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Need to Save Money?
Invest in Truck Maintenance

By Doug Kaufman

Saving money on maintenance—is it frugal or cheap? Our experts provide sound advice.

If there’s one truism in the trucking industry, it’s that a truck is only making money if it’s running. If it’s parked for whatever reason, it may not be costing anything in operating expenses, but it sure isn’t contributing to a positive bottom line.

The only way to ensure a truck’s continued operation is to pay attention to its maintenance requirements. On-the-road breakdowns will cost time and money and can quickly damage your relationships with drivers and customers. But what constitutes proper attention to maintenance? The Fleet Equipment Advisory Board recently offered an explanation of how spending money to save money is a key part of today’s modern fleet operation.

Members of the board have successful histories of keeping trucking fleets rolling, carrying freight and personnel safely and profitably. Some of their methods may vary, but their results are clear: spending money on preventive maintenance can save you money down the road.

“We’re not in the maintenance business any more,” explains Darry Stuart, president and CEO of DWS Fleet and a self-described “limited time executive” helping the trucking industry recognize and implement the challenges of proper maintenance. “We’re in the asset-management business. The shop people, directors of maintenance or supervisors are directly in control of asset management. They’re tied to asset utilization because they are the guys who makes sure the relationship between the truck and the technicians allows the trucks to run all day, every day.”

Maintenance Matters
Bruce Stockton, former vice president of maintenance and asset management, CFI, said his title at Con-way continued on page 4
Local agencies across Indiana and the country work hard to maintain their transportation infrastructure. Yet this work is getting harder all the time, since maintenance revenue are not keeping pace with inflation. Transportation funding has decreased in recent years, due largely to the decrease in dollars distributed through the Motor Vehicle Highway funds (Figure 1).

The reduction in funds means there are fewer people to get the work done and less money to buy road materials. One county highway department has been reduced from 38 employees to 21 employees. Another agency reports that their funds allow a re-paving interval of 79 years, even though the pavement only lasts for 20 years.

Why are Funds Diminishing?
This decrease in funding is due to a number of factors, including gas tax rates that have not kept up with inflation, a decrease in vehicle miles of travel, and increasing fuel efficiencies.

Gas Taxes Have Remained Static
The federal gas tax is 18.4 cents per gallon. This tax was last raised in 1993. Adjusting for inflation, the 18.4 cents authorized in 1993 is now worth only 11.5 cents. As a result, the federal investment in transportation has decreased by more than a third.

A similar issue has occurred at the state level. The state gas tax, implemented in 2003, is set at 18 cents. Adjusting for inflation, the tax is now worth just 14.4 cents. Note that while Indiana also collects a sales tax of 7 percent on gasoline, the revenue from this tax is deposited in the Indiana General Fund, not the transportation fund.

Vehicle Miles of Travel Has Decreased
The number of vehicle miles of travel (VMT) peaked in 2007. The decrease was initially attributed to the economy; however, even as the economy has improved, VMT has not returned to previous the 2007 level.

The reason for the decrease in VMT is not well known; it correlates with a decline in automobile ownership and may also be due to increases in transit use, bicycling and pedestrian trips, and a move toward more compact development.

Fuel Efficiency is Increasing
In recent years, fuel efficiency has increased steadily, and this trend is projected to continue. On August 28, 2012, new federal fuel economy rules were issued. These Corporate Average Fuel Economy (CAFE) standards have a goal of 54.5 mpg average fuel efficiency for the 2025 model year—a dramatic increase from 27.6 mpg in 2011.

Consequences of Decreased Funds
The result of these changes is that existing transportation funding has

![Figure 1: MVH Distributions to Local Agencies Have Declined While CPI has Increased](image1)

![Figure 2. The Average Age of Indiana’s Local Bridge is 41 Years (built in 1971)](image2)
not kept up with the transportation needs. Simply put, there is not enough money to repair and rehabilitate aging road infrastructure. At the national level, the American Society of Civil Engineers (ASCE) documented the issue, and their report card has given America’s bridges a C and roads a D.

Closer to home, Indiana is also faced with the challenge of maintaining their infrastructure with decreasing revenues. This challenge is evidenced by Figure 2, which shows the age of Indiana’s bridge inventory. The average bridge age is 41 years (built in 1971), and there are over 2,600 local bridges that are over 70 years old!

While all bridges are safe for the posted loads, some vehicles may need to find alternate routes to avoid older bridges. Other bridges may be “functionally obsolete,” which means that they do not meet current design standards for the traffic they carry.

Developing a Solution
Road funding is a topic of great interest for decision makers at the local and state level. In fact, the Indiana Legislature has created a Joint Subcommittee to study the issue. In response to the challenges associated with reduced road funding, and in an effort to learn more about Hoosiers’ opinions on the issues, LTAP has initiated a survey regarding road funding. More information is available on the LTAP website. There, participants may view a brief video regarding road funding concerns and take the online survey.

Share this information with your friends and neighbors! Indiana LTAP wants to hear from as many people as possible. The results of this study will be shared with decision makers at all levels, so it’s important to participate and let your voice be heard.

To watch the Road Funding video and participate in the survey, please visit: http://tinyurl.com/RoadFundingSurvey

If you have questions, please e-mail roadsurvey@ecn.purdue.edu.

Research Funding Callout:
Research Applications for Local (REAL) Benefits

Does your agency have an innovative process or program it would like to evaluate, but lacks the funds to do so? Indiana LTAP’s REAL Benefits program can help pull those ideas off the drawing board and convert them into functioning results.

Overview of the Program
New for 2013, the Indiana LTAP REAL Benefits program aims to foster innovation in the construction, maintenance, and operational activities of Indiana’s transportation agencies. The REAL Benefits Program invites these agencies to apply for funding to test a new product or process.

