

# The INSIDE

# LANE

A newsletter for employees of the Arizona Department of Transportation

AUGUST 2017

VOLUME 2, ISSUE 2



*10 things to ask your manager  
about the Leaders Conference*

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**ADOT**

## GREETINGS!

What do operations, overhead message boards, signs and roadway striping, freeway pump stations, traffic safety and engineering, incident management, oversized load permits, highway lighting, connected and autonomous vehicles, traffic signals, pavement management and emergency management, all have in common? **TSMO!** Transportation Systems Management and Operations (TSMO) is a relatively new ADOT division that was launched in October 2015.

TSMO isn't just an Arizona movement. This is a national focus that many state DOTs are embracing and developing. Other states are looking at ADOT as a leader in this arena to re-create what we are doing.

The division is also focusing on new technologies as a means to squeeze more capacity, efficiencies and safe operations out of our highway system. We've been working closely with the governor's office in successfully attracting industry to work and test technologies in Arizona, which has resulted in you seeing Uber, Google and other autonomous vehicles being tested here. We are also looking to pilot truck platooning across Arizona very soon.

We are also pioneering new technologies such as the Wrong Way Driver Pilot along Interstate 17 in Phoenix to save lives by detecting and informing the traveling public. The pilot will be operational late this year and has gained national attention. Nowhere else is this being done.

TSMO is comprised of approximately 300 dedicated people that I'm very proud to be working with. TSMO works across all the divisions and groups on a daily basis, and it is critical to the success of the agency's mission of OneADOT.

In regards to me, I grew up in Iowa, the heartland of the U.S. Out of high school in the early 1980s, I worked full time as a draftsman to pay my way through college while also taking night classes. While finishing my civil engineering degree at the University of Missouri-Rolla, I spent my summers working as a construction inspection intern at the Iowa DOT. I have two wonderful kids and a loving wife with two cats (not grumpy ones). I enjoy exploring Arizona and have hiked numerous areas throughout the state. I did give up my Harley Davidson motorcycle a few years back due to too many close calls by other drivers and seeing the fatalities with my job.

Drive safely and focus on the road. Put your phone away as nothing is more important than you arriving home or to your destination. Be safe!



*Brent Cain, P.E.  
TSMO Division Director*

## The INSIDE LANE

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The Inside Lane is published monthly for the employees of the Arizona Department of Transportation by ADOT Communications.

Address all comments and suggestions to [InsideLane@azdot.gov](mailto:InsideLane@azdot.gov).

A web version of this newsletter can be found on ADOTNet or at [azdot.gov/InsideLane](http://azdot.gov/InsideLane).

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### Share your best cover shot

Do you snap shots that show off the scenic side of transportation in Arizona? Share them with us and we might put your photograph on the next cover of The Inside Lane.



*This photo of the 2017 ADOT Leaders Connection Conference was taken by ADOT Video Production Project Manager Kim Katchur. Read more about the conference on page 4.*

It can be a great picture of an MVD office, a beautiful highway shot or even an artsy photo of construction materials. Whatever the subject, the photo should highlight some aspect of the work happening here at ADOT.

Submit your original, digital photographs to [InsideLane@azdot.gov](mailto:InsideLane@azdot.gov) in JPEG format (no larger than 10MB). Along with the photo, please provide a brief description and your name/title.

## SPOTLIGHT ON:

# ADOT'S TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS DIVISION

**I**N OCTOBER, ADOT's Transportation Systems Management and Operations Division (TSMO) will turn two years old.

ADOT launched the division in 2015 to — in very technical terms — optimize the performance of existing infrastructure through implementation of systems, services and projects to preserve capacity and improve reliability and safety of our transportation system.

A simpler way of putting it would be to say TSMO is the division that works to solve traffic congestion by using technology and other methods that don't include the construction of new roads.

In honor of the division's upcoming anniversary, here's an abbreviated look at just a couple of things the team has been working on over the past two years. And, because TSMO is responsible for so much, it's going to take two articles to cover everything. Be sure to stay tuned and check out next month's newsletter for the rest of this story.

## TRAFFIC INCIDENT MANAGEMENT (TIM)

"Our goal is to maximize the throughput of traffic and in order to do that we need to manage the congestion," said Deputy State Engineer of TSMO Jim Windsor, adding that approximately 50 percent of that congestion is nonrecurring, meaning it is caused by crashes, incidents or even weather. "To address that type of congestion, we're trying to build a more robust TIM program."

Traffic Incident Management (TIM), Windsor explains, involves procedures that clear crashes and incidents from the road quicker to get traffic moving again and reduce the chance of secondary crashes.

One accomplishment in this area is the agency's adoption of [an internal "quick clearance" policy](#) earlier this year. The document sets forth practices for the clearance of disabled vehicles from state highways.

Another highlight has been the move to put a Department of Public Safety State Trooper in ADOT's Traffic Operations Center 24/7. A pilot program started in 2014 stationed a trooper in the TOC for just part of the day. Windsor said the program's success convinced ADOT to expand the hours and fund a full-time partnership.

"We've seen the importance of having that trooper in the TOC," Windsor said. "It has been a big help in reducing clearance time."

