SAFM – Cost & Economics
SSF /Cost Conf/Fleet Aging Analysis

Presented to DODCAS
13 Feb 2004

SAFM-CES

Adjusting for SSF Implementation

What is Single Stock Fund?

- ***Single Stock Fund (SSF) is a HQDA business process reengineering initiative to integrate the way secondary items (replacement assemblies, repair parts, and consumables) are managed.***

Background:

- ***Prior supply management process featured both wholesale and retail.***

SSF Implementation to Date:

- ***Milestone 1&2 implemented FY01.***
- ***Milestone 3 implemented FY02-03.***

Adjusting for SSF Implementation

How Did We Account for SSF in Cost Factors?

Pre-SSF:

- ***National demands were captured at wholesale level only; also credit was determined according to an MSC average.***

Under SSF:

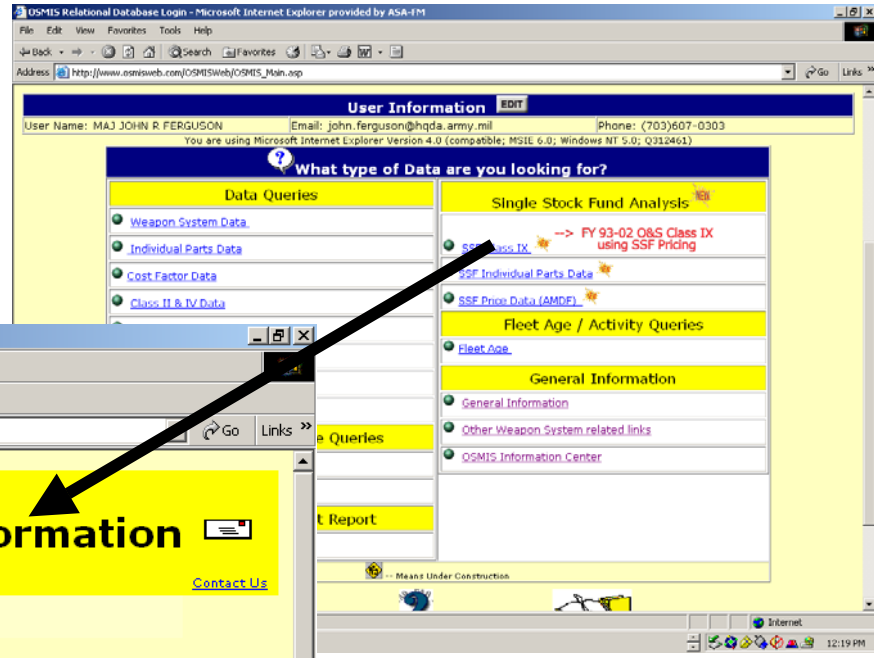
- ***We have merged wholesale and retail demands for FY 99, FY 00, & FY 01 to reflect the changing point of sale; also credit was determined at the NSN level of detail.***

- ***For FY 02 and Forward National demands are captured at wholesale level only; and credit is determined at the NSN level of detail.***

Adjusting for SSF Implementation

How Can You See SSF Estimated Retail and Wholesale Demands on OSMIS?

Added estimate for pre SSF Retail demands



Weapon System Class IX Query Information - Microsoft Internet Explorer provided by ASA-FM

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Address http://www.osmisweb.com/OSMISWeb/OSMIS_SSFClassIXList.ASP

Please do not hit the back button on your browser!!

Press for New Query

Your Weapon System SSF Class IX Information

Contact Us

Current Filter: MDS = M1A1 AND Macom = AW AND Start Year = 2002 AND End Year = 2002 AND Quarter = 1-4 AND report without CONOPS AND AMDF Year = 2002 AND AMDF Quarter = 2

To see the definitions of the column headers, click on them with your mouse.

