

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

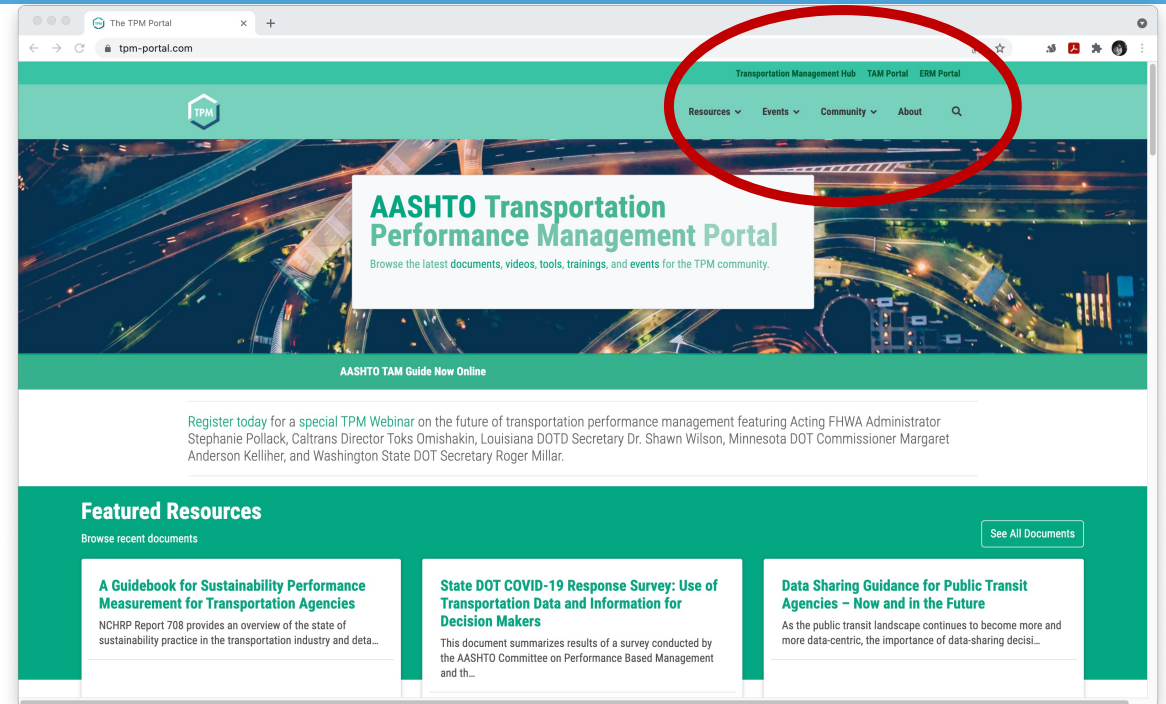


November 16, 2022

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@aaashto.org



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



Leadership Matters

Arizona Management System

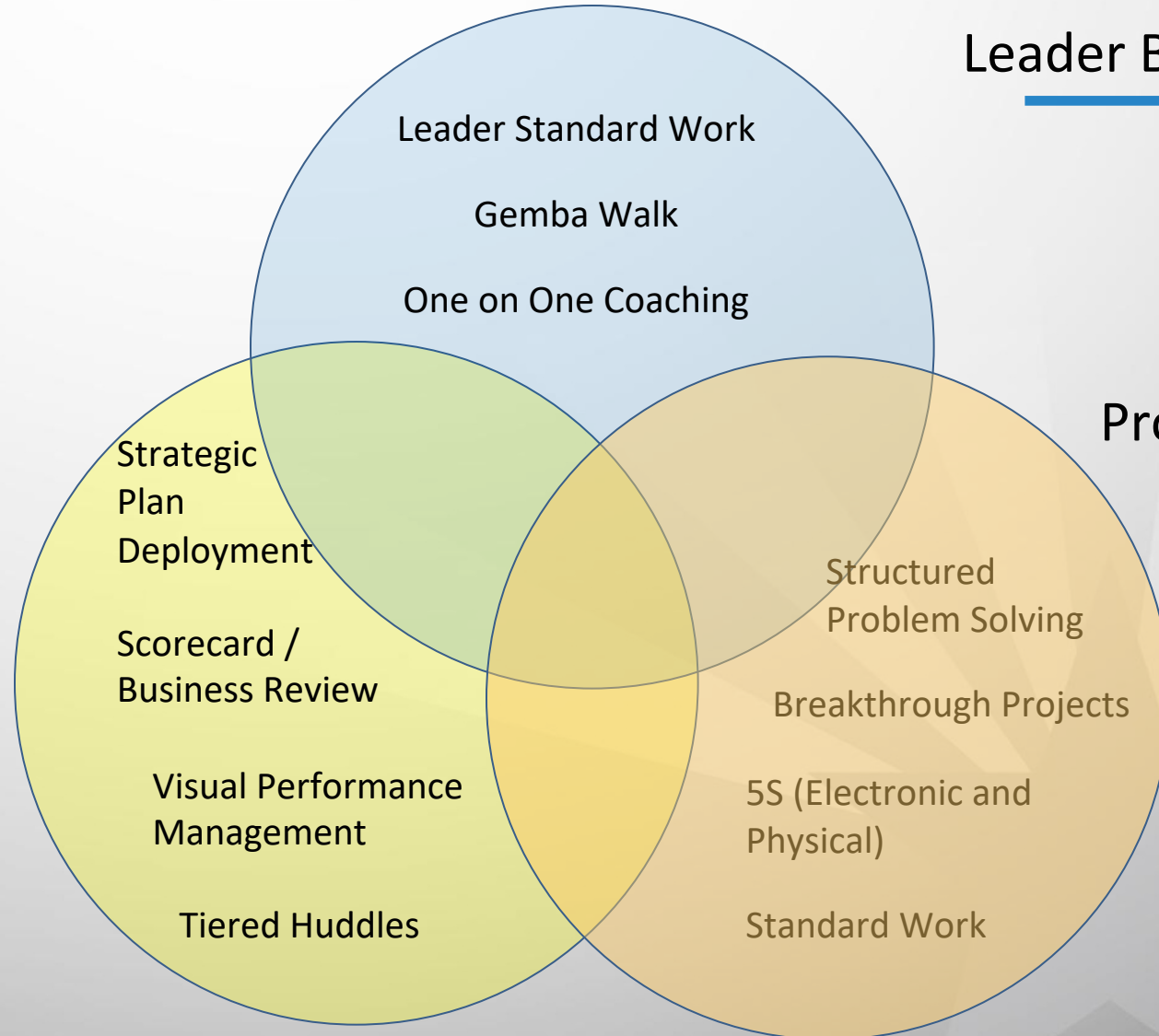
Lisa Pounds
Office of Continuous Improvement & Employee Engagement
Arizona Department of Transportation
TPM Webinar
November 16, 2022

Arizona Management System

Performance Management

Leader Behaviors

Problem Solving



AMS

"Learning is a journey, not a destination."



