



Fleet Performance Metrics Update
2015 Northeast-Midwest Equipment
Fleet Management Conference
June 17, 2015

Scott Ratterree, Fleet Manager
Andrew W. Bannasch, Analyst

Agenda

- ❑ Timeline

- ❑ 2014 National Conference Recap
 - Goal
 - Action Items

- ❑ “Champions”/National Fleet Metrics Team Discussion

- ❑ Retention Metric (“Replacement Recommended”)

- ❑ Metric Parameters

- ❑ Region Reporting Status

Agenda (continued)

- M5 Fleet Management System (Webinars)
- MDOT Assistance
- Why Report?/DOT benefits
- EMTSP Website/DOT Contact List/Reporting
- Next Steps
- Open Discussion/Questions

Timeline

- 10/2009: Initial Implementation of Fleet Management System
- 06/2010: Attended Southeast States Conference (Austin, TX)
- 09/2010: Midwest/Northeast States Conference (Pittsburgh, PA)
 - Initiation of Performance Metrics initiative/Conduct Survey
- 07/2011: MAASTO
 - Several concurrent sessions on “performance measures”
- 08/2011: Midwest/Northeast States Conference (Kansas City, KS)
 - Performance metrics presentation and briefing/roundtable
 - Issue Statements on Four Key Performance Metrics
 - Initiation of Conference Calls
- 06/2012: First National Fleet Conference (Mobile, AL)
 - Performance metrics presentation/round table
 - 40 States attended – majority vote to adopt four national metrics
 - Initiate/participate work groups via webinars (Metrics, NCSFA, M5)
- 08/2012: Team Webinar (13 States)

Timeline (Continued)

- ❑ 09/2012: AASHTO Subcommittee on Maintenance Adopts Resolution 12-03 (Equipment Fleet Management Performance Metrics)
- ❑ 09/2012: AASHTO Subcommittee on Maintenance Adopts Resolution 12-04 (Schedule for Alternating Biennial Regional and National AASHTO EMTSP Partnership meetings)
- ❑ 10/2012: Team Webinar (11 States)
- ❑ 11/2012: Team Webinar (13 States & Canadian Province)
- ❑ 11/2012: AASHTO Standing Committee on Highways (SCOH) adopts/approves Resolutions 12-03 and 12-04
- ❑ 12/2012: Team Webinar (9 States & Canadian Province)
- ❑ 01/2013: TRB “Spotlight” presentation
- ❑ 05/2013: Team Webinar (9 States & Canadian Province)
- ❑ 05/2013: EMTSP website operational
- ❑ 06/2013: Southeast States presentation
- ❑ 06/2013: Northeast/Midwest States presentation
- ❑ 07/2013: Initial submission of metrics for web site posting (20 States reporting to date)
- ❑ 07/2013: NAFA coding approved and posted on website
- ❑ 10/2013: Team Webinar (11 States & Canadian Province)

Timeline (Continued)

- ❑ 01/2014: TRB presentation – Committee on Maintenance Equipment
- ❑ 02/2014: Team Webinar (8 States)
- ❑ 05/2014: Team Webinar (8 States & Canadian Province)
- ❑ 06/2014: National Equipment Managers' Conference (Orlando, Florida)
- ❑ 07/2014: AASHTO Subcommittee on Maintenance (Charleston, West Virginia)
- ❑ 09/2014: “Champions” Webinar
- ❑ 10/2014: M5 Webinar (8 States)
- ❑ 12/2014: “Champions” Webinar
- ❑ 02/2015: Team Webinar (9 States & Canadian Province)
- ❑ 02/2015: M5 Webinar (6 States)
- ❑ 03/2015: “Champions” Webinar (scheduled did not occur)
- ❑ 04/2015: M5 Webinar (5 States)
- ❑ 05/2015: “Champions” Webinar
- ❑ 05/2015: Team Webinar (scheduled did not occur)
- ❑ 06/2015: Northeast/Midwest Equipment Managers' Conference (St. Louis, MO)
- ❑ 07/2015: AASHTO Subcommittee on Maintenance (Des Moines, Iowa)

