

# WisDOT Lean Government Initiative Status Update



March 19, 2013

WisDOT Board of Directors



# Lean project results



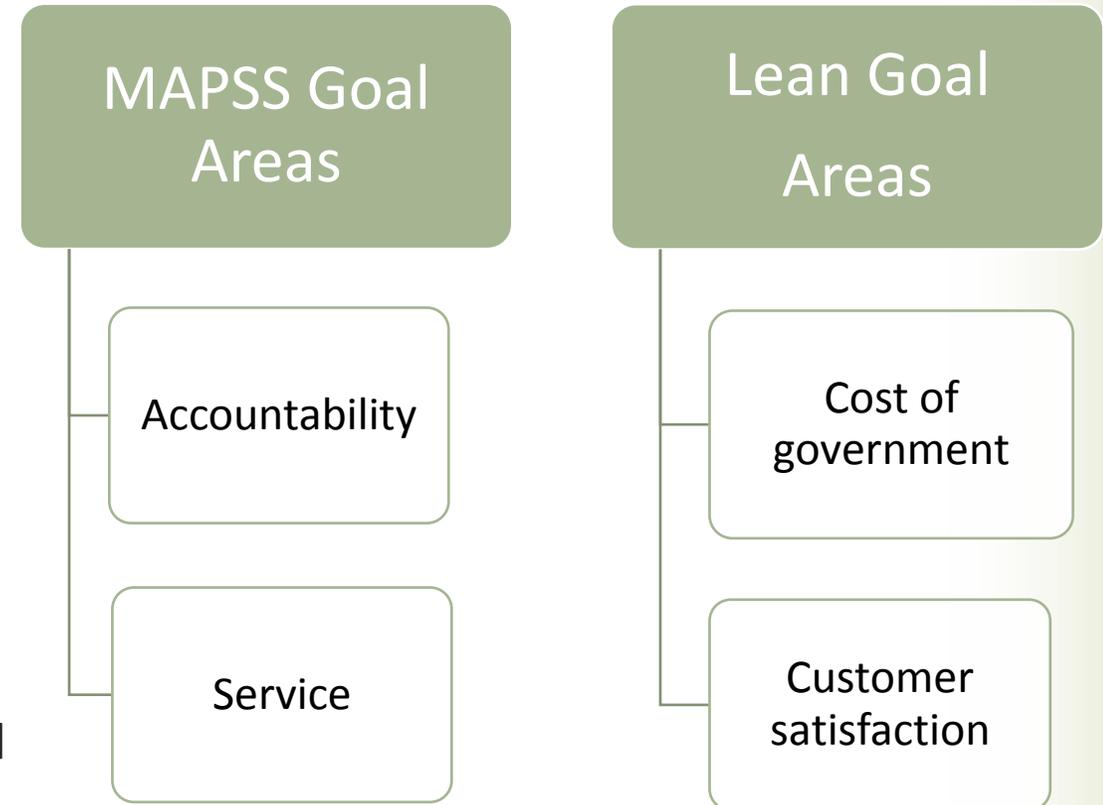
## **Transit procurement process**

Ian Ritz, Division of Transportation Investment Management

# Issue and goals – Transit procurement



- Shared-ride taxi (SRT) service procurement process is lengthy, complex and poorly understood by local transit partners
  - Inconsistent format and content of information submitted to business area
  - Submissions frequently incomplete or inaccurate
  - Significant delays and staff resources throughout process due to rework steps
- Project goals
  - Reduce lead time of reviews and approvals
  - Reduce staff hours spent on SRT procurements
  - Enable local transit sponsors to complete their end of the process efficiently and accurately



