

# **Lean Six Sigma RIE Project Summary: BUMED-NCA-INDUSTRIAL HYGIENE- FY11:IMPROVE DOEHRS-IH UTILIZATION**

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**NAVMED NCA**

# INTRODUCTION

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- **DOEHRS UTILIZATION METRICS**
- **NAVY DOEHRS USE STATUS (2-11 to 2-12)**
- **LEAN SIX SIGMA OVERVIEW**
- **DOEHRS IH LEAN SIX SIGMA PROJECT**

# DOEHRS-IH UTILIZATION METRICS

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- **BUMED DOEHRS-IH METRICS (7-24-09 MANDATE, 5-YEAR PLAN)**
- **OMB METRICS (The % of DoD high risk-designated workplaces that have an annual hazard characterization assessment completed within the last 12 months)**
- **DOD DOEHRS-IH UTILIZATION METRICS (DHSS)**

# BUMED DOEHRS-IH IMPLEMENTATION GOALS

## DOEHRS-IH IMPLEMENTATION AND UTILIZATION GOALS FY-10 through FY-14

DOEHRS-IH Implementation/Utilization Focus Items <sup>1</sup>	Percent (%) Implementation/Utilization <sup>1</sup>				
	FY-10	FY-11	FY-12	FY-13	FY-14
1. Regular use of DOEHRS-IH by trained IHPO staff.	100 for all years				
2. Entry of IHPO IH equipment into DOEHRS-IH	All equipment is expected to be entered in FY-10				
3. Entry of AOR supported commands into DOEHRS-IH	20	40	60	80	100
4. Entry of AOR Shops into DOEHRS-IH:					
a. Entry of AOR Priority 1 (i.e., WCC "A") Shops into DOEHRS-IH	20	40	60	80	100
b. Entry of AOR Priority 2 (i.e., WCC "B") Shops into DOEHRS-IH	20	40	60	80	100
c. Entry of AOR Priority 3 (i.e., WCC "C") Shops into DOEHRS-IH	20	40	60	80	100
5. Entry of Shop processes into DOEHRS-IH	20	40	60	80	100
6. Entry of personal air samples into DOEHRS-IH. (Note: Requires previous entry of applicable Command, Shop, Processes, SEG, and IH equipment into DOEHRS-IH.)	50	75	100	100	100
7. Entry of personal noise dosimetry samples into DOEHRS-IH. (Note: Requires previous entry of applicable Command, Shop, Processes, SEG, and IH equipment into DOEHRS-IH.) <sup>2</sup>	50 <sup>2</sup>	75 <sup>2</sup>	100 <sup>2</sup>	100 <sup>2</sup>	100 <sup>2</sup>

**Note:**

1. IHPOs that are migrating legacy data shall delay entering DOEHRS data until migration is complete.
2. Personal noise dosimetry metrics will be reported annually by individual MTFs via the annual BUMED Metrics reporting process.

Enclosure (1)



# BUMED DOEHRS-IH IMPLEMENTATION STATUS FY11

METRIC	REQD	DONE	%	FY 11 GOAL	MET GOAL?
PRIORITY 1 SHOPS	5690	3596	63	40	YES
PRIORITY 2 SHOPS	14615	8009	55	40	YES
PRIORITY 3 SHOPS	5813	3605	62	40	YES
PROCESSES	114234	43687	38	40	MAYBE
IH EQUIPMENT	4761	4654	98	100	MAYBE
PBZ + ND SAMPLES	8288	6303*	76	75	MAYBE*

**\*Not certain that all samples are PBZ or ND**

# OMB METRICS SUMMARY

## JAN-DEC 2011

Month	Army	Navy	Air Force	Average
31-Jan-11	49.14%	0.40%	60.92%	25.78%
28-Feb-11	45.61%	31.65%	56.70%	41.33%
31-Mar-11	46.04%	40.34%	55.19%	45.12%
30-Apr-11	47.12%	39.36%	61.07%	46.06%
31-May-11	47.95%	38.49%	66.01%	46.68%
30-Jun-11	52.21%	39.03%	68.06%	48.99%
31-Jul-11	49.69%	35.20%	63.65%	45.46%
31-Aug-11	46.86%	30.47%	61.94%	41.91%
30-Sep-11	49.10%	28.36%	62.06%	41.84%
31-Oct-11	47.31%	27.41%	63.07%	40.82%
30-Nov-11	47.77%	25.52%	71.56%	41.07%
31-Dec-11	51.22%	4.96%	72.01%	33.12%

## OMB Metrics – Next Steps\*

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- “PMO is concerned about this metric and how it is being reported because goals are not being met
  - Concerned about an OMB query about the reasons for the low metrics
    - Any response to OMB concerns will have to be provided by the Services”
- “In looking at the data, the PMO suggests the Navy needs to review its policies and procedures to see what might be done to improve the results and help us to understand what is driving the low results”

\*Derived from OMB Metric Review powerpoint presentation dtd 8 February 2012

## DOD DOEHRS-IH UTILIZATION METRICS

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- PREPARED MONTHLY FOR DEFENSE HEALTH SERVICES SYSTEMS (DHSS) BY NORTHRUP GRUMMAN
- PURPOSE IS TO MEASURE THE DEGREE TO WHICH DOEHRS IS USED THROUGHOUT DOD



# DOD DOEHRS-IH UTILIZATION METRICS

Entity	Metric
Program Office Personnel	A count of the number of accounts approved by Industrial Hygiene Program Office (IHPO).
Shops	A count of the number of Shops created within each IHPO.
Processes	A count of the number of Processes associated with Shops created within each IHPO.
Master Schedule	A count of the number entries in the Master Schedule for each IHPO.
WMP	A count of the number of Workplace Monitoring Plan (WMP) entries (e.g., sampling tasks) for each IHPO.
Samples	A count of the number of industrial hygiene samples for each IHPO.
SEGs	A count of the number of similar exposure groups (SEGs) created within each IHPO.
IH Assessments Defined	A count of the number of industrial hygiene assessments identified and defined within each IHPO.
IH Assessments Completed	A count of the defined industrial hygiene assessments that have been assessed/completed by each IHPO.



