INDOT’s Continuous Improvement Efforts

Kristin Brier and Derek Weinberg
Innovation & Enhancement, INDOT
Innovation & Enhancement?

- **Who we are:**
  - Internal consulting group working at direction of Executive Staff and Program Managers
  - Continuous improvement focus
  - Neutral third party examining internal business processes and organizational issues

- **Who we are NOT:**
  - Innovative Project Delivery
  - Research and Development
  - These guys...
“What would you say you do here?”
Continuous improvement will help us spend less time on non-value-added activities and more time accomplishing our mission.
Natural Reactions to Problems
Program Reviews

- Hold in-depth conversations with the people who do the work:
  - What works well?
  - What made sense when we started that doesn’t make sense anymore?
  - What should we be doing that we are not?
  - What other ideas for improvement do you have?

- Use input to formulate recommendations for improvement.
Program Reviews

- Utilities and Railroads
- Customer Service
- Prequalification
- Design In/Out
- Fleet
- Materials & Tests
- Highway Lighting
Process Improvement

- Facilitate process mapping to:
  - Determine the current state of the process
  - Identify problems in the process (handoffs, rework, bottlenecks)
  - Find solutions that will have the “biggest bang for the buck
  - Build a future state process with those solutions in place.
PCO Process Improvement

- Central office and district staff members worked together to reduce rework and eliminate bottlenecks for auditing project financial documentation.

- **Team members are now approaching obstacles as problems to be solved instead of barriers to success.**
INDOT’s approach focuses on the “Plan – Do – Check – Act” cycle.

Provides a tool for all INDOT staff members to See It, Own It, Solve It, and Do It.
All Parts Are Not Equal…

We want robust planning, but NOT paralysis by analysis!
Problem Solving

- **Define the Problem** (Plan)
  - Quantify the Current Condition and the Standard Condition
    - Problem is defined as the gap between the two
  - Make a business case for solving the problem

- **Identify the Stakeholders** (Plan)
  - Who needs to be involved?

- **Find the Root Cause** (Plan)
  - Analyze to find the real cause of the problem and solve it, don’t treat symptoms.
Problem Solving

- **Select (Plan) & Implement (Do) Countermeasures**
  - Determine potential short-term and long-term countermeasures and evaluate against criteria
  - Choose the best and implement

- **Follow Up (Check) & Start Again (Act)**
  - Check at pre-determined intervals to find out if countermeasures worked or not, and why
  - Recommend next steps and start PDCA cycle again
Problem Solving Guides

- Training guides to solve problems and help others through the PDCA process
Problem Solving Guides

- Guides are already addressing problems throughout INDOT:
  - Citrix account creation
  - Traffic modeling requests
  - Fuel budget reduction
  - Data connectivity in the field
Engagement

We are not the experts.

The people who do the work know best how to do the work, and have good ideas for how to make it better.

Our job is to engage people at all levels in all parts of the agency to find better ways to accomplish our mission and move forward together as One INDOT.
Contact Information

Innovation & Enhancement
Derek Weinberg: dweinberg@indot.in.gov
Kristin Brier: kbrier@indot.in.gov
Mark Joseph: mjoseph@indot.in.gov