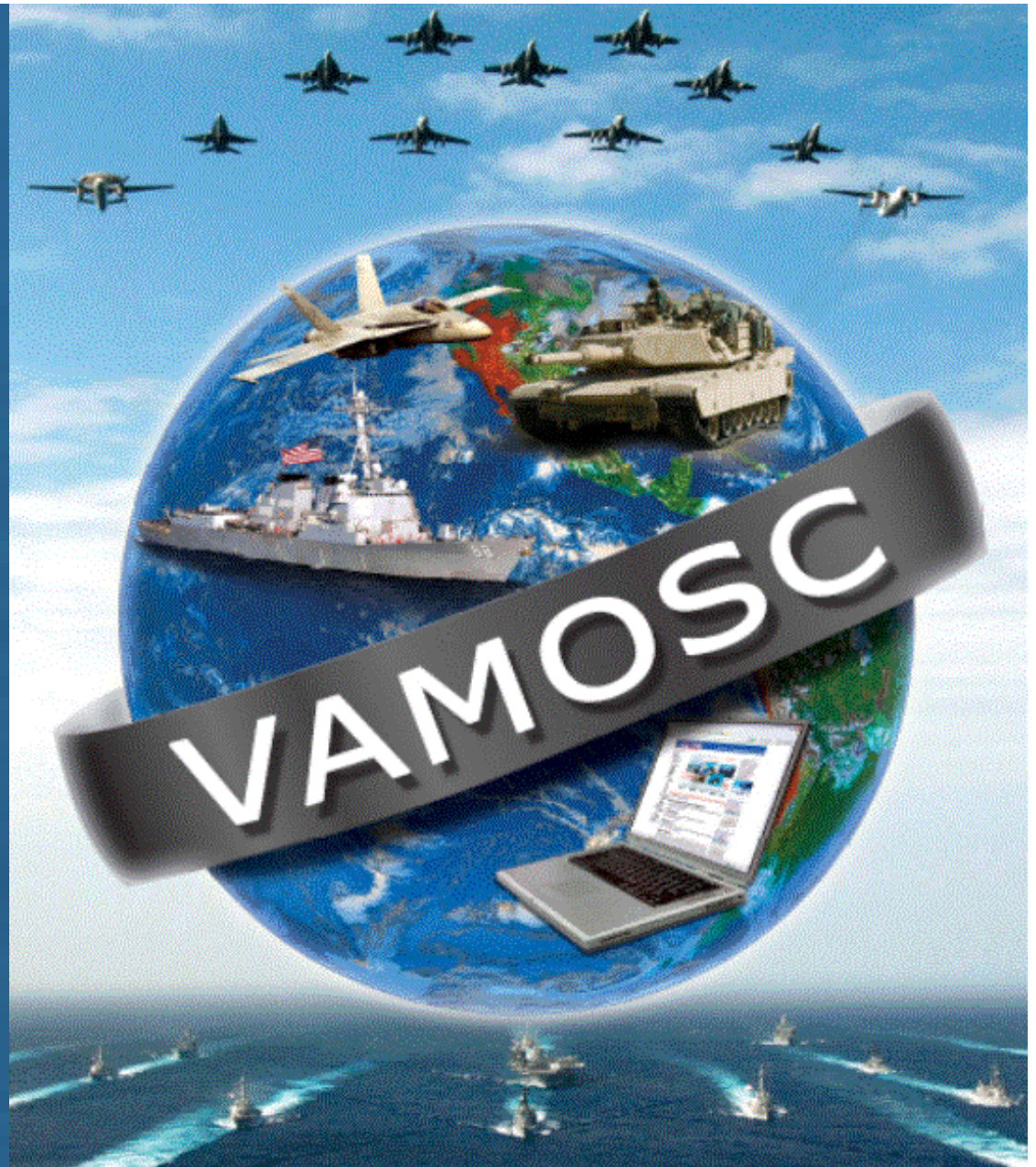
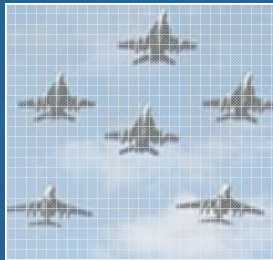
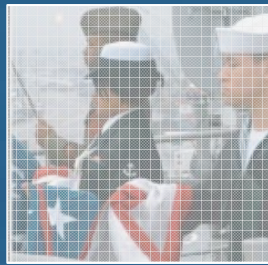