## SMARTER SIGNALS

Traffic signal timing that can be adjusted from an office, signals that can "talk" to your car and ramp meters that "know" how fast you're going aren't years away from being developed. TSMO is putting the technology to work today.

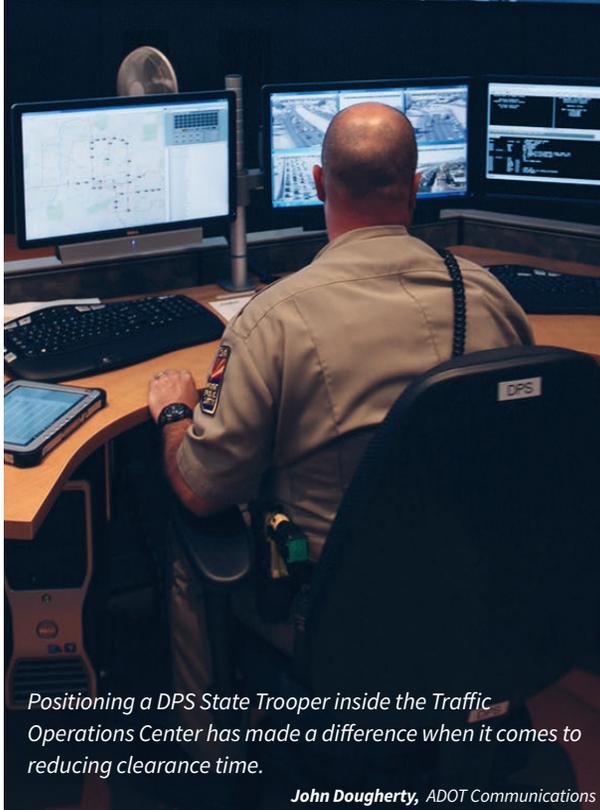
Earlier this month, the timing of ramp-meter signals along southbound State Route 51 in Phoenix was adjusted to respond to the flow of morning rush-hour traffic, expanding an ADOT program that began last fall along the freeway's northbound on-ramps.

Instead of the ramp meters being programmed with predetermined red-light intervals, the signal timing is adjusted using traffic-flow data from sensors embedded in the freeway's pavement in order to ease congestion.

This is the first of a two-step process for the southbound SR 51 ramp meters. TSMO's Intelligent Transportation System engineers are also developing an adaptive process that will allow ramp meters to slow down the rate vehicles are allowed onto the freeway to reduce traffic congestion at locations farther down the roadway. "Typically, you might go to a consultant for this type of work, but we're doing this in-house," said Windsor.

*Come back next month for more, including how TSMO is working on solutions related to wrong-way drivers and dust storms, and what the team is doing to plan for a future that includes autonomous vehicles.* ■

~Angela De Welles, Senior Communications Specialist



*Positioning a DPS State Trooper inside the Traffic Operations Center has made a difference when it comes to reducing clearance time.*

*John Dougherty, ADOT Communications*



Michael Harris, ADOT Communications

## BUILDING ONE ADOT:

# Annual Leaders Connection Conference is time to learn, build relationships

*Managers offered new problem-solving techniques*

### Got problems? No problem!

Identifying what's not working often is the first step toward finding a solution, which is why problems were the big focus of the annual ADOT Leaders Connection Conference held earlier this month in Phoenix.

Attended by ADOT's executive leadership team and about 700 supervisors and managers from around the state, the conference provided participants an opportunity to learn more about problem identification and everyday problem solving, explains ADOT Senior Lean Coach Heather Franek.

In addition, conference attendees received some insight on what a manager's role should be when it comes to helping their team solve problems, and they got instruction on how to use daily huddle board meetings to find and track issues.

"We're adding problem-solving tools to the huddle boards to help us identify problems early, or even predict problems, and track

them through the problem-solving process so the problems don't come back," Franek said.

Having just wrapped its fifth year, the Leaders Connection Conference continues to motivate this agency's leadership with information and inspiration. The goal for each conference is to bring together ADOT managers so they can build relationships and connect through learning.

But just because the conference has ended, doesn't mean the managers are done. Not by a long shot!

Anyone who had the privilege of attending now has a responsibility to share what they learned with their teams and all the employees who held down the fort during the two-day event.

So, if your manager hasn't yet filled you in, this list of questions should help you to get the conversation started...



*A poster gallery/scavenger hunt, top photo, along with smaller group exercises were all a part of the conference agenda.*

# TOP 10 things to ask your manager about the 2017 Leaders Connection Conference

1. Which posters did you see and what did you learn about the PDCA method? (PDCA problem-solving teams created posters to share some of their findings. During the conference, a poster gallery/scavenger hunt was conducted.)
2. Can you tell us about the problem-solving tools that were introduced and when our team is going to start using those tools?
3. Can you explain more on the agency's new True North and how our team plays a role?
4. How are you, as a manager, going to help this team make time for problem solving? (Conference attendees were asked to start thinking of ways to give their employees regular time for problem solving.)
5. What did you like best about the conference and what did you find most valuable?
6. What animal did Director Halikowski compare himself to at the 12:55 mark in the newest video from the Direct Connect series? (OK, this one's a little specific! While the video premiered during the conference, it now is available for all employees to view. Find it in ADOTNet's "what you need to know" album.)
7. Can you share some of the worksheets and problem-solving tools you brought back from the conference?
8. What was your biggest takeaway on huddle boards?
9. What did you learn from Director Halikowski's "Connecting the dots" talk on day two?
10. How does the conference's theme, Building One ADOT, apply to our team?

