



Financial Management EFFICIENCIES

Enhancing Financial Effectiveness

North/West Passage Peer Exchange
March 2015



Where Can Cost Savings be Found?

EFFICIENCIES

- ▶ An efficiency is a result of a deliberate decision or improved process that provides cost savings or higher quality outcomes.

SRC, M & O, Organizational Operations

RISK MITIGATION and OTHER COST SAVINGS

- ▶ The releasing of funds realized through effective project development and the elimination of risks that were initially identified in project scoping.

MARKET DRIVEN COST SAVINGS

- ▶ Savings that are realized through market forces resulting in lower bids and/or lower costs of consumable materials than amount budgeted.



Efficiencies

- ▶ Distinction between internal efficiencies and external impacts
- ▶ Internal efficiencies – result from a deliberate decision or improved process that provides cost savings or higher quality outcomes
- ▶ External impacts – outcomes to the public that improve access, mobility, and safety for all users of the transportation system
- ▶ Dollar values will be calculated for the internal efficiency category



Internal Efficiencies

Internal Efficiencies have been separated into three categories. Each has a sub-group assigned to analyze/manage

- ▶ State Road Construction
- ▶ Maintenance & Operations
- ▶ General Operations



Our Goal

- ▶ Demonstrate at least 5% total cost saving efficiencies by October 1, 2015 (5% in comparison with the total SFY SRC budget).

GOAL = \$60,000,000

To date:

SRC Efficiency Cost Savings	\$38,272,853
M & O Efficiency Cost Savings	\$ 4,303,000
Administrative Efficiency Cost Savings	<u>\$ 522,000</u>
TOTAL	\$43,097,853

3/25/2015



SRC Methodology

- ▶ Projects let/programmed in FY '15
- ▶ Baseline is when a project enters the STIP
- ▶ Identify project level efficiencies through interviews with PMs/district staff
- ▶ Looking at meeting FY'15 goals for legislation as it is currently written, and for longer term implementation



SRC Efficiencies Discussion Guide

1. ATCs
2. Balanced Letting
3. Detailed Scoping
4. Exempt From CRU Review
5. Funds Swap
6. Innovative Delivery Methods – IDIQ, CMGC, Design/Build
7. Major Projects Review
8. Performance-Based Design
9. Project Tying
10. Reduced Pay Items by Using Lump Sum
11. Selection of Procurement
12. Traffic Control Plan
13. Use of Technology to Drive Efficiencies
14. Value Engineering
15. VECPs



SRC Efficiencies Found

Cost Saving Activities	Amount Found in Project Analyses
Value Engineering	\$ 8,748,749
Alternative Technical Concepts	\$ 3,710,350
Design Optimization	\$ 11,460,771
Contract Design Flexibility	\$ 9,936,450
Innovative Delivery Methods	\$ 3,710,000
Traffic Control Plans	\$ 706,533
Total	\$ 38,272,853

3/25/15



Maintenance & Operations

- ▶ Baseline – efficiencies implemented since 2008
- ▶ Efficiency cost savings calculated as annual average savings
- ▶ Analysis includes a B/C calculation and a scope of implementation



Maintenance & Operations

Automatic Flagger Assistance Devices (AFADs)

- portable traffic control devices used by flagging personnel instead of traditional flagging equipment.
- With an increasing number of distracted drivers, safety of flaggers and workers in work zones is a growing concern.
- The reduction in personnel required for flagging allows for reassignment of people to other aspects of the scheduled work, resulting in quicker turn around and faster project completion.
- The lifecycle annualized cost savings is \$13,000 per AFAD.



Maintenance & Operations

Automatic Flagger Assistance Devices (AFADs)

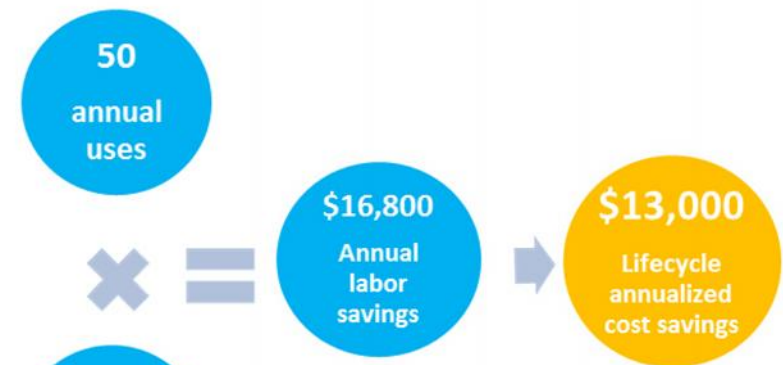
AFAD Cost



Labor



Summary (per AFAD)



