

Performance, Innovation and Excellence Section (PIE)



VTrans

Finance & Administration Division

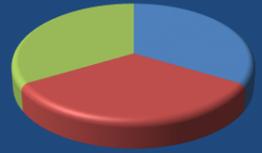
Michael Lozier – PIE Section Chief

Paul Keegan – Lean Program Manager

June Burr – Business Process Manager

January 2016

Why PIE?



VTrans Mission

Provide for the safe and efficient movement of people and goods.

White Paper August 2014:

CHALLENGE: Under pressures of constrained revenues and budgets, and skill drain due to a retiring workforce, increase our capacity to meet our Mission through proper resource allocation, and become more efficient, effective, and productive with available resources.

PROPOSED SOLUTION: Creation of the PIE Section (manager position), charged with “...promoting process improvement, innovation and excellence throughout the Agency by leading process improvement activities, promotion and support of innovation and performance measurement.”

What is PIE?



- ❖ **Executive Management priority to operationalize/institutionalize *Continuous Improvement (CI)* @ VTrans**
- ❖ **Vision: Assist in cultivating at VTrans an organizational culture of Continuous Improvement**
- ❖ **Mission: Operationalize by aligning with specific Goals of the VTrans Strategic Plan**
- ❖ **Strategy: Affect cultural and adoptive change through awareness, education, training, and engagement of VTrans management and staff**

What is PIE?



Continuous Improvement

- ❖ **Core business of PIE**
- ❖ **Ongoing effort within the organization to plan, implement, and review/measure for further improvement opportunities**
- ❖ **Innovative growth strategy. It grows the organization from within with existing resources by creating new capacities and employee skills, allows for doing more with less, and expands the capabilities and services of the organization in support of organizational goals and objectives.**

What is PIE?



Continuous Improvement

❖ **Benefits include:**

- ✓ **Cost reduction**
- ✓ **Increased productivity/capacity**
- ✓ **Accelerated task completion**
- ✓ **Improved quality of a product or service through added value and better alignment with customer needs**
- ✓ **Human Resources**