# Results and next steps – Transit procurement

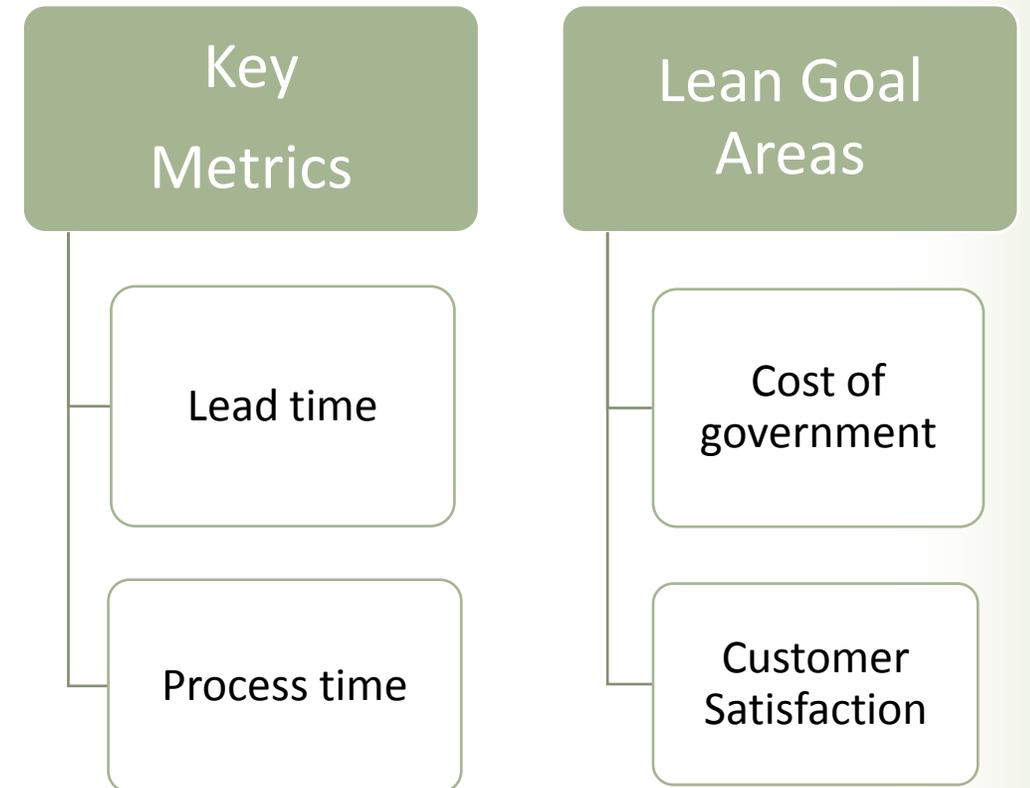


## Results

- Reduced average lead time by 50 percent
- Reduced business area process time by 70 percent, or 36 hours per procurement
- Implemented toolkits for local sponsors
- Up-front technical assistance to local sponsors

## Next steps

- Fully implemented new process for shared-ride taxi service procurements
- Apply lessons learned to other types of procurements



# Lean project results



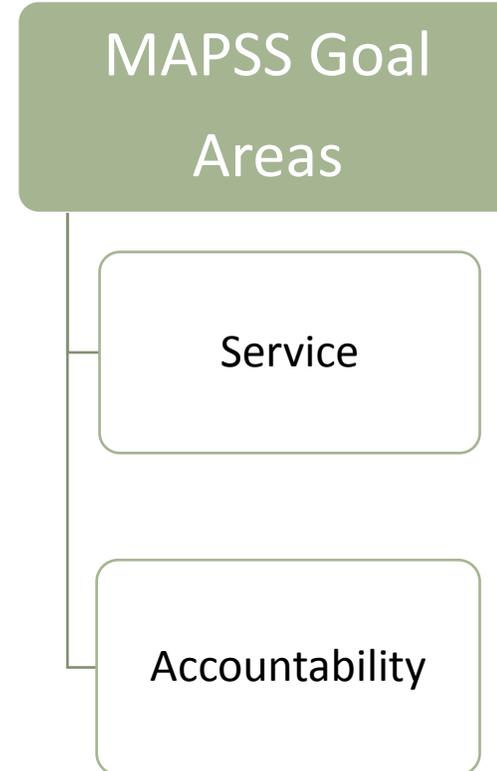
## **Timely aeronautics payments**

Tami Weaver, Division of Transportation Investment Management

# Issue and goals – Timely aeronautics payments



- Current time to pay aeronautics invoices ranges from 20-30 calendar days, 2-3 times the target of 10 days
  - Lack of predictability in lead time
  - Duplication of effort
  - Paper-based process
- Project goals
  - Exceed customer expectations by shortening the payment time without loss of quality
  - Reduce duplication of effort by staff