Maintenance & Operations

Maintenance Decision Support System

- MnDOT has developed performance measures and targets to track how fast we can restore bare driving lanes after snow and ice events as well as measuring the resources used
- In order to efficiently use those resources real-time information is needed for drivers to apply the precise mixture of salt, sand, and chemicals based on the roadway needs.
- MnDOT is now employing the use of three technologies to optimize these resources:
 - MDSS
 - Mobile Data Computers
 - Automated Vehicle Location



Maintenance & Operations

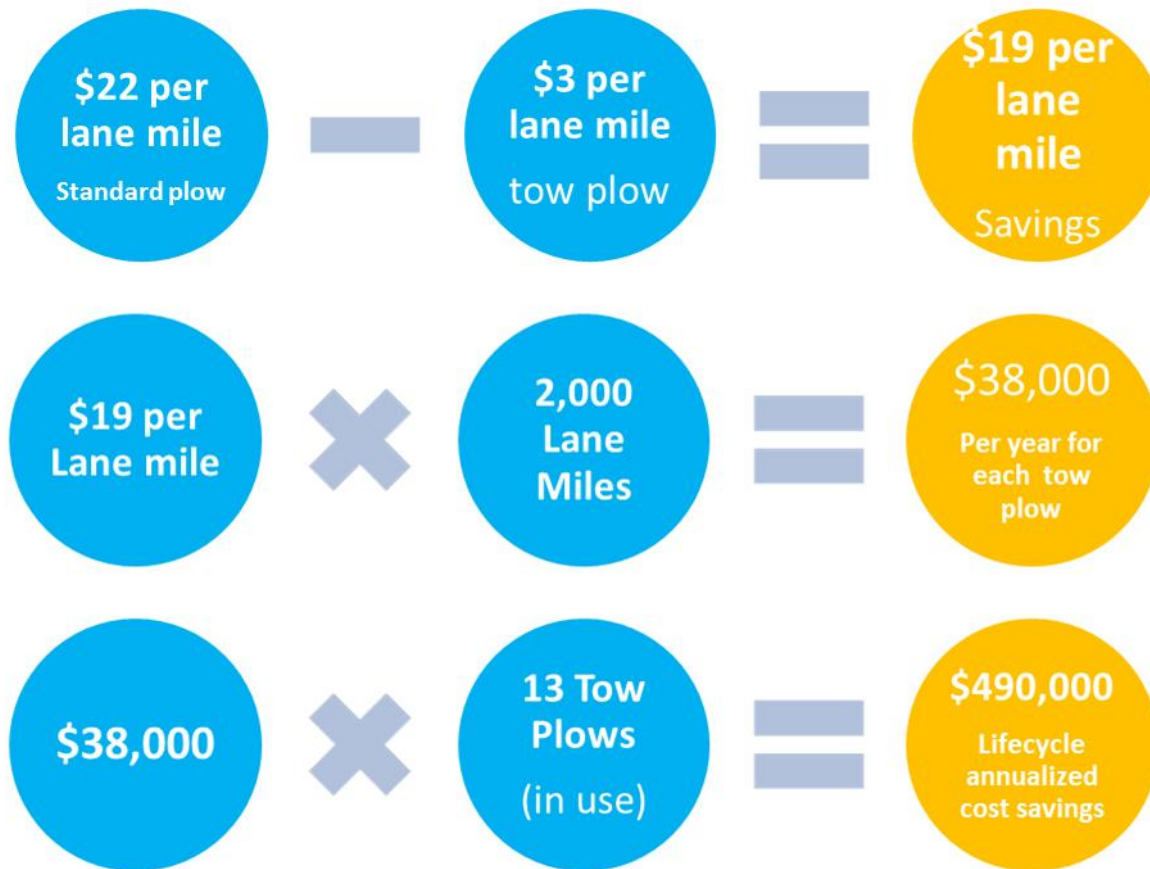
Tow Plow

- existing operational gap of snow plow trucks needed to deliver snow and ice removal services.
- Unmanned tow plows allow the agency to clear the equivalent of two plows
- Cannot fully replace the use of a fully outfitted plow and not appropriate in all situations
- The lifecycle annualized cost savings is ~\$490,000



Maintenance & Operations

Tow Plow



Upcoming Project Milestones

- ▶ **Project completion milestones:**

- By 3/31/15 – Complete efficiencies analysis for 25 projects let in FY '15.

- By 6/30/15 – M & O efficiencies analysis and methodology approved.

- By 6/30/15 – Organizational Operations efficiencies analysis and methodology approved.

- By 7/30/15 – Final draft of future (FY'16 and beyond) SRC efficiencies methodology approved.

- ▶ **Efficiencies project report will be complete by October 1, 2015.**