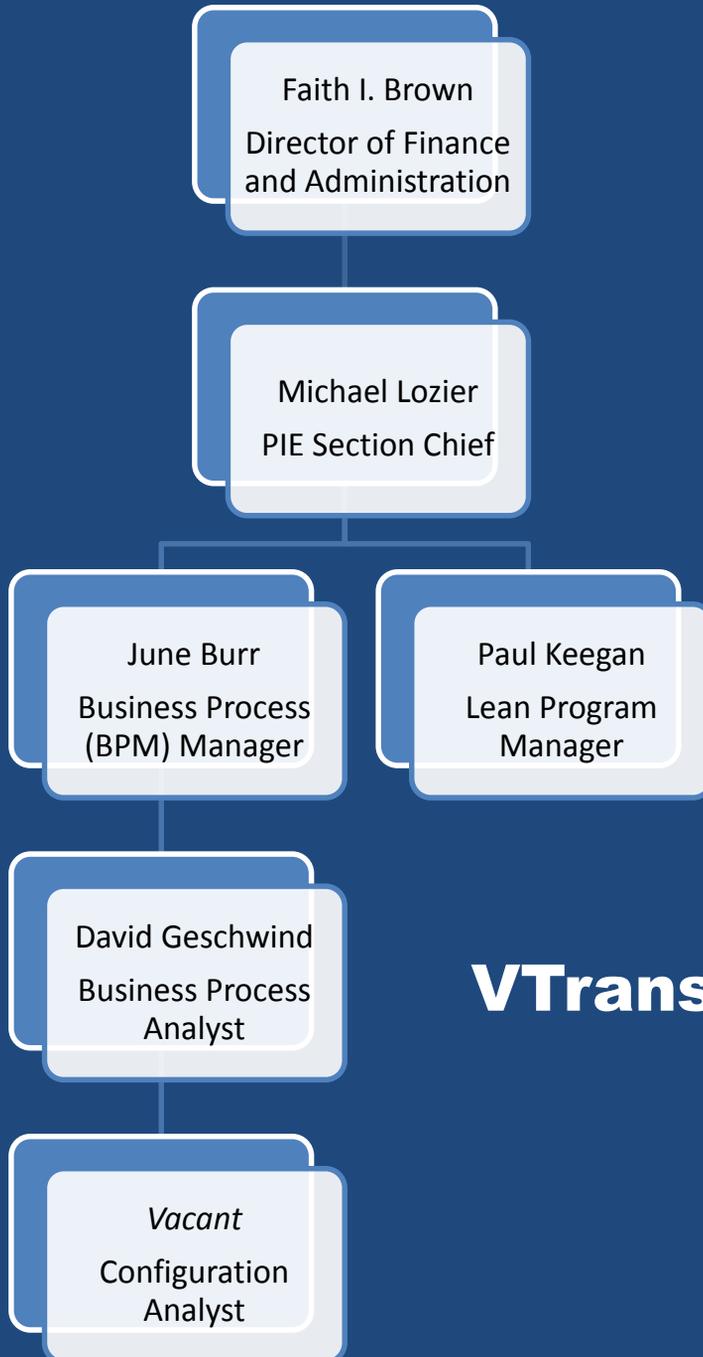
❖ **PIE CI initiatives include:**

- ✓ ***Lean Process Improvement***
- ✓ ***Business Process Management (BPM)***

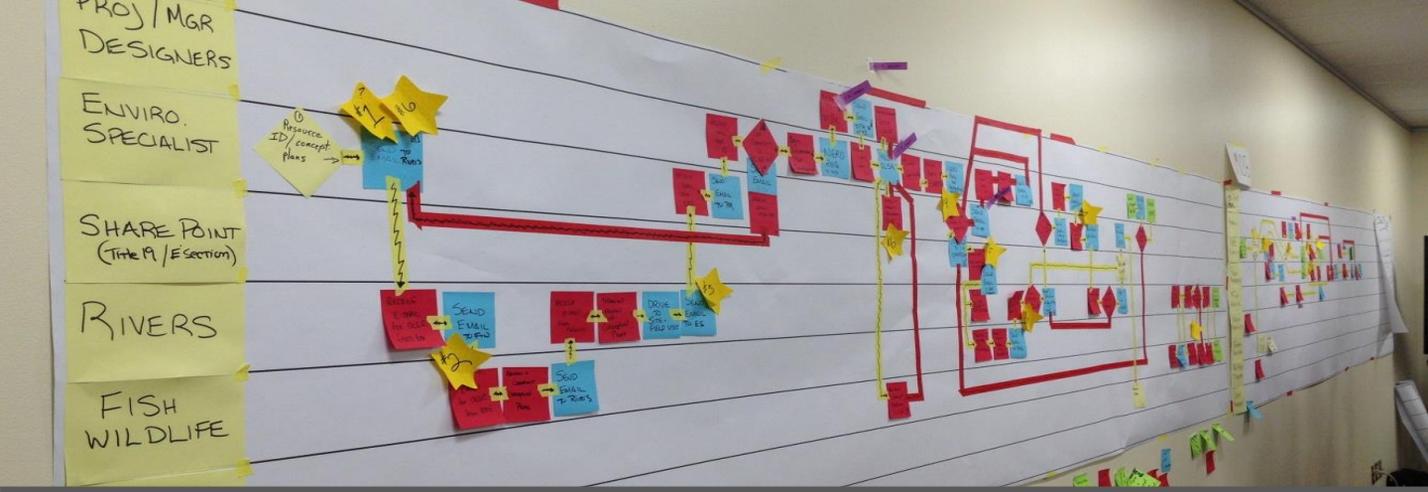


Who is PIE?

“Established” June 2015



VTrans!!



Lean Process Improvement

Vermont Agency of Transportation

- What it is
- How it works
- Results
- Why we use it

LEAN DEFINED



Lean is a collection of principles and methods that focus on identification and elimination of **waste** in any process.



Waste is defined by any specific activity that does not add value to the customer.



Essential Lean

How wasteful is your office?