# Results and next steps – Timely aeronautics payments

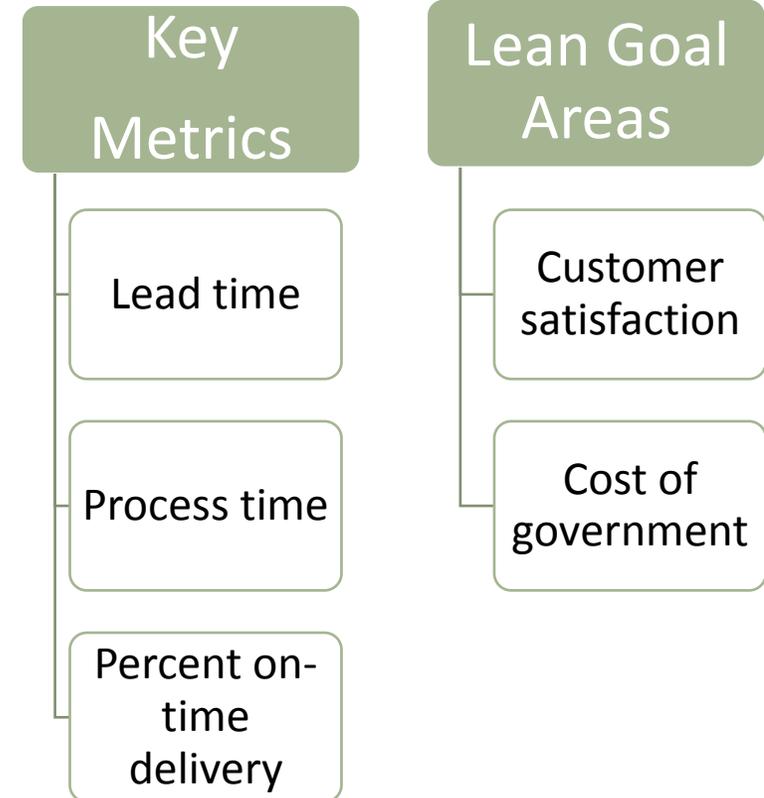


## Results

- Payment of all invoices made within 10 days of approval
- Reduced process time by 78 hours annually
- Improved accuracy by reducing chances for error
- New forms for contractor and consultant invoice payments
  - Combined two forms into one, eliminating duplication
  - Eliminated redundant items in the coding box
- Reduced cost of paper supplies and postage

## Next steps

- Pilot of new process implemented
- Will monitor improvements during spring and summer construction season



# Lean project results



**School bus inspection process**

Mark Resheske, Division of State Patrol

# Issue and goals – School bus inspections

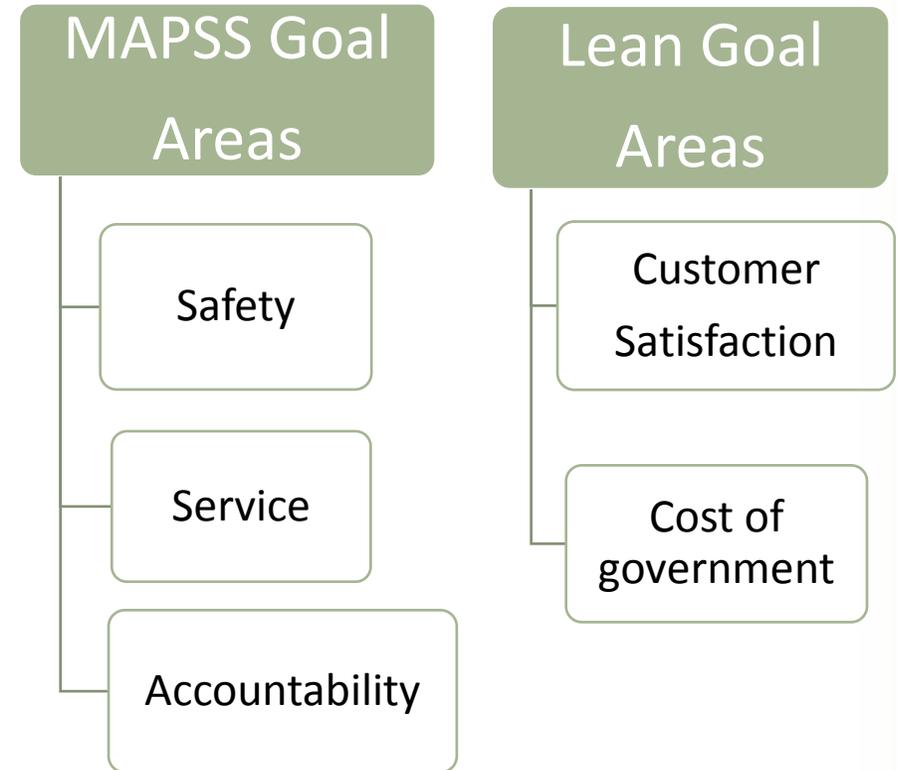


Current process for inspecting Wisconsin's 10,000 school buses takes 14 days and relies on a paper-based system