1
In 2015, Director Halikowski challenged the agency to:

- manage for daily improvement.
- change the way we work because our processes and tools hinder us

2
In February 2016, Director Halikowski launched the Office of Continuous Improvement (OCI) to create a culture:

- that acknowledges everyone has problem-solving skills.
- that provides everyone the opportunity and expectation to make improvements.
- where everyone, every day, everywhere comes together in small teams to reflect on results and improving processes.

3
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.

4
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 Launches 12 agency-level PDCA projects to solve problems and "teach" eight-step problem solving.

5
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.

6
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.

7
July 2019-June 2020:

- 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 PI
- Kaizen Challenge: 50% targeted at long term strategies

8
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

9
FY22 actions planned

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



Role of Leadership

Model, Lead, Vision

Monitor results and processes
Facilitate system problem solving

'Do' and Improve



8-step PDCA

Kaizen

Standardized Work

AKA – THE ADOT WAY



AIR
Accountability
Integrity
Respect

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

KAIZEN

Process and results
Total systems
No judgment/
no blame

THE PRINCIPLES OF KAIZEN

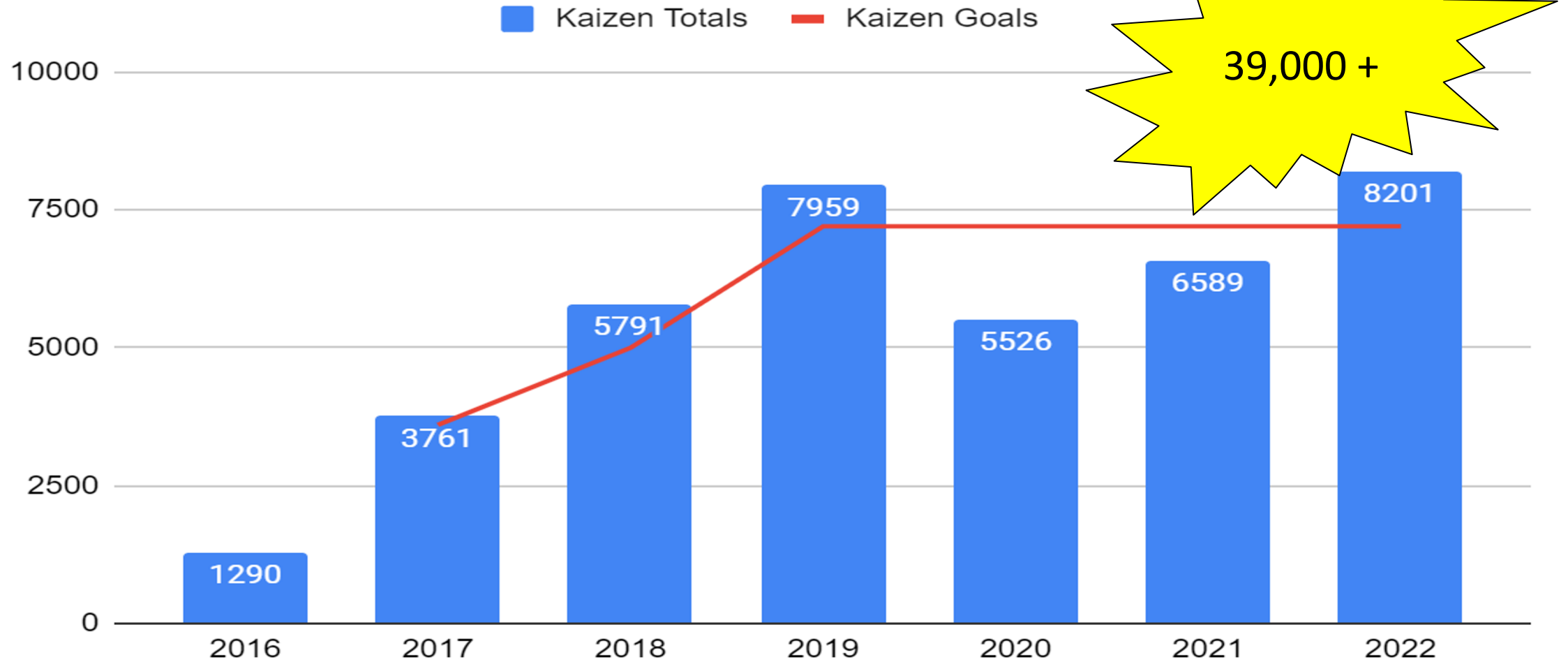
**PROCESS & RESULTS
THINKING**

**TOTAL SYSTEMS
THINKING**

**NON-JUDGMENTAL
/ NON-BLAMING**

- ❑ 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 Totals and Agency Goals