[To see photos from the conference, please click here.](#)

~Angela De Welles, Senior Communications Specialist

# ADOT employees working behind the scenes to plan upcoming conference

AASHTO's annual meeting to be held in Phoenix

Angela DeWelles, ADOT Communications

**W**HEN IT COMES TO conferences, AASHTO's annual meeting is a pretty big deal in the transportation industry. AASHTO, of course, is the American Association of State Highway and Transportation Officials, and its yearly meeting brings together transportation, government and commercial organizations from around the country.

This year, the important event is being held in Phoenix and ADOT is serving as host.

That means a "small army of ADOT volunteers" has been working since last November to coordinate all the details, says ADOT Local Public Agency Section Manager Jodi Rooney.

Rooney serves as chair of the meeting's planning committee, joined by cochairs Local Public Agency Liaison Jennifer Catapano and Employee Engagement Program Administrator Kim Phillips. Made up of about a dozen ADOT employees, the committee has been meeting regularly for months to lock down everything from transportation and logistics to meeting signage.

"All of these volunteers are coming together and doing this work, while also doing their regular jobs.

Save the Date!  
**AASHTO 2017**  
ANNUAL MEETING



September 24-28, 2017  
Sheraton Grand Downtown Phoenix  
For more information, contact Jennifer Catapano at 602.712.4873

We'd like to extend a thank you to our fabulous and fun volunteers," said Rooney, adding that all ADOT employees should consider volunteering when opportunities like this come around. "It helps them to expand professionally and the experience gives everyone a larger context."

Up to 800 people are expected to attend the event, scheduled Sept. 24-28 at the Sheraton Grand Phoenix hotel, and about 80 ADOT employees will be on hand to make sure the meeting runs smoothly.

While offering transportation executives the opportunity to network and share the latest in industry policies and innovations, the annual event also gives the host state a place in the spotlight.

"It's an honor for us to be host agency," Phillips said. "This is our time to shine. We are ADOT! It takes many people who have a diverse set of skills to plan an event like this."

More information on the meeting, including the agenda and an exhibitor list, can be found online at [aashtoannualmeeting.org](http://aashtoannualmeeting.org). ■

~Angela De Welles, Senior Communications Specialist



ADOT Communications

## NOW PLAYING ON A SCREEN NEAR YOU

**THE EAGERLY** anticipated second episode of Direct Connect is now online and, just like they did the first time around, ADOT's Video Team has blended information and entertainment as they show ADOT Director John Halikowski out in the field and on the job with state employees.

Available to view in the "[Direct Connect Album](#)" on [ADOTNet](#), episode 2 follows Director Halikowski as he learns how officers from ADOT's Enforcement and Compliance Division (ECD) protect the state's infrastructure by making sure all commercial vehicles are following the law.

Highlights from the video show the director, stationed for the day at the I-40 Topock Port of Entry, catching up with a truck that bypassed the port and assisting on the Level 1 inspection of a big rig.

"I especially have to thank this team here today and this crew," says Halikowski at the end of the episode. "This has been a new learning experience for me — being in that Tahoe, chasing down that vehicle, and being under that truck. My hat is off to people who ... are crawling under all different makes and types of vehicles to make sure that they're safe, to make sure those drivers are safe and to make sure that we all stay safe."

If you haven't already checked out the first episode, you can also find it in ADOTNet's "Direct Connect Album." Fans of the show will want to stay tuned ... a third episode is already in the works! ■

~Angela De Welles, Senior Communications Specialist

# ADOT AWARD WINNERS HONORED AT LEADERS CONFERENCE

**I**N AUGUST, more than 700 leaders and managers from across the agency gathered in Phoenix for ADOT's annual Leaders Connection Conference. Amidst the training and professional development workshops, conference-goers were also in attendance for the first-ever Annual ADOT Awards.

Employee Engagement Program Administrator Kim Phillips, who organized the awards, explained, "The annual agency awards came out of two years of work to enhance the Awards and Recognition program with the goal to reach more employees."

The awards have five different categories: Customer Service Award, Innovation Award, Team of the Year, Leader of the Year and Employee of the Year. Due to scheduling conflicts, the honorees received their awards earlier this year in a smaller, more local ceremony.

## Customer Service Award: David Egliskis

You've undoubtedly seen the message boards above Arizona's freeways alerting motorists to travel times, traffic and weather conditions, and other clever safety messages.

Traffic Engineer Specialist David Egliskis manages the messages about planned roadway construction and maintenance activities from the Traffic Operations Center (TOC) in Phoenix. In addition, whenever a major sporting or social event takes place — say, like the Super Bowl or an Arizona Cardinals home game — he plants himself in the TOC or the Glendale Traffic Management Center to monitor some of the densest and most challenging traffic events of the year.



