CMMI TECHNOLOGY CONFERENCE & USER GROUP

AN ENTERPRISE APPROACH TO PROCESS IMPROVEMENT

VADM WALLY MASSENBURG

COMMANDER,
NAVAL AIR SYSTEMS COMMAND

14 NOVEMBER 2006

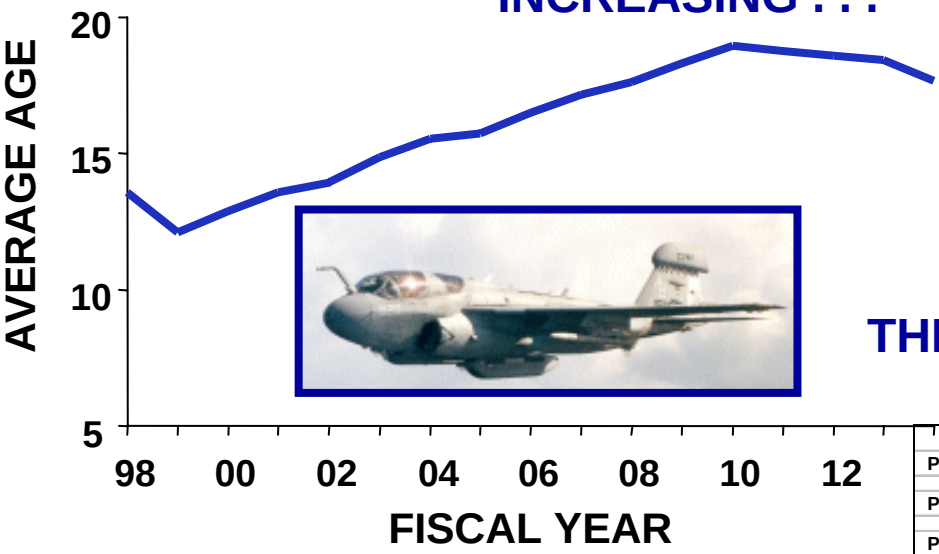
OUTLINE

- **OUR ENTERPRISE JOURNEY**
- **AIR*SPEED* SUCCESS STORIES**
- **NAVY ENTERPRISE: THE WAY AHEAD**

OUR ENTERPRISE JOURNEY

THE DILEMMA

20-YEAR-OLD AIRCRAFT ARE COSTLY TO MAINTAIN . . .
MAINTENANCE MAN-HOURS PER FLIGHT HOUR
INCREASING . . .



. . . AND WE CAN'T AFFORD TO BUY
THE NUMBER OF NEW AIRCRAFT WE NEED

	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
PB98	71	125	144	150	164								
PB99	71	119	143	154	164								
PB00		105	140	163	183	187	201						
PB01			128	130	173	177	187						
PB02				88	92	115	119	143	155				
PB03					90	85	105	147	193				
PB04						100	100	133	191	254	302		
PB05							111	134	183	238	283		
PB06								128	170	195	242	248	242

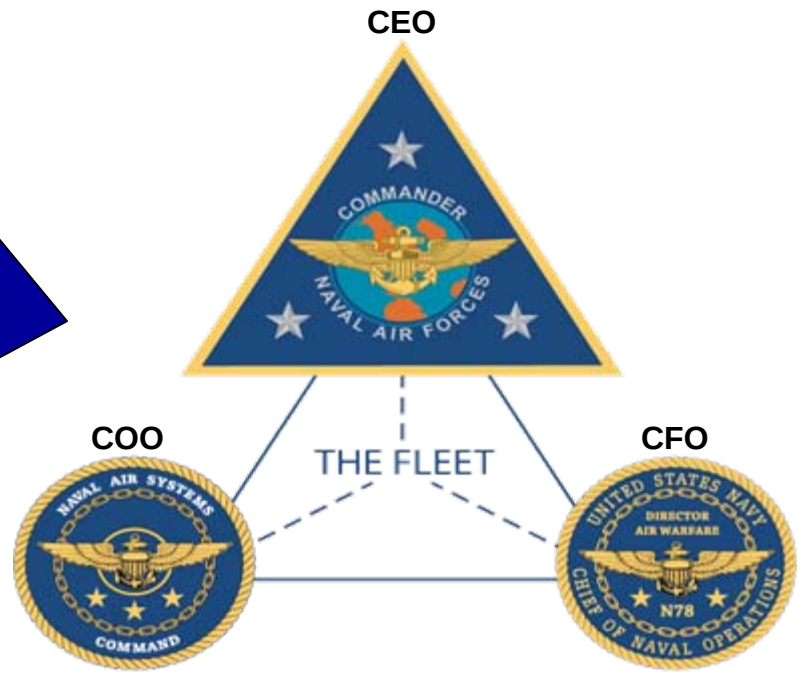
THE PROBLEM:

WE NEED TO BUY AN AVERAGE OF 190 NEW AIRCRAFT EACH YEAR TO MAINTAIN OUR AVERAGE AIRCRAFT AGE

NAVAL AVIATION ENTERPRISE
LEAN SIX SIGMA (LSS) JOURNEY

- **THE YEAR IS FY01 . . .**
  - CURRENT READINESS . . . $1B DEFICIT
  - FUTURE READINESS . . . NEED MORE AIRCRAFT
- **CNO EXECUTIVE BOARD DIRECTION . . . DECEMBER 2000**
  - SINGLE PROCESS OWNER FOR NAVAL AVIATION
  - FIX CURRENT READINESS
  - AFFORD FUTURE READINESS

CONCLUSION
WE NEEDED TO CHANGE OUR BEHAVIOR
TO ACHIEVE DIFFERENT OUTCOMES . . .