KAIZEN

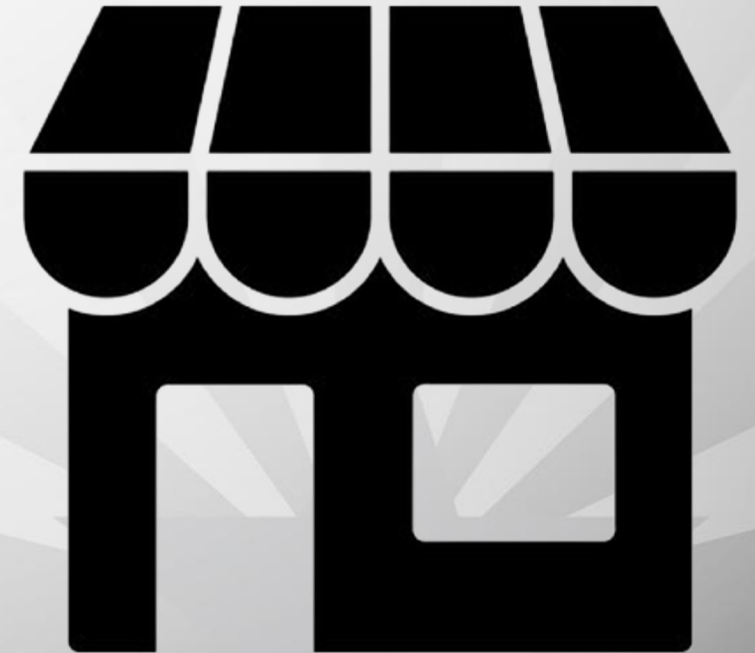
Process and results
Total systems
No judgment/
no blame

2023 Focus - “Shareable” Kaizens

Kaizen Marketplace

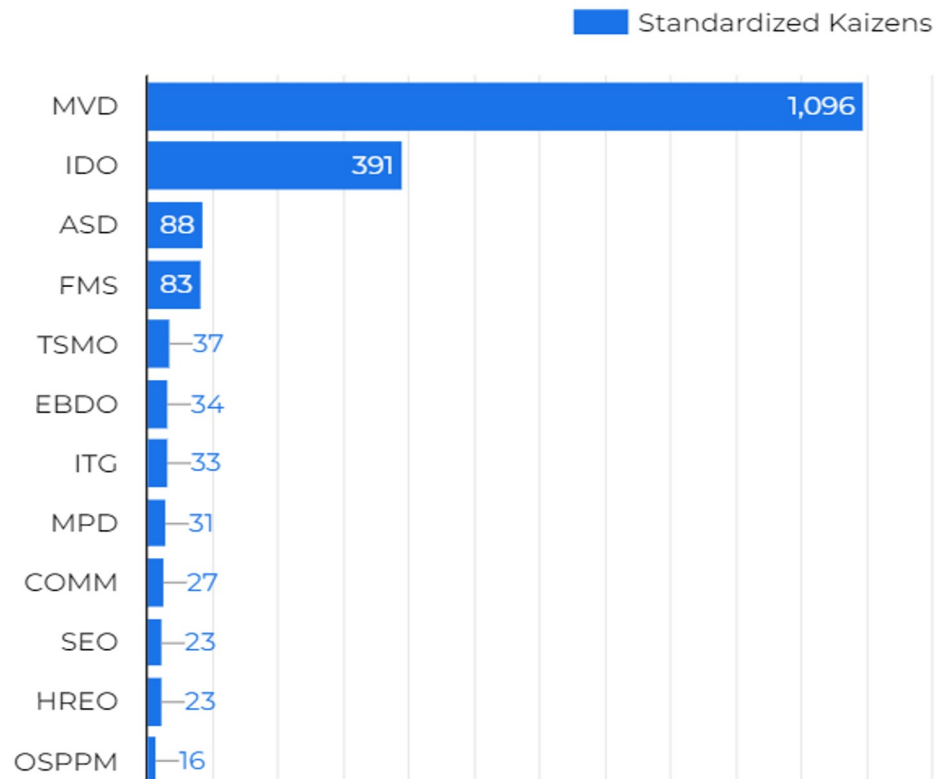
**Kaizen Marketplace... A place to submit,
share, and celebrate kaizen!**

- Enterprise Wide Process Improvements
- Data Points for Shareable Kaizens
- Driving Leader Behavior



Competition Never Hurt Anyone

Kaizen Count



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.	COMM	1240 - COMMUNICATIONS	22



ADOT



ARIZONA MANAGEMENT SYSTEM

**Performance
Management**

**Leader
Behavior**

**Problem
Solving**



Performance Management

Metrics

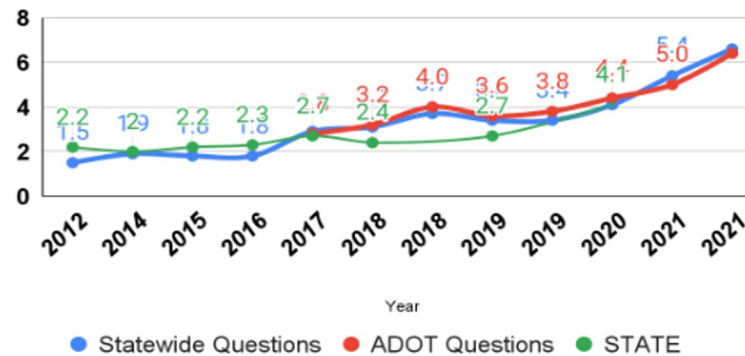
Huddles

Business Reviews

Employee Engagement Score
4.0 emp engagement survey score by 4/1/20

Strategy: Build a Culture of Highly Engaged Employees
Annual Objective: Grow and Mature Agency Problem Solving Muscle
Owner: Kismet Weiss
Update: Jan 2022

Engagement Ratio Scores



Engagement Score
6.8 / 80%

Shout Out Activity
61%

FYXP Enrollment
58%

Action Plan Progress
42%

Comments

Engagement ratio continues to improve year over year - the Strongly Agree responses increased*