The Seven Wastes



Defects/Rework
Inputting the same data into two places or missing information off a form



Overproduction
Producing too much, such as multiple versions of the same document



Waiting

Waiting for a meeting to start, a computer to start up or for customer information you need



Transport

Walking to meetings or travelling around the building to collect goods or meet with others



Over-processing

Printing out documents you could read on screen or sending reports to people that never get looked at



Inventory

Holding too much stock, such as stationary or equipment that is never used or out of date brochures



Motion

Getting up to go to the printer, look for files or heading to another area to complete a task

The Eighth Waste



Employee talent

Spending time on menial tasks that can be outsourced, or failing to appreciate how their skills could be best utilised

The Eighth Waste

BENEFITS

Eliminate backlog

Reduce process times

Decrease complexity

Eliminate unneeded steps

Improve work quality

Create consistency

Improve work environments

Enhance transparency

Save money

Reduce spending

**LEAN EVENT
IN PROGRESS**

Please do not remove items from walls

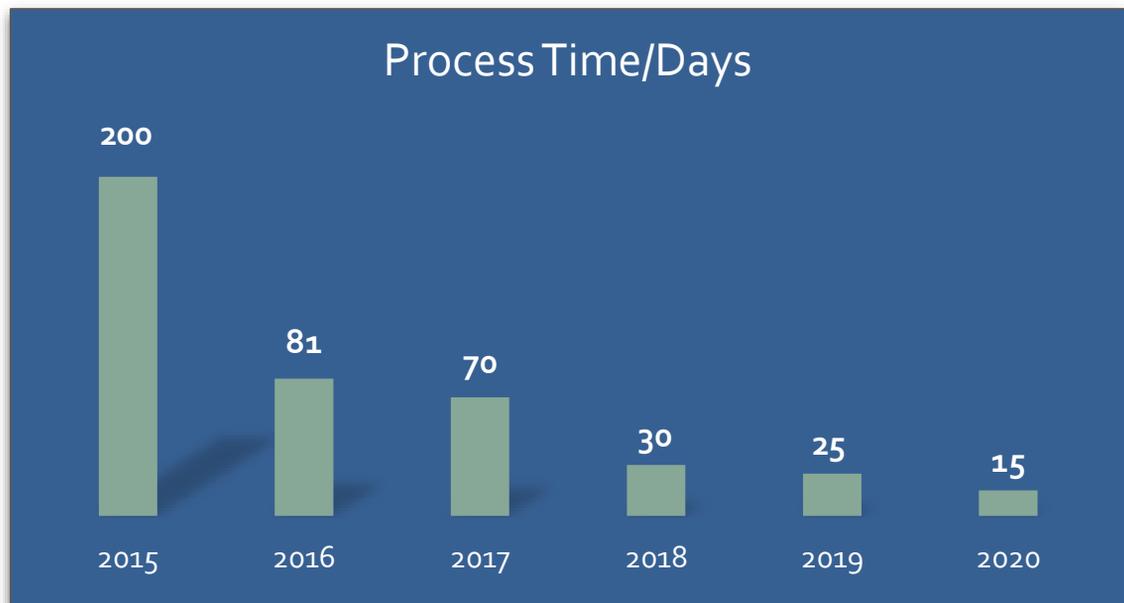


RESULTS - VTrans

Town Highway Grant Process

Sept 29 – Oct. 2, 2015

	<u>Current State</u>	<u>Improved State</u>	<u>% Improvement</u>
# of Process Steps	57	27	53%
# of Value Added Steps	8	2	75%
# of Decision Points	6	4	33%
# of Loop Backs	6	2	67%
# of Handoffs	25	5	80%
# of Delays	27	15	44%
# of Tracking Systems	8	4	50%
Process Time	200	81	60%