This program is modeled after a successful endeavor initiated by the Minnesota LTAP office (known as Local Operational Research Assistance Program, or OPERA). Visit their website to see projects that have been funded and to get inspiration about possible project ideas (www.mnltap.umn.edu/about/programs/operat).

The key idea of REAL Benefits is to fund projects with the potential to develop innovative procedures and techniques and to share the findings statewide so many local agencies can benefit from the research.

How to Apply
The REAL Benefits Program will fund projects up to $10,000. (Projects may receive additional funding from other sources such cities, counties, suppliers, and manufacturers.) A local agency that is granted funding through REAL Benefits will receive 80 percent of the total approved project cost when expenses are incurred and the remaining 20 percent when the final documentation is submitted. Projects will be reviewed and approved by the LTAP Technical Advisory Committee, a subcommittee of the LTAP Advisory Board that includes engineers from local agencies across Indiana.

In order to apply for REAL Benefits funding, please complete and submit the project proposal form, available at rebarecn.purdue.edu/LTAP1/TechAssist/RBP.aspx. Submitted proposals (in Word or PDF format) should be directed to Sarah Hubbard. Local agencies may submit more than one proposal for consideration.

Project Examples
Projects eligible for REAL Benefits funding include (but are not limited to) the following areas:

- Pavement marking and road striping equipment
- Deicing and anti-icing methods, equipment, and materials
- Salt storage handling equipment
- Snow fence (blowing snow) systems
- Pavement resurfacing options
- Road marking performance and measurements
- Bridge paint removal and handling
- Roadside vegetation management
- Roadside sign maintenance
- Erosion control methods
- Work-zone safety products
- Field test and evaluation of other work-zone safety projects
- Work-zone safety procedures
- Equipment management systems
- Equipment tracking systems

To Submit an Application
Return applications to Sarah Hubbard, Research Manager.

Email: sarahh@purdue.edu
Fax: 765-496-1176
Mail: Indiana LTAP
Attn: Sarah Hubbard
3000 Kent Avenue
Suite C2-118
West Lafayette, IN 47906

Submission Deadline:
April 12, 2013
reminded him daily of his responsibility. “What we do know is that if you don’t do regular maintenance and you don’t maintain the equipment—whether it’s a truck or a trailer or building, for that matter—you’re going to spend the money anyway.”

Stockton says Con-way views maintenance just like one of its other core values. “We just don’t violate it. We tell operations that the truck or trailer is due for service and there’s really no squabble. Everyone in the organization understands that when it needs to be serviced, it’s serviced; and it’s pulled out of rotation as needed.”

Bozzutos, a wholesale distributor of food and household items to IGA stores and other small grocery chains in a 12-state region of the northeastern U.S., practices Yankee frugality when it comes to vehicle maintenance, says Bob Hamilton, director of fleet maintenance for the company.

If you’ve done that from day one and kept up with it, it’s an easy thing to do,” says Hamilton.

**What is the Cost of Quality**

“Being proactive and minimizing your unscheduled repairs is the most cost-effective thing you can do,” says southeastern Freight Lines’ David Foster, vice president of maintenance. “At the same time, though, you have to be sure you’re not over PMing something. There’s a happy medium—or as we ask here, what is the cost of quality? Finding that perfect point can be a challenge and it moves all the time because we continue to learn not only with the equipment we’re operating, but with the people across our system.

The cost of quality—that line in the sand—is what Stuart says is so elusive and so enticing to fleet maintenance personnel. Stuart says, “What really changed were upper management decisions looking for short-term results.”

In other words, the attempt to be the “low cost provider” often results in poor judgment when it comes to repairs. “I believe in fixing it right, but fixing it right is in the eyes of the beholder. If you’re not managing that in a microscopic way, then you’re going to be wasting money,” says Stuart.

“With the cost of goods and labor going up, we’re trying to keep all road breakdowns from occurring by doing good PM in-house,” says Peter Nativo, Transport Service Co.’s vice president of maintenance. Part of the program in place at this bulk liquid transport organization is to look at the Top 10 road failures, identify the cause and eliminate it. Nativo says in some cases the cause has been poor understanding of modern components.

“We When we first started looking at the Top 10, our first Number 1 was the alternator. We found out that the one that had always been our spec didn’t have enough amperage for all the electronics in today’s world. We started upgrading to a higher-amperage version on all new tractors and began a replacement program. So whenever a tractor came in for PM, we took off the old one and put on the higher amperage version. By doing that, within a year and a half, the alternator issue, from being Number 1, had fallen completely off the Top 10.”

**We’re not in the maintenance business anymore . . . We’re in the asset management business.**

Stockton says, “Our motto is: ‘If it’s broken, fix it. If you can’t fix it, replace it.’ If you’ve been fixing things as they need to be repaired, you don’t have the peaks and valleys of the costs that the finance guys in this business get all worked up about. If you’re doing the work as it needs to get done, it levels the maintenance costs over the life of the truck.”
Nativo says he understands the fear many fleets have of spending money in an uncertain economy. “Sure, there are times to make a decision about cosmetic repairs based on how the year’s going or how the economy is, but in that case you also need to think about how it affects your image. If it’s a DOT repair needed—capable of any violation while running the tractor down the road—we will not let that go. Safety items are not a question.”

He suggests fleet managers pay close attention to the partnership with suppliers—are you really getting the best value for what you’re buying? “I think I focus more on that than cutting back on the maintenance of the vehicle. Look for cost efficiencies rather than cutting maintenance,” he says.

An Eye to the Circumstances

“Ignoring maintenance is not an option,” agrees Foster. “If anything, in bad times you tend to focus on what you’re spending and how you can get more efficient with what you’re doing. Not necessarily changing what you’re doing as far as maintaining the equipment, but how you maintain it. A good example might be being more efficient and beating standard repair times. If you have multiple facilities, create a positive competition without reducing the quality. But are you putting off repairs to save money? Cutting costs in that way won’t save any money in the long run.”

