Transportation Performance Management Webinar Series

More Than Just Asphalt, Concrete, and Steel: Innovations From Our People that are Moving Our Transportation System Forward

Sponsored by AASHTO and FHWA

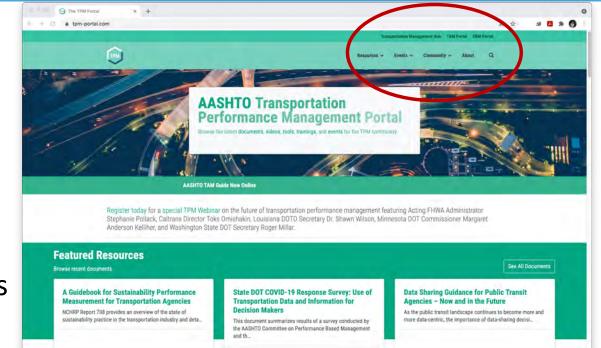




November 16, 2022 TPM Webinar 14

Transportation Performance Management Webinar Series

- Our TPM webinar series is held every two months, on topics such as communications, system performance management, data sources, and many more to come!
- Today is the 14th webinar in our bi-monthly series
- We welcome ideas for future webinar topics and presentations
- Use the webinar chat panel during the webinar
 - Submit questions for today's presenters
 - Submit ideas for future webinar topics



Find us on the AASHTO TPM Portal https://www.tpm-portal.com

Webinar Agenda

- 2:00 Welcome, Introduction, and Agenda Christos Xenophontos, Rhode Island DOT.
- **2:05 AASHTO Introduction and Perspective.** Matt Hardy, AASHTO.
- 2:10 Introduction to the AASHTO Committee on Performance Based Management (CPBM) Subcommittee on Organizational Management (OM). Gary Vansuch, Colorado DOT.
- **2:20** Leadership Matters: Arizona Management System. Lisa Pounds, Arizona DOT.
- **2:40 Missouri DOT: Innovations Challenge.** Kelly Backues, Missouri DOT.
- **3:00** The Transportation Lean Forum and Lean Everyday Ideas at CDOT. Gary Vansuch, Colorado DOT.
- **3:20** Panel Q&A Moderated by Matt Hardy, AASHTO.

AASHTO Introduction and Perspective

Matthew H. Hardy, Ph.D.

Program Director for Planning and Performance Management, AASHTO mhardy@aashto.org









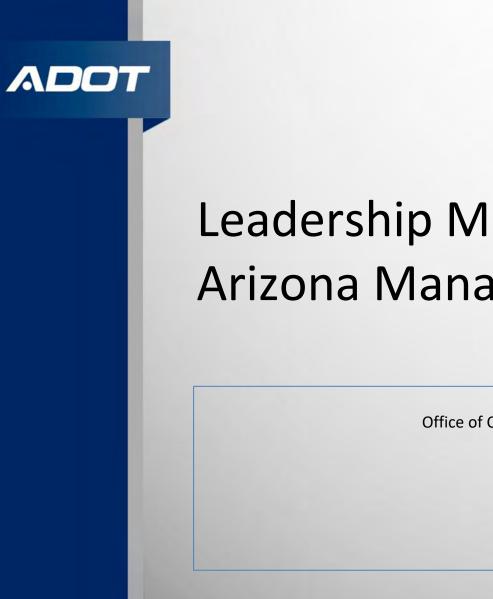
TPM Webinar 14:

More Than Just Asphalt, Concrete, and Steel: Innovations From Our People that are Moving Our Transportation System Forward

Wednesday, November 16, 2022

Organizational Management Subcommittee of AASHTO's Committee on Performance-Based Management (CPBM)



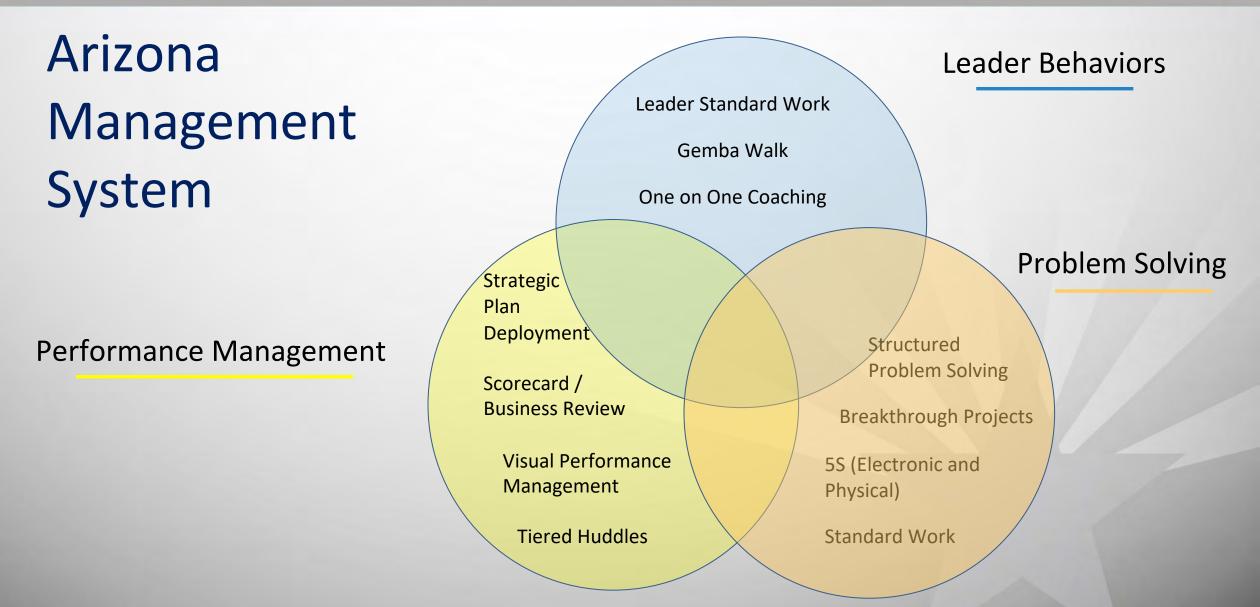


Leadership Matters Arizona Management System

Lisa Pounds Office of Continuous Improvement & Employee Engagement Arizona Department of Transportation TPM Webinar November 16, 2022

ARIZONA DEPARTMENT OF TRANSPORTATION





AMS "Learning is a journey, not a destination."