2014 National Conference Recap

- ❑ National Conference June 8-12, 2014 in Orlando, Florida
 - Fleet Performance Metrics Briefing Update + Discussion
 - Numerous States indicated ongoing efforts to report metrics
 - Roadblocks included: education/understanding, lack of available resources, Fleet Management System challenges, developing methodology/reports to retrieve information

- ❑ Goal

- ❑ Action Items

Goal/Action Items

- ❑ **Goal:** Increase number of States reporting at least one fleet performance metric by 100% (17 to 34 States) by the 2016 National Conference
- ❑ **Action Items:**
 - *Each Region designate a “Champion”*
 - ❖ Midwest – Scott Ratterree (Michigan)
 - ❖ Southeast – John White (South Carolina)
 - ❖ West – Greg Hansen (Washington)
 - ❖ Northeast – Jim Schmidt (New Jersey)
 - *Quarterly “Champion” conference calls*
 - *Quarterly Fleet Management System (M5) conference calls*
 - *Michigan DOT to assist other State DOTs, as needed, with reporting of fleet metrics*

“Champions”/Team Discussion

- ❑ Team Purpose: Region “Champions” to assist and collaborate with member States not yet reporting Fleet Performance Metrics and provide support, advice, education, and tools necessary to allow for capturing and reporting metrics information

- ❑ Quarterly “Champion” conference calls (September 2014, December 2014, March 2015 – scheduled but did not occur, & May 2015)
 - Approach
 - Retention Metric (reporting)
 - Metric Parameters
 - Region Reporting Status
 - M5 webinars (October 2014, February 2015, & April 2015)
 - MDOT Assistance
 - Incentive to Report
 - Better define benefits/impact to Management

“Champions”/Team Discussion (continued)

- ❑ Suggestions for “outreach” and collaboration with States not reporting:
 - Region/State webinars
 - Phone calls/e-mails
 - Site visits
 - More surveys ☹
 - Include all State DOTs in “Champions” webinar

- ❑ Identify specific reasons States are not reporting metrics:
 - Lack of resources/too labor intensive
 - Unable to compile data or develop methodology
 - Need education and/or training
 - Need to align fleet data with NAFA Codes
 - Need sample reports
 - Fleet Management System (FMS) issue(s)/Converting to new FMS
 - Don’t plan to report metrics
 - Concern with sharing “confidential” data

- ❑ Target “low hanging fruit” (which of four metrics is more easily reported)
 - Obtain commitment and timeline from State to report just one metric

Original Definition: Retention

A measurement to compare whether an individual vehicle(s) or piece(s) of equipment are within or exceed established criteria (typically in months or years of age and usage in miles or engine hours) for the expected life cycle or useful life. **Note: Report numbers/percentage for those units within established criteria. Example: If retention for a light truck is six years and eight of ten units are only five years old, then report 80%.** Retention schedules are developed (often using empirical data analysis) by organizations to determine the most cost effective method to replace a vehicle/piece of equipment.

Reporting of Replacement Recommended Metric

- ❑ Based upon original definition Retention was reported based upon those units within established criteria or the expected life cycle
 - 90% or greater = **Green**
 - 80-89% = **Yellow**
 - Less than 80% = **Red**

- ❑ Recommendation to report units not within established criteria or outside the life cycle
 - ❑ 10% or less = **Green**
 - ❑ 11%-20% = **Yellow**
 - ❑ Anything greater than 21% = **Red**

- ❑ Current parameters more in line with other metrics and reflect newer equipment/vehicles not requiring replacement

- ❑ New parameters better highlight immediate replacement needs

Stoplight Charts: Retention (Previous)

Light Vehicles



92%

NAFA 1 & 2

Medium Vehicles



79%

NAFA 3 & 6

90% or greater = Green

80% - 89% = Yellow

Less Than 80% = Red

Heavy Vehicles



84%

NAFA 7 & 8

Non-Self Propelled



69%

NAFA 0

Equipment



72%

NAFA 9

Overall



81%

NAFA All

Stoplight Charts: Replacement Recommended

Light Vehicles



8%

NAFA 1 & 2

Medium Vehicles



21%

NAFA 3 & 6

Less Than 10% = Green
10% - 20% = Yellow
Greater Than 20% = Red

Heavy Vehicles



16%

NAFA 7 & 8

Non-Self Propelled



31%

NAFA 0

Equipment



28%

NAFA 9

Overall



19%

NAFA All

Definition: Replacement Recommended

A measurement to compare whether an individual vehicle(s) or piece(s) of equipment are within or exceed established criteria (typically in months or years of age and usage in miles or engine hours) for the expected life cycle or useful life. **Note: Report numbers/percentage for those units outside established criteria or beyond expected life cycle. Example: If replacement for a light truck is six years and eight of ten units are only five years old, then report 20%.** Replacement schedules are developed (often using empirical data analysis) by organizations to determine the most cost effective method to replace a vehicle/piece of equipment.

