

WisDOT Lean Government Initiative Status Update



June 9, 2015

WisDOT Board of Directors



Lean project results



Delivery Route Optimization

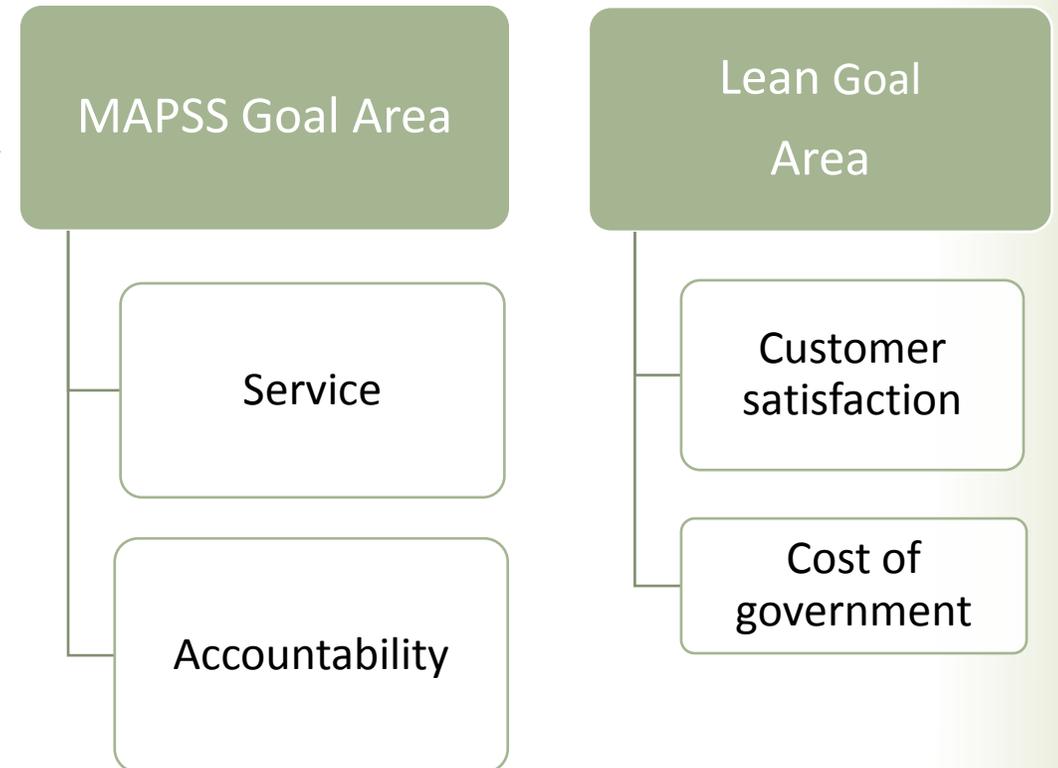
Terry Wendt

Division of Business Management

Issue and goals – Ensure delivery routes and schedules efficiently support business needs



- ❧ WisDOT programs have changed dramatically since current delivery routes and schedules were created
- ❧ Routes and schedules have not been validated recently
- ❧ Significant vehicle and staff costs are required to perform statewide delivery service
- ❧ Purpose of delivery service is to support business needs of WisDOT divisions
- ❧ Project goals
 - ❧ Identify opportunities to reduce delivery route mileage, drive time and operational costs
 - ❧ Ensure delivery routes and schedules are justified by current business needs