Manpower cost Estimating Tool for Enhanced Online Reporting (METEOR)



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Agenda

- METEOR Overview
- Direct Costs
 - VAMOSOC Data Source
 - Manpower Planning
- Indirect Costs
 - Data Source
 - Cost Of A Sailor Methodology
 - Linkage Between Direct and Indirect
 - Regression Coefficients
- Strengths & Weaknesses
 - Comparison to Others Methods
- Getting Access



METEOR Overview

What is METEOR?

- METEOR is a tool that estimates manpower costs
- Direct Costs
 - OSD CAIG Element 1.0 Unit Level Manpower
 - Data Source VAMOSC
- Variable Indirect Costs
 - OSD CAIG Element 6.0 Indirect Support
 - Derived from Cost of a Sailor (COAS) Study
 - Data Source Budget Material
- Web enabled application
- Successor to Navy's COMET Model



Direct Cost

Naval Visibility and Management of Operating and Support Costs

Aviation

FY86-08 (Aircraft Level)
FY96-08 (Maintenance)



Navy Infrastructure

FY06-07
Certified Obligations
Real Property Records



Ships

FY84-08 (Ships)
FY93-08 (Ship Systems)
FY90-08 (MSC)



USMC Ground Systems

FY1995 - 2008
429 Ground Combat Systems



Weapons

FY1990 - 2008
27 Air/Surface-Launched Missiles
5 Torpedoes



Personnel

FY2002 - 2008
Navy & Marine Corps
Active & Reserve Personnel





Direct Cost

VAMOSOC Data Source

Personnel

FY2002 - 2008

Navy & Marine Corps
Active & Reserve Personnel



<u>Direct Costs</u>	<u>Data Source</u>
	MPN
1. Basic Pay	DMDC ¹
2. Retired Pay Accrual	VAMOSOC ³
3. Basic Allowance for Housing	DMDC ¹
4. Subsistence	DMDC ¹
5. Incentive Pay, Haz Duty & Aviation Career	DMDC ¹
6. Special Pays	DMDC ¹ , Budget ²
7. Allowances	DMDC ¹
8. Separation Payments	DMDC ¹
9. SSX Payment	VAMOSOC ³
10. Permanent Change of Station	DMDC ¹

¹ Defense Manpower Data Center

² Military Personnel - Navy (MPN) 2008/2009 Budget

³ Calculated by VAMOSOC on base pay

- **Direct costs = \$ paid directly to a sailor**
- **Direct costs come from the VAMOSOC, which is fed data from the Defense Manpower Data Center (DMDC).**
- **METEOR adds bonus previously not available**



Direct Cost

Example of Manpower Planning

Scenario	
Direct costs source	vamosc
Platform Selection	
Platform	SHIPS
Ship Type	SUBMARINE (NUCLEAR PROPULSION)
Ship Class	LOS ANGELES
Ship Flight	FLIGHT III
Manning Selection	
Ship Name	COLUMBIA
Manpower Lifecycle Costs Inputs	
Start Year	2007
Duration	1
Duty Type	Active Duty
Manning Level	AQD/NEC

Pay Grade	Designator	AQD	2007	
O01	1170	0	0.48	
O01	1170	SN0	0.05	
O01	1175	0	0.33	
O01	1175	SN0	0.87	
O01	3100	0	0.2	
O01	3105	0	0.18	
O01	3105	SQ1	0.05	
O02	1120	0	0.33	
O02	1120	SN0	0.27	
O02	1125	SN0	2.65	
O02	1170	0	1.32	
O02	1170	SN0	0.42	
O02	1175	0	0.35	
O02	1175	SN0	2.82	
O02	3100	0	0.05	
O02	3100	SQ1	0.1	
O02	3105	SQ1	0.23	
O02	3107	0	0.03	
O02	3107	SN0	0.07	
O03	1120	SN0	2.22	
O03	1125	SN0	1.4	
O03	1170	SN0	0.13	
O03	1175	SN0	0.2	
O03	3107	0	0.12	
O03	3107	SQ1	0.13	
O03	6400	KD4	0.28	
O04	1120	SC2	0.07	
O04	1120	SN0	2.08	
O05	1120	SN0	1.05	
Total		0	0	18.48