In 2015, Director Halikowski challenged the agency to: • manage for daily improvement.

BAA - THE ADDIT WAS

 change the way we work because our processes and tools hinder us

Phase 4: July 2018 - June 2019

- Leaders coach and support teams with a focus on "Connecting One ADOT," introduced at the 2018 Leaders Conference.
- Launched AMS team member training with learning modules Total Systems Thinking, Leader Standard Work and 1:1 Coaching.
- Applied the concepts, tools, and practices centered around these modules.
- Standardized 8,318 kaizens across ADOT, exceeding the goal of 7,200.

ROUGH

ROAD

Phase 1: February 2016 - August 2016

- Developed a CI Transformation Roadmap and communicated the leaders' vision.
- · 32 executive leaders and OCI trained in Lean.
- Used mile wide and mile deep approaches to cascade Lean concepts, principles and tools.
- Offered Measuring for Performance class to managers for cascading to teams
- Provided two classes on eight different Lean topics taught by ADOT executives at 2016 Leaders Conference.

Phase 2: September 2016 - Spring 2017

- 72 ADOT senior leaders were trained in Lean and OCI received certification to deliver future training.
- Learners receive support from Phase 1 leaders serving as coaches.
- Team members are offered a 30-minute Introduction to Lean CBT course.
- The agency-wide goal of 3,700 kaizens launches.
- Supervisor training of 90 minute sessions covering eight topics is offered statewide.
- ADOT Launches12 agency-level PDCA projects to solve problems and "teach" eight-step problem solving.

Phase 3: April 2017 - June 2018

- ADOT embeds 14 Lean coaches within divisions.
- Seven certified ADOT staff train 92 senior leaders in Lean.
- Senior leader learners are coached by Phase 2 leaders.
- The 2017 Leaders Conference focused on "Building One ADOT" and implementing Tiered Huddles throughout ADOT.
- Nine five-day PDCA workshop events allow learners to practice eight-step problem solving.
- The AMS MGR Series of four classes, facilitated by ADOT Lean coaches/staff, launches targeting 600 + supervisors/managers.

July 2019-June 2020:

In February 2016, Director Halikowski

Improvement (OCI) to create a culture:

that provides everyone the opportunity

where everyone, every day, everywhere

launched the Office of Continuous

· that acknowledges everyone has

problem-solving skills.

improvements.

and expectation to make

comes together in small

improving processes.

teams to reflect on results and

- Delivered AMS Team Member Training Modules: Introduction to AMS, Kaizen, The 8 wastes
- Introduced a new True North at the Leaders
 Conference: Safely Home
- Leaders Conference breakout sessions: 1:1 Coaching and Pl
- Kaizen Challenge: 50% targeted at long
- term strategies

July 2020-June 2021

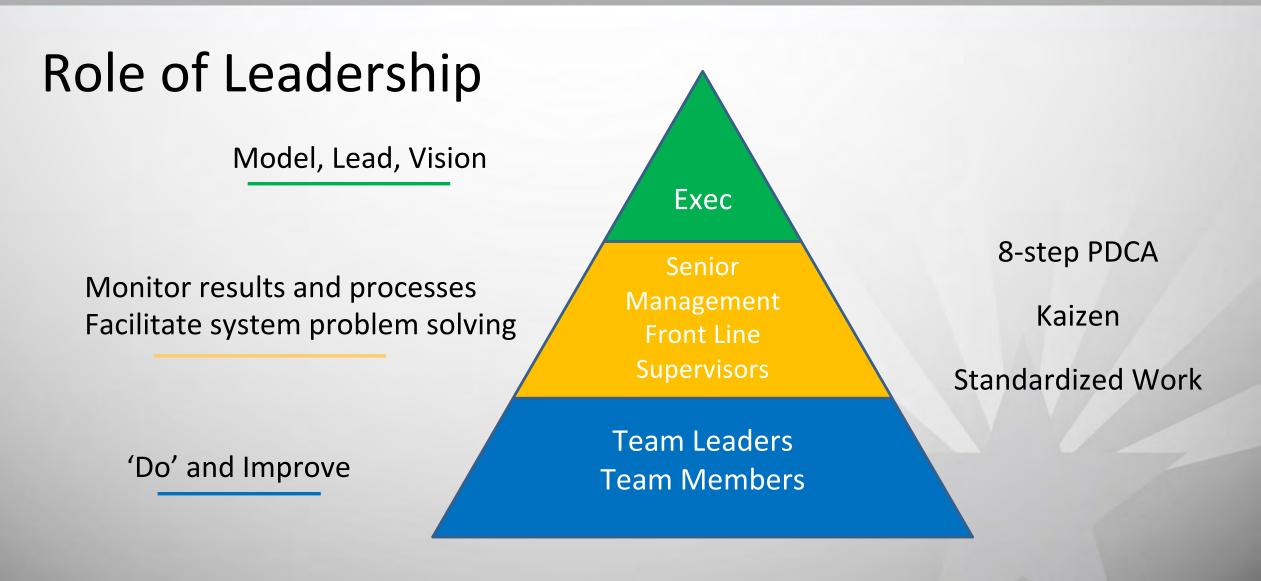
- · Introduced AKA -THE ADOT Way
- Monthly Leader Reflection Stops/Spring Training
- First Virtual Leaders Conference in November: Make work more Human
- · Town Halls with Director Halikowski
- Kaizens focused on core work processes
- Strategic Initiatives PDCA groups