# DOD DOEHRS METRICS STATUS

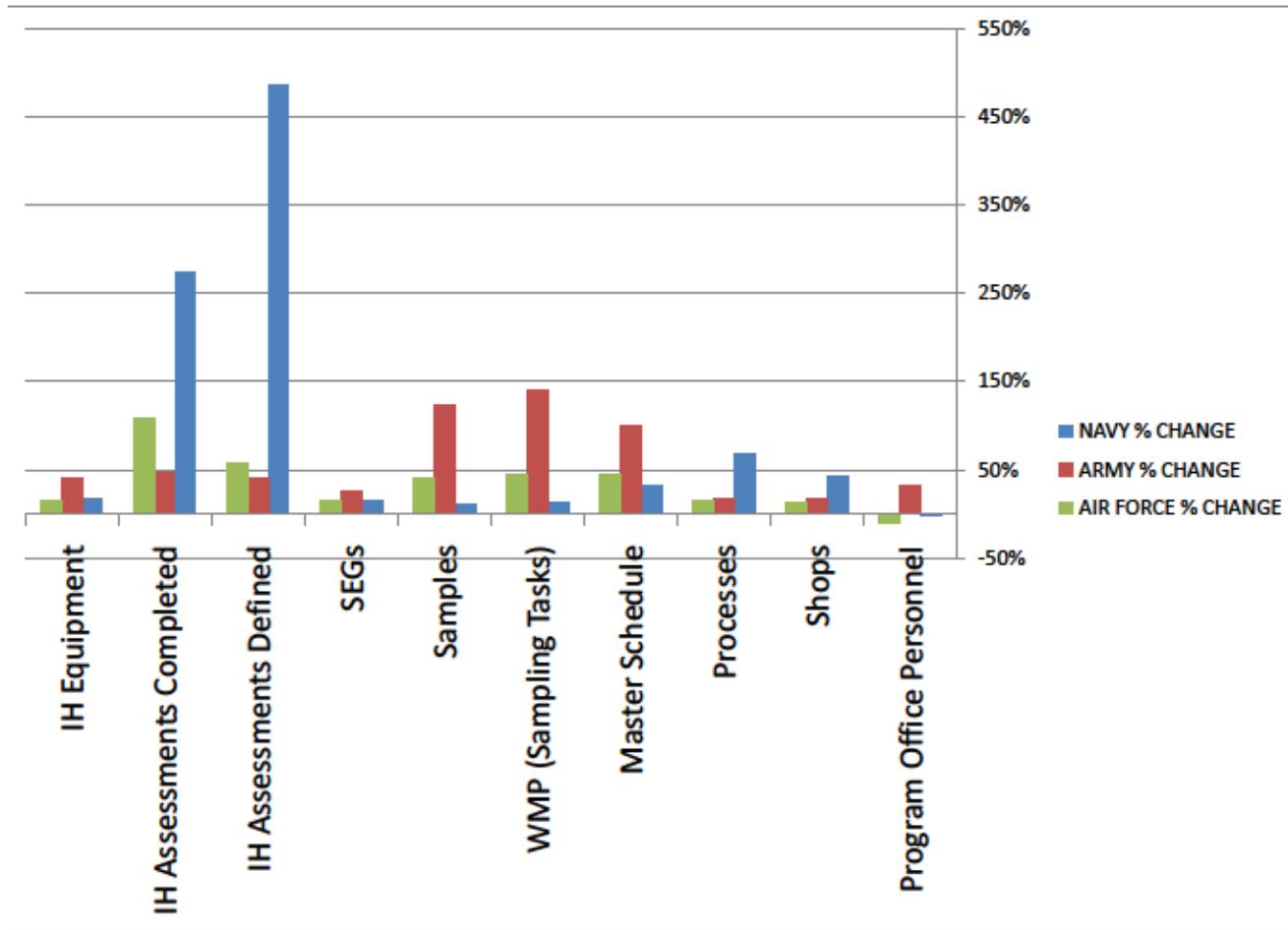
## 2-11 to 2-12

SUMMARY DATA AS OF:	NAVY-2/1/2011	NAVY-2/3/2012	ARMY-2/1/2011	ARMY-2/3/2012	AIR FORCE-2/1/2011	AIR FORCE-2/3/2012
Program Office Personnel	403	395	935	1239	2456	2180
Shops	14830	21217	22904	27016	12568	14281
Processes	28636	47962	47525	55536	60659	70017
Master Schedule	46155	61092	65874	132016	137484	198070
WMP (Sampling Tasks)	45699	52119	35530	85035	99750	144144
Samples	64173	71710	47044	105148	133355	186787
SEGs	10658	12179	4477	5602	11519	13257
IH Assessments Defined	175	1027	2412	3388	55396	87225
IH Assessments Completed	97	364	1508	2229	6864	14387
IH Equipment	5956	6940	10247	14507	24211	27767