Parameters: Replacement Recommended

- Reporting units not within parameters - opposite of other three metrics
- Data point all State DOTs should track regarding assigned equipment
- Regardless of budget, manage fleet wisely
- Better highlights replacement needs to management
- May be okay to not replace units used for seasonal programs and contingency purposes on schedule

Parameters: Utilization

- No change at this time
- Slightly broader parameters than other metrics
- May be affected by less utilized seasonal & contingency units
- May be impacted by operations & geography
- Impacted by lack of commercial availability of mission critical assets

Parameters/Stoplight Charts: Utilization

Light Vehicles



54%

NAFA 1 & 2

Medium Vehicles



53%

NAFA 3 & 6

85% or greater = Green

70% - 84% = Yellow

Less Than 70% = Red

Heavy Vehicles



56%

NAFA 7 & 8

Equipment



49%

NAFA 9

Overall



54%

NAFA All

Parameters: Preventive Maintenance

- No change at this time
- Fleet Management Core Competency
- Ensures good health of fleet & enhances availability
- Extends fleet life and reduces long-term costs
- Standards should be high!

Parameters/Stoplight Charts: Preventive Maintenance

Light Vehicles



93%

NAFA 1 & 2

Medium Vehicles



93%

NAFA 3 & 6

90% or greater = **Green**

80% - 89% = **Yellow**

Less Than 80% = **Red**

Heavy Vehicles



96%

NAFA 7 & 8

Non-Self Propelled



89%

NAFA 0

Equipment



89%

NAFA 9

Overall



92%

NAFA All

Parameters: Availability/Downtime

- No change at this time
- Reported the same as PM Compliance
- Important management tool regarding health & condition of fleet assets and ability to meet mission requirements
- Will encourage timely reporting/repair of assets
- Could potentially foster support for additional resources (i.e. parts, people, and funding)

Parameters/Stoplight Charts: Availability/Downtime

Light Vehicles



97%

NAFA 1 & 2

Medium Vehicles



97%

NAFA 3 & 6

90% or greater = **Green**

80% - 89% = **Yellow**

Less Than 80% = **Red**

Heavy Vehicles



92%

NAFA 7 & 8

Non-Self Propelled



98%

NAFA 0

Equipment



96%

NAFA 9

Overall



97%

NAFA All

Region Reporting Status

- ❑ Currently 22 of 50 States (44%) submitted metrics form for posting on the EMTSP website. Twenty-one States (42%) actually reporting data
 - Improvement from 17 States (34%) in June 2014
 - Kentucky did not provide data but is working towards that goal
 - Eight States (42% of those reporting data) are reporting all four metrics
 - Seven States (37% of those reporting data) are reporting three metrics
 - Six States (29% of those reporting data) are reporting two metrics
 - Goal: 34 States to report at least one metric by June 2016

- ❑ Region status:
 - Northeast – 5 of 11 States (45%) reporting metrics
 - ❖ Delaware/Maryland/New Jersey/Pennsylvania/Vermont reporting
 - ❖ Maine/Rhode Island/New Hampshire/New York/Connecticut/Massachusetts not reporting

Region Reporting Status (Continued)

- Midwest – 5 of 13 States (38%) reporting metrics
 - ❖ Michigan/Minnesota/Missouri/Ohio/South Dakota reporting
 - ❖ Illinois/Wisconsin/Oklahoma/Kansas/Iowa “soft” commitment to report
 - ❖ Nebraska/North Dakota/Indiana not reporting

- Southeast – 4 of 13 States (31%) reporting metrics
 - ❖ Arkansas/North Carolina/South Carolina/Virginia reporting
 - ❖ Texas/Louisiana/Mississippi/Georgia/Alabama/West Virginia/Tennessee/Florida not reporting.
 - ❖ *Kentucky has submitted form, but not yet provided data*