FY22

actions planned

- Virtual AMS Manager classes launched
- Maturity and sustainment activities
- 2nd Virtual LC in November 2021
- PESTLE & SWOT analysis introduced











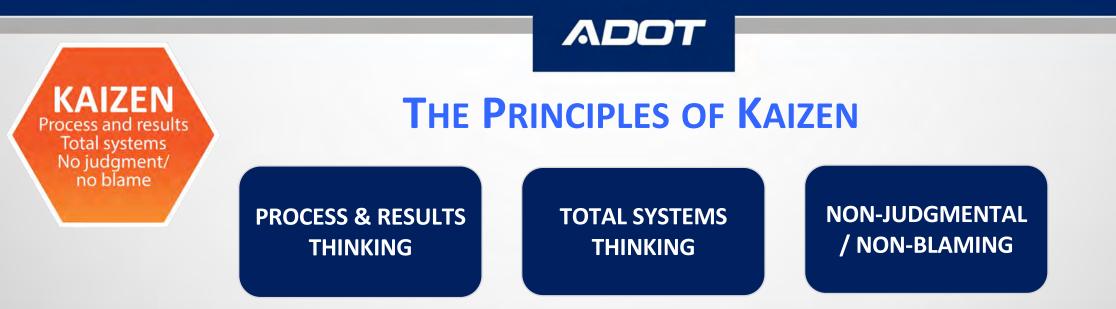


Our Core Values

Accountability - take responsibility for our actions

Integrity - hold ourselves to the highest ethical and professional standards

Respect - Treat everyone with respect and dignity



Focusing on the process, not just results, will have a greater & longer lasting impact

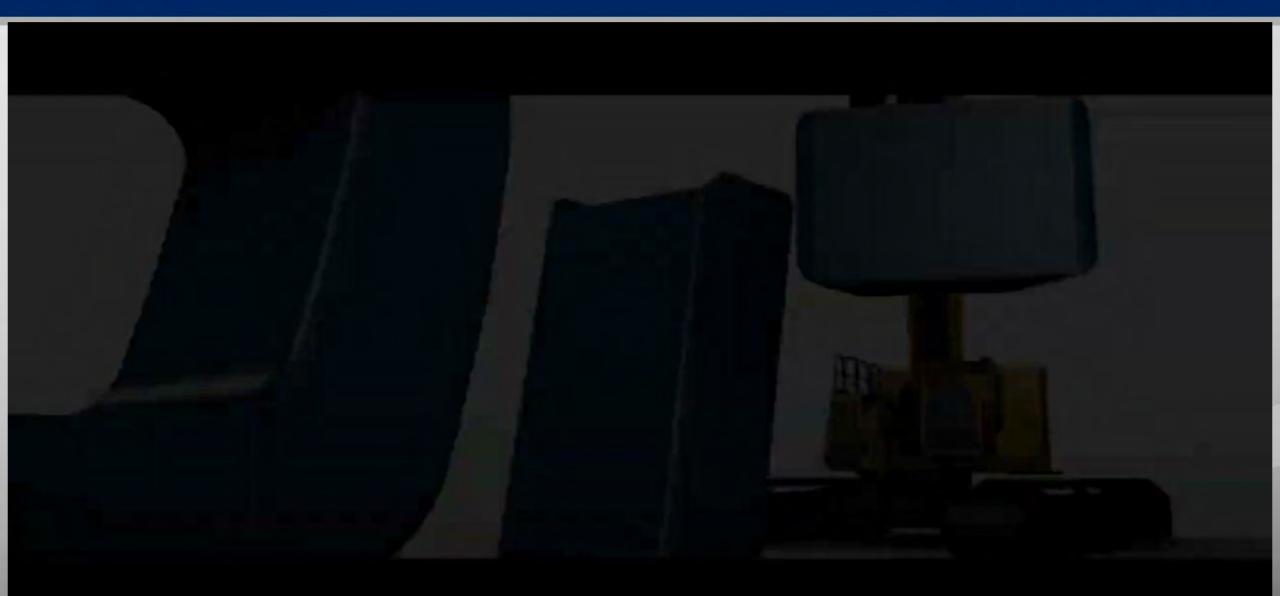
Making choices based on the benefit to the Agency, not just our own unit

We identify problems with the processes and engage people as problem solvers











KAIZEN Process and results Total systems No judgment/ no blame

2023 Focus - "Shareable" Kaizens

Kaizen Marketplace

Kaizen Marketplace... A place to submit,

share, and celebrate kaizen!

. Enterprise Wide Process

Improvements

- . Data Points for Shareable Kaizens
- Driving Leader Behavior





Competition Never Hurt Anyone



Standardized Kaizens by Unit

	Div/Program	Unit	Kaizen Count
1.	MVD	3420 - RECORDS MANAGEMENT	195
2.	MVD	3348 - REGULATORY ADMINISTRATION	127
3.	MVD	3422 - DRIVER COMPLIANCE	126
4.	MVD	3412 - MVD SUPPORT SERVICES	75
5.	MVD	3115 - COMMUNICATIONS	56
6.	MVD	3416 - SPECIALIZED REGISTRATION SERVICES	50
7.	MVD	3121 - CHINLE	41
8.	MVD	3424 - VEHICLE & TITLE SERVICE SUPPORT	37
9.	MVD	3166 - SURPRISE	37
10.	MVD	3188 - TEMPE	28
11.	FMS	2110 - CFO	27
12.	FMS	2160 - FISCAL OPERATIONS	26
13.	IDO	4319 - CENTRAL MATERIALS TESTING	25
14.	СОММ	1240 - COMMUNICATIONS	22