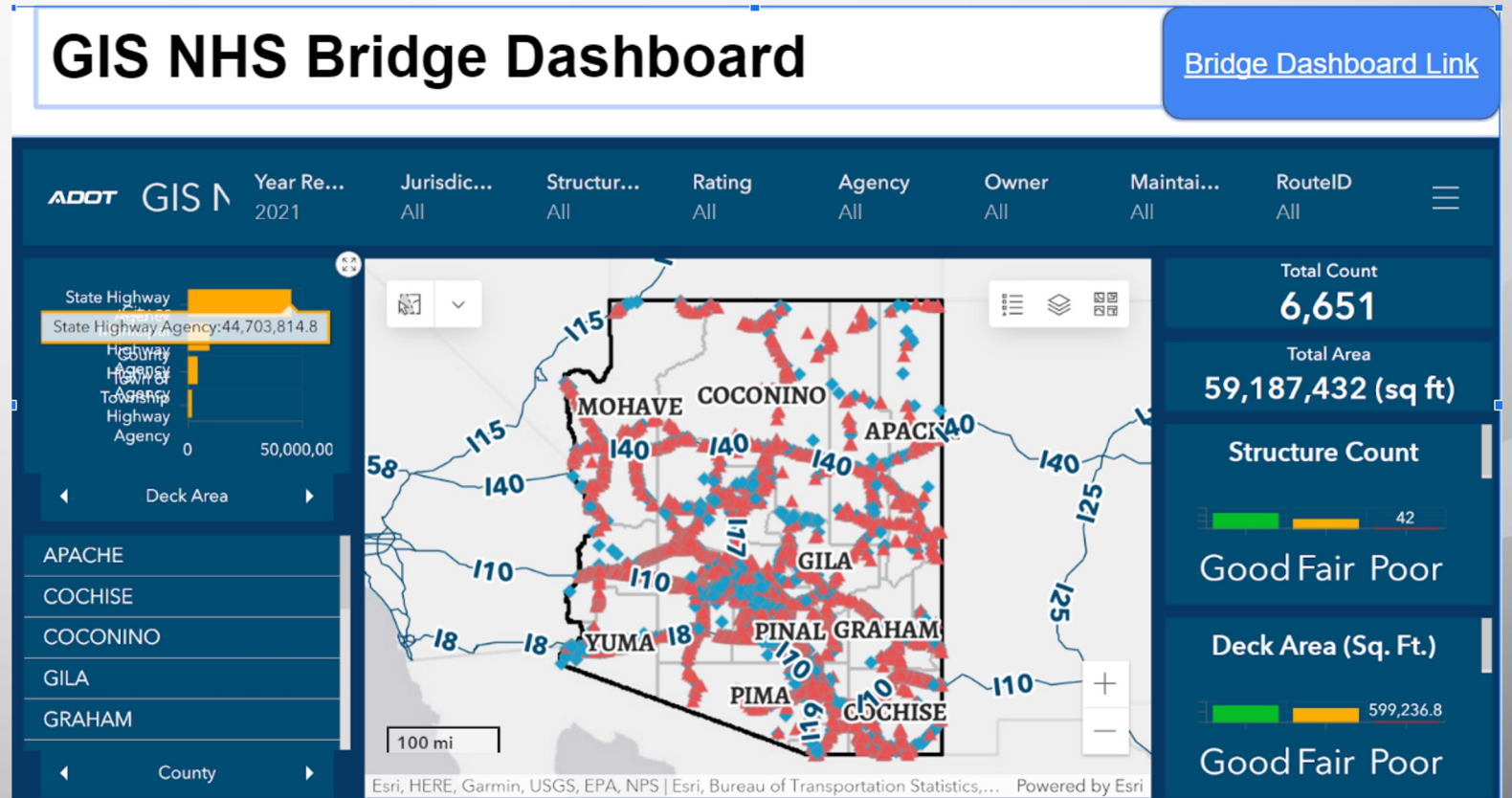
Using new formula: engagement % comparing "favorable" to "unfavorable" to "neutral" responses.

Progress on EES plans lagging. Planning individual division meetings to review Pulse results and plans.



Performance Management

- Visual Management
- Dash Boards





Leader Behaviors

Coins are Given to
Leaders for Exhibiting
AKA Leader Behaviors



AMS
Performance management
Leader behaviors
Problem solving

Problem Solving



**Everyone
Everywhere
Every Day**

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!

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?