Photos by Casey Miller, ADOT Communications

## Innovation Award: Barb Domke and Marissa Eskridge

One of the major programs that ADOT's Business Engagement and Compliance Office (BECO) manages is the Disadvantaged Business Enterprises (DBE), which helps qualifying women- and minority-owned businesses compete for state and federal contracts. Barb Domke and Marissa Eskridge launched three online initiatives to simplify the processes for DBE customers, attract new companies to ADOT's DBE program and open up the lines of communication with BECO.



## Team of the Year: ADOT Video Team



For years, the ADOT Video Team — which consists of Kim Katchur, Casey Miller, John Dougherty and Mike Harris — has brought their creativity and skill to making not only high-quality, but also award-winning videos. From shooting video of projects all around the state, to filming Director Halikowski as he tries out different ADOT jobs for the Direct Connect series, the ADOT Video Team brings to life

much of what the agency accomplishes every day.

## Leader of the Year: Harry Edwards



As shop foreman at the Equipment Services Shop in Tucson, Harry Edwards has taken on the challenge to help change the culture at ADOT. Since the agency adopted the philosophy of Continuous Improvement, Edwards has worked with his team to build a rapport in which everyone feels comfortable to share ideas for process improvements to the shop. As a result,

he and his team have created 30 kaizens ... and counting. But Edwards didn't stop there. He took the positive lessons he'd learned with his team and took them to other Equipment Services shops. Thanks to Edwards taking the lead with being an agent of change for the agency, other teams at ADOT are benefiting.

## Employee of the Year: TJ Swanson

Senior Security Engineer TJ Swanson has been on the front line of ensuring ADOT's cyber security for a long time. From taking a late-night call to repair an application for the Enforcement and Compliance Division, to writing a script that saves and archives employee data, to streamlining processes with the Federal Highway Administration, Swanson has been committed to keeping ADOT's systems both secure and ever-improving.

Several of the award winners were honored in July during a ceremony in Phoenix. To learn more about the inaugural ADOT Award winners, take a look at the [video](#) that the ADOT Video Team put together. ■

~Dani Weber, Senior Communications Specialist

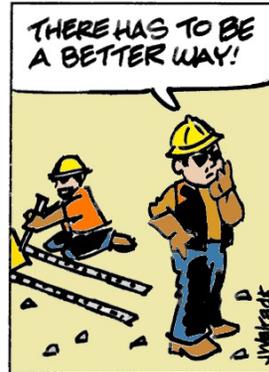


# KAIZEN FOR CASH

# WINNERS

Congratulations to the top three winners as depicted in cartoons by Graphic Specialist John Walrad. Can you guess which muda (waste) was tackled by each team?

## Transportation System Management and Operations – Cash Award \$800



## Information Technology Group – Cash Award \$500



## Motor Vehicle Division – Cash Award \$300



### Honorable Mentions

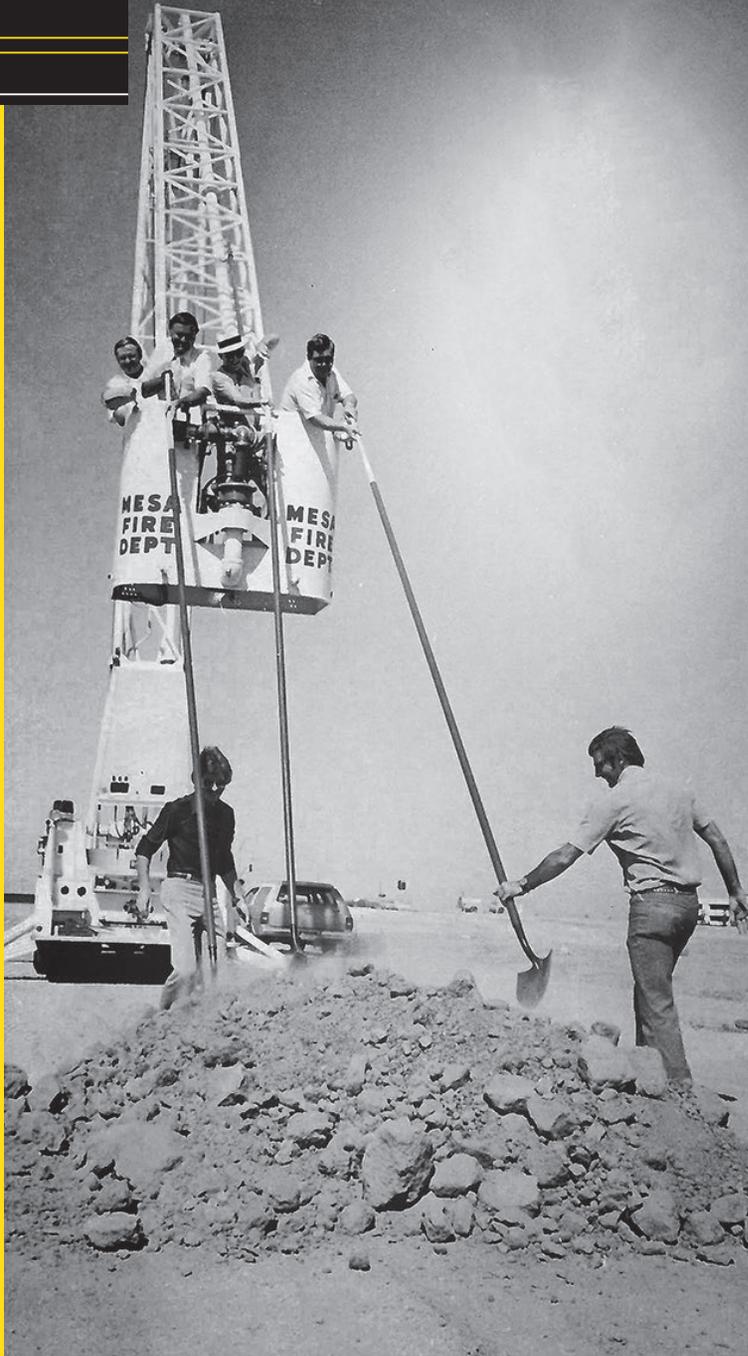
Four entries received honorable mentions in the Kaizen for Cash contest and were awarded \$200 each.