Stockton says when times have gotten tough, his company has kept vehicles longer. “We’re keeping trucks a year longer than planned. The trucks we’re trading in have 650,000 miles on them—it’s a good thing we didn’t skimp on maintenance the first 520,000 or we’d have been in real trouble.”

He continues: “To me, it just reinforces that you should stick to your guns on best maintenance practices—you just never know. There could be another downturn. Every truck we have—whether it has 60,000 or 600,000 miles on it—we’re treating as if we’re going to keep it forever.”

Of course, doing too much maintenance because “that’s the way we’ve always done it,” can be damaging as well, and often signals a disconnect between management and the repair bay. Stuart says the difference between hard times and regular times is how you spend the money. Cutting corners can result in damage to other components that require even more costly maintenance next time.

“Our motto is: If it’s broken, fix it. If you can’t fix it, replace it.

There’s no greater way to understand what’s going on than by spending time wandering around in your shop and talking to people. All the answers are on the floor and all the problems are on the floor, in the parts usage and in the invoices for the parts you buy. The problem is, you have to recognize those things,” Stuart says.

“If supervisors are managing properly and they’re spending time and energy looking and observing, they can corral that stuff and direct it in a fashion to control it. The mistake a lot of fleets make is they put their supervisors making reports or charts and graphs—not that numbers aren’t important. If you can’t measure it, you can’t manage it. But once you measure it, you need to know how to fix it.”

Communication is Key

Stockton says part of the challenge can be alleviated by keeping all parties in the loop with regard to maintenance schedules.

“We plan accordingly, which I think is why there isn’t a big squabble. We can tell them ahead of time when that truck or trailer will be due for its PM intervals. Give the driver a heads up, operations a heads up and in their planning for that truck, they won’t let it go on the board to take a load until the driver and maintenance say the truck is ready.”

Obviously, however, this is not a universal sentiment. “Guys I network with have the fear that if they take the truck off the road, they won’t have the income. The driver factor plays into it as well. I find most drivers are very cognizant of maintenance requirements, they want it done when it needs to be done. We spend a good part of our new driver orientation emphasizing that their truck is their tool, and they need to help us take care of that tool if they’re going to do their job. Because they’re permanently assigned to that tractor, they need to help us when they hear, see or feel
something that’s different; they need to let us know so it can be addressed.”

Addressing the needs of the customer—whomever that is determined to be—is critical, says Foster. “Everything we do is focused on serving our customers; and our customers are defined as operations and the drivers. Our efforts, in turn, make them better able to serve those external customers.”

**Our people have been our greatest success in helping us lower our costs because we listen to them.**

### Everyone on Board

Foster says it’s a team effort, especially at Southeastern’s maintenance facilities. “Our people have been our greatest success in helping us lower our costs because we listen to them. They’ve made some great suggestions about changes we need to make procedurally and/or spec’ing, and they’ve thoroughly embraced the training that we have made available for them. That’s been the key to controlling our costs—that and good communication across the system,” says Foster.

Nativo says Transport Service continually preaches the importance of preventive maintenance and its role in driver processes. “In each of our major terminals, we have a TV broadcast system that covers different topics each month. One thing we never take off the broadcast is the importance of a good, thorough pre- and post-trip inspection. We require drivers to do both, and in the broadcast system we explain how important they are to prevent road failures on the street and to share any issues with technicians.”

To encourage the drivers’ participation in controlling costs, Nativo says each driver gets a $28 tire gauge and instructions on gauging tires every day. “One driver recently told me with pride that he had 340,000 miles on his tires because he gauged them every day.”

Hamilton, too, says fleet owners need to have all the departments working together as closely as possible. “Just as with an OEM dealership, where sales, parts and service departments are a three-legged stool, if you have one department not hitting, you’re ending up on the ground.”

And as CSA 2010 gains momentum, the relationship between drivers and maintenance will be even more critical. “I think CSA 2010 is going to be a good thing for the industry, for safety and for drivers (in the end),” says Stockton. “Drivers who are conscientious about their equipment—whether it’s a tractor or trailer—will find their job doesn’t really change if they’re paying attention. CSA hasn’t changed the rules, it just enforces the rules we already had.”

Stuart agrees in the importance of the driver in this equation and suggests more communication will bring better results. “There’s a huge wall between drivers and the shop, and I think there’s a huge difference in language. The driver knows the minute something is wrong with the vehicle and the majority of drivers really just want the truck to be trouble-free—but they don’t know how to communicate it.”

Stuart says communication is more important than ever. “With CSA 2010, it’ll be more critical. For 30 years we’ve been wanting drivers to write up trucks so we can fix them…now they’re going to do that and if your operation isn’t prepared to handle that in a quick fashion, you’re going to have late loads. If a driver knows he’s going to get points and they’ll stay with him forever, he’s not going to leave the yard unless he believes he can get through the day without a problem.”

### Practice in Action

Stuart cautions, however, that the time to start planning is past. “If the maintenance guys are worrying about this today, it’s too late. If they don’t have a practice in place, if they haven’t figured it out by now, they never will.” So if preventive maintenance in your fleet is seen as an expense and not an opportunity, what can you do? Stuart suggests calling in an expert.

“Unfortunately, you have to understand the game before you can coach it, and for many owners, the only thing they understand is sales and the checkbook and when the checkbook gets thin and sales are down, panic starts setting in. And when panic sets in, the temptation is to just stop spending,” Stuart cautions. “Nobody is spending just to spend, but they may not have the experience to manage through it.”