ARIZONA MANAGEMENT SYSTEM

Performance Management

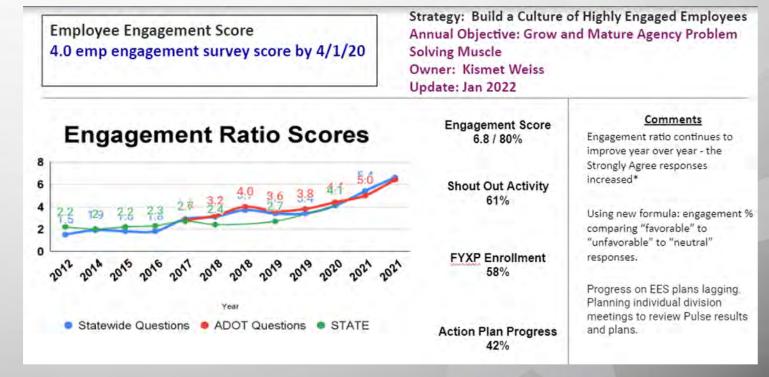
Leader Behavior

Problem Solving



Performance Management

Metrics Huddles Business Reviews

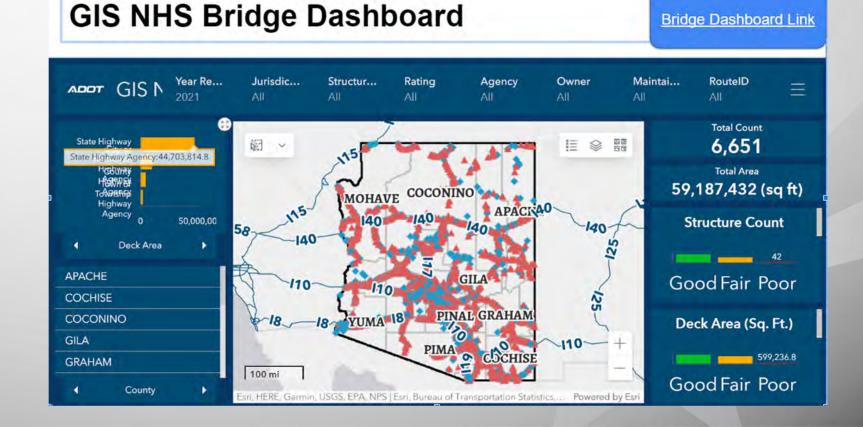




 Visual Management

Dash Boards

Performance Management





Leader Behaviors

Coins are Given to Leaders for Exhibiting AKA Leader Behaviors









Problem Solving





Employee Engagement

Engagement Percentage

Survey	Positive	Neutral	Negative
2022 Employee Engagement	77%	15%	6%
2021 Pulse	81%	13%	6%
2021 Employee Engagement	77%	15%	7%
2020 Employee Engagement	75%	16%	8%
2019 Pulse	76%	16%	8%
2019 Employee Engagement	73%	17%	9%

* A Pulse Survey was not administered in 2020



AKA the ADOT Way

- Lead with **RESPECT**
- Measure performance be okay with the **RED**
- Release the **HUMAN** potential

Everyone, Everywhere, Every Day!



ARIZONA DEPARTMENT OF TRANSPORTATION

Thank You



Missouri Department of Transportation Innovations Challenge



How and When it Began

- > 2007 Tool and Equipment Challenge
- > 2012 Expanded the program
 - Productivity
 - Projects
- Rebranded as Innovations Challenge

Innovations Challenge Categories

Tools and Equipment

Fabricating or modifying tools and pieces of equipment

Productivity

Employees changing processes, materials and products

Projects

Innovative projects driven by management

Challenge Criteria

Originality – How new is it to MoDOT?

Safety – How does this improve the safety of our employees and the public?

Internal and External Performances – How much does it improve productivity and service to our customers and employees?

Conserving Resources – How much time and money does it save?

Rounds and Timeline

Competition: September – December

First-Round winners: January

Second-Round Evaluations and Showcase Attendees Announcement : February

Showcase: April



First-Round Winners and Statewide Evaluations

- > 144 first-round winners
- \$75 per person up to a maximum of \$450 per team
- Second-round evaluations
- > Narrowing the field to the top 60

Challenge Coordinators

- Promote the Competition
- Collect Submissions
- Technical Review Team
- Safety Reviews
- Choose 18 first-round winners
- Determine Showcase Innovations



Showcase Judging

60 innovations
6 Judges per category
Judges rank their top 6





Showcase Awards

- Productivity Top 4
- Projects Top 4
- Tools and Equipment Top 4
- Director's Awards for Safety, Service and Stability
- Dickson People's Choice



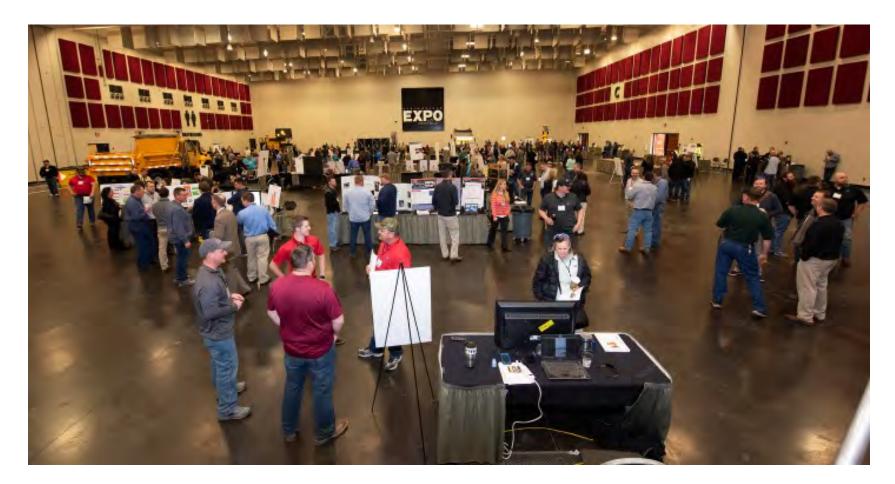
Showcase Earnings

- Category and Director's Awards winners earn up to \$425 per person up to a maximum of \$1,550 per team
- Showcase category winners also earn from \$1,000 or \$10,000 for the district or division budget





Showcase Day!