- West – 7 of 13 States (54%) reporting metrics
 - ❖ Alaska/Arizona/Oregon/New Mexico/Utah/Washington/Wyoming reporting
 - ❖ Idaho/California commitment to report
 - ❖ Hawaii/Colorado/Nevada/Montana not reporting

M5 Fleet System Webinars

- ❑ Purpose to collaborate and share M5 best practices between State DOTs.
 - Maximize use of Fleet Management System
 - Facilitate/promote national efforts such as reporting of fleet performance metrics

- ❑ Webinars: 10/09/14, 2/26/15, & 4/30/15
 - Eight States participated (Michigan, Virginia, Minnesota, Washington, Vermont, Iowa, Delaware, & Texas) @ 10/09/14 webinar
 - Six States participated (Michigan, Virginia, Minnesota, Vermont, New Hampshire, & Texas) @ 2/26/15 webinar
 - Five States participated (Michigan, Washington, Texas, Delaware, & New Hampshire) @ 4/30/15 webinar

M5 Fleet System Webinars (continued)

□ Discussion items

- Web-based Inventory Checkout System
- Meters and expected usage
- Garage reports/dashboards
- Custom Reports
- MDOT assistance
- Annual Inventory
- Software version 14
- EMTSP website
- M5 Interfaces
- Tracking rental equipment
- Tracking transactions
- Tracking vehicle and equipment build-up
- Standardization of PM Intervals

Michigan DOT Assistance

- ❑ Michigan DOT will assist other State DOTs in reporting metrics on as needed basis
 - Provide access to database
 - Schedule training webinars
 - Sites visits (would need to discuss funding travel)
 - Send sample reports for those States utilizing the same FMS (have done for at least three States)

- ❑ Already provided assistance to Delaware (reporting), Texas, Tennessee, Vermont (reporting), and Virginia (reporting)

- ❑ Reinitiated M5 Fleet Management System webinars in October 2014
 - Allows for sharing of reports
 - Enhances collaboration
 - Better understand concerns of States not reporting

Why Report?

- ❑ Sharing ideas, “benchmarking”, and collaborating nationally regarding “best practices”
 - Enhanced interactions and familiarity via webinars/conference calls with State DOT personnel
 - State Fleet DOT recognition/visibility on EMTSP website
 - Detailed State DOT information in supporting documentation folder on website

- ❑ MAP-21 initiative
 - Reporting of fleet metrics not required
 - Availability, reliability, and maintainability of vehicles and equipment impacts ability to maintain roads and bridges

- ❑ Reflection of State pride and a willingness to become engaged with other DOTs

Examples of DOT Benefits

- ❑ Improved visibility of fleet activities at management level
- ❑ Positive impact and improvement to PM Compliance Statewide (nearly 100% increase in 3 year period)
- ❑ Higher visibility for funding replacement units
- ❑ Improved ability to report seasonal impacts
- ❑ Pertinent fleet reductions/reassignments
- ❑ Improved networking/sharing on a national level

EMTSP Website

- ❑ Individual metrics by region/state
- ❑ Information and Forms section
- ❑ State folders for supporting documentation
- ❑ Access/updates
- ❑ Demonstration/link - <http://www.emtsp.org/>