NAVAL AVIATION ENTERPRISE

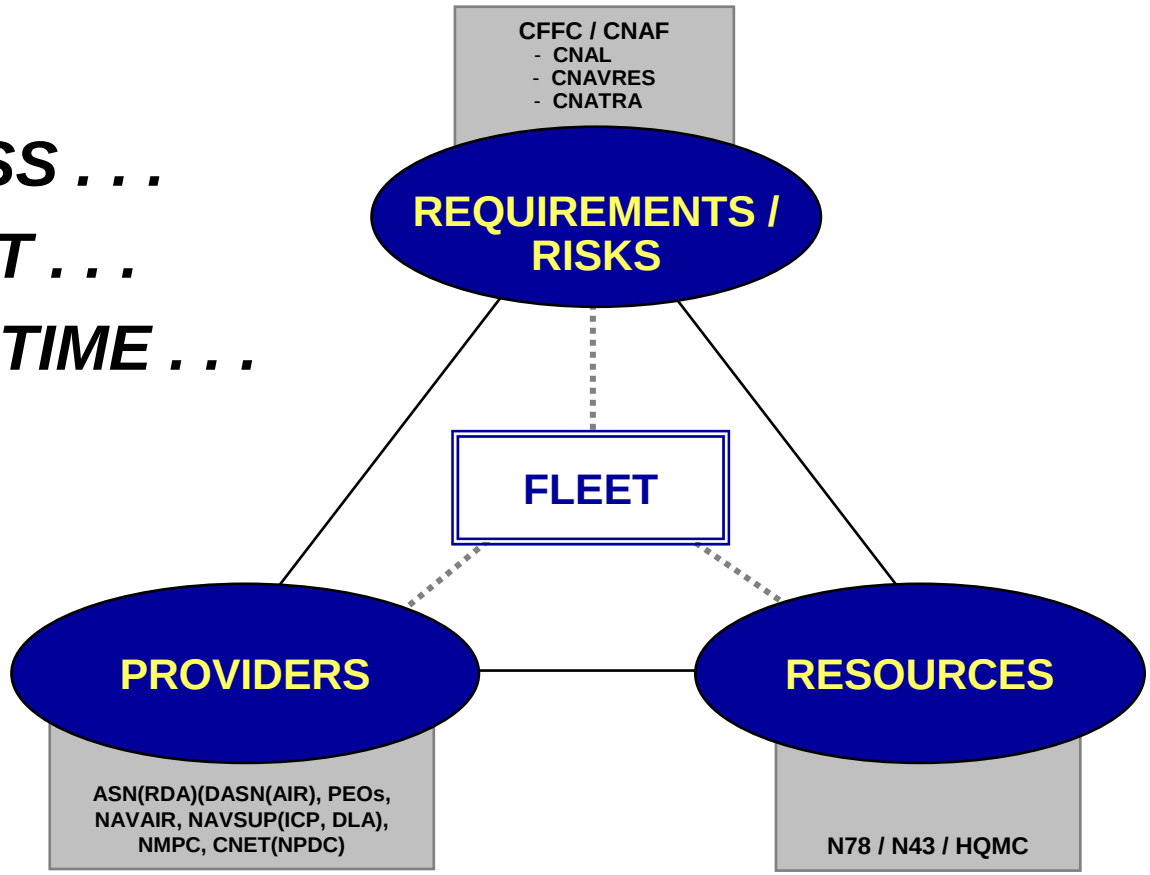
NAVAL AVIATION VISION

RIGHT FORCE . . .

RIGHT READINESS . . .

RIGHT COST . . .

RIGHT TIME . . .



. . . TODAY, AND IN THE FUTURE

ENTERPRISE PRINCIPLES

- APPLY A *PROCESS* PERSPECTIVE
- UTILIZE A SET OF CONSISTENT, INTEGRATED, AND HIERARCHICAL *METRICS*
- ENSURE FULL AND CONSISTENT *TRANSPARENCY* OF DATA AND INFORMATION THROUGHOUT
- ESTABLISH AND MAINTAIN PROCESS *DISCIPLINE* THROUGHOUT
- ESTABLISH AND MAINTAIN *ACCOUNTABILITY* FOR ACTIONS AND RESULTS THROUGHOUT
- APPLY AN *INTEGRATED GOVERNANCE* STRUCTURE

A DELIBERATE, DISCIPLINED PROCESS TO ACHIEVE AVIATION UNITS READY FOR TASKING AT THE RIGHT COST . . . TODAY AND IN THE FUTURE