All Navy
Lieutenant (O3)



Lieutenant
Submarine Service
Nuclear Qualified



- Develops historical manning by ship type, class, and hull
- Manpower Life-Cycle cost inputs by pay grade, designator/rating, and AQD/NEC



Direct Cost METEOR Model Output

Scenario	Element	O01	O02	O03	O04	O05	O06
Direct cost: vamosc	Base Pay	33944.68	44299.93	57083.7	70123.93	84364.46	99029.21
	Retirement	9161.33	11952.56	15413.55	18942.84	22775.35	26570.96
Platform Selection	BAH	408.81	0	1322.91	0	0	0
Platform SHIPS	MIHA Misc Amt	0	0	0	1065.46	0	0
SUBMARINE (NUCLEAR PROPULSION)	OHA	0	0	7487.12	61644.24	24505.49	0
Ship Type	VHA I	16679.28	17914.99	21300.06	24966.09	25752.15	28345.22
Ship Class LOS ANGELES	BAS	2298.06	2290.78	2289.03	2290.42	2307.78	2303.76
Ship Flight FLIGHT III	Career Sea Pay	1527.12	1404.59	2230.17	3603.5	4530.81	3512.44
Manning Selection	Hazardous Duty Pay I	3136.82	3954.6	7589.15	8610.48	9356.74	10291.21
	Career Sea Pay Premium	1519.52	1709.14	1371.22	1244	1382.08	0
Manpower Lifecycle Costs Inputs	Diving Duty Pay	3201.53	2516.97	2018	2126.3	0	0
Start Year 2007	Foreign Language Proficiency Pay I	3600	3600	0	4200	1096.8	0
Duration 1	Hostile Fire / Imminent Danger Pay	3359.22	3179.96	3162.73	3316.96	3241.25	0
Duty Type Active Duty	Officer Saved Pay	6189.79	1279.56	880.08	978.75	0	0
Manning Lt A/QD/NEC	Clothing / Uniformed Equipment Allowance	555.18	0	228.5	0	0	0
	COLA	5012.94	5681.35	6815.84	8773.6	9685.36	0
Lieutenant	CONUS COLA	0	2077.88	3792.61	0	0	0
Submarine Service	FSA II	3100.76	3581.23	3443.68	3564.56	3792.16	0
Nuclear Qualified	Accrued Leave Pay	0	3488.66	845.45	0	0	0
	FICA	2596.77	3388.94	4366.9	5364.48	6453.88	7575.73
	PCS	6231.95	7393.28	11358.57	15768.8	13624.48	13616.36
	Nuclear Career Annual Incentive Bonus	587.49	180.32	656.13	984.96	4469.9	0
	Total	103111.3	119894.7	153655.4	237569.4	217338.7	191244.9



Direct Costs displayed by elements and Grade



Indirect Costs

PRESBUD Data Source

Indirect Costs	Data Source	
	MPN	OMN
1. Recruiting	DMDC ¹	Budget ²
2. Officer Acquisition	DMDC ¹ , NETC ³	Budget ² , NETC ³
3. Base Support/Administrative	Budget ²	TBD
4. Training (Basic)		NETC ³
5. Training (Professional)		NETC ³
6. Medical		Navy Comptroller Rates ⁴
7. Individual's Account (TPPH)	DMDC ¹	TBD

¹ Defense Manpower Data Center

² Operations and Maintenance - Navy (OMN) 2008/2009 Budget

³ Naval Education and Training Command (Cost Factors Handbook)

⁴ Military Personnel Composite Standard Pay and Reimbursement rates



DEPARTMENT OF THE NAVY FY 2008
PRESIDENT'S BUDGET

YOUR NAVY AND MARINE CORPS - FIGHTING THE LONG
WAR...AND PREPARING FOR FUTURE CHALLENGES

5 February 2007

- Indirect costs = \$ that support of the entire establishment and not just the sailor
- Indirect costs come from the budget data
- Incorporates data from 1992 to 2008 to include Medical and retirement changes