Results and next steps –

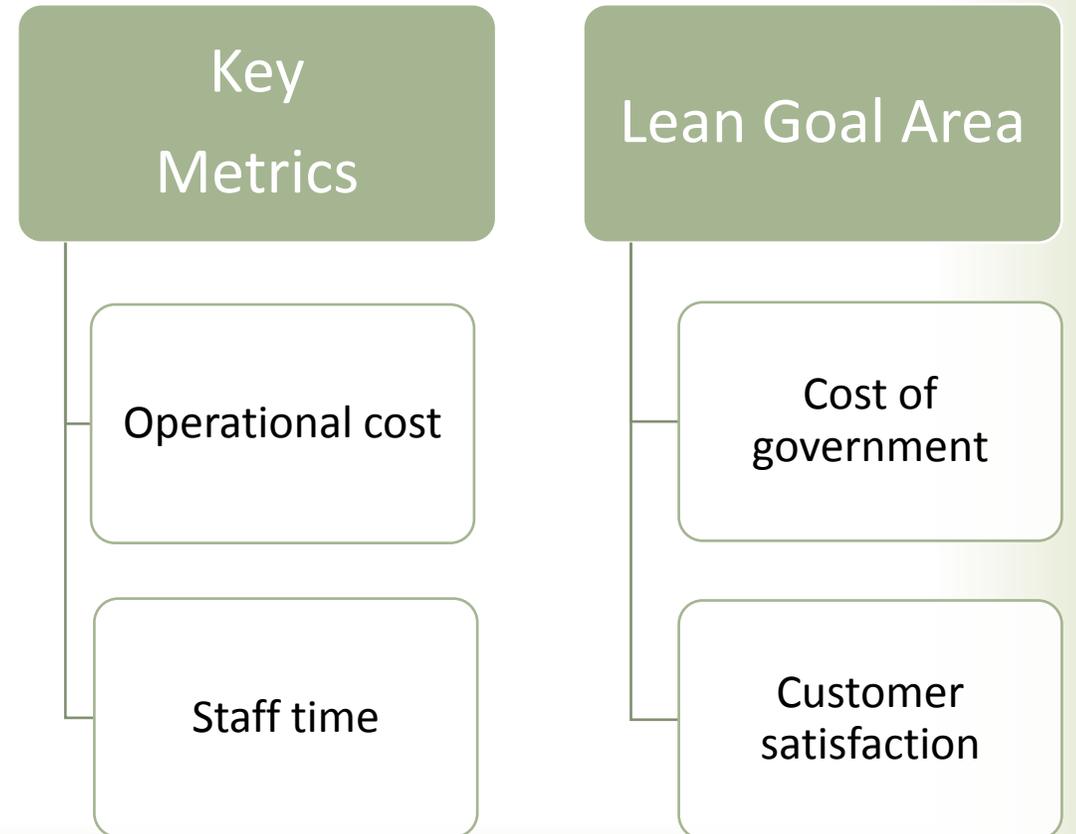


Results

- Reduced the cost of delivery service by approximately \$9,300 (\$8,300-DBM and \$1,000-DMV)
- Redirected approximately 231 staff hours (171-DBM and 60-DMV) toward other assignments
- Added delivery service to two DMV locations

Next steps

- Publish revised route itineraries/schedules
- Continue to track delivery service performance
- Monitor product and service ordering trends



Lessons learned



- Customer input into identifying and prioritizing business needs reduced resistance to delivery service changes.
- Frequency of service was the key improvement variable.
- Road networks significantly influence route development.

Lean project results



STN Roadway Network Data Efficiency Lean Project

Chris Dickerson

Division Transportation Investment Management
Bureau of Planning and Economic Development

Issue and goals



Problem:

- ❧ In the State Trunk Highway Network (STN) data process, completing one dataset takes an average of 31.54 minutes. This prevents other products that rely on this data from being produced in an accurate and timely manner.

Goals:

- ❧ Reduce the time to process the STN data.
- ❧ Evaluate process to identify and remove any non-value-added steps (manual steps)
- ❧ Produce more consistent and accurate data
- ❧ Better GIS data organization
- ❧ Documentation of new process

MAPSS Goal Areas

Service

Lean Goal Area

Cost of government

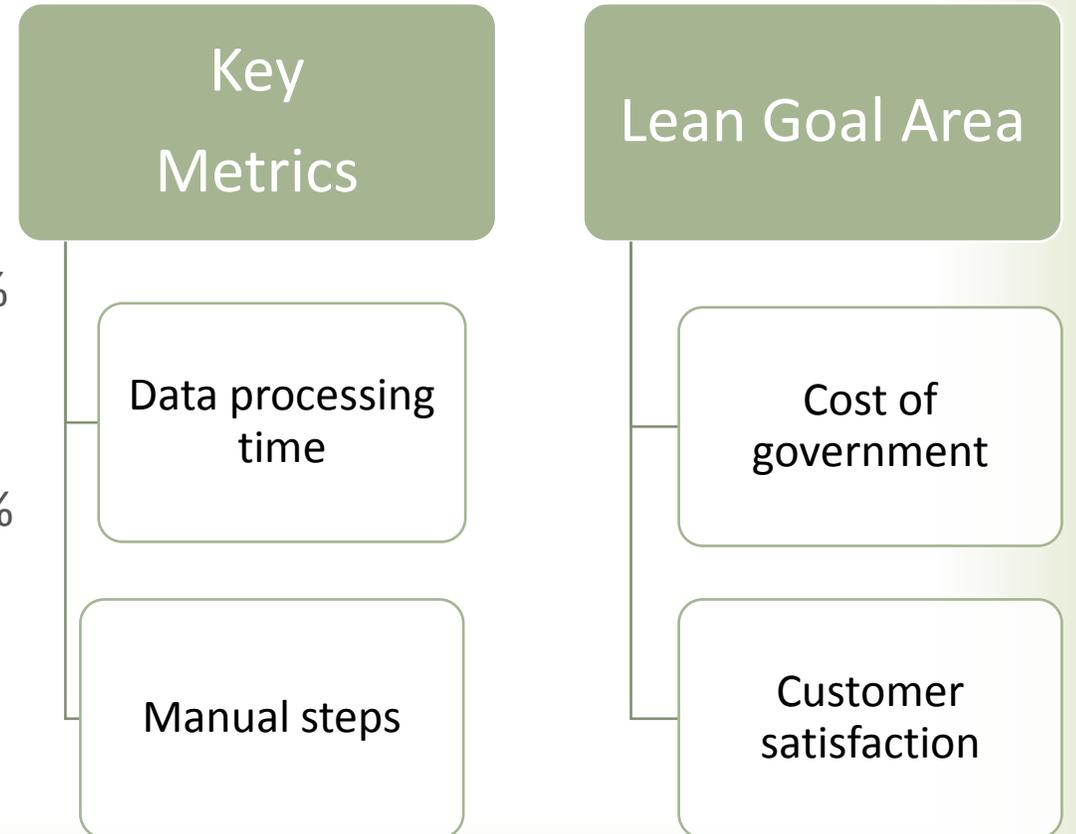
Customer satisfaction

Results and next steps



Results:

- ☞ Reduction in data processing time
 - ☞ Process one GIS layer (Avg. in minutes)
 - ☞ Old processing time = **31.54** Reduction of $\approx 56\%$
 - ☞ New processing time = **13.86**
 - ☞ Process all six GIS layers (Avg. in minutes)
 - ☞ Old processing time \approx **189.24** Reduction of $\approx 83\%$
 - ☞ New processing time = **32.13**
- ☞ Reduction in manual steps for data processing
 - ☞ Old process – one layer = **59**, all six layers \approx **354**
 - ☞ New process – **35** steps to process either one or all six layers Reduction of ≈ 41 & 90%



Lessons learned



- ☞ While working on the STN Roadway Data Efficiency Lean Six Sigma initiative, the project gave me vast insight to how WisDOT uses STN data at a statewide level to produce other products that rely on the data.
- ☞ With the improvements that have been made, we are adapting new geographic information systems (GIS) technologies. We will need to continue to monitor the process and reevaluate GIS methods every year to ensure continuous improvements.

Lean project results



MAPSS Quarterly Update Process

Brent Sloat

Office of Policy, Finance and Improvement
Performance, Policy and Research

Issue and goals



Problem:

- Four quarterly updates collectively saw a defect rate of 41.6%, completeness and accuracy of material submitted by BITS was roughly 75%, and completeness and accuracy of material submitted by CCS was roughly 73%
- This drives additional rework and increased process time to undesirable levels

Goals:

- Decrease the defect rate of data and narrative templates to 25%
- Increase the completeness and accuracy of BITS products to 80%
- Increase the completeness and accuracy of CCS products to 80%



Results and next steps



Results:

☞ Reduction in defect rate

Current state = 41.6% Future state = 27.7%

☞ Improvement in completeness and accuracy (BITS)

Current state = 75.2% Future state = 80%

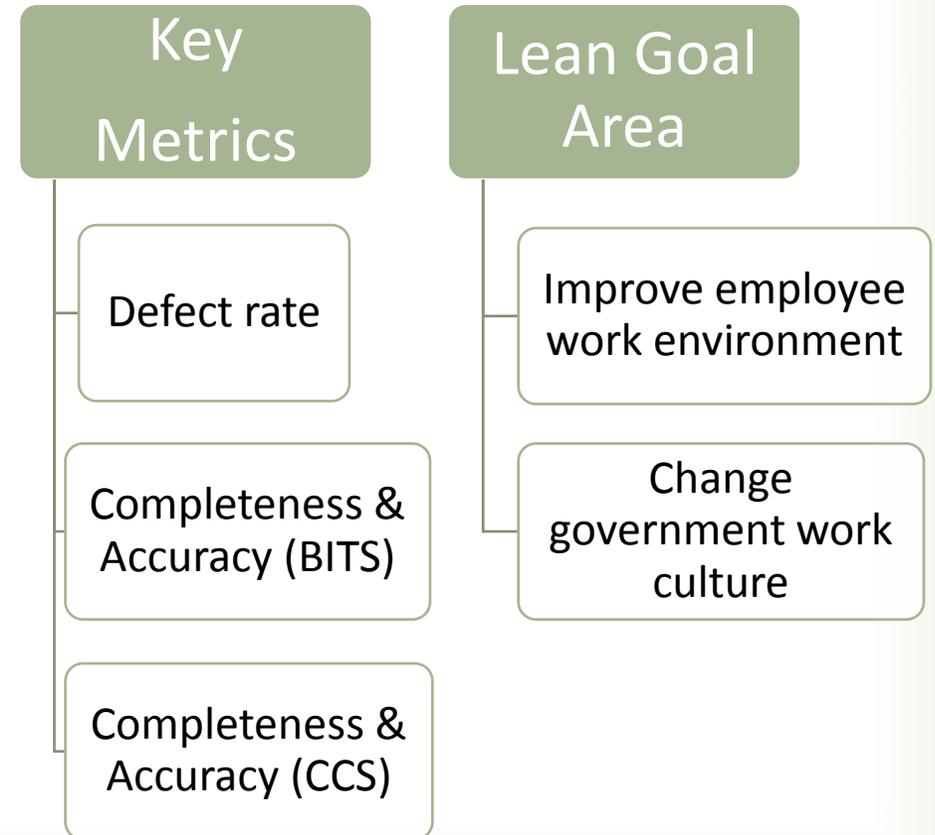
☞ Improvement in completeness and accuracy (CCS)

Current state = 72.7% Future state = 87.9%

Next steps:

☞ Continue modifications to templates

☞ Follow control plan



Lessons learned



- ☞ Make the performance levels visible for the team members. What gets seen, gets done.
- ☞ Quality metrics are not easy.
- ☞ Do not confuse activity with progress.