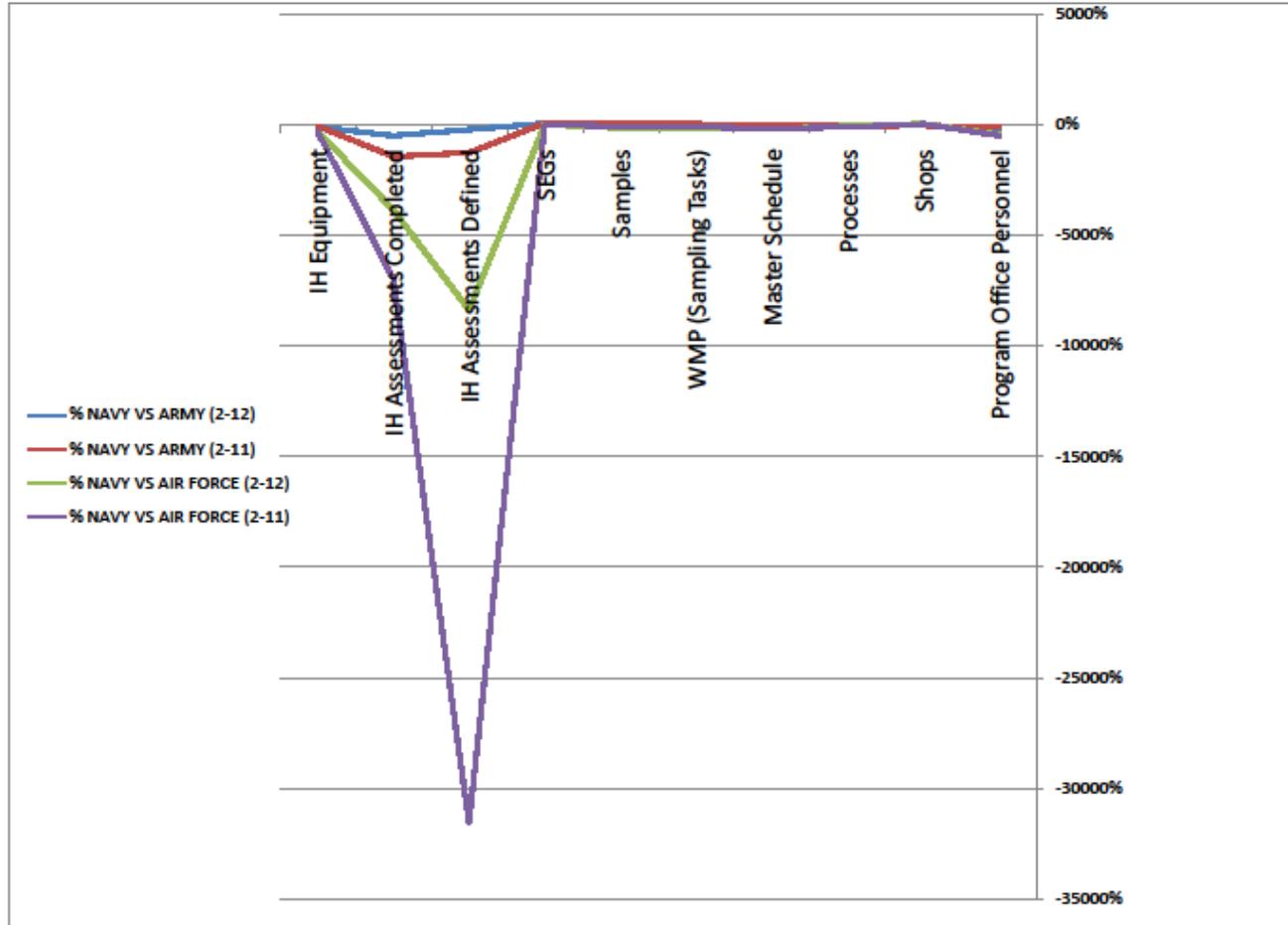
# DOD DOEHRs METRICS SELF COMPARISONS

## % CHANGE 2-11 TO 2-12



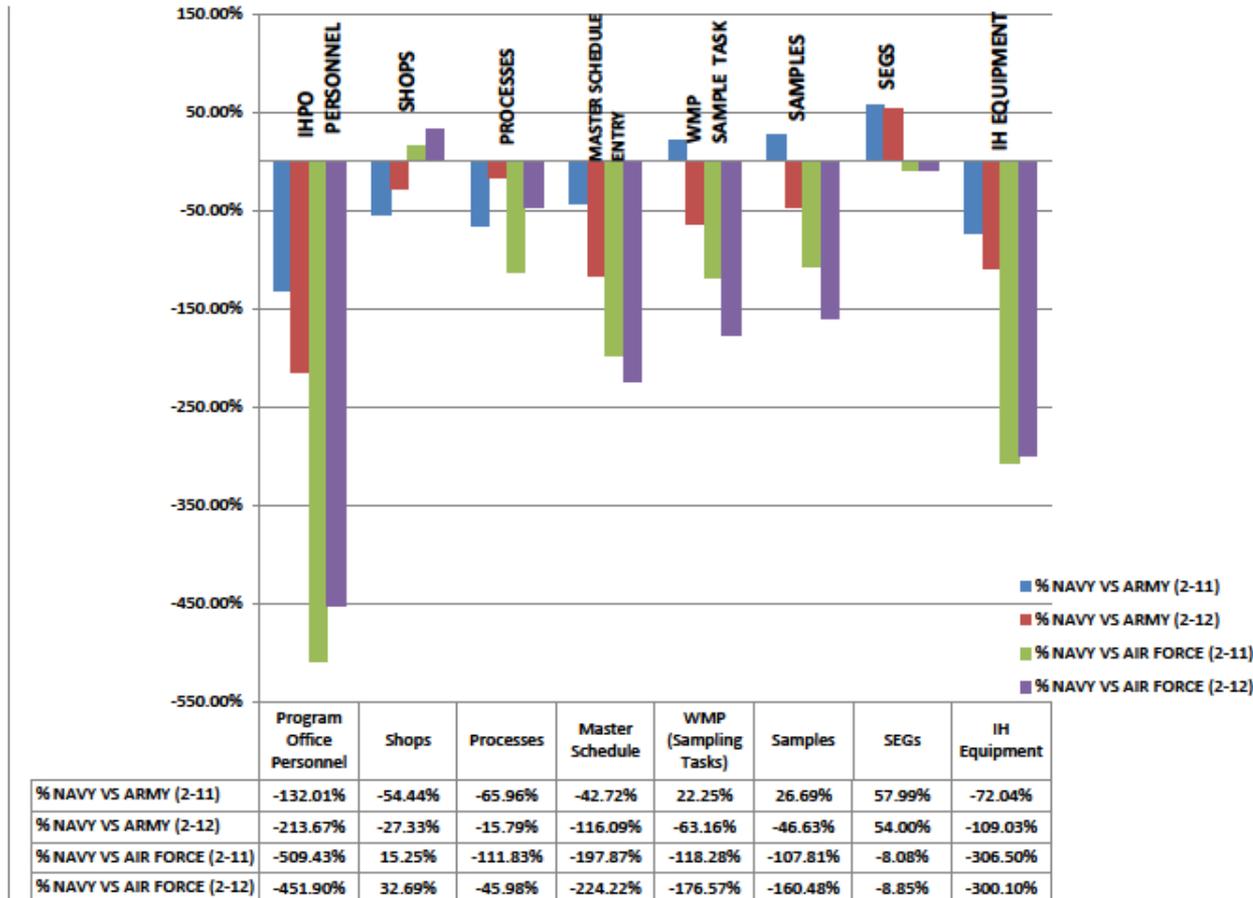


# DOD DOEHS METRICS SERVICE COMPARISONS WITH IH ASSESSMENTS





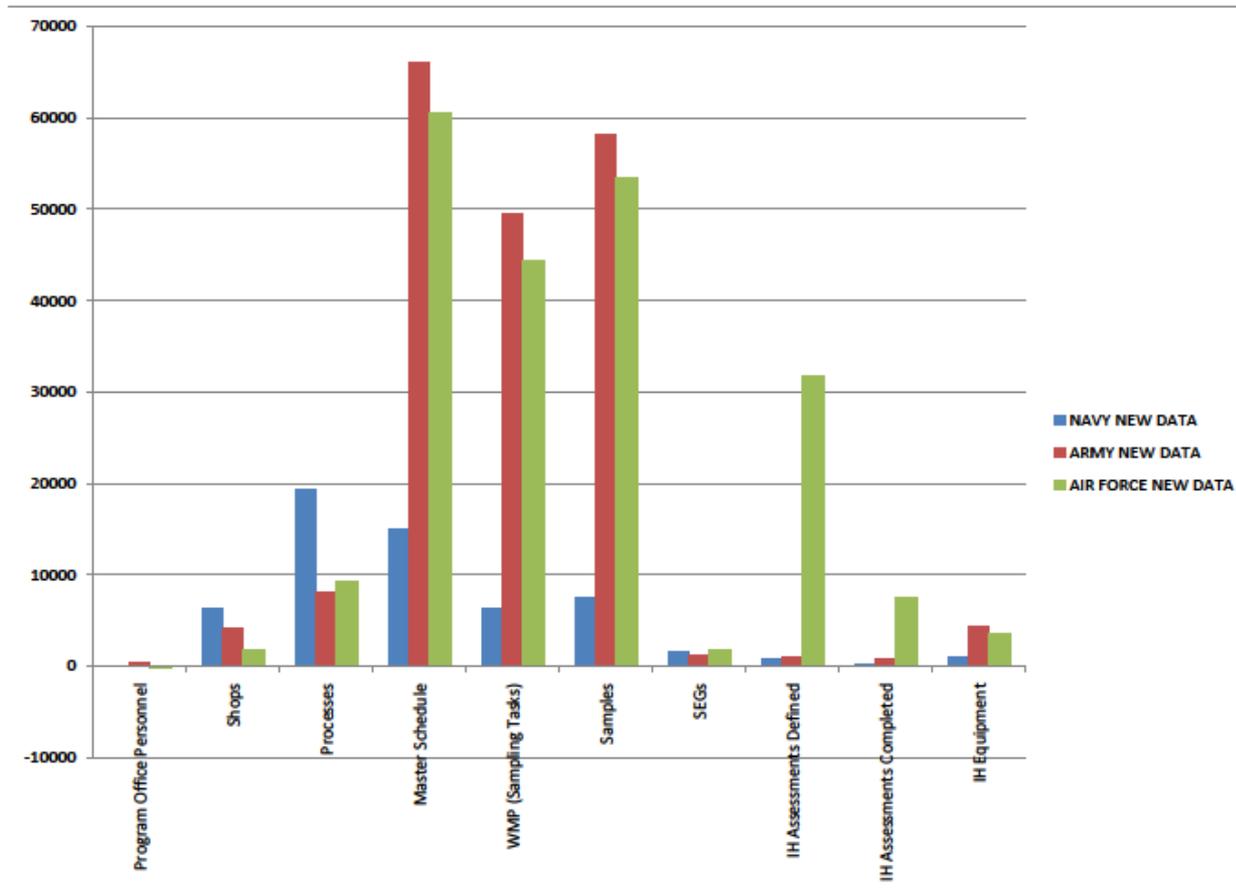
# DOD DOEHS METRICS SERVICE COMPARISON WITHOUT IH ASSESSMENTS





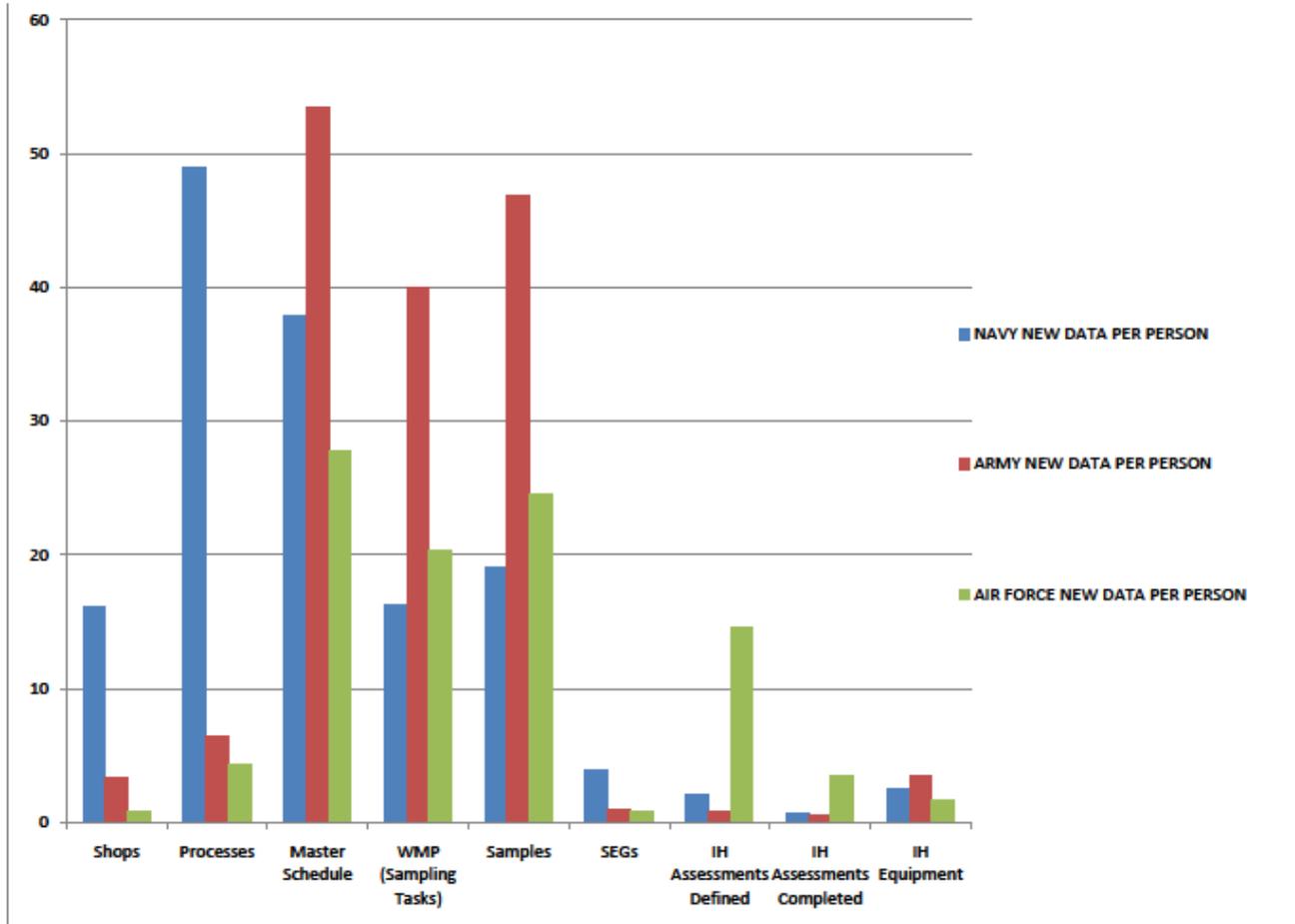
**NAVY MEDICINE**  
World Class Care...Anytime, Anywhere

# DOD DOEHS METRICS SERVICE COMPARISONS NEW DATA 2-11 TO 2-12





# DOD DOEHS METRICS SERVICE COMPARISONS NEW DATA PER PERSON 2-11 TO 2-12



## DOEHRS METRICS CONCLUSIONS

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- NAVY IH ASSESSMENTS<< AIR FORCE
- NAVY IH SAMPLES<<ARMY
- NAVY IHPO PERSONNEL<<AIR FORCE  
AND ARMY



# BUMED-NCA-INDUSTRIAL HYGIENE- FY11:IMPROVE DOEHRS-IH UTILIZATION

<b>Problem Statement:</b>			<b>Project Goal:</b>			
<p>DODINST 6055.05 requires the use of Defense Occupational and Environmental Health Readiness System (DOEHRS-IH) throughout DOD. BUMED mandated increasing Navy use of DOEHRS-IH in 2009 with full use in 2014. An independent audit of the use of DOEHRS throughout DOD by the Office of Management and Budget (OMB) in 2010 indicated that the Navy's implementation of DOEHRS-IH was seriously deficient based upon an OMB metric that measured