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Memorandum
6300 Georgetown Pike
McLean, VA 22101

Subject: **ACTION:** Distribution of the FHWA Research Publication “Sample Guide Specifications for Construction of GRS-IBS”

Date: OCT 15 2012

From: Michael F. Trentacoste
Associate Administrator for Research, Development, and Technology (HRT-1)
McLean, VA

Amy C. Lucero, P.E.
Director of Technical Services (DTS-1)
Lakewood, CO

In Reply Refer To: HRDI-40

To: Associate Administrator for Infrastructure
Associate Administrator for Federal Lands Highway
Directors of Field Services
Federal Lands Highway Division Engineers
Director of Resource Center
Division Administrators

The Federal Highway Administration (FHWA), Offices of Infrastructure Research and Development and Technical Services would like to announce the availability of the FHWA publication titled “Sample Guide Specifications for Construction of Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS).” Publication No. FHWA-HRT-12-051. The Sample Guide Specifications presented in this publication have been issued to provide boiler plate specifications for construction of the GRS-IBS technology. The Sample Guide serves as the technical basis for agency-developed standard specifications, which should incorporate local experience and practice where applicable. Also, it supports the FHWA’s Every Day Count (EDC) initiative on this technology.


Please inform your appropriate State department of transportation representative, Local Technical Assistance Program centers, or any other interested partner on the availability of this Sample Guide.

Should you have any questions, please contact Mr. Michael Adams, Geotechnical Researcher, at Mike.Adams@dot.gov or at 202-493-3025, or Mr. Daniel Alzamora, Implementation Team Leader, at Daniel.Alzamora@dot.gov or at 720-963-3214.
A Road Safety Audit (RSA) is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. It is also a way for your agency to improve safety and communicate to the public its efforts in proactively working toward crash reduction.

An RSA aims to answer the following questions:

- What elements of the road present a safety concern? To what extent, to which road users, and under what circumstances do these hazards exist?
- What opportunities are available to eliminate or mitigate identified safety concerns?

Public agencies with a desire to improve the overall safety performance of roadways under their jurisdiction should look to an RSA to accomplish these goals. RSAs can be used in any phase of project development, from planning and preliminary engineering to design and construction. RSAs can also be used on any sized project, from a minor intersection to highways.

In Indiana, the completion of an RSA is required as part of the application process for Highway Safety Improvement Program (HSIP) funds.

**What Happens in an RSA?**
A successful RSA follows these eight steps:
1. Identify project/roadway location
2. Select RSA team
3. Conduct initial meeting and data review
4. Perform field review(s)
5. Conduct analysis and prepare report
6. Present findings to project/roadway owner
7. Project/roadway owner prepares formal response
8. Incorporate findings

An important part of the RSA process is the data review. Pertinent data to review includes crash history, traffic volumes, pedestrian usage, and bicycle usage.

Another key element of the RSA is the field review. The field review will investigate the site, take measurements, and observe traffic. Site visits should coincide with the time of day when the safety issue is apparent, e.g. school dismissal, peak hour.

The RSA team’s visit may draw the interest of passing motorists and nearby residents and business owners. The RSA team should take this opportunity to speak with these people to get their input on the situation.

Once all the data is collected and the field review is complete, the RSA team will analyze the findings and collaborate on a report of recommendations to the roadway owner.

**Who is on an RSA Team?**
The objective of selecting an audit team is to choose an independent, qualified, and multidisciplinary team of experts who can successfully conduct a road safety audit. RSA teams are diverse in order to draw from the breadth of experience of related professionals.

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**What is the Different between an RSA and a Traditional Safety Review?**

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<thead>
<tr>
<th>Road Safety Audit</th>
<th>Traditional Safety Review</th>
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<tbody>
<tr>
<td>• Performed by a team independent of the project</td>
<td>• The safety review team is usually not completely independent of the design team</td>
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<tr>
<td>• Performed by a multi-disciplinary team</td>
<td>• Typically performed by a team with only design and/or safety expertise</td>
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<tr>
<td>• Considers all potential road users</td>
<td>• Often concentrates on motorized traffic</td>
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<tr>
<td>• Accounting for road user capabilities and limitations is an essential element of an RSA</td>
<td>• Safety Reviews do not normally consider human factor issues</td>
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<tr>
<td>• Always generates a formal RSA report</td>
<td>• Often does not generate a formal report</td>
</tr>
<tr>
<td>• A formal response report is an essential element of an RSA</td>
<td>• Often does not generate a formal response report</td>
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Data Courtesy of Federal Highway Administration, [http://safety.fhwa.dot.gov/rsa](http://safety.fhwa.dot.gov/rsa)
RSA team might be comprised of individuals with the following knowledge and experience:

- Law enforcement
- Traffic Engineering/Operations/Safety
- Roadway design
- Knowledge of the local area
- Emergency Response

**Will RSAs Increase the Liability of my Agency?**

A common concern about RSAs is that they will increase an agency’s liability. However, US Code 23 U.S.C. § 409 ("Section 409") protects agencies from litigation in matters reviewed and documented during RSAs or other similar activities. Specifically, the Code:

expressly forbids the discovery or admission into evidence of reports, data, or other information compiled or collected for activities required pursuant to several federal highway safety programs, or for the purpose of developing any highway safety construction improvement project, which may be implemented utilizing federal aid highway funds, in tort litigation arising from occurrences at the locations addressed in such documents or data.

Furthermore, implementing a plan to reduce the crash potential and improve the safety performance of a roadway is a proactive approach to safety and should be used in defense of tort liability.

Identifying and documenting safety issues on existing roads are not admissions of guilt. Rather, they are the first steps in a process designed to improve safety. It would be difficult to fault proper documentation, communication, and logical prioritization of an agency’s plan to address safety issues. The value of the RSA process in identifying potential roadway safety issues makes it an important component of any agency’s safety strategy.