MDS	MDS Name	Activity Basis	MACOM	MACOM Name	FY	QTR	CONS Estimated Added SSF Extcost ($)	REPS Estimated Added SSF Extcost ($)	CONS SSF Wholesale Extcost ($)	REPS SSF Wholesale Extcost ($)	TOTAL Extcost ($)	Density	AVG Cost / SYS ($)	Activity	A C H O ($)
M1A1	ABRAMS	MILE	E1	USAREUR	2002	1	236,433.54	2,452,246.46	5,541,830.50	12,583,657.08	20,814,167.58	387	53,783.38	68,552	3
M1A1	ABRAMS	MILE	E1	USAREUR	2002	2	266,918.24	2,040,249.75	6,020,129.50	13,981,307.70	22,308,605.19	402	55,494.04	65,205	3
M1A1	ABRAMS	MILE	E1	USAREUR	2002	3	233,867.05	2,010,633.88	5,211,998.06	9,767,625.65	17,224,124.64	444	38,793.07	73,734	2
M1A1	ABRAMS	MILE	E1	USAREUR	2002	4	42,041.63	450,550.25	5,692,217.20	13,558,671.80	19,743,480.88	420	47,008.29	66,581	2
M1A1	ABRAMS	MILE	FC	FORSCOM	2002	1	1,084,652.65	1,268,923.20	7,393,426.73	18,613,815.31	28,360,817.89	484	58,596.73	93,866	3
M1A1	ABRAMS	MILE	FC	FORSCOM	2002	2	2,213,877.71	1,314,849.40	8,456,123.35	23,059,784.95	35,044,635.41	509	68,849.97	89,445	3
M1A1	ABRAMS	MILE	FC	FORSCOM	2002	3	155,836.52	525,086.28	6,189,659.62	15,163,878.93	22,034,461.36	480	45,905.13	82,843	2
M1A1	ABRAMS	MILE	FC	FORSCOM	2002	4	437,604.11	351,094.11	11,527,470.80	30,815,245.95	43,131,414.98	483	89,299.00	85,096	5
M1A1	ABRAMS	MILE	P8	EUSA	2002	1	618,125.26	303,954.69	1,819,261.43	3,821,992.14	6,563,333.53	147	44,648.53	21,594	3
M1A1	ABRAMS	MILE	P8	EUSA	2002	2	53,463.52	1,140,147.64	2,093,896.64	5,086,603.69	8,374,111.50	154	54,377.35	42,668	1
M1A1	ABRAMS	MILE	P8	EUSA	2002	3	55,550.60	110,277.59	2,606,690.08	5,859,821.47	8,632,339.74	147	58,723.40	27,195	3
M1A1	ABRAMS	MILE	P8	EUSA	2002	4	38,175.89	117,791.60	2,628,103.11	6,706,042.49	9,490,113.09	144	65,903.56	24,678	3

Merged wholesale and retail demands

OPTEMPO Cost Conference

- The 2004 OPTEMPO Cost Conference is scheduled to take place in Phoenix/Scottsdale, AZ from 25-29 July 2004.

- Conference information will be available on the OSMIS website later this year that can be accessed through http:/www.asafm.army.mil (OSMIS Reports).

- An official announcement, with detailed information about registration and hotel reservations, will be sent to you in the March/April timeframe, if you attended last year's conference. If you would like to be on the mailing list for conference information, please email us at Cost.FactorConf@hqda.army.mil.

- We plan to offer a program that will provide the latest information and training on OPTEMPO cost issues. This year's conference will cover a period of three and one-half days (one more day than last year) in an effort to allow you to attend a larger number of training workshops and working group discussion forums.

Please mark this event on your calendar, and we look forward to seeing you in July 2004!

Fleet Aging Analysis

Analysis of OSMIS Track Wheel Vehicle Data

Definition of Variables

- Climate (corrosion surrogate):

1- Dry	2- Woodland	3- Mountain	4- Jungle	5- Coastal
Ft. Hood	Ft. Bragg	EUSA	Ft. Polk	Ft. Lewis
Ft. Riley	Ft. Campbell	Ft. Drum		Ft. Stewart
	USAREUR			USARPAC

- Age – average age based on year of manufacture
- Annual Operating Cost – total Class IX obligations
- Cost per mile – Annual Operating Cost/total activity
- Cost per system – Annual Operating Cost/system density
- Activity – miles reported
- OPTEMPO – miles reported per system
- Density – system quantities

Statistical Significance (r2) of Potential Cost Driver Variables and Annual Operating Costs

	Climate (Region)	Activity (Miles)	Age	Density	r2 (all variables)*
HMMWV		X	X		.84
LMTV/MTV		X	X	X	.85
M809/M939 (5 ton truck)		X	X	X	.90
M35 (2½ ton truck)	X	X	X	X	.64
M915 (Tractor)		X		X	.91
HEMMT			X	X	.75

*Note: r2 > .65 is acceptable for budgeting

Activity, Age & Density combined are cost drivers, but these variables independently do not fully explain costs.