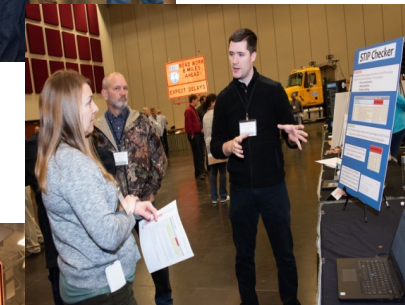
Rounds and Timeline

Competition: September – December

First-Round winners: January

**Second-Round Evaluations and
Showcase Attendees
Announcement :** February

Showcase: April

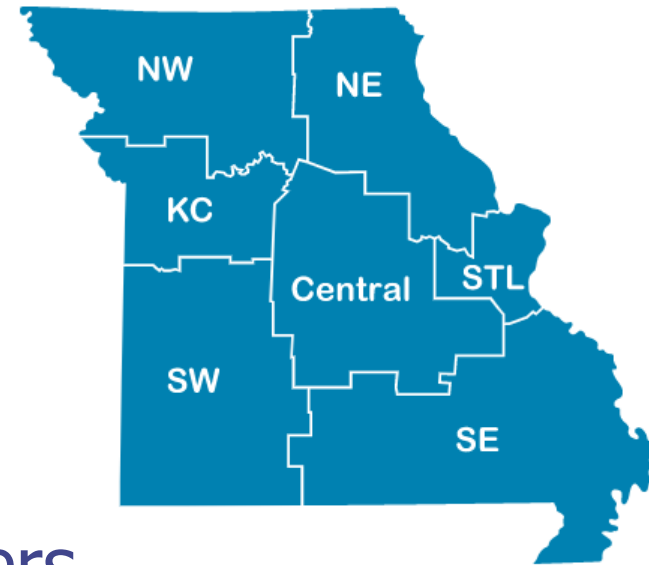


First-Round Winners and Statewide Evaluations

- 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



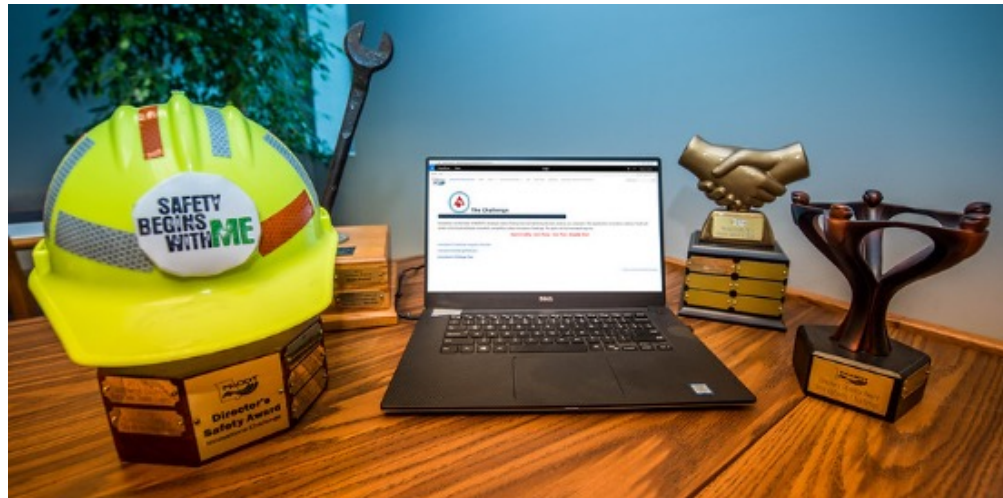
Showcase Judging

- 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

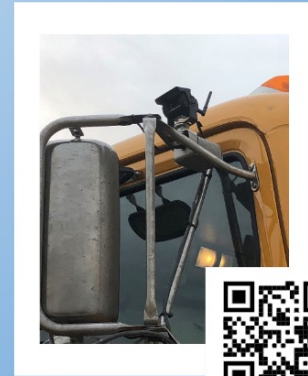
MoDOT's Weekly News Feature



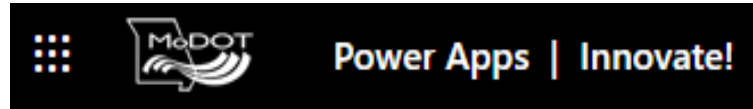
Implement This Innovation!

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!



Innovations Order Form

* District

* Building

Total Budget: \$3,500.00 **Budget Already Spent:** \$0.00

[Handouts & Videos](#) **This Order Total:** [Place Order](#)

Blade Saver	Item Price: \$350.00	Subtotal: \$0.00
<i>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.</i>		
Concrete Sled Design with Ripper Teeth & Winch	Item Price: \$1,800.00	Subtotal: \$0.00
<i>Notes: Will have a longer lead time due to Central Office purchasing/fabrication</i>		
Hopper Topper	Item Price: \$1,500.00	Subtotal: \$0.00
<i>Notes: Will have a longer lead time due to Central Office purchasing/fabrication</i>		
Rotating Herbicide Rack	Item Price: \$1,800.00	Subtotal: \$0.00
<i>Notes: Will have a longer lead time due to Central Office purchasing/fabrication</i>		

Focusing on Implementation

Program Delivery

Innovations relating to Design,
Bridge and Roadway construction

Administrative and Support

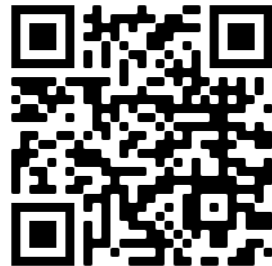
Innovations that improve processes,
increase efficiencies and save money

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:
www.modot.org/innovations-challenge



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,

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COLORADO

Department of Transportation

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

Wednesday, November 16, 2022



COLORADO

Department of Transportation

The Transportation Lean Forum, and Lean Everyday Ideas at CDOT



Transportation Lean Forum (TLF)

TRANSPORTATION LEAN FORUM





Overview

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





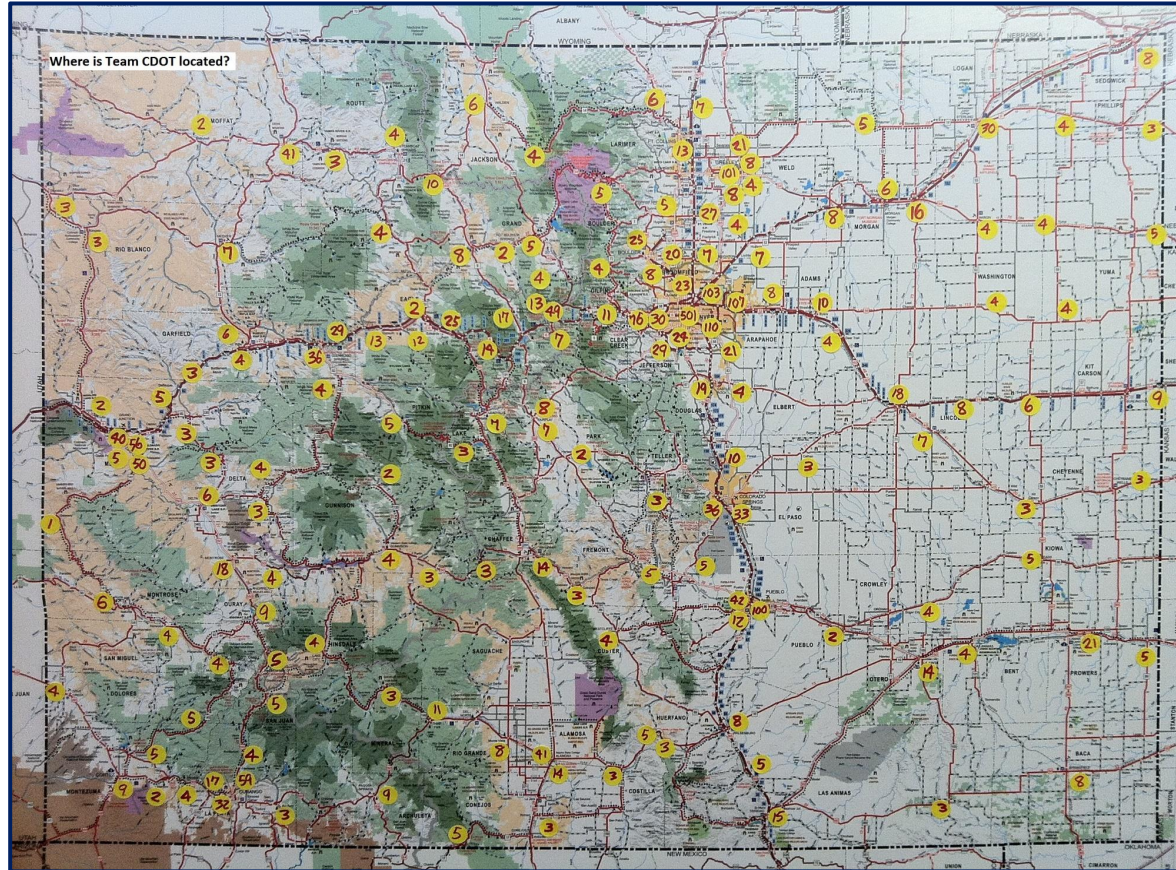
Colorado Department of Transportation





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.