- Buses out of service longer than necessary
- Paper reports and mailed certifications
- Redundant data entry
- Lack of readily available, searchable data

Project goals

- Reduce lead time
- Return safe buses to service faster
- Increase data availability
- Reduce costs of paper and postage



# Results and next steps – School bus inspections

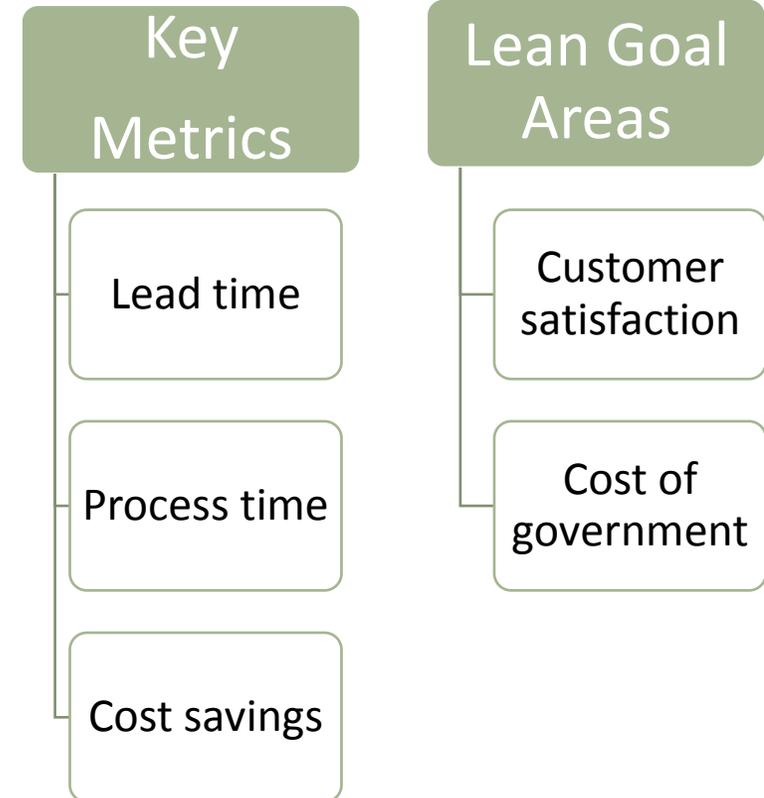


## Results

- Reduced process time by 80 percent for buses failing inspection, and by 56 percent for buses passing inspection
- Reduce total process time by approximately 6,958 hours annually upon full implementation
- Shortened lead time by 2-3 days, allowing 2,500 buses annually to return to service faster
- Paperless system saves DOT \$1,850 annually in printing and postage costs
- School bus companies save printing and postage costs by verifying certifications online

## Next steps

- Full implementation expected by July 2013
- Apply process model to other DSP inspections