Observations

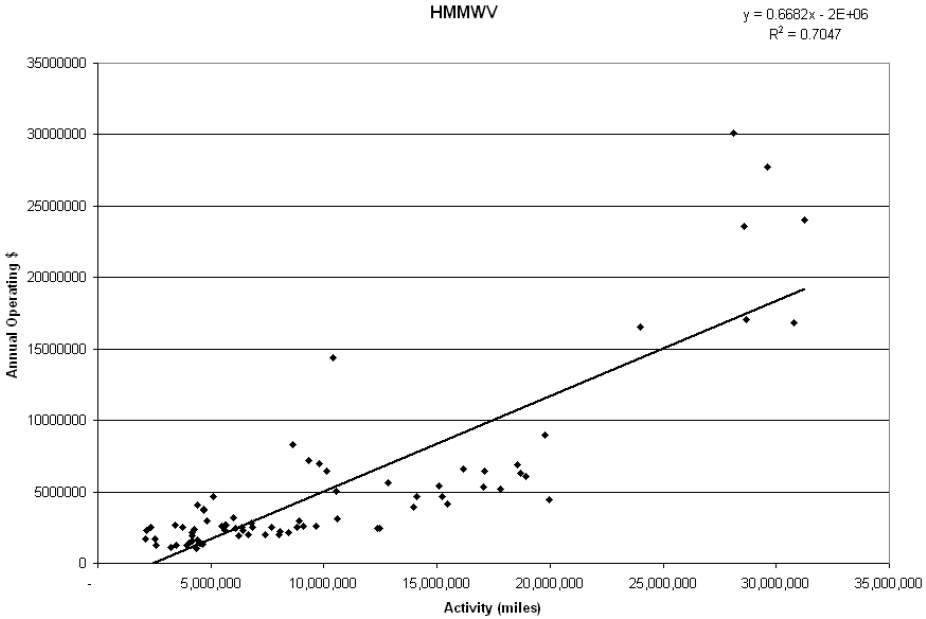
- Activity, Age & Density combined are cost drivers, but these variables independently do not explain costs.
- Average Cost per system appears to be a low proportion of new acquisition costs:

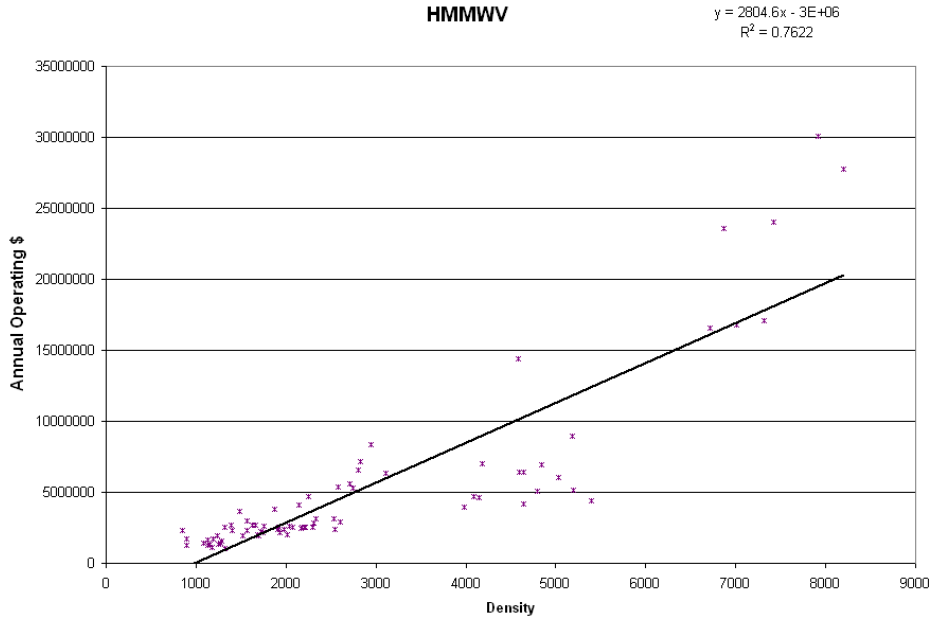
	HMMWV	FMTV	M809/M939	M35	M915	HEMTT
Annual Operating $ as % of Acquisition $	< 1.5%	< .5%	< 1.5%	< 1.5%	< 2.5%	<1.5%

- TWV readiness reports consistent over last 5 years:

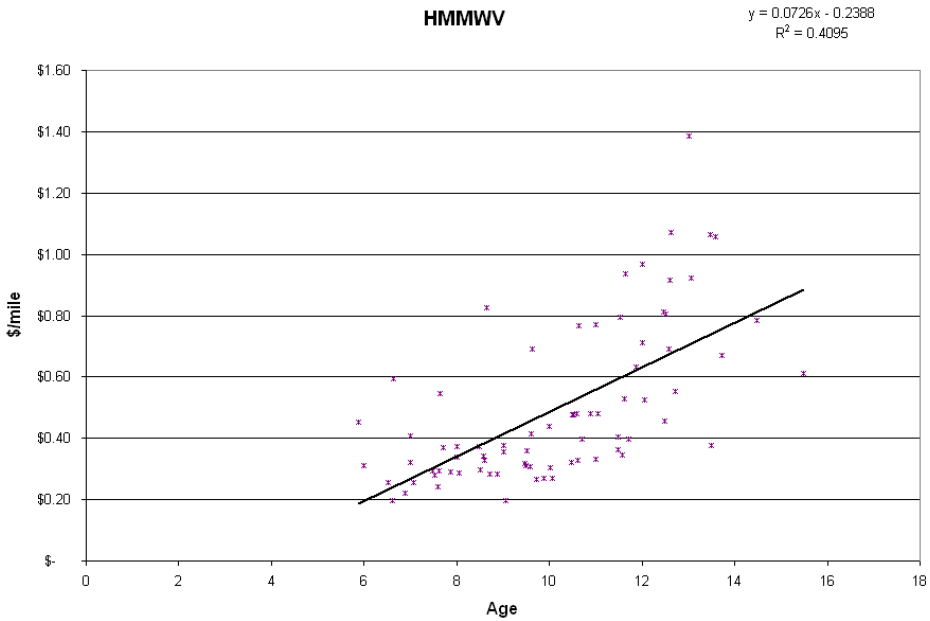
	HMMWV	FMTV	M915	HEMTT
FMC %	91-96%	92-96%	82-98%	84-91%

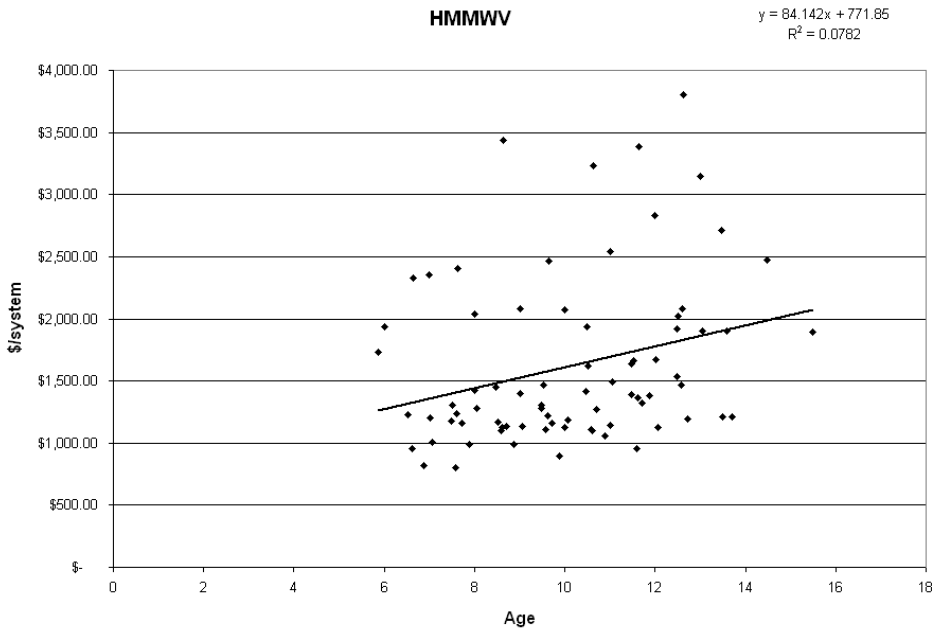
- Annual cost per system is trending higher as OPTEMPO is declining.
- Top 10 cost drivers (parts) represent 20-50% (FY02) of total annual operating costs.
- Top 10 cost drivers consistent over the FY97 to FY02 timeframe.
- Current maintenance practices do not result in greater cost per mile for corrosive climates.
- No significant spikes in average annual operating costs per system.