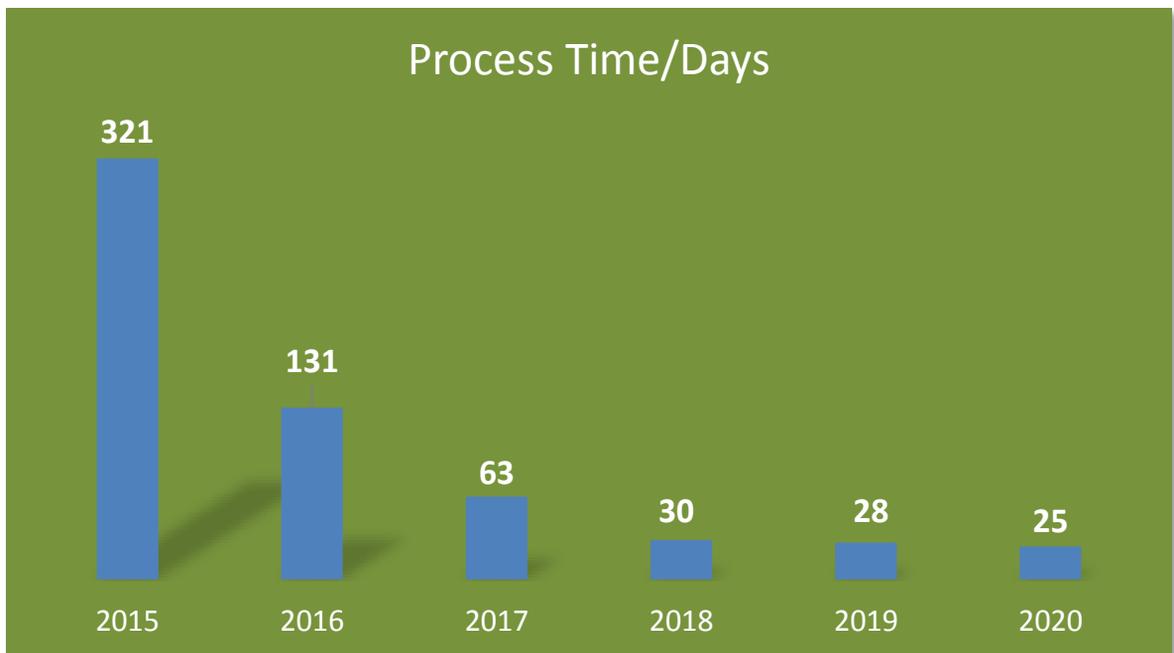


Projected savings

RESULTS - VTrans

Governor's Highway Safety Program January 4 – January 8, 2016

	<u>Current State</u>	<u>Improved State</u>	<u>% Improvement</u>
# Process Steps	36	25	31%
# Value Added Steps	9	6	33%
# Decision Points	7	4	43%
# Loopbacks	9	3	67%
# Handoffs	28	14	50%
# Delays	10	5	50%
# Days Lead Time	321	131	59%



Projected savings

RESULTS - Wisconsin

Lean Government Initiative Annual Report

"Measurement is the first step that leads to control and eventually to improvement. If you can't measure something, you can't understand it. If you can't understand it, you can't control it. If you can't control it, you can't improve it." - H. James Harrington

Significant funding issues exist at the state and federal levels, while ongoing transportation needs continue to be present in all modes. Wisconsin's economic vitality depends on a safe and efficient multimodal transportation network to move Wisconsin's citizens to work, and to support industry, agriculture and tourism.

The Wisconsin Department of Transportation (WisDOT) is taking on this challenge by actively employing Lean Six Sigma, in alignment with the department's MAPSS performance improvement program, to assist in meeting our mission to provide leadership in the development and operation of a safe and efficient transportation system.

WisDOT is committed to continuing to make our processes better and more efficient, while showing accountability and transparency for results. Since July 2012, the department has completed 43 projects aimed at improving customer service, maximizing efficient operations, saving costs, streamlining processes, and informing data-driven decisions.

To date, the department has generated project savings in excess of \$1.5 million and improved the time spent on these processes by nearly 30,000 hours. The dollars and staff hours will continue to be redirected to other department activities and priorities.

I am pleased to present the Fiscal Year 2015 Lean Government Annual Report.



Mark Gottlieb, P.E.
Secretary
Wisconsin Department of Transportation

RESULTS - Ohio

LEANOhio *Making state government in Ohio simpler, faster, better, and less costly.*

The results continue to add up

Since January 2011, LeanOhio has completed more than 80 major improvement projects and events, including 61 Kaizen events. All of them have aimed for measurable results.

With Kaizen events in particular, where teams overhaul their biggest high-priority processes, gains have been especially noteworthy.

SIMPLER: In calendar year 2014, Kaizen teams cut an average of 73% of the steps in the processes they improved – resulting in far fewer delays, decision points, loopbacks, handoffs, and frustration for the users of government services.

FASTER: Kaizen teams made their processes twice as fast, from the time a customer asks for a service to when that service is delivered. They reduced start-to-finish process times by 52% on average, ensuring far faster service to customers. And they eliminated backlogs of work in process.