An Act

HOUSE BILL 13-1299

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:

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 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.

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.

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

An Act

HOUSE BILL 13-1299

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

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Lean Everyday Ideas

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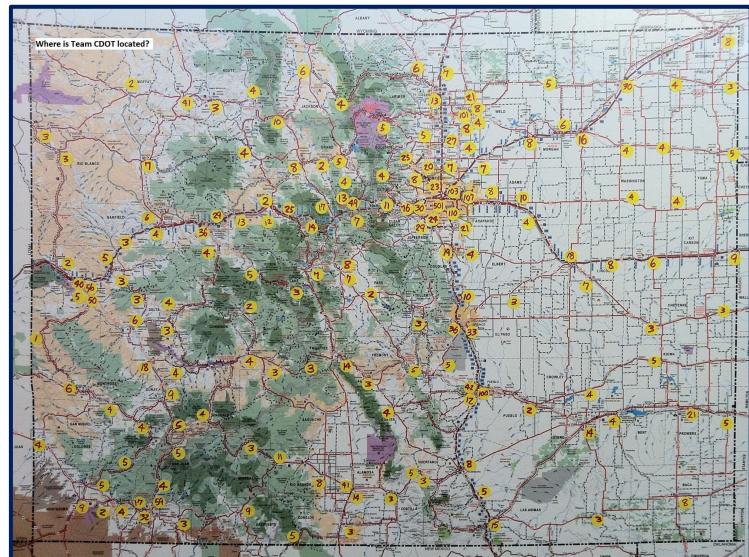
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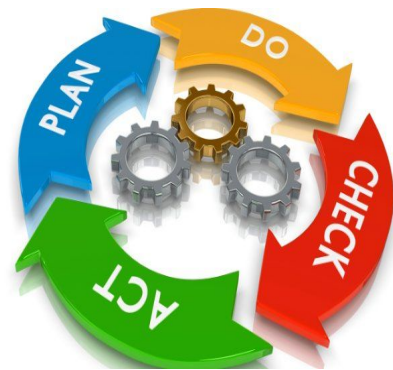
We are kind and civil with everyone, and we act with courage and humility



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

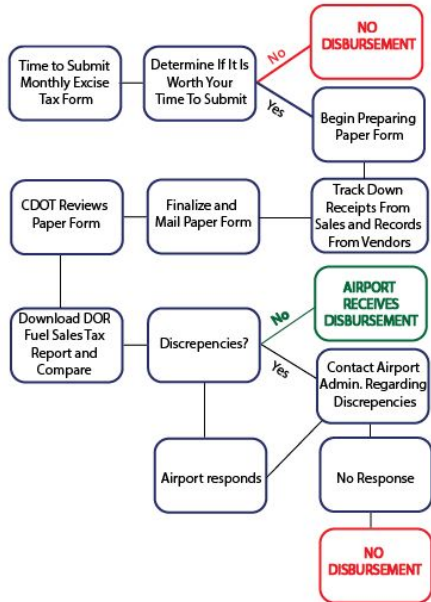




Goal

To streamline processes ...

Excise Tax: Before




Excise Tax: After





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.

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



CDOT Region 3 (Northwest Colorado)



To stay organized....

Color coded files to save time and reduce error

File Color Coding System Reduces Filing Errors

Administration



Challenge

Human Resource files were incorrectly refiled, which led to mistakes and rework.

Innovation

Color code Human Resources files based on first and last name digits

Parts Used

- File folders
- Labels

Benefits

- Saves time
- Reduces errors and rework

CDOT Headquarters (Denver Metro)

File Room Color Coding			
Inner Tab Color		Outer Tab Color	
Number	Color	Number	Color
N/A		000-999	BRD
1000	BLK	100-199	BLK
2000	GRY	200-299	GRY
3000	PRPL	300-399	PRPL
4000	BLUE	400-499	BLUE
5000	GREEN	500-599	GREEN
6000	YLLW	600-699	YLLW
7000	ORNG	700-799	ORNG
8000	PINK	800-899	PINK
9000	RED	900-999	RED

[Taj Schakel](#) - Human Resources
Business Process Expert

[CLICK HERE FOR MORE DETAILS](#)



COLORADO
Department of Transportation

Published: 5/29/19

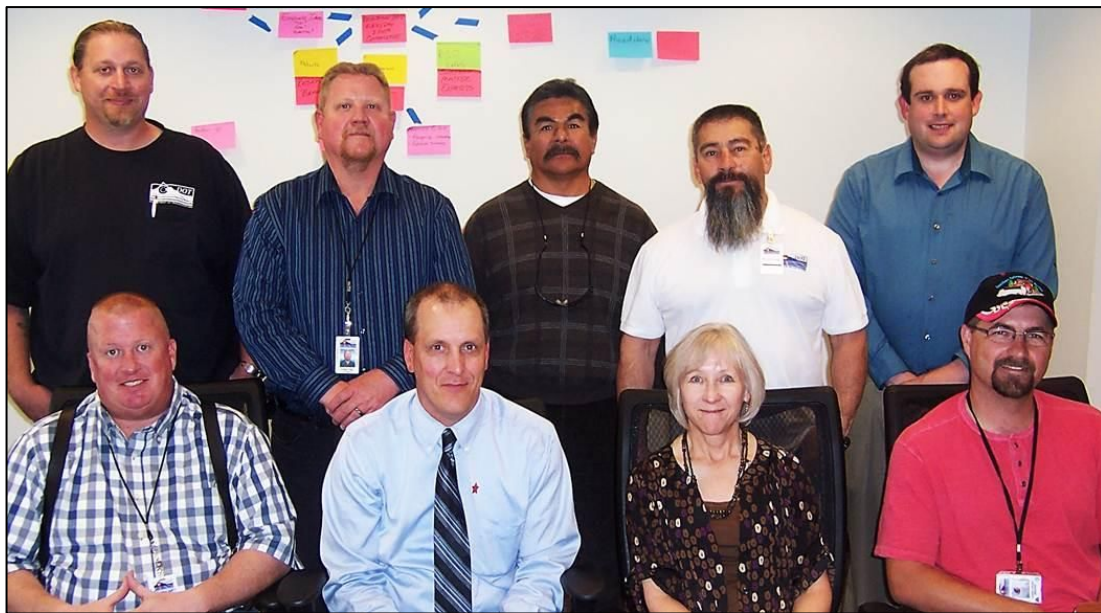


Solution



May 2013: 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



Solution

“**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.”