- Standardized procurement alerts to internal customers by Procurement (Administrative Services Division) to eliminate motion.
- Enforcement and Compliance Division (ECD) patches available for purchase at uniform stores statewide to eliminate over-production, inventory and waiting.
- Creation of a template to avoid repeating work with no added value to the customer by Infrastructure Delivery and Operations, to eliminate motion, over processing and defects.
- Product Evaluation Committee voting tool by the Research Center (Multimodal Planning Division) to eliminate waiting, motion and unutilized talent.

## LOOK

## BACK

*For as long as there have been roads in Arizona, there have been people who plan, build and maintain them. It's those skilled women and men who have made this state's transportation history a remarkable one. From 1912 when the Arizona Highway Department was first established, to right now, right here at ADOT, state employees have continuously done the work necessary to keep Arizona moving. Take a look back at some of their stories.*



**E**VER HEAR that old saying, “those who turn dirt with the tallest shovels are destined for great reward”?

Probably not, because it's totally made up. However, if the adage actually were authentic, it might help explain this photo op from 1977. As it stands, we're not entirely sure why the fire department bucket truck and long-handled shovels were necessary for a simple groundbreaking ceremony. The props make for a good picture, though.

What we do know is that the photo was printed, courtesy of the Mesa Tribune, in the November 1977 issue of Newsbeat, ADOT's employee newsletter from that time. According to Newsbeat, ground was being broken on a new \$10.6 million, 2.5-mile stretch of the Superstition Freeway in Mesa.

Newsbeat also tells us that Oscar T. Lyon, Jr., assistant director of ADOT's Highways Division, is the person shown third from left inside the bucket on Mesa Fire Department's truck, and that he is joined by officials from the city of Mesa and M.M. Sundt Construction Company.

Newsbeat doesn't mention it, but Lyon was known for quite a bit more than just using novelty shovels at ceremonial groundbreakings...

According to [Arizona's Transportation History](#), a 179-page publication from 2011 that details the role transportation has played in the state's growth, Lyon came to work for the state's highway department after World War II and served as the district engineer for three districts. He went on to lead the construction of a major part of the

state's interstate highway system and was in charge of the Flagstaff District during construction of the challenging Virgin River Gorge section of Interstate 15 in northwestern Arizona, before eventually becoming assistant director of the agency.

Newsbeat also didn't say which stretch of the Superstition Freeway Lyon and crew were breaking ground on back in 1977, although we're guessing this was taken near Dobson Road since the building on the far right side of the photo looks a whole lot like the medical offices currently sitting near Dobson and Southern roads adjacent to Banner Desert Medical Center, known in the '70s as Good Samaritan Hospital.

The freeway's timeline, as noted in Arizona's Transportation History, gives a few more clues...

According to the report, the very first section of the Superstition Freeway was completed six years earlier in 1971. But at that time, it didn't go too far — after branching east off I-10, it ended just at Mill Avenue.

It's safe to say that by 1977, efforts to expand the freeway were well underway. ADOT continued to work its way east until the Superstition Freeway was completed in 1991 — that's when it reached its present-day junction with US Route 60 east of Apache Junction, bringing to a close more than two decades of construction work.

Do you have memories of working at ADOT in the 1970s? Share them with us at [InsidLane@azdot.gov](mailto:InsidLane@azdot.gov). 🇺🇸

*-Angela De Welles, Senior Communications Specialist*

# Share the road, stay safe

**IT MAY BE HARD** to believe, but the summer is starting to wind down. We're entering into the time of year when students head back to school, the days get shorter and we all start to see more events going on the calendar as temperatures begin to cool.

It's also when we begin to see more pedestrians and cyclists take to the streets, making now the perfect time to review and improve our habits when it comes to sharing the road.

Yes, I know I share this same message every year around this time, but it is something that's worth repeating — especially since pedestrian-involved crashes and fatalities spiked last year. The number of pedestrians killed rose to 197 in 2016 from 163 the year before and crashes increased by 16 percent, from 1,408 in 2015 to 1,637 last year.