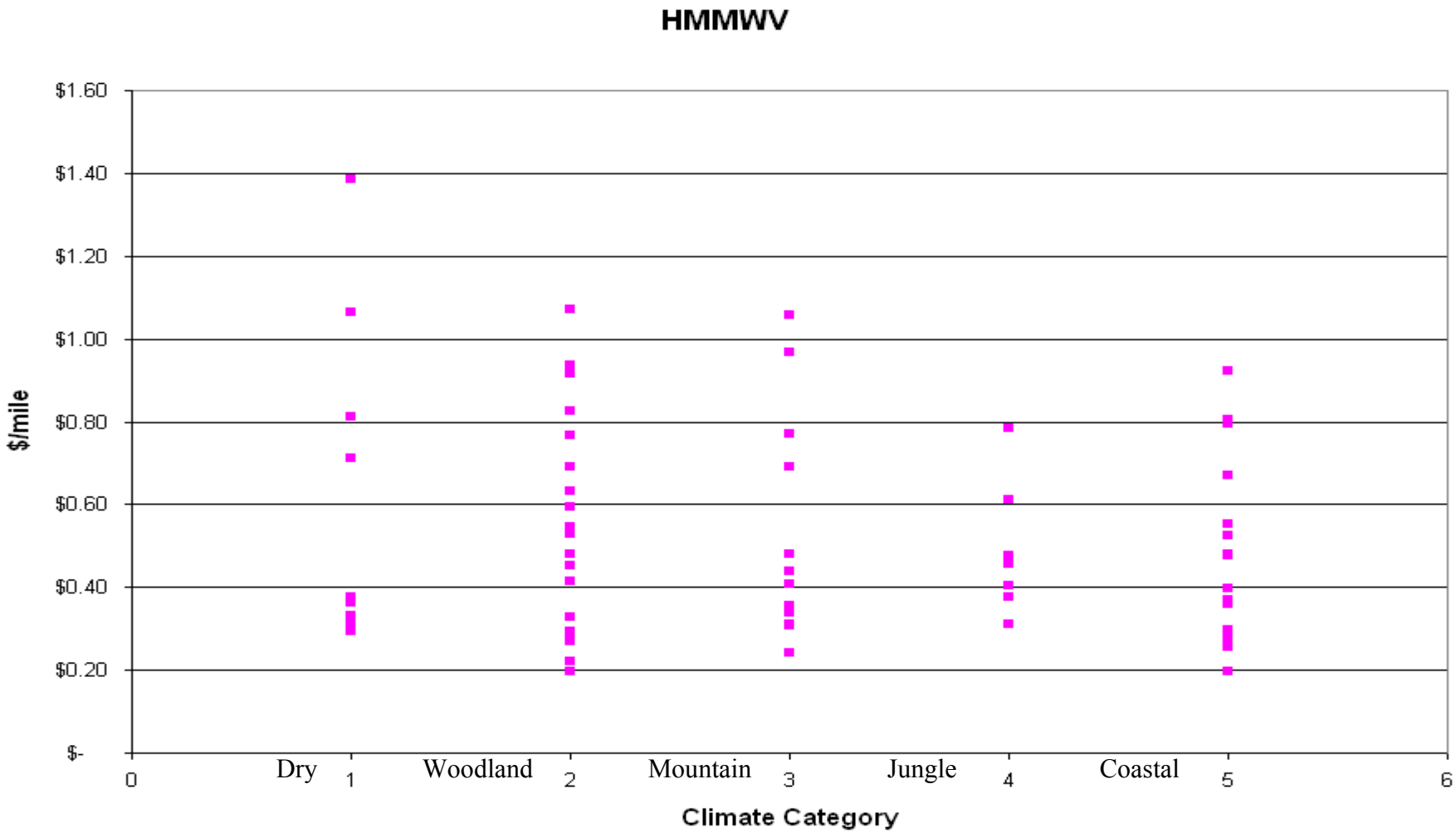




Activity, Density & Age impact Costs







Current maintenance practices do not result in greater cost per mile for corrosive climates.

HMMWV FY02 Top 10 Cost Drivers

1. Engine (top 2 driver last 6 years)
2. Tires (top 3 driver last 6 years)
3. Control Remote Switch
4. Battery (top 8 driver last 5 years)
5. Generator
6. Transmission
7. Engine Starter
8. Driving Differential
9. Voltage Regulator
10. Windshield

Armywide: FORSCOM, USAREUR, Korea

Consistent Top 10 Cost Drivers for at least 5 of last 6 years

Conclusions

- Average annual operating costs per system by itself is not a good criteria to support new acquisition decisions. For acquisition decisions use vehicle age (adjusted by maintenance history) and mileage, assuming it can be tracked by individual systems.
- Top 10 System Class IX Cost Drivers account for 20-50% of system annual operating costs. Focus maintenance efforts on these key parts to reduce O&S costs and add life expectancy to vehicle.
- Impact of refurbishment/overhaul programs needs to be evaluated.