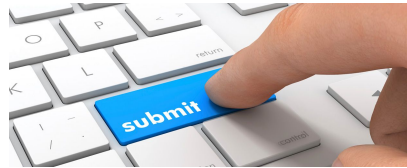
How It Works

The screenshot shows the 'Lean Ideas @ CDOT' website. At the top left is the logo with the word 'Lean' in green, 'everyday ideas' in a script font, and '@ CDOT' in bold black. To the right of the logo is a gear with a lightbulb inside. Below the logo is a navigation menu with buttons for 'Home', 'Ideas', 'New Idea Database', 'Dashboard', 'Committee', 'Submit Your Ideas', and 'Lean Videos'. The 'Submit Your Ideas' button is highlighted. Below the navigation is a section titled 'Submit Your Ideas' containing two columns. The left column is titled 'I fixed it!' and features an icon of a hand with a lightbulb. The text below the icon reads: 'In our efforts to improve safety and customer service while reducing waste, we thank you for taking the time to share your implemented solutions here.' Below this text is a 'SUBMIT' button. The right column is titled 'I suggest!' and features an icon of two speech bubbles. The text below the icon reads: 'We are grateful for your suggestion to make CDOT the number one DOT.' Below this text is a link that says 'What happens to my Suggestion?' and a 'SUBMIT' button.



How It Works

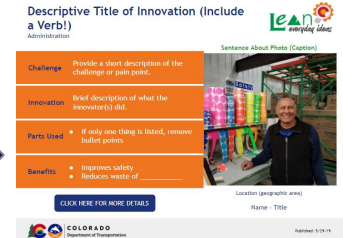
I fixed it!



Submit Idea

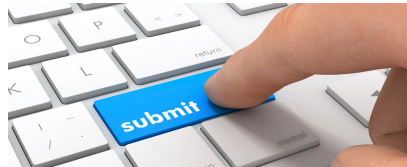


Vetting Process



Idea Card

I suggest!



Submit Suggestion



Vetting Process



Connect with Subject Matter Expert (SME)

Idea Card

Descriptive Title of Innovation (Include a Verb!)

Administration



Sentence About Photo (Caption)

Challenge

Provide a short description of the challenge or pain point.

Innovation

Brief description of what the innovator(s) did.

Parts Used

- If only one thing is listed, remove bullet points

Benefits

- Improves safety
- Reduces waste of _____



Location (geographic area)

Name - Title

[CLICK HERE FOR MORE DETAILS](#)



How It Works

Idea Cards

At CDOT, the vision for Lean is: "Everyone, Everyday, Improving Every Process and Every Product, to Benefit Every Customer." Below you'll find hundreds of improvements from CDOT employees that save time, effort, or money, reduce waste, or improve customer service and safety. Find out how we're continuously improving by reviewing the Lean Everyday Ideas below.

published_date: 11/19/2012 card_description: card_category: Choose a value card_region: Choose a value

1 - 200 / 202

Administration

Challenge: Provide a short description of the challenge or pain point.

Insulation: Staff introduced a 75% reduction in waste.

Particulate: A 50% reduction in waste, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

TEST 5

Quick Wash For Light Fleet Saves Time

Challenge: Washing of vehicles takes a large amount of time.

Insulation: An in-house bulk system for applying soap was created and introduced to all light fleet wash stations.

Particulate: Washing of vehicles was reduced by 25%.

Benefits: Increased safety, reduced cost, improved customer experience.

[CLICK HERE FOR MORE DETAILS](#)

Quick Wash For Light Fleet

Saving Time with Environmental Clearances Memo Template

Challenge: Difficult to create form of approvals and approvals process took a long time.

Insulation: A template that can be used for the same form across projects.

Particulate: Reduced cost.

Benefits: Increased internal and external customer service, reduced cost, improved customer experience.

[CLICK HERE FOR MORE DETAILS](#)

Environmental Clearances Memo Template

Save Time by Linking Documents

Challenge: Tying together information.

Insulation: Link spreadsheets, plan sets and documents together.

Particulate: Reduced cost, improved customer experience.

Benefits: Saves time and money, improved internal and external customer experience.

[CLICK HERE FOR MORE DETAILS](#)

Linking Of Documents

Sign Color Identifier

Challenge: Red sign color was not used and can be difficult to find the correct color.

Insulation: Sign color was identified and used in all projects.

Particulate: Red sign color was used in all projects.

Benefits: Improved safety by reducing time, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

Sign Color Identifier

2-Screen Presenting on Google Hangouts

Challenge: Presenting of data via google hangouts was difficult to use.

Insulation: A 2-screen presentation was created and used in all projects.

Particulate: Improved safety, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

2-Screen Presenting on Google Hangouts

Identifying Non-Compatible Chemicals Marker

Challenge: Chemicals that are not compatible with each other were not identified.

Insulation: A marker that is placed on the chemical containers that are not compatible with each other.

Particulate: Improved safety, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

Non-Compatible Chemical Marker

Improving On-call Schedule Sheets

Challenge: On-call schedule sheets were not used and were difficult to find.

Insulation: On-call schedule sheets were created and used in all projects.

Particulate: Improved safety, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

Section 3 On-Call Schedule Via Google Sheets

Organizing ProjectWise Environmental Folder Structure

Challenge: The folder structure was not organized and was difficult to find.

Insulation: The folder structure was organized and used in all projects.

Particulate: Improved safety, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

New ProjectWise Environmental Folder Structure

Managing Projects Using Kanban and Google Keep

Challenge: Managing projects using Kanban and Google Keep was difficult.

Insulation: Managing projects using Kanban and Google Keep was improved.

Particulate: Improved safety, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

Kanban Project Management in Google Keep

Broom Holder

Challenge: Organization in shop buildings.