Those numbers should tell all of us — motorists, pedestrians and bicyclists — that we need to pay attention, slow down and avoid distractions when traveling.

As someone who enjoys bicycling (I even bike to work at least once a week), I've seen firsthand some of the close calls that occur when everyone's not paying attention to the road. Intersections pose a notable challenge because drivers aren't always looking out for bicyclists or pedestrians.

Luckily, there are some great resources that focus on how to safely handle intersections,



Dallas Hammit

blind spots, crosswalks and everything in between. You can find those guides on ADOT's Bicycle and Pedestrian Program website at [azbikeped.org](http://azbikeped.org). Look for "Sharing the Road with Pedestrians" and "Arizona Bicycling Street Smarts." Both publications offer information on Arizona traffic laws and important safety tips.

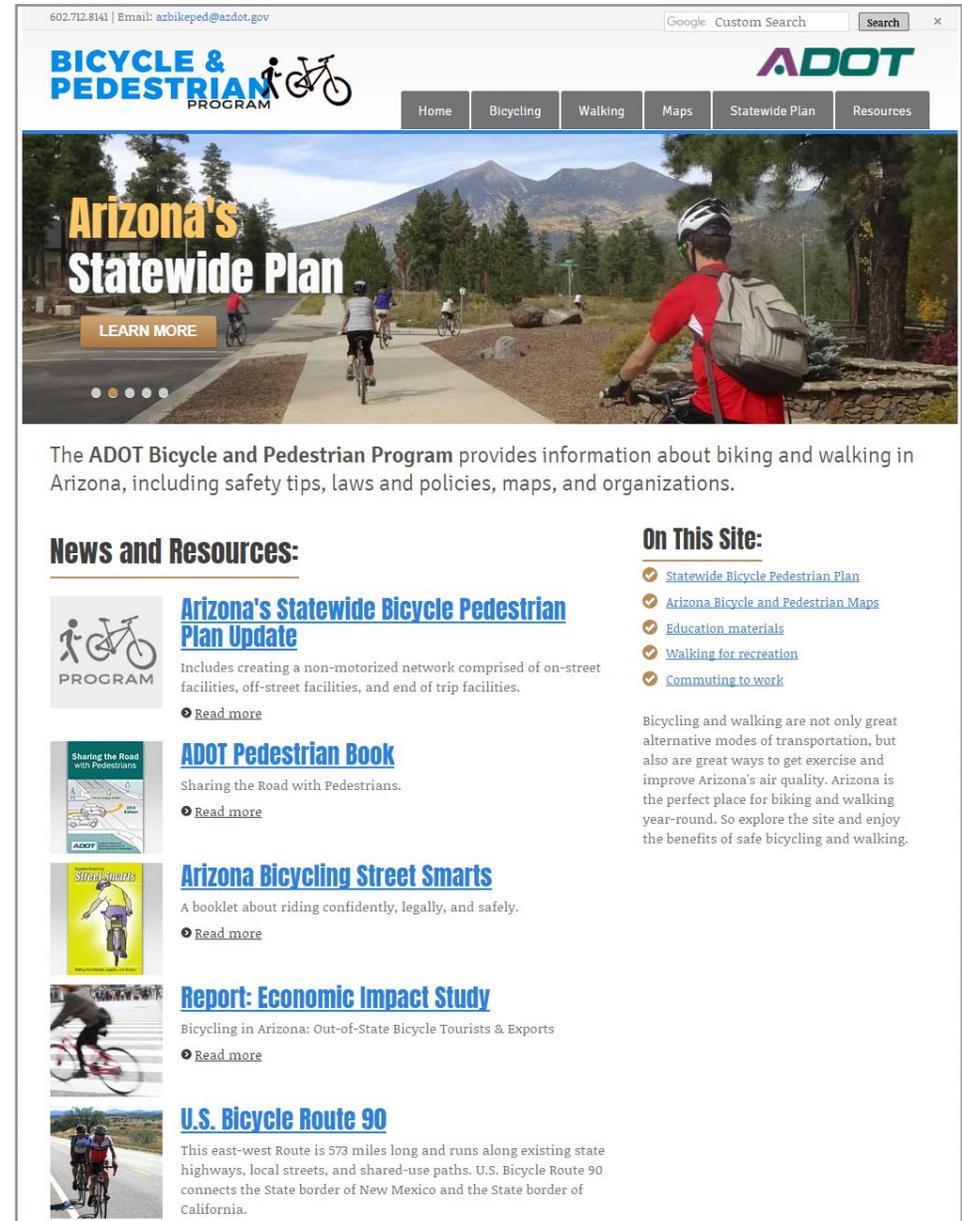
And, as always, please share these resources with your friends and loved ones and take the opportunity to talk with them about making safe choices.

Before I sign off, there's one more thing I'd like to make sure you're aware of...

In partnership with the Arizona Department of Public Safety and the Governor's Office of Highway Safety, ADOT will soon kick off a public safety campaign focused on how motorists can minimize the risk of being in a crash with a wrong-way vehicle.