Showcase Award Luncheon!



MoDOT's 2018 Showcase

Innovations Showcase 2018 - YouTube

The most important step... Implementation

"A good idea on the floor is worthless unless we put it into action." Ed Hassinger, MoDOT Deputy Director and Chief Engineer

MoDOT's Weekly News Feature



Wing Camera

- A back-up camera mounted to the top of the passenger side mirror.
- Allows you to see over the front-mounted wing plow, making it easier to see cars or other obstructions while plowing.
- Contact: Northwest District Maintenance Crew Leader David Poynter.





MoDOT's Innovation Store!

 District CO Subtract Building Use for testing only Total Budget: Budget Already Spent \$0.00 \$3,500.00 \$1,500.00 This Order Total: Place Order Blade Saver Item Price: \$350.00 Subtotal: \$0.00 Notes: A new option is available this year for items to be fabricated by the building to encourage recycling and the use of available scrap material onhand. Includes up to \$100 material cost and \$250 incentive. Concrete Sled Design with Ripper Teeth & Winch 	Innov	vations Order F	orm
Total Budget: Budget Already Spent \$0.00 \$3,500.00 \$0.00 Handouts & Videos This Order Total: Place Order Blade Saver Item Price: \$350.00 Subtotal: \$0.00 Notes: A new option is available this year for items to be fabricated by the building to encourage recycling and the use of available scrap material on- hand. Includes up to \$100 material cost and \$250 incentive. Subtotal: \$0.00 Concrete Sled Design with Ripper Teeth & Winch Item Price: \$1,800.00 Subtotal: \$0.00	* District CO	~	
\$3,500.00 \$3,500.00 Handouts & Videos This Order Total: Place Order Place Order Blade Saver Item Price: \$350.00 Subtotal: \$0.00 Notes: A new option is available this year for items to be fabricated by the building to encourage recycling and the use of available scrap material on- hand. Includes up to \$100 material cost and \$250 incentive. Concrete Sled Design with Ripper Teeth & Winch \$0.00	* Building Use fo	or testing only	
Handouts & Videos Place Order Blade Saver Item Price: \$350.00 Notes: A new option is available this year for items to be fabricated by the building to encourage recycling and the use of available scrap material onhand. Includes up to \$100 material cost and \$250 incentive. Concrete Sled Design with Ripper Teeth & Winch		\$0.00	
Blade Saver Subtolat: \$0.00 Notes: A new option is available this year for items to be fabricated by the building to encourage recycling and the use of available scrap material on- hand. Includes up to \$100 material cost and \$250 incentive. Concrete Sled Design with Ripper Teeth & Winch Item Price: \$1,800.00	Handouts & Video	s This Order Total:	Place Order
Notes: A new option is available this year for items to be fabricated by the building to encourage recycling and the use of available scrap material on- hand. Includes up to \$100 material cost and \$250 incentive. Concrete Sled Design with Ripper Teeth & Winch Subtotal:			
	Blade Saver	Item Price: \$350.00	
	Nates: A new option is a building to encourage a hand. Includes up to \$1 Concrete Sled Design with Ripper Teeth & Winch	available this year for items to b recycling and the use of availabi 100 material cost and \$250 ince Item Price: \$1,800.00 er lead time due to Central Offic	\$0.00 he fabricated by the le scrap material on- ntive. Subtotal: \$0.00
Hopper Topper litem Price: \$1,500.00 Subtotal: \$0.00	Notes: A new option is to building to encourage of hand. Includes up to \$1 Concrete Sled Design with Ripper Teeth & Winch Notes: Will have a longe purchasing/fabrication	available this year for items to b recycling and the use of availabl 100 material cost and \$250 ince Item Price: \$1,800.00 er lead time due to Central Offic	\$0.00 he fabricated by the le scrap material on- ntive. Subtotal: \$0.00 re Subtotal:
Hopper Topper Subtotal.	Notes: A new option is a building to encourage a hand. Includes up to \$1 Concrete Sled Design with Ripper Teeth & Winch Notes: Will have a longe purchasing/fabrication Hopper Topper Notes: Will have a longe	available this year for items to b recycling and the use of availabl 100 material cost and \$250 ince Item Price: \$1,800.00 er lead time due to Central Offic Item Price: \$1,500.00 er lead time due to Central Offic	\$0.00 be fabricated by the e scrap material on- ntive. Subtotal: \$0.00 e Subtotal: \$0.00

Focusing on Implementation

Program Delivery

Innovations relating to Design, Bridge and Roadway construction

Administrative and Support

Innovations that improve processes, increase efficiencies and save money

MoDOT's Performance Management Tool: Tracker

Measuring implemented innovations

Check out our websites!

Best practices and showcase event videos, visit MoDOT's Innovations Challenge website at: <u>www.modot.org/innovations-challenge</u>



Check out our websites!