the % of high risk workplaces with a current annual assessment. For FY10 only 0.59% of Navy high risk workplaces had current hazard assessments entered into DOEHRS, compared to 67% and 61% of the Air Force and Army high risk work places, respectively.</p>			<p>Identify problems and policies which interfere with effective DOEHRS utilization, in alignment with other services, and implement solutions to improve compliance and performance throughout Navy Medicine.</p>			
<b>Expected Benefits:</b>			<b>Metric</b>	<b>FY10 Baseline</b>	<b>Improvement Goal</b>	<b>FY11 STATUS</b>
<p>Identify feasible and effective solutions to improve DOEHRS-IH implementation throughout Navy Medicine to meet Navy, DOD and OMB goals for management of industrial hygiene data.</p>			% HIGH RISK WORKPLACES WITH CURRENT ANNUAL ASSESSMENT IN DOEHRS	0.59%	70% in FY11	28.36%
			% Utilization* of DOEHRS-IH	20%	40% in FY11	40%
<b>Tollgate</b>	<b>Planned End Date</b>	<b>Actual End Date</b>	<p>*Utilization defined as % of shops (by hazard category) and % of processes entered into DOEHRS-IH</p> <p>**Will be calculated by 31 October 11 when FY11 BUMED IH Metrics are reported</p>			
<i>Pre-Event</i>	3-25-11	3-25-11				
<i>Event</i>	4-4-11	5-2-11				
<i>Post Event</i>	6-8-11	8-31-11				
<i>Validate</i>	10-12-11	10-12-11				