DOT Contact List

DOT NATIONAL METRICS CONTACT LIST

Updated on 6/02/2015

STATE	CONTACT			Description of Fleet Management System Used	COMMENTS
	NAME	Email	PHONE		
ALABAMA	Ronald Pruitt	pruittr@dot.state.al.us	334-242-6063	In-House	Fleet Manager/Bureau Chief
ALASKA	Diana Rotkis	diana_rotkis@alaska.gov	(907) 269-0787	Homegrown	Fleet Manager
ARIZONA	Gary Lowe	glowe@azdot.gov	602-712-7284	Asset Works M-4	Fleet Manager
ARKANSAS	Danny Keene	Danny.Keene@ahtd.ar.gov	(501) 569-2672	AHTD Equipment Mgmt. System	Division Head, Equipment & Procurement
CALIFORNIA	Lisa Kunzman	lisa.kunzman@dot.ca.gov	(916) 227-9705	AssestWorks - FA	Fleet Manager
COLORADO	Chris Volkert	chris.volkert@state.co.us	(303) 512-5513	SAP	Fleet Manager
CONNECTICUT	James Chupas	james.chupas@ct.gov	(401) 641-7234	Synergen	Equipment Manager
DELAWARE	Jamie Kavelak	Jamie.Kavelak@state.de.us	(302)760-2514	AssetWorks M5	Fiscal Management Analyst
FLORIDA	Angel Birriel	angel.birriel@dot.state.fl.us	850-410-5517	Homegrown	Fleet Manager
GEORGIA	Jim Leben	jleben@dot.ga.gov	(770) 484-3201	AssetWorks FA	Asst. State Equipment Administrator
HAWAII	Llewellyn Honda	llewellyn.honda@hawaii.gov	(808)587-2628	SPRINT GEOTAB G06 "PRO PLAN"	Equipment Supt./Safety Coord.
IDAHO	Steve Spoor	Steve.Spoor@itd.idaho.gov	(208) 334-8413	Agile Assets	Fleet Manager
ILLINOIS	Marty Morris	marty.morris@illinois.gov	(217) 785-7144	MMIS	Fleet Administration Unit Manager
INDIANA	Mark Shields	mshields@indot.in.gov	812-241-9594	Asset Works M-5	Fleet Manager
IOWA	David May	david.may@iowa.gov	(515) 239-1059	Home made mainframe based	Fleet Manager
KANSAS	Tim Cunningham	timc@ksdot.org	(785) 296-3853	Homegrown	Looking to purchase a commercial package
KENTUCKY	Rick Durham	Rick.Durham@ky.gov	502-564-3916	Agile Assets 6.8	Director, Division of Equipment
LOUISIANA	Leslie Mix	Leslie.Mix@la.gov	(225) 379-1796	SAP	Maintenance Management Administrator
MAINE	Donald Hutchins	Donald.Hutchins@maine.gov	(207) 592-7368	AssetWorks - M5	Fleet Manager
MARYLAND	Tim Lawler	tlawler@sha.state.md.us	(410)582-5530	Maximo 4.1.1	Chief, Equipment Division
MASSACHUSETTS	Chuck Labbee	Chuck.Labee@state.ma.us	(781)-431-5108		
MICHIGAN	Scott Ratterree	RatterreeS@Michigan.gov	(517)-284-6444	AssetWorks - M5	Fleet Manager
MINNESOTA	Bob Ellingsworth	Robert.Ellingsworth@state.mn.us	(651) 366-5704	AssetWorks - M5	Fleet Manager
MISSISSIPPI	Julie Ethridge	jethridge@mdot.ms.gov	(601) 359-7930	Financial Management System and Wennsoft-Based Equipment Management System	Asset Management Division Director