To view videos and descriptions of Showcase innovations, visit MoDOT's Showcase Homepage at: www.modot.org/innovations-showcase-homepage

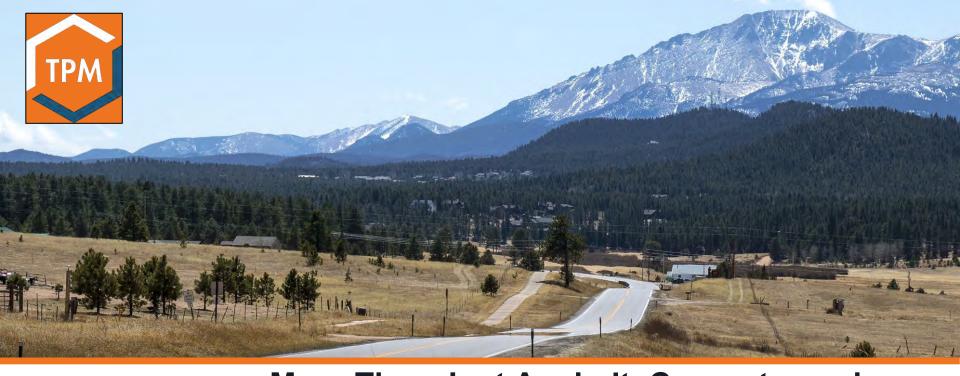


MoDOT's 2022 Showcase

InnovationsRecap2022.mp4 | Powered by Box

For more information,

Contact Kelly Backues at: <u>Kelly.Backues@modot.mo.gov</u> Office: (573) 751-5985 Cell: (573) 301-9397





More Than Just Asphalt, Concrete, and Steel: Innovations From Our People that are Moving Our Transportation System Forward

COLORADO Department of Transportation

Wednesday, November 16, 2022





The Transportation Lean Forum, and Lean Everyday Ideas at CDOT

COLORADO Department of Transportation



Transportation Lean Forum (TLF)

TRANSPORTATION LEAN FORUM





- 1. About CDOT
- 2. Goals
- 3. Solution
- 4. How it works
- 5. Execution
- 6. Summary





Colorado Department of Transportation



Colorado Department of Transportation

People at over 200 different staffed locations, across the 104,000 square miles of Colorado!





Drivers for Improvement and Innovation

NOTE: The governor signed this measure on 6/5/2013.



HOUSE BILL 13-1299

BY REPRESENTATIVE(S) Ferrandino, Buckner, Court, Exum, Fields, Fischer, Garcia, Gerou, Ginal, Hammer, Hullinghorst, Kraft-Tharp, Labuda, Lebsock, Lee, May, Melton, Mitsch Bush, Moreno, Pabon, Primavera, Rosenthal, Ryden, Salazar, Singer, Tyler, Vigil, Williams, Young, Kagan; also SENATOR(S) Steadman.

CONCERNING CHANGES TO THE "STATE MEASUREMENT FOR ACCOUNTABLE, RESPONSIVE, AND TRANSPARENT (SMART) GOVERNMENT ACT" OF 2010, AND, IN CONNECTION THEREWITH, MAKING AN APPROPRIATION.

Be it enacted by the General Assembly of the State of Colorado:

EXCELLENCE

We are committed to quality!

We are leaders and problem solvers, continuously improving our products and services in support of our commitment to provide the best transportation systems for Colorado.



Driver 1

SAFETY We work together to achieve a high-performing culture!

We promote and apply consistent and sustainable work behaviors in everything we do. PEOPLE We value our employees!

We acknowledge and recognize the skills and abilities of our coworkers and draw strength from our diversity and commitment to equal opportunity.

INTEGRITY We earn Colorado's trust!

We are honest and responsible in all that we do and hold ourselves to the highest moral and ethical standards.

CUSTOMER SERVICE

We strive to provide the highest level of customer satisfaction and experience!

With a can-do attitude we work together with others to respond effectively to our customers' needs.

EXCELLENCE We are committed to guality!

We are leaders and problem solvers, continuously improving our products and services in support of our commitment to provide the best transportation systems for Colorado.

RESPECT

We treat everyone with respect!

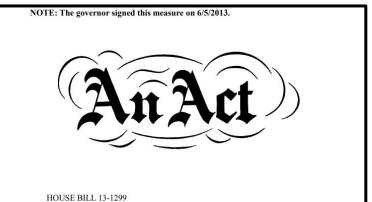
We are kind and civil with everyone, and we act with courage and humility

Driver 2



The SMART Government Act requires the agencies of the Colorado Executive Branch to implement the following:

- Establish and manage a statewide performance management system;
- Incorporate Lean continuous process improvement to increase government efficiency; and
- Ensure state employees receive training on operational excellence.



BY REPRESENTATIVE(S) Ferrandino, Buckner, Court, Exum, Fields, Fischer, Garcia, Gerou, Ginal, Hamner, Hullinghorst, Kraft-Tharp, Labuda, Lebsock, Lee, May, Melton, Mitsch Bush, Moreno, Pabon, Primavera, Rosenthal, Ryden, Salazar, Singer, Tyler, Vigil, Williams, Young, Kagan; also SENATOR(S) Steadman.

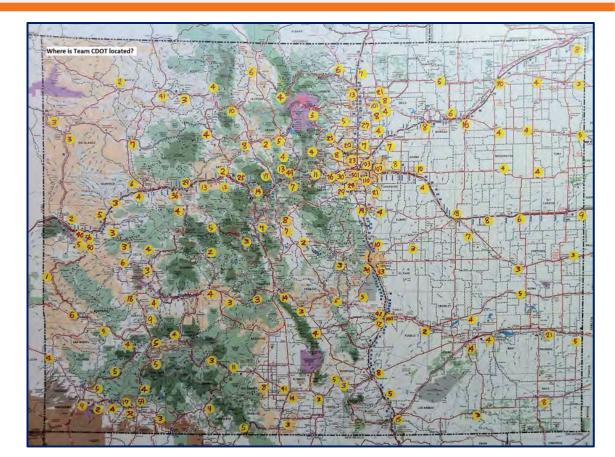
CONCERNING CHANGES TO THE "STATE MEASUREMENT FOR ACCOUNTABLE, RESPONSIVE, AND TRANSPARENT (SMART) GOVERNMENT ACT" OF 2010, AND, IN CONNECTION THEREWITH, MAKING AN APPROPRIATION.