# Lean project results



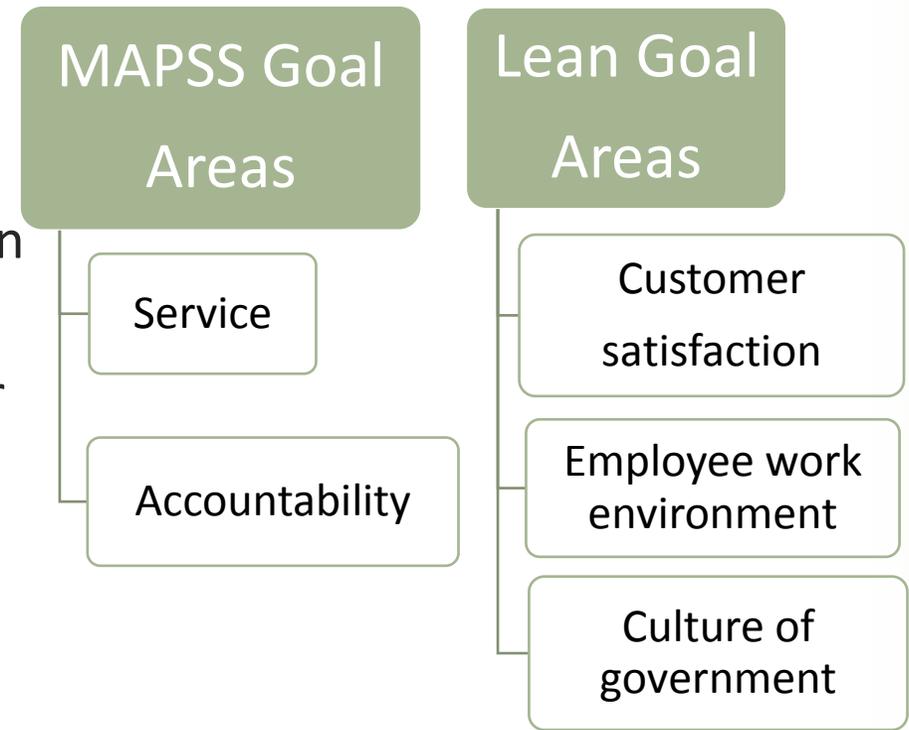
**Let project closeout process**

Gigi Trebatoski, Division of Transportation System Development

# Issue and goals – Let project closeout process



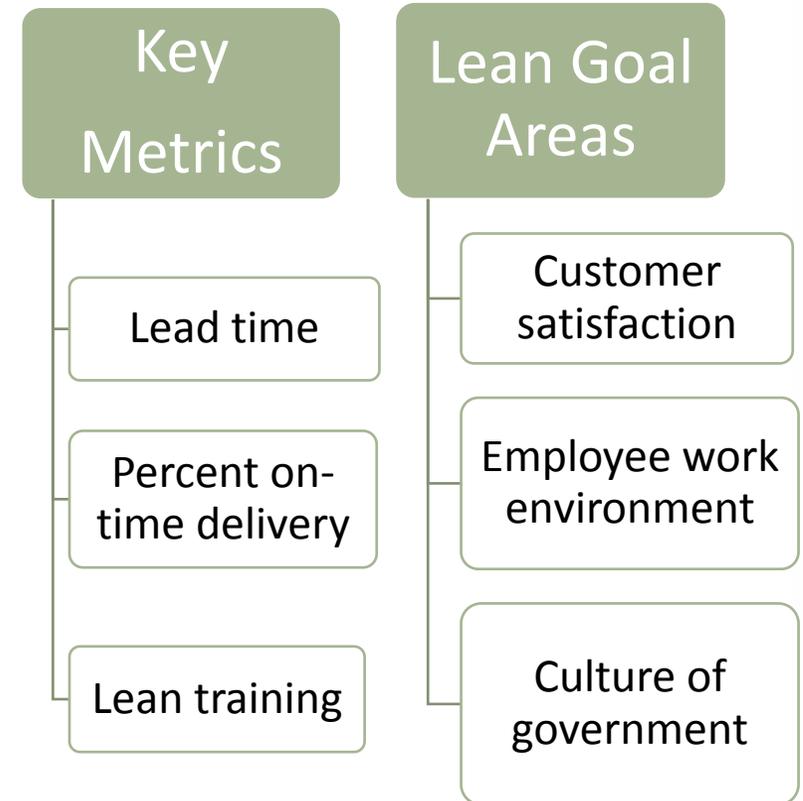
- ❧ The current process to close out Let projects only meets the on-time performance target of 6 months in 25 percent of cases
  - ❧ There are many steps and handoffs required between work completion and final payment
  - ❧ Significant delays can cause lead times of over 1 year
  - ❧ The process is conducted differently across regional offices
- ❧ Project goals
  - ❧ Increase on-time performance to 45 percent by July 2014