**How to Learn More . . .**

**Or Schedule an RSA for Your Agency!**

RSAs have proven to be highly effective in identifying and reducing the crash potential of roadway projects. In addition to being a requirement of the HSIP application process, RSAs are a good idea for any agency who wants to improve the safety of their roads.

If you are interested in having a road safety audit done on your roadways, contact the LTAP HELPERS program at ltaphelpers@ecn.purdue.edu or 765-494-7038.

Additional information on RSAs is available at safety.fhwa.dot.gov/rsa.
Poetic License:
Saint Paul Paves the Way
By Cindy Ratcliff

Paris has the Louvre and Rome the Sistine Chapel, but in St. Paul, Minnesota, a tribute to the city’s literary artists has been set in stone, so to speak.

Giving voice to professional and amateur poets alike, Everyday Poems for City Sidewalks is a vanguard project through which the poetry of Saint Paul’s residents is stamped into the sidewalks, transforming the walkways into a public book.

The project, conceptualized by Saint Paul’s City Artist in Residence, Marcus Young, in partnership with The Department of Public Works and Public Art Saint Paul, creates moments of open-air reading for its residents. “But it’s so much more than just stamping words on concrete,” Young says. “It’s an opportunity for residents to contribute to the beautification of their own city.”

Forty-one poems have made their mark throughout Saint Paul since the program began in 2008. As the city goes about its normal business of replacing broken sidewalks, it provides an opportunity to add more poetry. Thousands of poems have been submitted to be considered for publication in pavement, and each year a panel reviews them, selecting poems anonymously. “We don’t know if the writer is famous or a third-grader. If you’re a resident, you’re qualified to submit your work,” says Young. Once selected by the panel, each poem gets its own artistic treatment in terms of font, shape, and size. Some even have a graphic element. “It’s all very carefully done,” says Young. “From how it’s treated to how it’s placed within the sidewalk panel. They are all individual works and we treat them that way.”

Saint Paul’s innovative approach to public art has attracted national attention, but Young could not have predicted the level of success the program would have, especially when he was just starting out as the city’s Artist in Residence six years ago. Not officially a city employee, Young works for a small non-profit agency, Public Art Saint Paul, which partners with the city in an effort to integrate an artistic perspective into city planning. “We are trying to make art from within the city system, not just as an afterthought,” Young says.

Housed within the Public Works Department, Young, who operates as a free agent within the realm of the City of Saint Paul, readily admits that the learning curve for city processes was a steep one. “My background is in theatre and music. I had no clue how a city is maintained and designed and built. I was sitting there with the planners and engineers and architects—I spent a year being the least informed person in the room but always felt there was

‘Everyday Poems for City Sidewalks’ transforms the city into an open book.

“[Everyday Poems is] so much more than just stamping words on concrete. It’s an opportunity for residents to contribute to the beautification of their own city.”

—Marcus Young
a place for me and that my own set of skills would come into play,” describes Young.

His place was defined one day when he was spending time with the city sidewalk inspector, learning how she marks sidewalks and understands if they are failing. Young says that he asked questions like a child. He was curious about how the city stamps the sidewalks to tag them. Then, the biggie: “Don’t you see these blank squares as blank sheets of paper?”

From there, an idea was born. “If we have the technology to make the sidewalk tags, why not use them to write a book? One written by our own citizens?”

The city was very open to new ideas. They asked Young to explore his in what he describes as “a coming together of artistic open-mindedness,” balanced, of course, by practical safety concerns and efforts to decrease the chance of sidewalk surface failure. (In nearly five years, the poetic panels have seen no increase of surface failure.)

“The commitment was gradual, but now we have 41 poems in our collection,” says Young. “So this big experiment in part is what happens when the artist is at the table.”

Other cities are interested in following suit, and Young says he is working collaboratively on a manual that will provide instruction on how to follow Saint Paul’s processes. “It truly is a work of art. We’re still trying to figure out how to share this with other cities in the proper way—a way that it will be successful for them, too,” Young says. “We want them to learn how to do it our way—learn from our mistakes and experience.”

In the meantime, Saint Paul will continue its award-winning city art project, which Young believes will pave the way for additional works of art to follow.

“Just this week we’ve brought on two additional artists who will work at 60 percent time. So in some ways, that is a wonderful indication of the success of the program so far and things to come,” says Young. “After years of being here as a single position, my contention all along is that a city of our size is made by teams of engineers, planners, and architects—it’s a team effort. Art-making ought to be like that, too.”

As for the future of this project, Young sees it as something that could last indefinitely.

“A living system is something that needs attention, improvement, and constant reevaluation. We continue to ask those questions, just like with any other city system. If you were to dream farther, it could become many other things. It could be a city field guide or textbook, not just book of poetry. A goal we have discussed is having a poem within a five minute walk of every residential home. And another more whimsical answer would be this work of art is done the day the city no longer needs to fix sidewalks. It’s a project integrated into sidewalk maintenance.”

To be placed on the mailing list for the instruction manual for Everyday Poems for City Sidewalks, you may contact Young at marcus.young@ci.stpaul.mn.us.

Cindy Ratcliff is a freelance writer who specializes in landscape, trees, and chemicals. She can be reached at cindy_ratcliff@yahoo.com.
Dawn hasn't yet broken in Louisville, Kentucky: it is three o'clock on a snowy morning. Most of the city’s residents are in bed when a message goes out on the Louisville Public Works Department Twitter account.

Though social media like Twitter and Facebook may seem foreign to many local city and county highway departments, it's a way of life at the City of Louisville: the city was recently named one of the country’s “Top 10 Social Media Cities” in a University of Illinois at Chicago study.

“Social media is a very effective way to reach our citizens quickly and directly without the filter of traditional media,” says Louisville Deputy Director of Communications Chris Poynter. “Today this is more important than ever before. The mainstream media is declining, the number of reporters covering city government is decreasing, and the way people consume their news is fractured— it’s typical now for people to hear about things first through social media.”