# BUMED-NCA-INDUSTRIAL HYGIENE- FY11:IMPROVE DOEHRIS-IH UTILIZATION

## Core Team

Project Lead	Project Sponsor / Champion	Command Black Belt	Financial SME
Mr. Joseph Kotek (NAVMED NCA)	CAPT Jonathan P. Nelson (BUMED)	CAPT Patrice Bibeau and Ms Suzanne Roberts (BUMED)	CDR Gilmore (BUMED)

## Team Members

Ms. Carla Treadwell PROCESS OWNER (BUMED)	Mr. Stephen Smallets (NAVMED EAST)	Mr. Gary Cheely (NAVMED WEST)	Ms. Christina Nomura (NAVMED SUPPORT COMMAND)
CAPT Donald Hagen (NMCPHC)	Mr. John Bishop (NMCPHC)		

# LSS OVERVIEW-WHAT IS IT?

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- DOD AND NAVY SPONSORED  
PROCESS IMPROVEMENT SYSTEM
- BASED ON PRINCIPLES OF:  
LEAN-EFFICIENCY/WASTE REDUCTION  
SIX SIGMA—  
EFFECTIVENESS/VARIABILITY  
REDUCTION

## LSS OVERVIEW-WHY USE IT?

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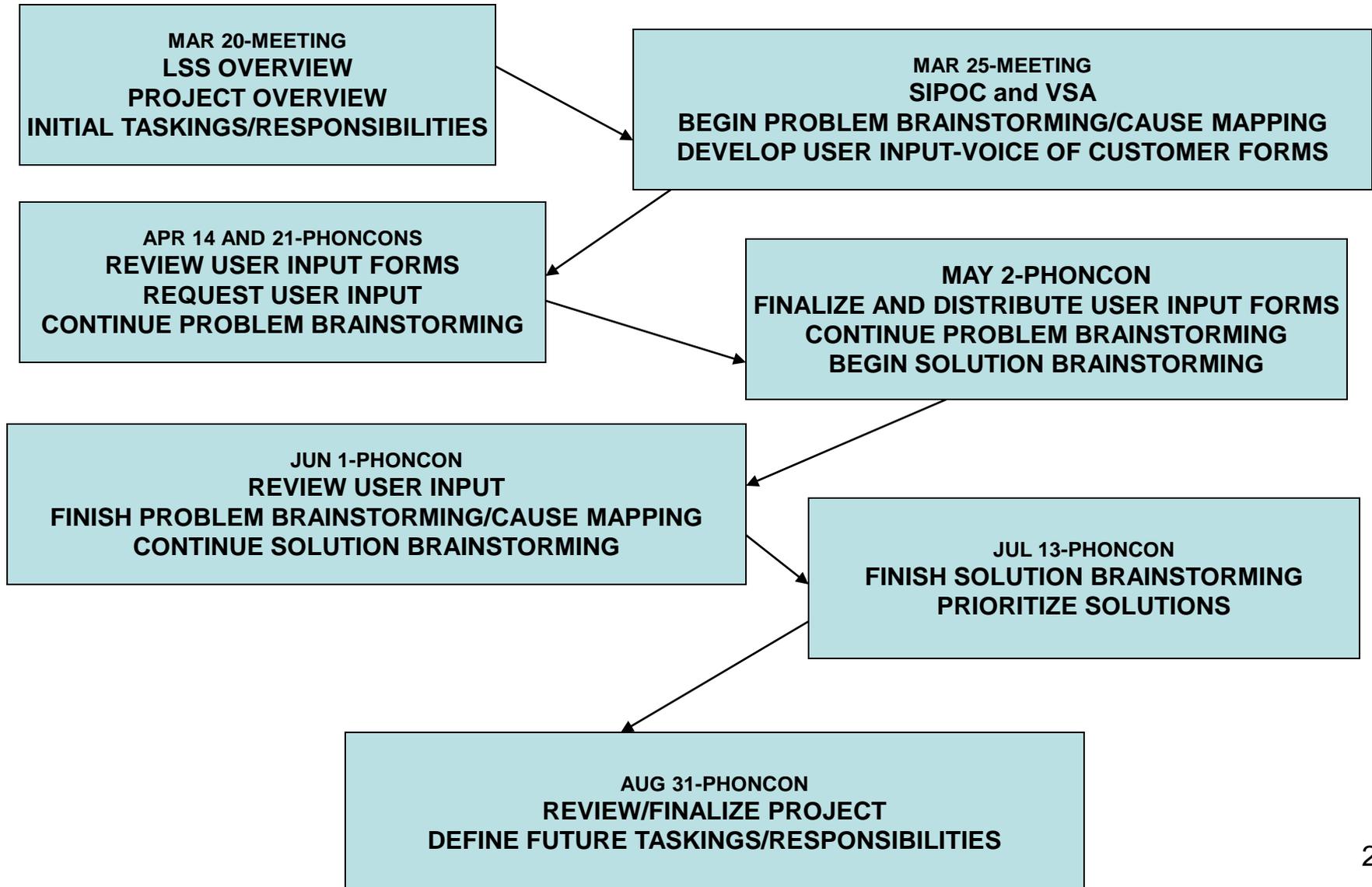
- CHARTER-CONTRACT-COMMITMENT
- TOP-DOWN SUPPORT
- GOAL ORIENTED
- ACCOUNTABILITY
- TRAINING-MENTORSHIP
- VISIBILITY (CPIMS)

# DOEHRS-IH PROJECT METHODS

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- PROCESS MAP
- SIPOC (Suppliers, Inputs, Process Steps, Outputs, Customers)
- CAUSE AND EFFECT MAPPING
- VOICE OF CUSTOMER (Customer Satisfaction Survey)