Indirect Cost

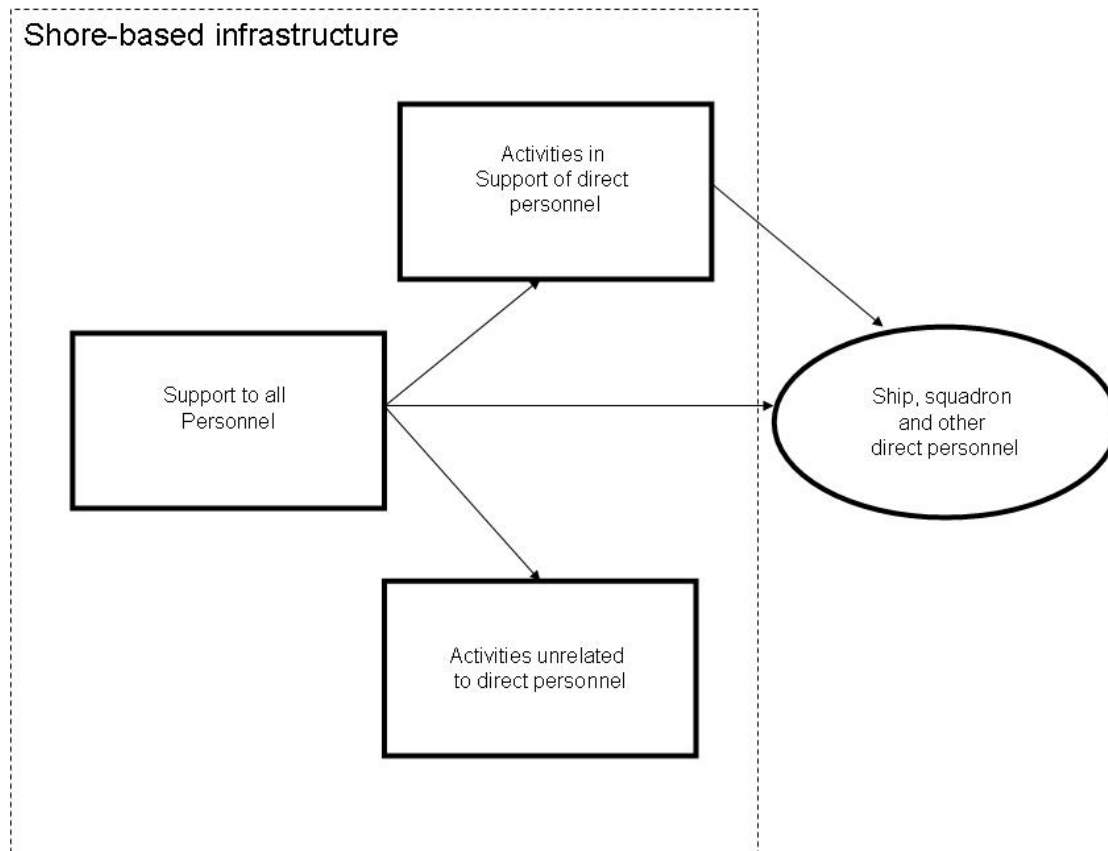
Cost Of A Sailor (COAS) Methodology

- Used same assumptions
 - Based on Program Elements with Strong linkage between Afloat (direct) and Ashore (indirect)
- Updated with recent budgeting data (FY95-08)
- Regression analysis to develop relationships
 - Number of officers/enlisted in direct forces
 - Number of officers/enlisted in support forces and amount of OMN associated with support infrastructure
 - Number of officers/enlisted with no personnel support role