Be it enacted by the General Assembly of the State of Colorado:

Spreading Innovation



How do we take innovations developed in one place, and spread them across CDOT?









2020 Innovation in the Workplace Award!

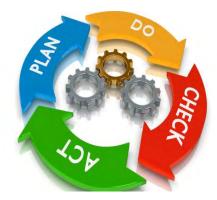








Fostering a culture of improvement where new ideas are valued, tested, and shared, by engaging everyone in improving the **business**



- what management sees

what frontline staff see



The most dangerous phrase in the language is, "We've always done it this way".

- Admiral Dr. Grace Hopper, computer pioneer who was first person to devise the theory of machine-independent programming languages, in the 1940's

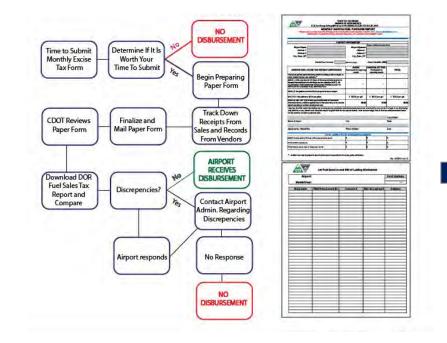






To streamline processes

Excise Tax: Before





LeanIdeas.CoDOT.gov



Goal

To improve safety....

Use a carrier lift with crane to improve safety and increase time of installation by not requiring employees to lift, carry, or hold guardrail.

LeanIdeas.CoDOT.gov

Now One Employee Can Install or Remove a 25' Guardrail Section



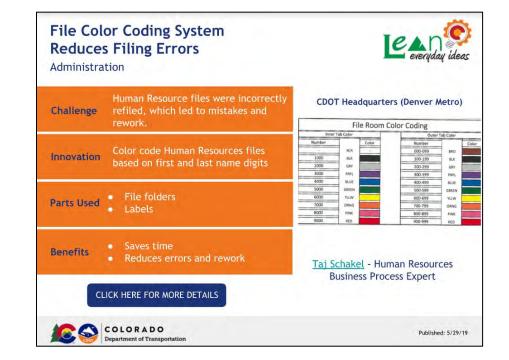
CDOT Region 3 (Northwest Colorado)



Goal

To stay organized....

Color coded files to save time and reduce error



LeanIdeas.CoDOT.gov





Why is this **important**?

- Because we're asking employees to do more with less in a field that is rapidly changing
- Big ideas can only succeed by people changing and adapting to them, and by making changes to how work is done





Solution



<u>May 2013</u>: Project team members, seated from left: Brad Bauer, Mark Eike, Roselle Drahushak-Crow, and Chris Brewer.

Standing from left: Kirk Lane, D'Wayne Gaymon, Mickey Madalino, Ken Martinez, and Guy Norris

LeanIdeas.CoDOT.gov





"Ideas are happening everyday in the workplace. Our challenge is to be receptive to them, recognize them and even more important share them across your organization. Whether it is across the state or with adjoining cubicles these ideas don't always flow well and you need to assist the ideas to flourish and grow. Done well it is a happier workforce, more efficient workers and a stronger organization that resulted from your frontline employees ideas."