# Results – Let project closeout process



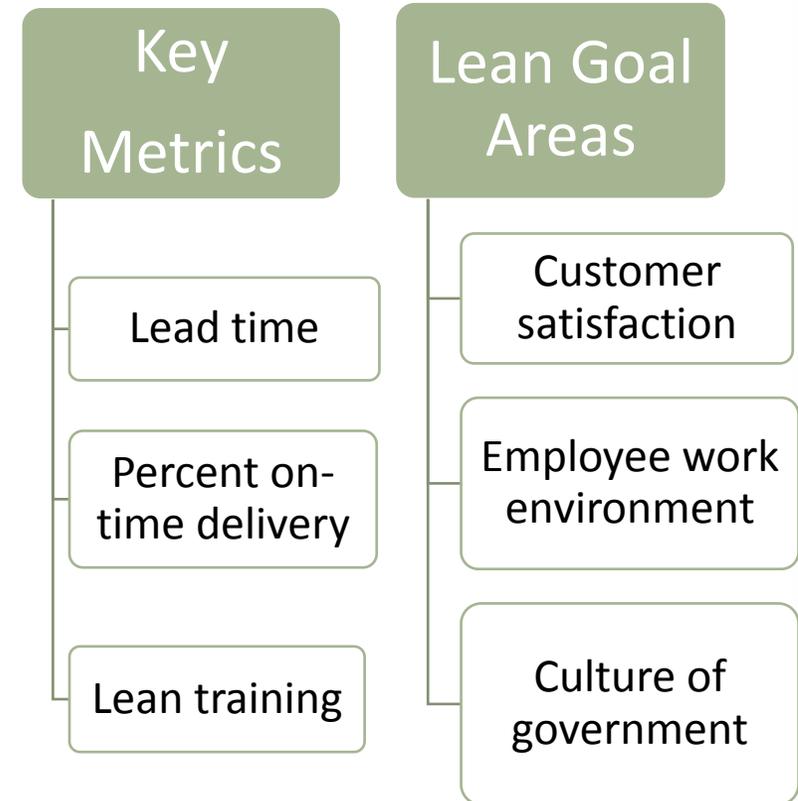
- As a first phase of a larger project, established baseline data for describing current state
- Identified a set of root causes for project delays
- Brought together employees from across the state to share perspectives on a complex process
- Identified Best Practices for quicker closeout
- Developed high-level, future state process map
- Trained 38 WisDOT staff in Lean Six Sigma tools



# Next steps – Let project closeout process



- Foundational elements required to enable improvement
  - Standardize term definitions
  - Standardize team member composition
  - Define process owner and project lead and determine roles and responsibilities
  - Develop detailed future state flowcharts
  - Update project tracking software to reflect process improvements
  - Create project closeout sections in the *Standard Specification and Construction Materials Manual*
- Two forthcoming Lean projects in chartering stage
  - Payroll clear date lead time
  - Materials certification lead time



# Lessons learned



Leadership and culture

Data and planning

Problem-solving

Capitalizing on results

# Lessons learned – Leadership and culture



- ☞ Teams need guidance from management on the appropriate levels of approval needed
- ☞ Learning the Lean process can have other staff benefits in building a culture of improvement
- ☞ Communication is key; this is complicated when staff are at different locations, regions
- ☞ Strategic, consistent communication is important to developing the Lean culture and developing expectations

# Lessons learned – Data and planning



- ☞ Take the time to gather baseline data
- ☞ Clear charters with quantitative targets are imperative to documenting gains (verb, noun, time frame)
- ☞ Lean projects are most effective when they focus on processes WisDOT “owns”
- ☞ When multiple stakeholders are involved, you may need to temper your expectations

# Lessons learned – Problem-solving



- ☞ When you embark on a project, sometimes it becomes more complex than you originally thought
- ☞ You may need to “back up” before you can move forward
- ☞ It is important to focus on the process before jumping to the conclusion
- ☞ Make sure to consider all the staff who play a role in the process, to include all perspectives and potential solutions
- ☞ By coming together, people understand their role in the overall process

# Lessons learned – Capitalizing on results



- ❧ The improvements implemented within projects can sometimes be applied to other, similar processes
- ❧ Sometimes what we initially think of as an isolated project will actually lead to additional improvements over time – continuous improvement
- ❧ Results can sometimes be surprising to the team

# Looking ahead



☞ April report to WisDOT Board of Directors will include results of DBM PCard process

☞ Lean projects kicking off in April:

☞ DTSD Let project closeout process – six foundation elements teams

☞ DTSD Let project closeout process – payroll clear date lead time

☞ DSTD Let project closeout process – material certification lead time

☞ DTSD Inactive project closeout process

☞ Interagency Facilities Lean Value Stream Mapping event scheduled April 29 – May 2