Indirect Cost

Linkage Between Direct and Indirect Personnel

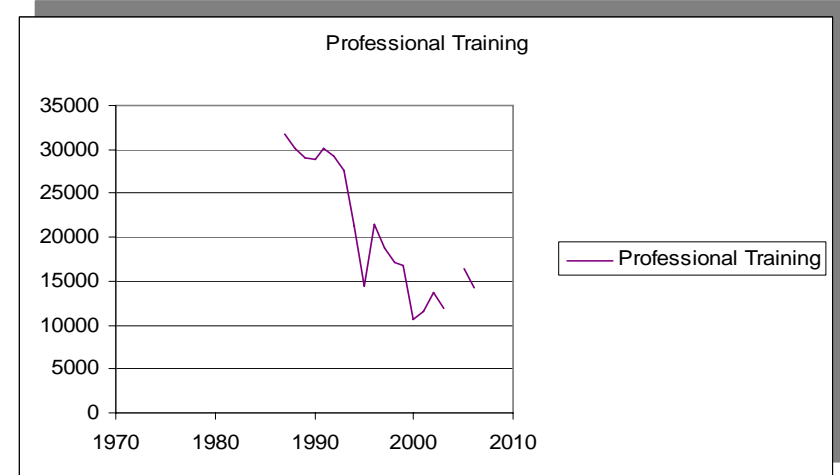
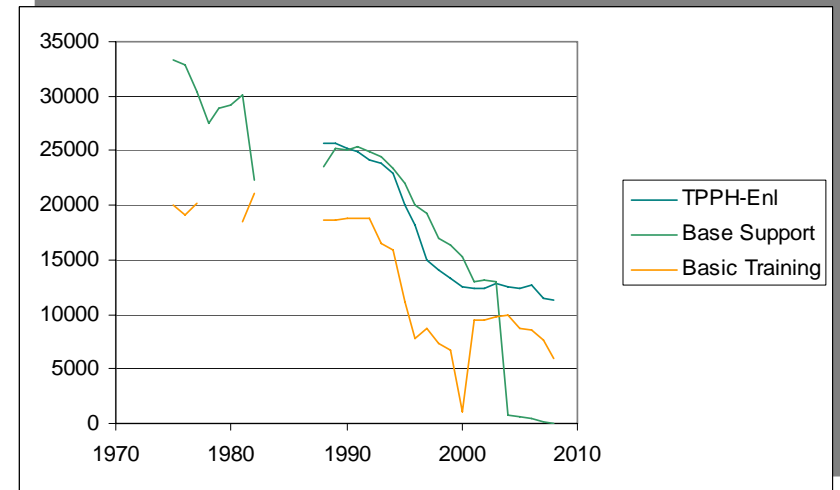
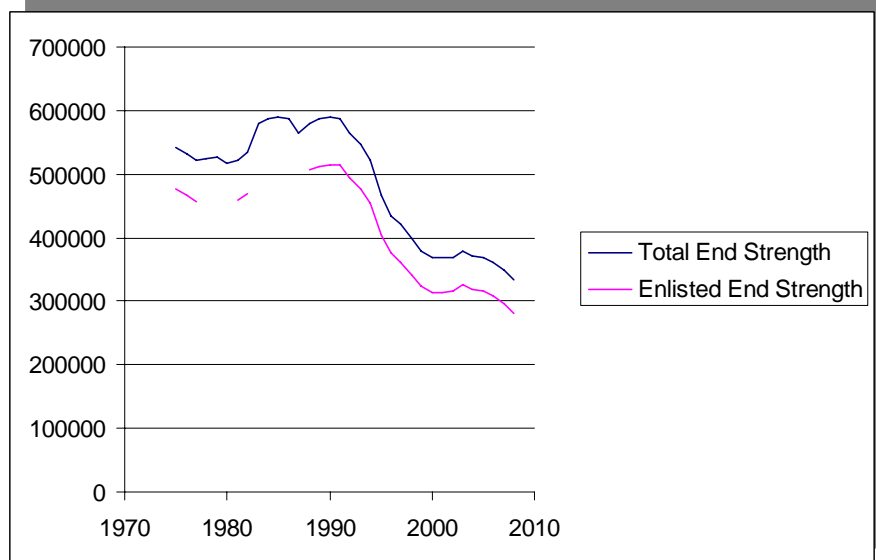


- Recruiting
- Officer Acquisition
- Training (basic)
- Training (Professional)
- Base support / Admin
- Medical
- TPPH



Indirect Cost

Historical FYDP data (FY1995 - 2008)