BETTER: A primary goal of Lean is to improve services to the customer. By eliminating activities that do not add value, Kaizen teams have redirected more than 500,000 staff hours to higher-priority efforts that improve customer service – equivalent to 250 fulltime employees who are now available for mission-critical work.

LESS COSTLY: Since January 2011, the projected cost savings produced by Kaizen teams when their improvements are fully implemented exceeds \$155 million. In terms of a return on investment for every \$1 invested in LeanOhio activities, the state gained \$40 in projected savings.

Review a summary of Kaizen events in Ohio state government since January 2011.

Department	Changes to Process:	Metrics:	As a Result:
Ohio Department of Youth Services Interdisciplinary Treatment Team (IDT) Meeting Process	<ul style="list-style-type: none">• Reduced steps from 195 to 81 (58% reduction)• Reduced handoffs from 90 to 54 (40% reduction)	<ul style="list-style-type: none">• The interdisciplinary treatment team meeting process touch time reduced from 2,136-2,848 hours to 1,068-1,808 hours per month• Projected \$3,154 yearly in paper and printing	Transformed process for treatment teams will strengthen the focus on youth while freeing up 12,000 hours per year for mission-critical activities
Ohio Supreme Court Procurement and Contracts Process	<ul style="list-style-type: none">• Reduced steps from 131 to 28 (79% reduction)• Reduced decision points from 19 to 12 (37% reduction)• Reduced handoffs from 37 to 15 (59% reduction)	<ul style="list-style-type: none">• 1 day to approve purchases of goods under \$5,000• 4 days to approve service purchases under \$5,000• \$4,250 in projected material savings per year	91% of all purchase requests will get processed in 1 day on average with simplified work flow
Ohio Office of Budget and Management, Office of Shared Services Other agencies involved in this Kaizen event: PUCO,	<ul style="list-style-type: none">• Reduced steps from 80-157 to 21• Reduced decision points from 4-24 to 3	<ul style="list-style-type: none">• 5 processes standardized to 1• Per-transaction processing time reduced from a matter of hours to a matter of seconds	1 simple accounts receivable process will become standard practice, replacing 5 separate agency processes

WHY LEAN?

Transportation budget cuts

Reduce our costs related to errors, waste, duplication, bottlenecks, backlogs, etc.

70 yr. old methods -“it’s always been done that way”

Improve employee morale - employees often see what needs to change but no one has the authority, time and support to make the change

Increased customer expectations for better, faster and cheaper services

Silver Tsunami – Succession planning and preparing for backfill



Town Highway Grant Lean Event

Business Process Management Overview

- End-to-end process understanding, visibility, control & communication
- Combines CI, performance management & organizational change with technology
- Anchors success & sustainability
- Process, people AND technology
- Enables a process excellence culture

Business Process Management Recap

- Unsustainable costs
- More with Less?
- Innovate
- Reengineering
 - Automation
 - Analytical management tools
 - Holding the system accountable
- Rethinking work
 - Perspective
 - Manage
 - Proactive v reactive

Objective: Improved Process Performance



Estimated Efficiency Gain & Savings*

- Efficiency Gain
 - 89% Pilot Project
 - 521 to 55 avg. day decrease
(avg. 466 less days)
 - 75% goal for ROW Project
- Est 20 yr. efficiency savings
 - \$712, 500 Pilot Project
 - \$18,540,000 ROW Project

*Estimations Independently Reviewed by Coeur Group, October
2014 (as requested by DII)

Business Process Management Return on Investment*

	Finals Pilot Project	ROW Project
Lifetime Efficiency Gain	\$712,500	\$18,540,000
20 Year NET GAIN Lifetime Efficiency Gain - Total Dev Cost - Lifetime Operational Run Cost	\$245,065	\$17,095,410
State ROI	6.62	63.17
State Investment Gain	\$1 State Investment	\$1 State Investment
	= \$6.62 Return	= \$63.17 Return

*Estimations Independently Reviewed by Coeur Group, October 2014 (as requested by DII)

Value

**“If we put a good performer
in a bad system,
the system will win every time”**

G. Rummler & A. Brache
Organizational Performance Pioneers