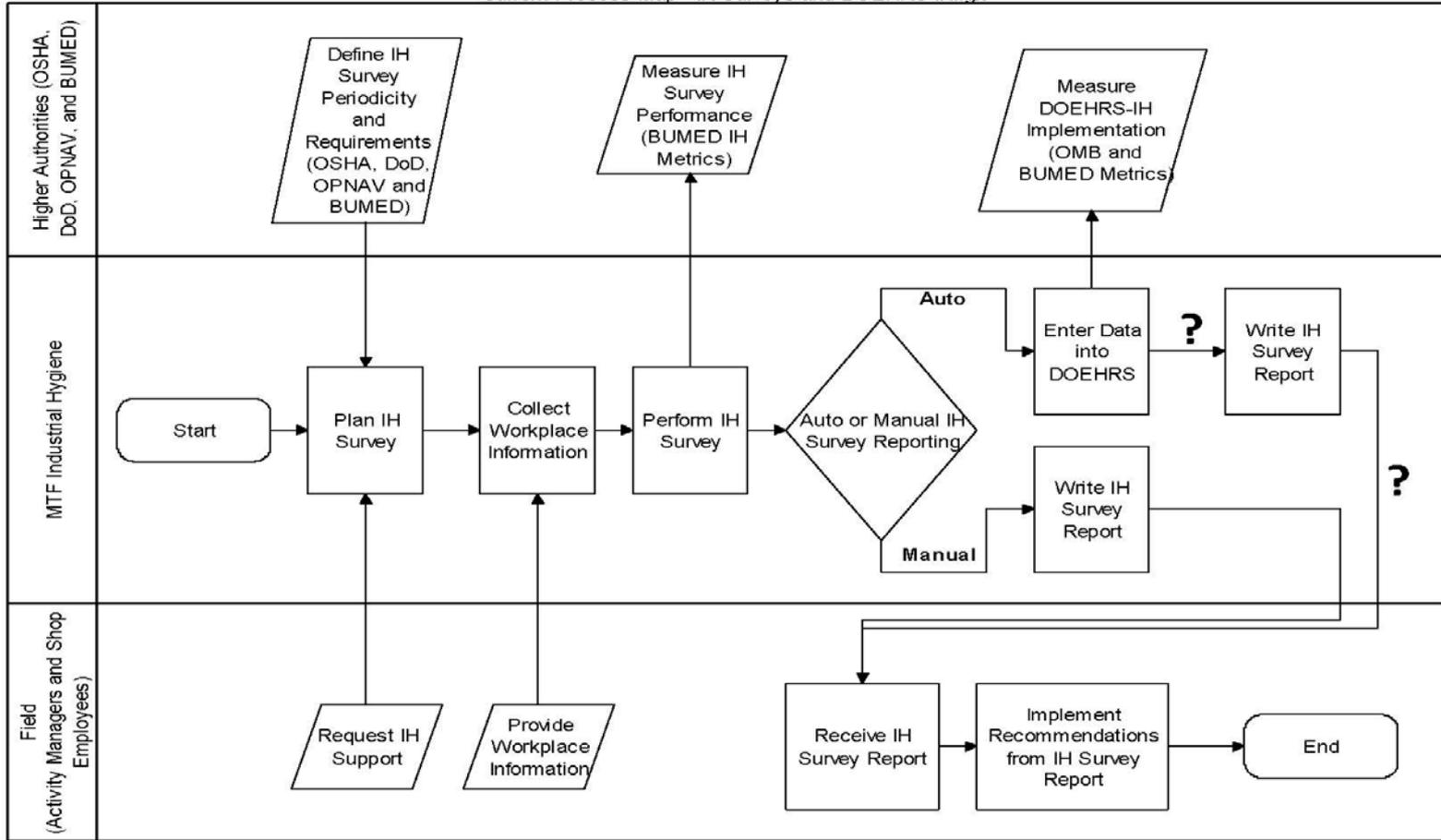
## PROJECT ROADMAP





# IH SURVEY AND DOEHRS-IH PROCESS MAP

Current Process Map - IH Surveys and DOEHRS-IH.igx

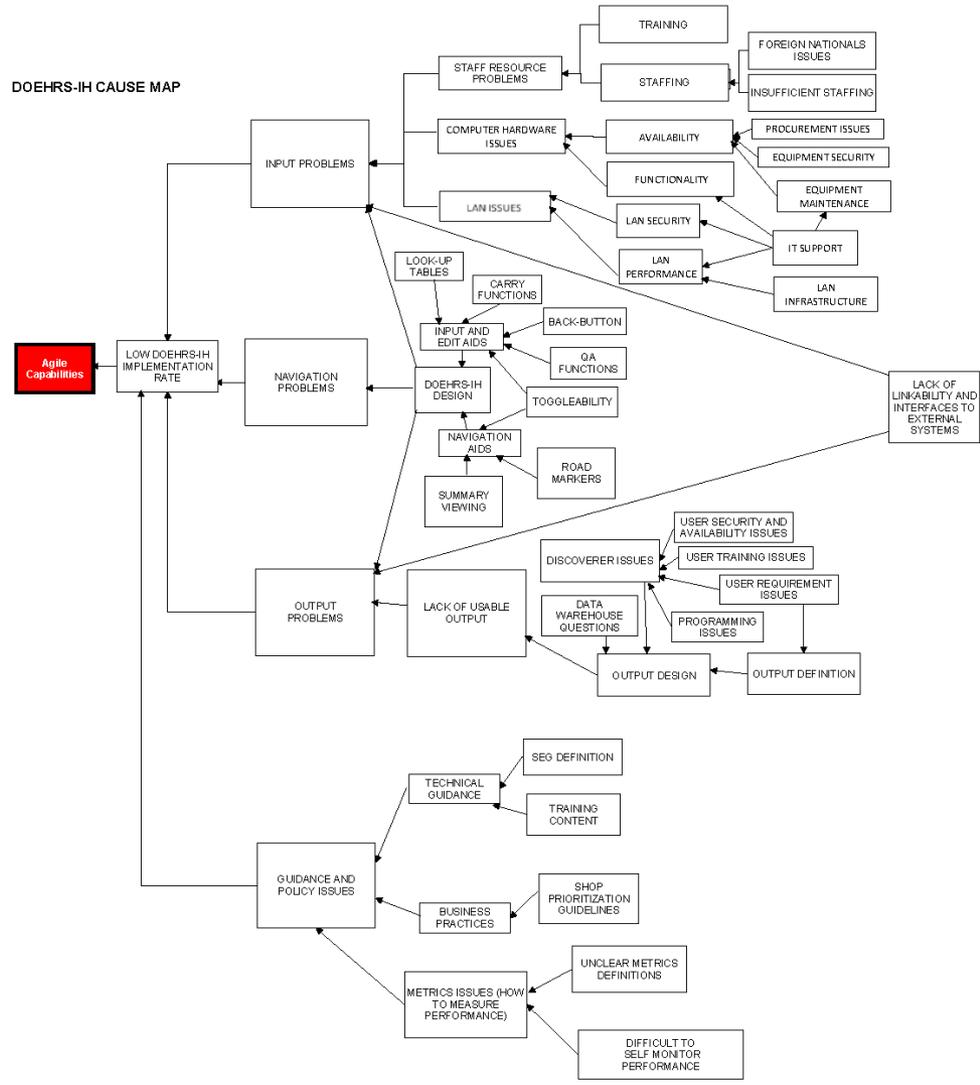




# DOEHRS-IH AND IH SURVEY SIPOC

Suppliers	Inputs	Process Steps	Outputs	Customers
Higher Authorities (OSHA, DOD, OPNAV, BUMED)	Regulations and Policy	Set Annual Plan	Productivity and Exposure Metrics	Higher Authorities (OSHA, OMB, DOD, OPNAV, BUMED)
Exposure Standards and Guidelines (ACGIH, NIOSH, AIHA, NMCPHC)	Business Practices and Rules	Gather Data and Information	Executive Summary	Activity Leadership(CO/XO)
Activity Safety Office	Technical Guidelines	Do Site Visits	Program Summaries	Activity Program Managers (SAFETY, RPP, HCP, HRO, LEGAL, etc)
Shop Supervisor and Workers	Workplace Information and Field Observations	Collect Sampling Data	Shop Survey Report	Shop Supervisor and Workers
Industrial Hygiene	Sampling Data	Analyze Sampling Data	Sampling Data Reports and Summaries	Occ Med
	Decision Making and Analysis	Write IH Survey Reports	Employee Exposure Reports (SF600's and Notification letters)	Industrial Hygiene
		Communicate IH Survey Reports and Metrics	Deficiencies and Findings	
			Health Information and Recommendations	