Indirect Cost MPM Regression Coefficients

Indirect Cost Category	Dependent Variable	Explanatory Variable	Sample Yrs.	Factor Est.	t-ratio	R ²
Recruiting	Total count in recruiting activity	Enlisted End Strength	75-83; 88-08	0.0106	11.40	0.82
Officer Acquisition	Total count in officer acquisition	Officer End Strength less count in acquisition activities	88-04	0.0408	9.68	0.86
TPPH-Officer	TPPH Off	Officer End Strength less TPPH Off	88-08	0.1498	18.64	0.95
Medical	MPN Costs	End Strength	92-04	1057.00	4.43	0.64
TPPH-Enlisted	TPPH Enl	Enl End Strength less TPPH Enl	88-08	0.0702	33.63	0.98
Base Support	Total count associated with base support	End Strength	75-82; 88-03	0.0628	6.31	0.64
Administration	Total count associated with admin. Activities	End Strength	75-82; 88-98; 04-08	0.0037	5.18	0.55
Basic Training	Total count associated with basic training	Enlisted End Strength	75-82; 88-08	0.0665	9.67	0.79
Professional Training	Total count associated with professional training	Total End Strength less total count associated with professional Training	88-04; 06-07	0.0803	11.04	0.88



Indirect Cost METEOR Model Output

Scenario
 Direct costs source vamosc

Platform Selection
 Platform SHIPS
 Ship Type SUBMARINE (NUCLEAR PROPULSION)
 Ship Class LOS ANGELES
 Ship Flight FLIGHT III

Manning Selection
 Ship Name COLUMBIA

Manpower Lifecycle Costs Inputs
 Start Year 2007
 Duration 1
 Duty Type Active Duty
 Manning Level AQD/NEC

ENLISTED INDIRECT

Element	MPN	OMN	MPN-SPA	Total By Cost Element
Administration	288.06	0	0	288.06
Base Support	4889.18	1029.03	0	5918.21
Basic Training	5177.24	0	0	5177.24
Medical	1056.99	0	0	1056.99
Professional Training	6251.61	0	2639.93	8891.54
Recruiting	825.24	0	0	825.24
TPPH	4760.06	0	0	4760.06
Total	23248.38	1029.03	2639.93	26917.34