Last month, I shared the driving tips that are a key part of the effort. But now I want to let you know that once the "Drive Aware, Get There" campaign launches, you'll be able to check out a new video, news release and social media posts that ADOT has developed. There also will be a newly redesigned webpage that you can find online at [azdot.gov/wrongway](http://azdot.gov/wrongway). The site will highlight the video and include a Frequently Asked Questions section offering helpful information for motorists. 🚗

~Dallas Hammit, Deputy Director for Transportation



602.712.8141 | Email: [azbikeped@azdot.gov](mailto:azbikeped@azdot.gov) Google Custom Search Search

**BICYCLE & PEDESTRIAN PROGRAM**  **ADOT**

Home | Bicycling | Walking | Maps | Statewide Plan | Resources

## Arizona's Statewide Plan

LEARN MORE

The ADOT Bicycle and Pedestrian Program provides information about biking and walking in Arizona, including safety tips, laws and policies, maps, and organizations.

### News and Resources:

- Arizona's Statewide Bicycle Pedestrian Plan Update**  
Includes creating a non-motorized network comprised of on-street facilities, off-street facilities, and end of trip facilities.  
[Read more](#)
- ADOT Pedestrian Book**  
Sharing the Road with Pedestrians.  
[Read more](#)
- Arizona Bicycling Street Smarts**  
A booklet about riding confidently, legally, and safely.  
[Read more](#)
- Report: Economic Impact Study**  
Bicycling in Arizona: Out-of-State Bicycle Tourists & Exports  
[Read more](#)
- U.S. Bicycle Route 90**  
This east-west Route is 573 miles long and runs along existing state highways, local streets, and shared-use paths. U.S. Bicycle Route 90 connects the State border of New Mexico and the State border of California.

### On This Site:

- [Statewide Bicycle Pedestrian Plan](#)
- [Arizona Bicycle and Pedestrian Maps](#)
- [Education materials](#)
- [Walking for recreation](#)
- [Commuting to work](#)

Bicycling and walking are not only great alternative modes of transportation, but also are great ways to get exercise and improve Arizona's air quality. Arizona is the perfect place for biking and walking year-round. So explore the site and enjoy the benefits of safe bicycling and walking.

# KAIZEN KORNER

Kaizen is a Japanese word that refers to any improvement responsible for eliminating waste or improving safety and quality. Changes made as the result of a kaizen, even the smallest ones, can often add up to big results. At ADOT, employees from around the state are implementing kaizens. Here's a closer look at one of them...

## KAIZEN COUNT

The number of Kaizens submitted by ADOT employees so far in the new fiscal year is

# 92

For a complete breakdown by division, visit the [Office of Continuous Improvement page on ADOTNet](#).

## Douglas Port of Entry improves processes, resources

THE CULTURE of Continuous Improvement encourages everyone, everywhere to become active participants in finding ways to do business better, every day. At the Douglas Port of Entry (POE), some of the changes they've adopted have substantially improved their ability to serve their customers.

### Light tower installations

The commercial traffic at the Douglas POE is considerably lighter than some other POEs, and as a result it's not cost-effective to offer 24-hour service and inspections. However, commercial traffic doesn't always travel during business hours. Customers in need of inspections can often arrive either before or after normal hours.

During the winter months, when the days are short and the nights are long, the limited visibility of darker hours is a challenge that makes it easy to overlook safety issues.

Last winter, the Douglas Port of Entry ran extended hours to see traffic patterns and establish work hours at their facility. However, the lighter commercial traffic just wasn't enough for the new facility to justify the cost of installing permanent light structures.

Officer Bill McCraney, who is now retired, decided to think creatively. If they couldn't install permanent light towers, why not use the mobile light towers the facility already had on-hand for field operations?

"We were so ingrained in used the light towers for mobile operations, that it didn't even cross anyone else's minds to use them for extended-hour operations," Lieutenant Christina Parrish said of the kaizen.

By utilizing equipment that was already available, the facility is now able to offer full inspections under reduced visibility and at a low cost. The added light allows officers to see the drivers, their credentials and any activity going on within a truck's cab, as well as anything happening around the compound. The light towers have made nighttime operations not only possible, but also safer.

### Tool totes to tool boxes

Previously, officers at the Douglas POE carried tote bags with assigned tools to conduct Commercial Vehicle Safety Alliance (CVSA) inspections. Having tools assigned to specific people allowed for accountability and mobility. That mobility, however, was also a challenge. When officers would travel to other facilities in the Douglas area, they would have to take those tools with them.

In addition to having those tools taken out of rotation, the totes were often disorganized, and it wasn't uncommon for officers to accidentally take tools from the wrong tote. Officer Scott Long knew there was a better, more organized way to make the right tools available to officers when needed.

His solution was to install tool boxes between inspection bays at each facility, making necessary tools readily available to all officers. No more walking back and forth to the workstation, no more traveling around with tote bags, no more time wasted in setting up before each shift and breaking down again at the end.

"It's humbling for a supervisor," Lt. Parrish said. "You get so ingrained in what you do every day that it doesn't occur to you how you could do things better."