Insulation: Broom holder was created and used in all projects.

Particulate: Improved safety, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

Broom Holder

Checklist to Expedite Contractor Hiring Process

Challenge: Process of hiring a contractor was not expedited and was difficult to find.

Insulation: A checklist was created and used in all projects.

Particulate: Improved safety, reduced cost.

Benefits: Improved safety, reduced cost.

[CLICK HERE FOR MORE DETAILS](#)

SAP Shopping Cart Checklist

Use your phone to see them all!



SCAN ME

We have 358 Idea Cards (so far)!



How It Works

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

Idea Cards

At CDOT, the vision for Lean is: "Everyone, Everyday, Improving Every Process and Every Product, to Benefit Every Customer." Below you'll find hundreds of improvements from CDOT employees that save time, effort, or money, reduce waste, or improve customer service and safety. Find out how we're continuously improving by reviewing the Lean Everyday Ideas below.

published_date **card_description** **card_categories**

card_region

1 - 240 / 352

Search by date

Search by category

Search by keyword


Search by region



Earthwork Tool - Pre-Construction

Earthwork Tool Captures CDOT Best Practices

Pre-Construction Engineering



Challenge Engineering projects require a user-friendly tool capable of accommodating complex and simple projects

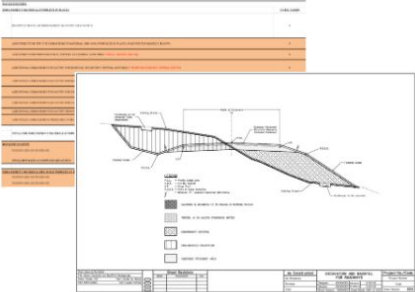
Innovation Earthwork Tool which synthesizes best practices

Programs Used Microsoft Word
Microsoft Excel

Benefits

- Synthesizes CDOT best practices
- Easy to understand
- Easily integrated into engineering projects


Keep Your Project on Track with the Earthwork Tool




CDOT Headquarters (Denver)
Project Support

[Jerome Estes](#) - Professional Engineer II
[Jacob Rivera](#) - Professional Engineer I
[Karen Berdoulay](#) - Professional Engineer II
Colorado Contractors Association (CCA)

Published: 09/14/18



COLORADO
Department of Transportation
Office of Process Improvement



[CLICK HERE FOR MORE DETAILS](#)

Check out LEI!





Execution

Earthwork Tool - Pre-Construction

Highlighted in:
Sharing Innovation Success
in Engineering and
Construction Series

Earthwork Tool Captures CDOT Best Practices
Pre-Construction Engineering

Challenge Engineering projects require a user-friendly 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

Keep Your Project on Track with the Earthwork Tool

CDOT Headquarters (Denver)
Project Support:
Jacquie Edles - Professional Engineer I
Janelle Brown - Professional Engineer I
Karin Burdette - Professional Engineer II
Colorado Contractors Association (CCA)

Published: 09/14/18
COLORADO Department of Transportation
CLICK HERE FOR MORE DETAILS

0:25 / 6:39

CDOT

6:04 / 6:39

CDOT

6:07 / 6:39

Mower Safety - Maintenance

Improves
Safety!!

Mower Safety Innovation Makes Mowers More Visible to Traffic

Maintenance



Challenge

Mowing vegetation next to traffic can be dangerous for maintenance crews.

Innovation

Equip mower with red flags and flashing beacons to increase visibility.

Parts Used

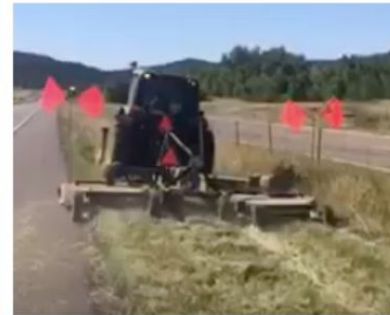
- Flags
- Poles
- Lights

Benefits

- Improves visibility to traffic
- Improves Safety

[CLICK HERE FOR MORE DETAILS](#)

Mower In Action



CDOT's Region 2 (Southeastern Colorado)

[Jennifer Cooley](#) - Heavy Equipment Operator III

Check out LEI!



Recycling Vinyl Banners - All of CDOT

Recycling Vinyl Banners for Sustainability

Administration



Challenge Fabric and vinyl banners from campaigns and events were thrown away after events, creating waste for landfills

Innovation Coordinated with a local company in Boulder, Colorado that will recycle and reuse banner materials

Company Used [Ecologic Designs](#)

- Benefits**
- Saves energy
 - Reduces environmental impact
 - Reduces landfill waste

Banner On Its Way to Be Recycled!



CDOT Headquarters (Denver)
Office of Communications

[Liz Larter](#) - Visual Communications Manager

Check out LEI!



Published: 08/08/18



Idea Cards - Central Services

Even LEI needs improvements!

Idea Cards to Spread Innovations

Administration, All of CDOT

Challenge Writing articles to highlight ideas was time consuming, had low readership, and required additional work to synthesize information into a powerpoint slide.

Innovation Implemented ideas are now condensed into one powerpoint slide, making it easier to share ideas. Additional details, photos, specifications, and guidance is linked to each card.

Programs Used Google Slides
Google Drive

Benefits

- Saves time
- Saves money
- Facilitates idea spread
- Improves customer experience

Published: 08/01/18



Idea Cards Make it Easy to Share Solutions!



CDOT Headquarters (Denver)
Office of Process Improvement

[Geneva Hooten](#) - Innovation and Improvement Lead
[Chavirat Burapadecha](#) - Process Improvement Intern
Karl Onsager - Process Improvement Intern

 [CLICK HERE FOR MORE DETAILS](#)

Check out LEI!





Summary

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

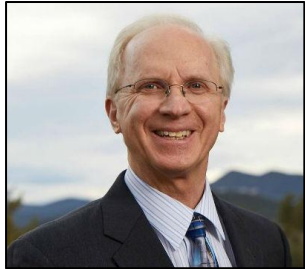




Thank you!

Gary Vansuch

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[LeanIdeas.CoDOT.gov](https://leanideas.codot.gov)



Q & A



Check out LEI!



Q&A

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



Transportation Asset Management Financial Plans



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