OFFICERS INDIRECT

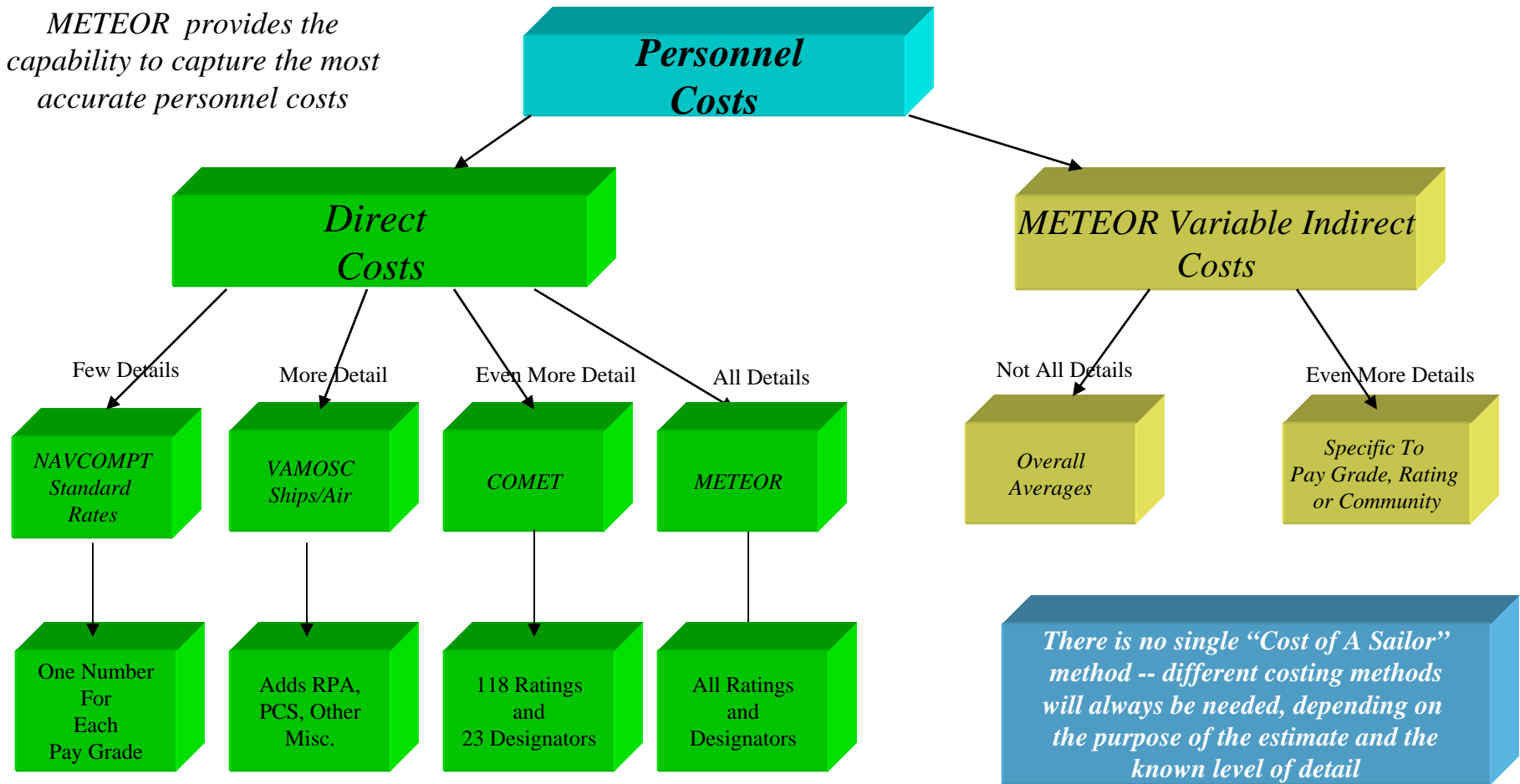
Element	MPN	OMN	MPN-SPA	Total By Cost Element
Administration	288.06	0	0	288.06
Base Support	4889.18	1029.03	0	5918.21
Medical	1056.99	0	0	1056.99
Officer Acquisition	5552.43	0	1679.21	7231.64
Professional Training	6251.61	0	11205.37	17456.98
TPPH	20386.14	0	0	20386.14
Total	38424.41	1029.03	12884.58	52338.02

Indirect Costs displayed by elements and appropriations



Comparison to Other Costing Methods

METEOR provides the capability to capture the most accurate personnel costs





Strengths

- Speed...
 - Manpower-to-Manpower O&S analysis
 - Manpower-to-Hardware O&S analysis
 - Total Ownership Cost studies
 - Cost exercises that require Squadron/Ship manning detail
 - Generate Manning Documents
 - Generate Cost Baseline
- Accuracy...
 - Based on actual
 - Run Lifecycle Cost Analysis
 - Run Delta Analysis



Weaknesses

- Model and costing methodology for Ship Platforms
 - Potential to be expanded to include any platform, base, or squadrons
- Indirect categories were exclusively based on NCCA COAS studies
 - Program Elements need to be reviewed to expanded known indirect costs
- Indirect costs treated as linear allocations
 - Cost savings realized when large, macro cuts are made to headcount (step function)



Access

- Access granted to authorized users
 - Government personnel and government-sponsored contractors
- Obtaining data:
 - Special request
 - VAMOS user account
 - Corporate documents
 - Custom queries
 - METEOR Manpower M
- More info:
 - On-line training
 - User Documents
 - On-line support
 - FAQs

Navy
VAMOS.com

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Conclusion

- Naval VAMOSOC
 - Navy's official operating and support cost database
 - Data available to government & contractors
 - Homepage: <http://www.navyvamosoc.com>
- METEOR:
 - Strengthen cost analysis within the Department of Navy for operating and support cost estimates
 - Improves direct cost details for identification of cost drivers
 - Better, precise and comprehensive costing tool for indirect costs
 - Leverage web based technology for application availability



Questions?



Sailors serving everyday