Governments Getting on Board
While some local governments still see social media as the technology of the future, a surprisingly rapid adoption of social media is occurring in local governments throughout the country. “Among the 75 largest U.S. cities, nearly 9 in 10 had a presence on Facebook and Twitter,” says Dr. Karen Mossberger, author of the University of Illinois at Chicago study. “We also looked at 20 cities in Illinois, and even among the smaller cities social media adoption has been rapid—half now report using Facebook or Twitter, or both.”

According to Mossberger, this large jump in local government social media use is a direct response to citizen’s changing needs. “During the past three years, social networks have become much more broadly popular among all age groups, especially people over age 35. National studies have also shown people like the idea of connecting with their government directly through social media.”

In addition, the legal concerns surrounding the use of social media by local governments are easing. “There has been a fear factor surrounding social media in local governments, especially in terms of First Amendment rights. However, governments are beginning to understand if they have a clear policy in place and they stick to that policy consistently, it minimizes risk,” says New Media Director for eRepublic Kristy Fifelski, known as “GovGirl.”
10 Tips for Launching Social Media

Due to the real-time and often urgent nature of transportation news, local transportation departments are ideally positioned to use social media. All three experts interviewed agree Twitter is the best social media channel for communicating local transportation news, and that Facebook is a good secondary method of social media communication.

“In Louisville, we use Twitter to notify the public when we close roads, when severe weather is on the way and when road projects are scheduled,” says Poynter. “It is also a great way to engage in two-way communication with our citizens when they have road and transportation problems and questions.”

The following ten tips will help you get your social media program started:

1. **Conduct an Assessment.** Your department may already have rogue social media accounts. Do a search, and if you find any existing accounts, determine the best way to bring those users into the fold.

2. **Establish a Policy.** Create a social media policy with the help of your legal team and determine how you will enforce it consistently.

3. **Set Goals.** Identify your desired outcome before you begin. Do you want to increase citizen engagement? Gather input for policy and budget decisions? Improve public safety? Do you want one- or two-way communication? Allow your goals to shape the direction of your social media plan.

4. **Learn the Ropes.** Study up on the unique aspects of communication on Twitter. Use this link to download a free "Twitter for Beginners" e-book: goo.gl/BQu6L

5. **Create a Team.** When a single person is in charge of social media it can become overwhelming. Consider empowering a number of staff members to update your social media accounts by incorporating social media use into daily work flows.

6. **Train Early & Often.** “Make sure your staff members and public officials understand your social media policy and know how to get communications sent through social media,” says Fifelski.

7. **Have a Laugh.** The best Twitter users don’t take themselves too seriously. Check out the Washington State Department of Transportation on Twitter (twitter.com/wsdot) for an example of how to successfully blend humor with transportation communication.

8. **Play by the Rules.** Make sure the tone of your message fits the channel. For Twitter, messages must be brief, simple and informative. Video and photos work well on Facebook.

9. **Keep it Up.** Frequent updates to your social media accounts are essential. “Government accounts can go very wrong when they are launched and nothing is done with them, or when they’re automated to simply regurgitate press releases,” says Fifelski. “This reflects negatively on the community.”

10. **Move Forward.** It’s easy for planning, policies, and bureaucracy to bog you down, but sometimes a leap of faith is required. “It’s really simple—just sign up for a Twitter and Facebook account,” says Poynter. “It’s free and you could get started today.”

Megan Tsai is a freelance writer specializing in transportation and engineering. Learn more at www.redwagonwriting.com.

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Creating a Social Media Policy

While you should always consult your organization’s legal team when crafting a social media policy, you no longer have to start from scratch. Because many local governments now have an established social media presence, those existing policies can become a framework for your own.

The following sample Facebook policy is from the GovDelivery “Social Media Best Practices” White Paper:

> The use of vulgar, offensive, threatening, or harassing language is prohibited. Public comments should be limited to comments related to the topic. [Name of organization] on Facebook is not the proper place to express opinions or beliefs not directly related to that topic. [Name of organization] on Facebook is not open to comments promoting or opposing any person campaigning for election to a political office or promoting or opposing any ballot proposition. [Name of organization] on Facebook is not open to the promotion or advertisement of a business or commercial transaction.


Indiana LTAP is gearing up to enter the world of social media! Keep an eye out for our upcoming survey about potential social media venues!
This fall, Indiana LTAP’s traditional winter maintenance training was enhanced by a unique opportunity. In an effort to reach out to the surrounding communities and share the training benefits, the City of Gary invited nearby Northwest Indiana communities to participate in the sessions held in their area. In addition to employees of Gary’s Parks Department, Sanitary Department, and General Services, employees of East Chicago and Hobart were also able to take part in the training. Thanks to the extended invitations, over 80 public works employees were trained during the two days of classes in the northwest region.

According to Dan Vicari of the Gary Sanitary District, inviting neighboring communities to the training enabled more street employees to take part in the technical assistance and training provided by Indiana LTAP. Furthermore, the training aided these workers in their shared goal: protecting the nearby waters of Lake Michigan.

The two-part training class began with classroom discussion of major topics such as Snow Plow Driver Safety, Snow Plow Equipment Inspection, Material Spreading, and Salt Spreading Equipment Calibration.

After the classroom presentations, Rich Domonkos of Indiana LTAP led attendees in a demonstration of proper calibration techniques with equipment supplied by Gary and East Chicago. These practical demonstrations illustrated that proper calibration leads not only to cost savings, but allow drivers to be most efficient during a snowstorm.

The most common assumption of proper calibration is that the process just keeps drivers from laying down too much salt—which wastes money and is damaging to both street equipment and the environment. A less-known benefit, however, is that the process also solves the issue of drivers not laying down enough salt per lane mile. This situation, common with salt/sand mixtures, presents a different kind of waste: wasted effort that does not meet a community’s winter maintenance needs, and excess sand being spread, which is also harmful economically and environmentally.