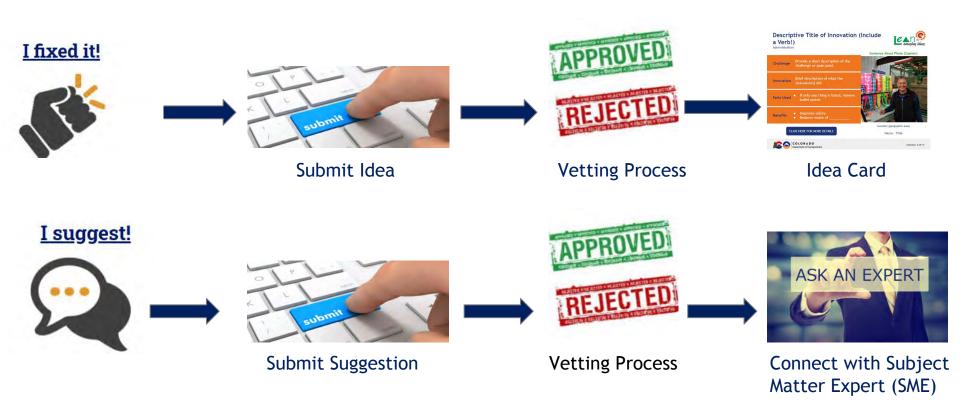
How It Works



LeanIdeas.CoDOT.gov



How It Works



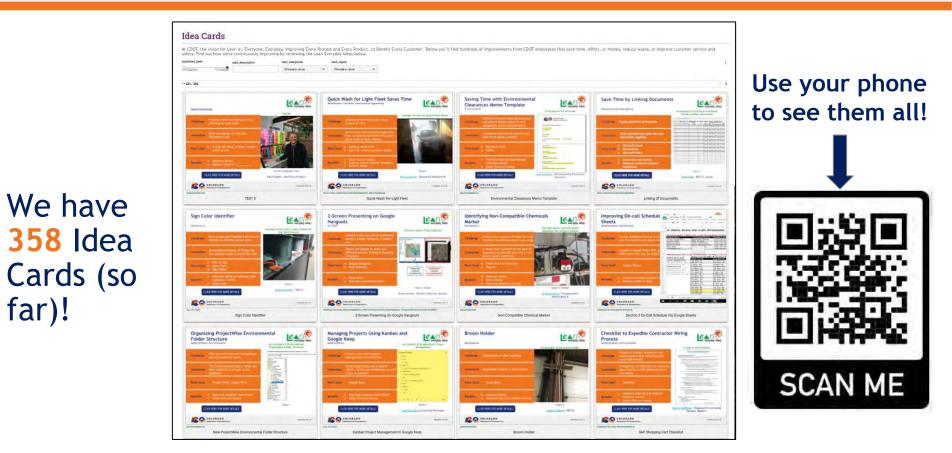


How It Works

Idea Card



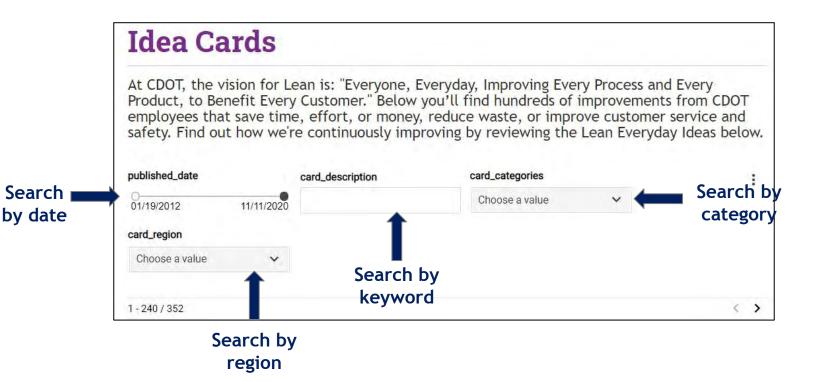






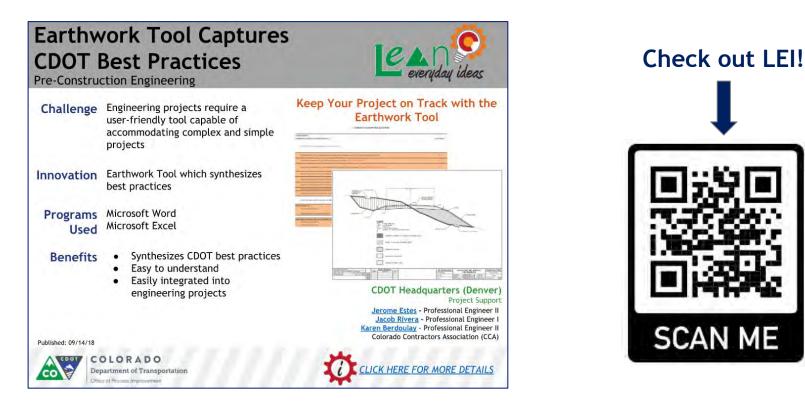


Searching and borrowing ideas is **EASY** with the searchable database





Earthwork Tool - Pre-Construction





Earthwork Tool - Pre-Construction Highlighted in: **Sharing Innovation Success** in Engineering and Earthwork Tool Captures CDOT Best **Construction Series** Practices Pre-Construction Engineering Challenge Engineering projects require a user-friendly tool Keep Your Project on Track with the Earthwork Tool capable of accommodating complex and simple projects Innovation Earthwork Tool which synthesizes best practices Programs Used Microsoft Word Microsoft Excel Benefits . Synthesizes CDOT best practices Easy to understand · Easily integrated into engineering projects Assessed Division COLORADO CLICK HERE FOR MORE DETAILS CDOT ciciquan mens N D 0:25/6:39 001 Play (k) • • • 3 6:04 / 6:39 Play (k) • • • • ÞI 6:07 / 6:39



Mower Safety - Maintenance



Improves Safety!!



Recycling Vinyl Banners - All of CDOT





Idea Cards - Central Services

Idea Cards to Spread **Check out LEI!** Innovations Administration, All of CDOT Writing articles to highlight ideas Challenge Idea Cards Make it Easy to Share Solutions! was time consuming, had low COOT Regional Values Coin CDOT State Lodging Program readership, and required additional work to synthesize information into a powerpoint slide. Implemented ideas are now Innovation condensed into one powerpoint slide, making it easier to share afety Alert System elineator Pulle ideas. Additional details, photos, specifications, and guidance is linked to each card. **Google Slides** Programs **Google Drive** Used Ö. **CDOT Headquarters (Denver) Benefits** Saves time Office of Process Improvement SCAN ME Saves money Geneva Hooten - Innovation and Improvement Lead Facilitates idea spread Chavirat Burapadecha - Process Improvement Intern Improves customer experience Karl Onsager - Process Improvement Intern Published: 08/01/18

CLICK HERE FOR MORE DETAILS

Even LEI needs improvements!



COLORADO Department of Transportation Office of Process Improvement





We're working at CDOT to engage everyone to improve our business, and we hope we have inspired you to do the <u>same!</u>







Thank you!

Gary Vansuch Gary.vansuch@state.co.us





LeanIdeas.CoDOT.gov







LeanIdeas.CoDOT.gov



All TPM Webinars: https://www.tpm-portal.com/event-directory/tpm-webinars/

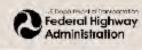
Save the Dates!

A bimonthly webinar series, Wednesdays at 2:00 PM EST

Visit TPM-Portal.com to register for future webinars

Please let us know about topics of interest for the 2023 TPM webinars!

Transportation Asset Management Financial Plans







For more information or to register: TPM-Portal.com