DOT Contact List

MISSOURI	Jeannie Wilson	jeannie.wilson@modot.mo.gov	(573) 526-1199	CCG FASTER	Fleet Manager
MONTANA	Jeff Gleason	jegleason@mt.gov	406-444-6151	Agile Assets 7.0	Fleet Manager
NEBRASKA	Janie Vrtiska	Janie.Vrtiska@nebraska.gov	(402) 479-4589	Enterprise Asset Mgt System	Fleet Manager
NEVADA	Kenneth Lee	Kwlee@dot.state.nv.us	(775) 834-8401		Equipment Superintendent
NEW HAMPSHIRE	William Dusavitch	wdusavitch@dot.state.nh.us	(603) 271-3721	AssetWorks - M5	Fleet Manager
NEW JERSEY	James Schmidt	jim.schmidt@dot.nj.gov	(609) 530-2200	AssetWorks M4	Manager, Bureau of Equipment
NEW MEXICO	John Kraul	john.kraul@state.nm.us	(505) 629-5565	AssetWorks - 6.3	Acting Equipment Manager
NEW YORK	Robert Martz	rmartz@dot.state.ny.us	(518) 457-2875	Fleet Anywhere	Director, Office of Fleet Admin and Support
NORTH CAROLINA	Neil Brooks	nbrooks@ncdot.gov	(919) 835-8004	SAP	State Fleet Management Superintendent
NORTH DAKOTA	Robin Rehborg	rrehborg@nd.gov	(701) 328-2543	AssetWorks - FA	Director of Fleet
OHIO	Doug Burke	Doug.burke@dot.state.oh.us	(614) 351-2836	Homegrown EMS	Fleet Manager
OKLAHOMA	Clay Norrell	cnorrell@odot.org	(405) 521-2550	Agile Assets 6.2	Equipment Manager
OREGON	Bruce Erickson	bruce.d.erickson@odot.state.or.us	503-986-2734	AssetWorks - FA	Fleet Manager
PENNSYLVANIA	James Smith	WALSMITH@pa.gov	(717) 787-4299	SAP/Plant Maintenance	Fleet Manager
RHODE ISLAND	Alex Pacheco	apacheco@dot.ri.gov	(401) 734-4872	VUEWorks	Motor Pool Manager
SOUTH CAROLINA	John White	whitejf@scdot.org	803-737-6675	HMMS Customized Module	Director, Supply and Equipment
SOUTH DAKOTA	Brad Maupin	brad.maupin@state.sd.us	(605) 773-3690	Main Frame Application	Fleet Manager
TENNESSEE	Gary L. Bryant	gary.l.bryant@tn.gov	615-741-0699	AssetWorks M5	Administrative Services Manager
TEXAS	Dalton Pratt	dalton.pratt@txdot.gov	(817) 370-3681	AssetWorks M5	Director of Fleet Operations Division
UTAH	Jeff Casper	jeffcasper@utah.gov	(801)-965-4976	Fleet Focus 6.4	Equipment Operations Manager
VERMONT	Ken Valentine	ken.valentine@state.vt.us	(802) 828-2564	AssetWorks -M5	Superintendent
VIRGINIA	Dick Bonistalli	r.bonistalli@vdot.virginia.gov	804-786-0575	AssetWorks M5	Assistant State Equipment Manager
WASHINGTON	Greg Hansen	greg.hansen@wsdot.wa.gov	(360) 705-7862	AssetWorks - M5	Fleet Administrator
WEST VIRGINIA	David Brabham	David.E.Brabham@wv.gov	(304) 473-5500	In House	Director, Equipment Division
WISCONSIN	Bob Sawle	Bob.Sawle@dot.wi.gov	(608) 516-8769	Fleet Focus FA/home grown	Interim Fleet Manager
WYOMING	Bernie Kushnir	bernie.kushnir@wyo.gov	(307)777-4062	Agile Assets Fleet	State Equipment Manager
SASKATCHEWAN (CANADA)	Goran Saric	goran.saric@gov.sk.ca	(306) 933-6217	FLEET MANAGEMENT INFORMATION SYSTEM (FMIS) – CUSTOMIZED COMPUTER APPLICATION	Director of Fleet

Reporting Requirements

- ❑ Twice a year to EMTSP--No later than January 10 & July 10
- ❑ Complete standard form and e-mail to ncpp@egr.msu.edu
- ❑ EMTSP will post to website prior to end of month
- ❑ It is okay to report incremental progress



Adobe Acrobat
Document

Next Steps

- ❑ Report/update metrics information in July 2015
- ❑ Continue striving to meet 2016 goal of 34 States reporting fleet metrics
- ❑ Continue periodic webinars (quarterly)
- ❑ Collaborate to assist states not reporting/or not able to report (Region Champions work with member states)
- ❑ Encourage State DOTs to share “good news” stories or presentations regarding their metric efforts
- ❑ Solicit suggestions to improve/enhance metrics reporting/website
- ❑ Recommendations for future metrics
- ❑ Contractor involvement?
- ❑ Long-term roadmap/plan
- ❑ More executive management attention/support
- ❑ Concentrate focus to report one metric (Preventive Maintenance or Replacement Recommended)
- ❑ Open to new ideas/suggestions

Questions/Discussion

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Contact Information

- Scott Ratterree – Fleet Manager
- Michigan Department of Transportation
- Mailing address: 2522 West Main Street,
Lansing, Michigan 48917
- Phone: 517-284-6444
- Fax: 517-334-7840
- E-Mail: RatterreeS@michigan.gov
- Website address: www.michigan.gov/mdot