The hot topic of this year’s training, however, emphasized that the effects of proper calibration extend to more than well-run equipment—but offer, in fact, benefits to water quality as well. This is a topic Indiana LTAP staff was introduced to at a conference hosted by the Indiana Floodplain and Stormwater Management Association. This issue is particularly relevant for the communities of northwestern Indiana, who lie in the watershed region of Lake Michigan. Gary leadership wants to ensure the city is doing all it can to provide healthy and vibrant waterways for its citizens to enjoy now and in the future.

Stormwater officials in the area also took an interest in the connections between salt spreader calibration and water quality. They requested that Indiana LTAP offer an abbreviated version of the training in Dyer, Indiana, that focused specifically on the practical benefits of good salt spreader calibration.
Reggie Korthals of the Indiana Department of Environmental Management (IDEM) was among the participants of the session in Dyer eager to hear how proper calibration leads to cost savings and benefits to northwestern Indiana’s waterways. According to Korthals, “The salt spreader calibration training allows the communities that are permitted under the NPDES municipal separate storm sewer system (MS4) permit to effectively limit the amount of salt that has the potential of impacting water quality in the state. The implementation of a salt calibration program can have an economic impact as well, saving municipalities monies for labor and product.”

Korthals noted that in previous years municipalities had tried beet juice and brine as alternatives for winter road care, in an effort to save money. The financial savings made possible by proper calibration, however, makes salt use affordable for regular deicing of streets and roads. Korthals recognized Indiana LTAP’s training session for offering the necessary “how-to” of salt spreader calibration, as well as demonstrating to both local agencies and their drivers the encouraging time and money savings of the processes. She recognizes as well the drivers’ enthusiastic response to the methods presented during the training and the benefits they offer.

The reception and engagement demonstrated by participants in Gary’s training sessions send the reassuring message that snow plow drivers and trainers have strong desires to serve their public and serve them right the first time. In regards to winter maintenance operations—with budget cuts and other cost-saving measures a prominent reality for today’s street departments—the snow plow drivers themselves have become a primary asset. More than ever before, it is critical that snow plow drivers be made aware of the operational safety and best practices for equipment use in order for their local agencies to make the biggest strides in serving the public.

Indiana LTAP appreciates the City of Gary hosting and inviting smaller communities to ensure winter operations are smooth for the 2012-2013 snow season. Not only do such regional meetings enable Indiana LTAP to reach as many street and road personnel as possible with new information and techniques, but regions acting in concert with one another provide better levels of service to their citizens. Training for street personnel is maximized when communities join together and foster work relationships that continue long after the initial training sessions have ended. Indiana LTAP would like to thank the City of Gary for taking part in this training vision. Special thanks go to the Gary Sanitary District, particularly Dan Vicari, Executive Director, and Al Williams, Safety Director, for their efforts in arranging the logistics of the training sessions, as well as advertising the events to surrounding local agencies.
ADA Corner

Question: Winter is coming on and once again we face snow removal. We’ve had complaints in the past, including TV coverage, from wheelchair users who can’t get to their bus stops. Can you give us some suggestions or a checklist for tackling this persistent winter problem?

—JD, Kansas City MO/KS Metropolitan area

JD, thanks for a great and timely question!

To improve your snow removal methods, you can begin by reviewing local policies regarding street- and sidewalk-clearing responsibilities.

- If a government agency has the responsibility, then a program needs to be put into place to address priority areas such as:
  - Bus/rail transportation stops.
  - Government, medical, educational, office/business, shopping facilities, and parking lots.
  - Arterial routes.
  - Other specific areas where requests have shown a need.

Once these locations have been identified, it is important to have the staff and/or contractors address them ASAP.

- If your agency is responsible for only the streets and sidewalks at your facilities, be sure to:
  - Follow the same priority guidelines for your facilities.
  - Maintain facility parking lots. (Do not push excess snow into accessible parking spaces.)
  - Request staff or contractors to monitor street and sidewalk conditions as snow continues or a new freeze sets in. The ice that results after the snow is often even more dangerous, resulting in serious falls or vehicles sliding into other vehicles or pedestrians.

When it comes to establishing actual snow-removal polices, keep the following steps in mind:

- Develop and maintain a priority checklist of areas known to experience high pedestrian use, such as government, medical, educational, office, or shopping facilities.
- Instruct your staff or contractors to not push snow from the streets onto curb ramps at intersections or crosswalks.
- Ensure that snow is not pushed into areas designated for accessible parking, both on the street and in parking lots.
- Follow up snow clearing with ice treatment, even after the snow is finished.
- Make sure your contracts clearly state that the contractors must remove, at their expense, snow they have dumped or pushed into the intersection, crosswalk curb ramps, and/or accessible parking spaces.
- Regarding individual owners who are responsible for snow removal on sidewalks in front of their facilities or private residences: It is important that policy enforcement is paired with a community-involved system that assists those who cannot remove the snow and ice due to disability, age, or other issues. Work with the media to not only announce the snow removal
policies for business and residential areas, but to also provide contact information for assistance groups that will help those who cannot perform required snow and ice removal themselves.

- When establishing snow/ice removal responsibilities, don’t forget to include the paths leading to bus/rail stops (including the actual shelters, waiting areas, and boarding zones).

This is just a quick overview of suggested polices and practices. Do note that the American Public Works Association has a yearly snow conference with additional helpful information. I strongly recommend that local agency staff and contractors attend these conferences to learn about new equipment and processes that can greatly improve efforts to control the effects of snow/ice storms.