Getting rid of the totes and moving to tool boxes also has the added benefit of creating a place for everything ... and putting everything in its place. The new system has cut down the clutter in work stations, which in turn makes tools easier to find, cuts down on inspection time and gets commercial vehicles back on the road faster.

Continuous Improvement doesn't have to be a complete overhaul. It can be small corrections to everyday business that have accumulating effects that save both time and resources. ■

~Dani Weber, Senior Communications Specialist

WINNER!

WINNER!



Casey Miller, ADOT Communications

**CONGRATULATIONS** to Charlie McLaughlin— winner of last month's "Where in AZ??" photo contest! McLaughlin, who works as a Tech 4 in Gila Bend, was the first person to correctly guess that the photo was taken off of US89 near Bitter Springs, looking toward the Vermilion Cliffs. ADOT Internal Communications Manager Kathy Boyle awarded Charlie earlier this month with a copy of the Arizona Highways publication, "Arizona: The Beauty of It All." ■



## Pump station maintenance technicians keep pumps ready for monsoon

**AFTER THE WORST** of the summer heat has past, anyone who's lived in Arizona for more than a year knows what comes next: monsoon. While the rain might be a welcome relief to some, flooding on a freeway can turn into an emergency situation rapidly and managing it is a challenge that requires a lot of preparation.

In the Phoenix metropolitan area alone, there are 72 pump stations spread along the Valley's freeway system. That's 247 pumps run by 161 industrial engines that can pump anywhere from 120 gallons per minute to 33,000 gallons per minute. If every pump were working at full capacity, they would have the combined ability to pump 3.2 million gallons in one minute.

That's a lot of water, though, so to put it in perspective, imagine this: A mid-sized sedan could fit into one of the pumps, which could drain your average swimming pool in about 40 seconds.

But that kind of machinery takes a lot of maintenance if it's going to be ready for the worst storms that hit the Valley. Throughout the year, teams inspect pump stations regularly, looking for leaks, faulty gauges or any other component that might be in need of repair.

When a storm or rain event does happen, it's all hands on deck, just like it was back in July when the first monsoon storm arrived in Phoenix. Pump Maintenance tapped Equipment Services and

Transportation Systems Management and Operations (TSMO) for assistance and sent teams to each pump station.

Once on-site, each team entered what Signals, Lighting and Technical Electrical Supervisor Patrick Shannon described as a "mini-TOC," referring to the Traffic Operations Center that oversees the traffic and freeway conditions in Phoenix. It's a telemetry system that provides information and alerts as needed so that teams can respond to station requirements immediately.

"It can be long hours," Shannon said. "Sometimes even three days. Summer storms are very heavy, very fast, but winter storms are long and drawn out."

During that storm in July, those pump station teams oversaw 9.4 million gallons of water pumped out of the city to keep the roadways clear and safe. It was one of those "very heavy, very fast" summer storms, but the hours of attention and maintenance they did ahead of time allowed for the operation to work smoothly and predictably. ■

~Dani Weber, Senior Communications Specialist



Dani Weber, ADOT Communications

*Pumps are placed strategically across the Phoenix metro area to keep roadways from flooding.*



*These pipes carry water away from the roads and into canals.*

Dani Weber, ADOT Communications



Dani Weber, ADOT Communications

*Lead Supervisor Patrick Shannon holds up electric leads, which give the alert to start the pumps when the water level rises.*

# Plan outlines rules for public involvement

*Ensures agency's outreach efforts are fair, inclusive*

**P**UBLIC INVOLVEMENT is a critical element of transportation planning, design, construction and operation. It can shape the outcome of a project — literally! It also aligns with our True North: Making Transportation Personal.

Now, the many ways we inform and involve the public during all phases of project delivery are outlined in the agency's first Public Involvement Plan (PIP) in 20 years. **If your job includes having any meetings, hearings or events and members of the public or stakeholders are invited or encouraged to attend, read the PIP first so you know what is required.**

The Federal Highway Administration (FHWA) approved ADOT's PIP in October 2016, putting into play the steps we must take to ensure our outreach efforts are fair and all-inclusive.

The plan provides tools and techniques for involving traditionally underserved populations, such as the disabled, minorities, low-income individuals and those who don't speak English; it explains the specific tactics for complying with Title VI of the Civil Rights Act, the Americans with Disabilities Act and other federal mandates.

Because ADOT receives federal funding, the PIP applies to the entire agency, including divisions that do not receive federal dollars. All employees — and consultants — who interact with the public are required to follow it. Many of the PIP's requirements are easy to implement, and ADOT Communications' Office of Community Relations is happy to help employees or consultants who have questions or need assistance.

Read the new [Public Involvement Plan on the ADOT website](#) or on [adot.net](#) on the Community Relations page. If you have questions or need assistance, call 602.712.2122 or email [KNoetzel@azdot.gov](mailto:KNoetzel@azdot.gov).

*-Kimberly Noetzel, Assistant Communications Director for Community Relations*

*Because ADOT receives federal funding, the PIP applies to the entire agency, including divisions that do not receive federal dollars.*



John Dougherty, ADOT Communications