# DOEHRS-IH PROBLEMS CAUSE MAP

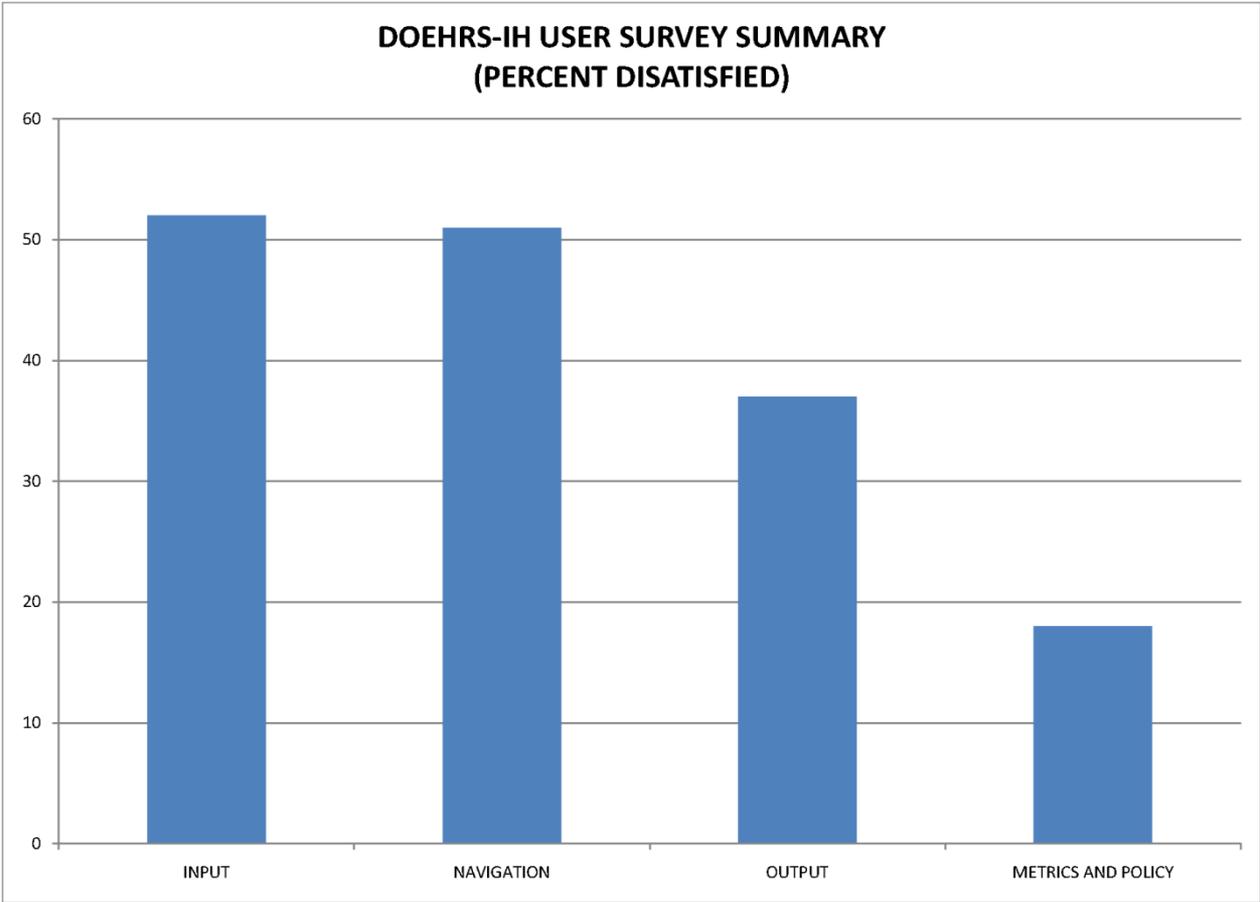


# Voice of the Customer

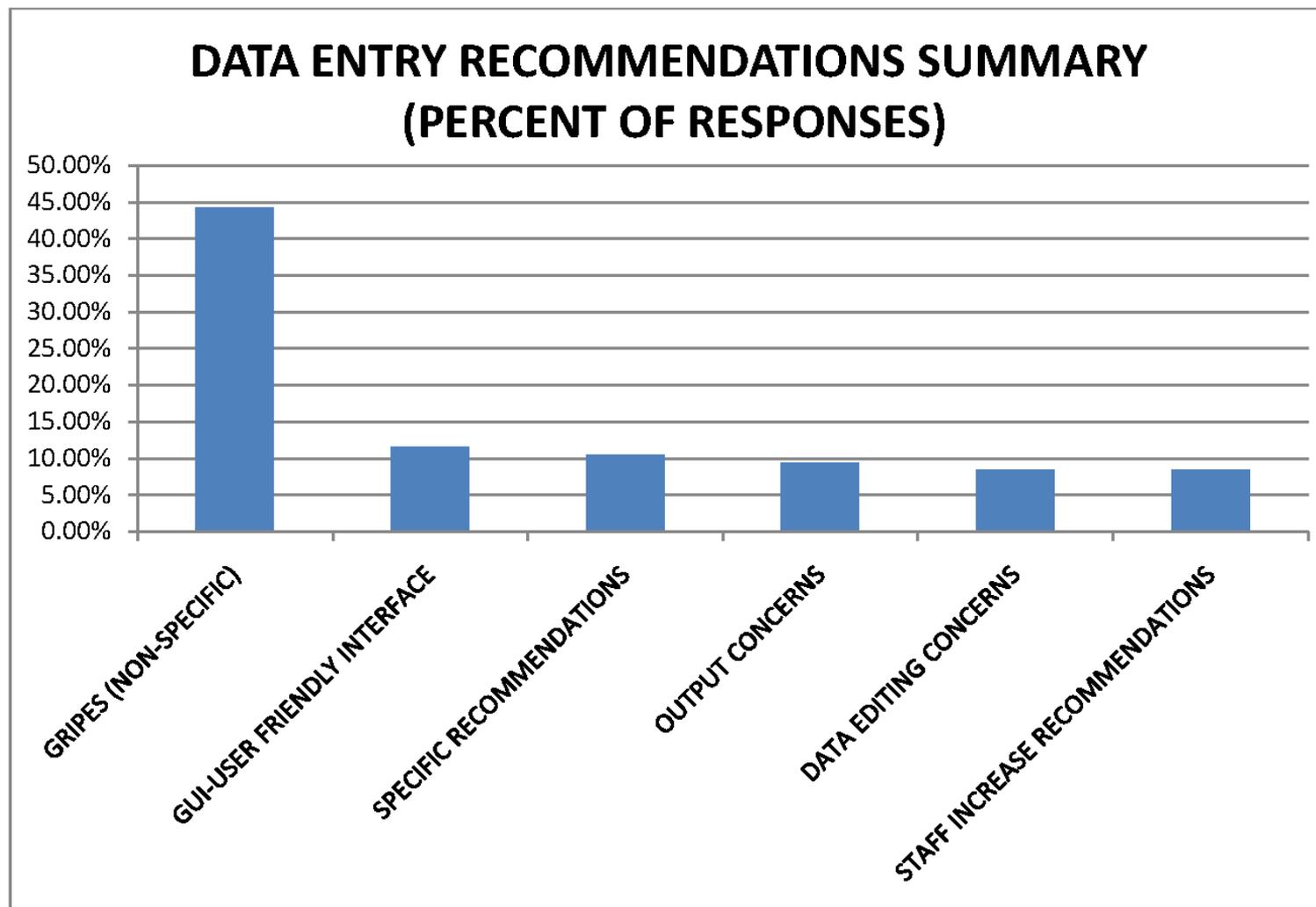
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- A CUSTOMER SATISFACTION SURVEY WAS SENT TO ALL DOEHRS-IH USERS TO ASSESS CUSTOMER NEEDS AND WANTS REGARDING DOEHRS-IH
- USED RESULTS OF SURVEY TO DOCUMENT CAUSES IMPEDING DOEHRS-IH USE AND IDENTIFY POSSIBLE SOLUTIONS

# Voice of the Customer

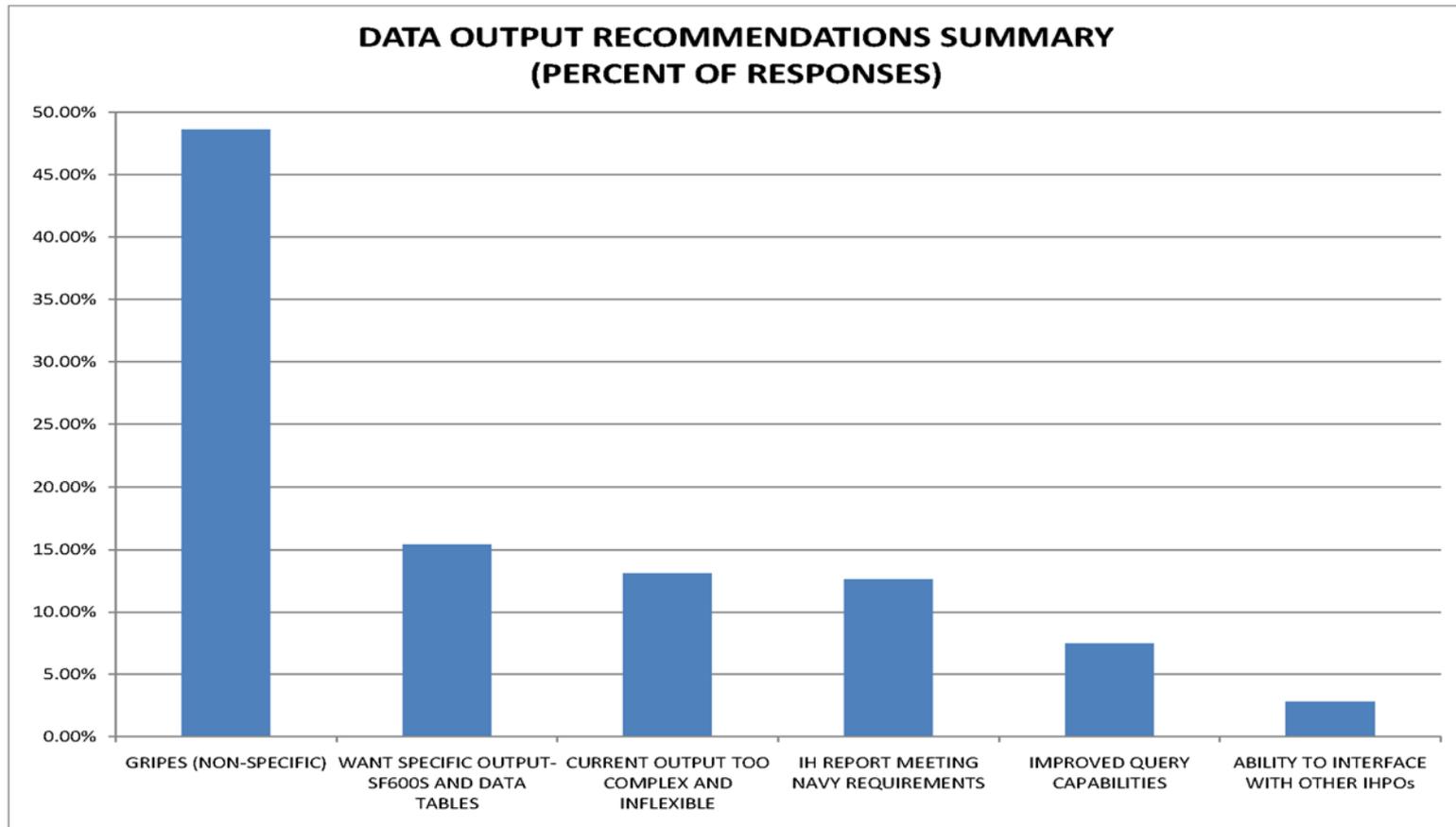


## Voice of the Customer





# Voice of the Customer



## PRIORITIZED SOLUTIONS

<b>PRIORITY</b>	<b>SOLUTION</b>	<b>FEASIBILITY</b>	<b>IMPACT</b>
1	GUI ALTERNATIVE	MEDIUM	HIGH
2	IMPROVE OUTPUT	MEDIUM	HIGH
3	IMPROVE EDITING AND QA FUNCTIONALITY	VERY LOW	HIGH
4	INCREASE STAFF	LOW	HIGH
5	IMPROVE DOEHRS TRAINING	HIGH	MEDIUM
6	SHARE DOEHRS SUPER USERS	MEDIUM	MEDIUM
7	DATA ENTRY WITH DOEHRS MOBILE	TBD	TBD
8	IMPROVE NAVIGATION	VERY LOW	MEDIUM