APWA’s 2013 Snow Conference will be held April 7-10 in Charlotte, North Carolina. Additional information about the conference is available at http://www.apwa.net/snow.

Parking space and accessible aisle with snow. SW access is at the access aisle.

Wheelchair users at bus stop and street intersection without snow removal.

Snow left at curb ramp, blocking access to the ramp.

Good snow removal from a federal guideline manual.

Wishing you the Best of Luck and a successful 2013!

Michele S. Ohmes

Michele Ohmes is an author, trainer, consultant, and motivational speaker who has helped both the public and private sector successfully comply with the Americans with Disabilities Act. For more information, visit www.michele-able.com.
FHWA Launches New Initiative to Help Local Public Agencies Manage Federal-Aid Projects

The Federal Highway Administration (FHWA) has launched an information-sharing initiative designed to help local public agencies and state departments of transportation manage their Federal-aid Highway Program projects. The initiative, called Federal-aid Essentials for Local Public Agencies, offers information about key aspects of the Federal-aid program on a single public website at www.fhwa.dot.gov/federal-aidessentials/index.cfm.

The website offers an online library of videos and resources, designed specifically for local public agencies. Each video addresses a single topic, condensing the complex regulations and requirements of the Federal-aid program into easy-to-understand concepts and illustrated examples. The videos are less than 10 minutes long, narrated in non-technical language, and supported with graphics and animation that give viewers the most essential content. The videos can be viewed in any sequence.

The website also has a State Resources button on the main page that provides access to a list of useful information, including individual state and FHWA local office LPA coordinator contacts and web links to state DOTs, state LPA manuals, local technical assistance program (LTAP) centers, and other helpful online resources. A drop-down menu on the main page, titled “I want to know about…,” helps users find information quickly about common Federal-aid topics. The website is regularly updated and new features added to meet state DOT and LPA needs and requests.

You can read more about the Federal-aid Essentials initiative in FHWA’s Public Roads magazine at http://www.fhwa.dot.gov/publications/publicroads/12septoct/03.cfm.

For more information on this initiative, please e-mail the Federal-aid Essentials for Local Public Agencies program at LPA-feedback@dot.gov.

Contact Indiana LTAP to have your agency’s ad appear in the newsletter!
(800) 428-7639
(765) 494-2164
inltap@ecn.purdue.edu

New Library Resources

Safety Edge Design and Construction Guide
Item #7075

The Guide provides information on the various elements to consider when designing and constructing pavement projects with the Safety Edge. The Guide also contains insights and lessons learned on previously constructed projects, highlighting items that may vary from conventional pavement design and construction.

For more information, or to request copies, call the LTAP Center at (800) 428-7639 or email inltap@ecn.purdue.edu.

Coming Soon!
LPA Certification Training

Check the Indiana LTAP website for Spring/Summer Training Dates and Registration Information.

On-Site Training is Available!
Available courses include:
- Snow Plow Safety
- Work Zone Traffic Control
- OSHA Flagger Training
- Chainsaw Safety

Contact the Indiana LTAP office to schedule your agency for a session!

For more details and registration information, visit our website at www.purdue.edu/INLTAP
Association Information

**Indiana Association of Cities and Towns**

Mayors Roundtables
North Central - January 16
Northern - January 18
South Central - January 23
Southern - January 24

IACT Statewide Town Roundtable
February 7
Indianapolis, The Pyramids

**Webinars**
The IACT Salary, Wage, and Fringe Benefits Survey
January 29
10:00am-11:30am EST

Exploring the Ins and Outs of TIF, Tax Abatement, and Other Incentives
February 28
10:00am-11:30am EST
Visit citiesandtowns.org

**Institute of Transportation Engineers**

ITE 2013 Technical Conference and Exhibit
March 3-6
San Diego, California

ITE 2013 Annual Meeting and Exhibit
August 4-7
Boston, Massachusetts
Visit www.ite.org

**Association of Indiana Counties**

AIC Legislative Conference
February 18-19

AIC Annual Conference
September 23-26
Florence, Belterra Resort
Visit www.indianacounties.org

**Indiana Street Commissioners Association**

ISCA Member Meeting
March 7
West Lafayette, Purdue University
Purdue Memorial Union

ISCA Annual Conference
August 21-23
Plymouth, Swan Lake Resort
Visit www.indianastreets.org

**Indiana Mineral Aggregates Association**

2012 IMMA Winter Workshops and Trade Show
February 5-7
Indianapolis, JW Marriott

2013 Operations Seminar
February 5
Indianapolis, JW Marriott

Annual Refresher Safety Training
February 15, March 28, April 12
Carmel

Surface: New Miner Safety Training Class
February 27-March 1
April 17-19
Carmel
Visit www.indmaa.org

**American Public Works Association**

February 1
Shoreline, Washington

North American Snow Conference
April 7-10
Charlotte, North Carolina

APWA Sustainability in Public Works Conference
May 13-15
San Diego, California

**Webinar**
Mutual Aid and Public Works
February 7
11:00am-1:00pm EST
Visit www.apwa.net and indiana.apwa.net

**Indiana Ready Mixed Concrete Association**

2013 IRMCA Short Course
February 28-29
Indianapolis, JW Marriott Downtown
Visit www.irmca.com

**National Association of County Engineers**

NACE 2013 Annual Conference
April 21-25
Des Moines, Iowa
Visit www.countyengineers.org
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Indiana Local Technical Assistance Program (LTAP) was established by the Federal Highway Administration (FHWA). The purpose of the LTAP program is to translate the latest, state-of-the-art road, highway, and bridge technologies into systems usable by local highway agencies. LTAP is funded by FHWA, the local agency distribution of the Motor Vehicle Highway Account, and Purdue University. A newsletter is published quarterly by the Indiana LTAP office at Purdue University. It is distributed free to county, city, or town road and street personnel and others with transportation responsibilities.