the intersection if safe to do so. Then, the default modes of dark signal-head indications and the "don't walk" indication appear. If another pedestrian pushes the crosswalk button, there is a predetermined time to allow vehicular traffic to clear before the sequence begins again.

INDOT's first High-intensity Activated crossWalk (HAWK), also called a pedestrian hybrid beacon, is on State Road 127 near Angola.

INDOT's first HAWK was installed on State Road 127 in the Fort Wayne District near Pokagon State Park in 2015. A crossing was needed to link a trail, which traverses on the east side of State Road 127 from near Angola to just south of Steuben County Road 300 North, where the location switches to the west side of State Road 127 to eventually connect to Pokagon State Park.

Following Federal Highway Administration (FHWA) guidelines, the district analyzed the possibilities of grade separation, a traffic signal, a HAWK, and a refuge island that includes a crosswalk with signs and flasher. These options were weighed against the 50 mph posted speed limit, the type of road, width of the paved highway, crosswalk length, and the average number of vehicles, pedestrians and bicyclists at the intersection. Also, traffic gaps were considered as part of the Indiana Manual on Uniform Traffic Control Devices (IMUTCD).

The district ruled out an uncontrolled, at-grade crossing because the number of adequate traffic gaps was determined to be insufficient. Traffic volumes were insufficient to support the installation of a traffic signal. However, the analysis left open the possibility for a HAWK or refuge island with crosswalk/signs/flasher.

"The median refuge island option included 6-inch curbs, and in order to meet design standards and provide a safer crossing for pedestrians, the speed limit would have needed to be reduced from 50 mph to 45 mph," said Fort Wayne District Traffic Engineer Dana Plattner. "A speed study by our office did not support this speed reduction because it was unlikely that the reduction in posted speed would have reduced actual vehicle speeds at the crossing. After analysis of all options, we concluded that a pedestrian hybrid beacon was the best solution taking into account safety and cost effectiveness."

More than three years later, Plattner is still happy with that decision.

"No crashes have occurred at the HAWK signal since it was activated in 2015," said Plattner.

The Seymour District's first HAWK installation will be constructed in a more urban environment near the intersection of State Road 45 and Tamarron Drive/Deckard Drive on the east side of Bloomington.

The resulting HAWK enables students in a neighborhood east of State Road 45 to cross into the neighborhood west of State Road 45 and use sidewalks there to walk to nearby University Elementary School.

To provide for greater pedestrian access to the school, the city of Bloomington recently finished installing sidewalks along State Road 45, curb ramps, and a pedestrian island to ease crossing of State Road 45. The gap study showed that there was less than the length of time required for students to cross the road at this uncontrolled location.

Another alternative was to signalize the higher-volume intersection of State Road 45 and Smith Road to enable students to walk to school. That intersection is just 500 feet away.

Considerations — including sight distance, mobility impacts, vehicular and pedestrian safety, and the optimal location for crosswalk utilization — resulted in a partnership with the city and a decision to install a pedestrian hybrid beacon close to Tamarron Drive/Deckard Drive.

The State Road 45 HAWK was designed by Traffic Design Manager Prakash Patel, who noted that recent FHWA research shows that HAWK sites experience a decrease in the total crash rate of 29 percent after installation.

New Communications Tool Can Build Bridges *Inside* the Agency

The INDOT Communications and Talent Management divisions will soon unveil a new internal collaboration tool for the agency.

Yammer is part of the Microsoft Office 365 suite of programs, and has been described as “Facebook for business.” In reality, the tool goes far beyond providing a method to stay connected to your coworkers. Because INDOT is such a complex organization, with more than 100 locations across the state, Yammer can be a valuable asset for departments looking to communicate and collaborate better.

INDOT has experimented with Yammer before, but the Indiana Office of Technology’s (IOT’s) move to Office 365 brings a new INDOT Yammer network with better features, security, and administrative controls. INDOT employees will simply use their work email and password to access the new Yammer network once it launches in October.

Vincennes District Deputy Commissioner Rusty Fowler has been an active user of the tool and said Yammer can help the agency break down some of the communication barriers.

“I think the sharing of best practices could easily be improved statewide,” Fowler said. “We’ve worked hard at eliminating silos in the agency, and Yammer gives us another opportunity to hit an audience across districts and other borders.”

Fowler also said Yammer will help promote a better sense of community within the agency, and Crawfordsville District Safety Director Terri Griffin agreed.



“Email may someday be outdated. As INDOT’s workforce continues to get younger, the agency will relate to social media more and more,” said Griffin, who has been active on Yammer and appreciates the ability to “follow” a Yammer user like a user would on Facebook or Twitter.

INDOT’s Yammer network will be managed by members of the Communications and Talent Management divisions. Employee Communications Program Manager Kevin Cole said the potential benefits of Yammer go beyond just social connections.

“Any department that has experienced less-than-adequate communications at INDOT should think about how a tool like Yammer can help,” said Cole. “Districts, departments, project teams, or individuals will be able to create Yammer groups that can be used to share ideas, best practices, project updates, policy changes, or anything else important to others in that group. Instead of information going out to just the people on an email list, a post to a Yammer group quickly reaches anyone who’s a member.”

Yammer will have a comforting familiarity for anyone who has used Facebook. New posts — complete with “likes” — appear on Yammer’s main screen, which is known as the news feed. Icons indicating private messages and other notifications appear in the upper-left corner. Access to various INDOT groups is also available from this same area. There’s even a mobile Yammer smartphone app so employees may stay connected away from the office. Unlike ERIN, INDOT’s Yammer network may be accessed away from the office through the Yammer mobile app.

Too many hashtags may be seen as tiresome on Twitter, but they can be very useful in Yammer. Yammer has a robust search function that finds hash-tagged posts quickly. INDOT employees may also bring someone into a conversation easily by mentioning them in a post or comment. Those mentioned will receive a notification and can easily join in.

Yammer can have tangible benefits for the agency, if enough employees are actively engaged. Research shows that organizations can increase productivity by as much as 20 to 25 percent by using a social collaboration tool like Yammer, but only if around one-third or more of its employees are using the tool on a consistent basis.

Microsoft has studied these benefits, and talked to 10,000 Yammer users across various companies and organizations. Microsoft’s survey revealed benefits in six areas:

- Team communication
- Productivity
- Knowledge sharing
- Employee onboarding
- Company culture
- Employee engagement

Cole said the bottom line is improving how we share information at INDOT.

“Yammer can function as an organic repository of all knowledge at the agency,” said Cole. “When questions and conversations are managed in a more open and collaborative space, answers can be easier to find.”

The INDOT Yammer network is set to launch the second week of October. Look for more information, including a direct link to the network, that week on ERIN.

The Yammer news feed is similar to that of Facebook and features access to various INDOT groups.