OPERATING AS AN ENTERPRISE

- **SINGLE PROCESS OWNER**
- **SINGLE FLEET-DRIVEN METRIC:**
  AIRCRAFT AND CARRIERS READY FOR TASKING AT REDUCED COST **(CONTINUING TO MATURE)**
- **VALUES – WHAT WE BELIEVE**
  - ***FLEET READINESS***
  - ***"COST-WISE" (LESS $s)***
  - ***TIME ON WING (LESS STUFF)***
  - ***SPEED (LESS TIME IN MAINTENANCE)***
  - ***PEOPLE (CONTINUOUS IMPROVEMENT)***
- **THREE MAIN FOCUS AREAS:**
  - **READINESS: TODAY, TOMORROW, AND FUTURE**
  - **TOTAL FORCE READINESS**
  - **COST MANAGEMENT**

APPROACH

NEED TO DEFINE:

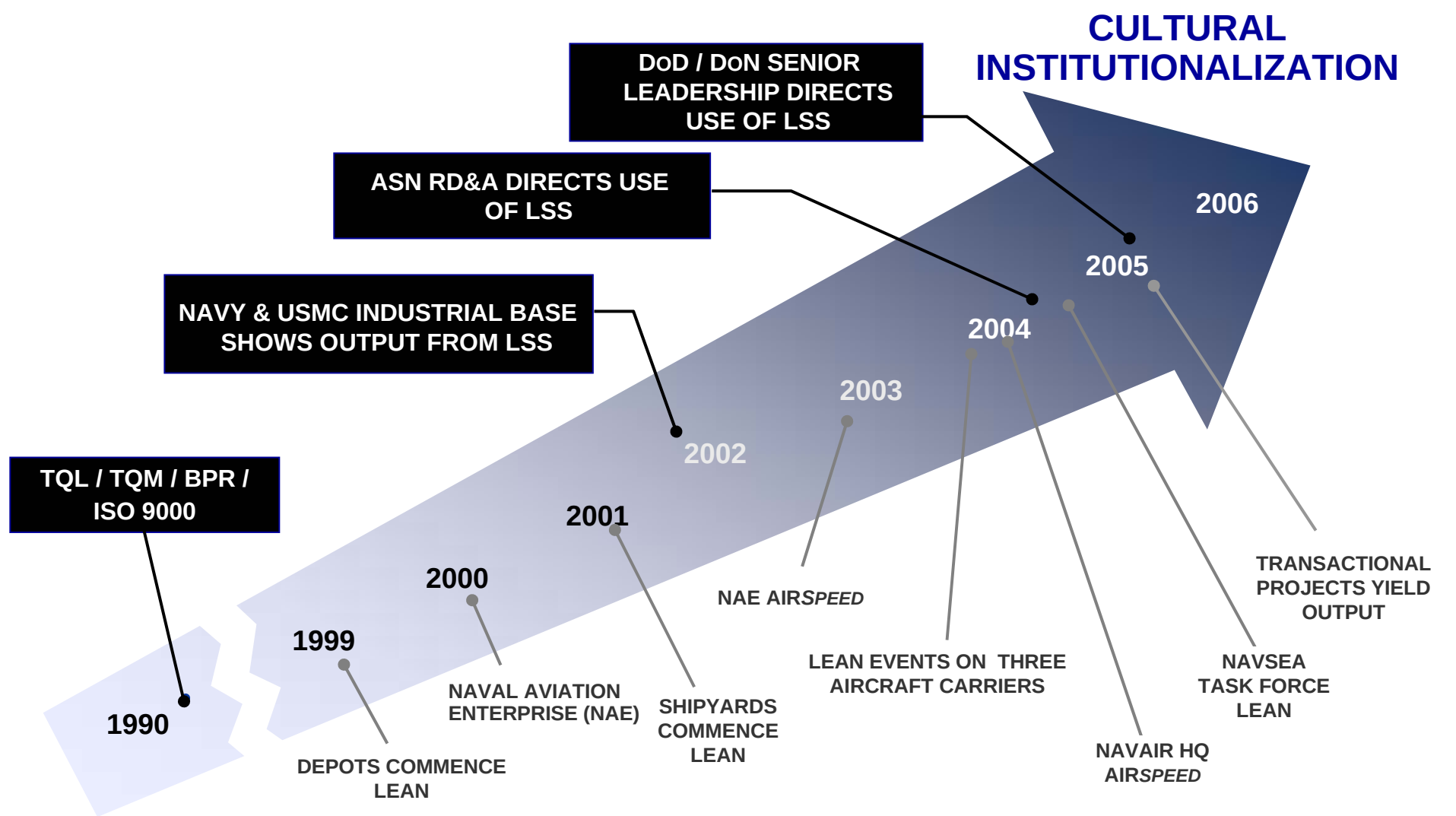
- DESIRED OUTPUT FIRST, **THEN . . . . . .**

- POLICIES / PROCESSES
  NEEDED TO OBTAIN OUTCOME; LASTLY. . . . . .

- BEHAVIORAL CONSTRUCTS / CONOPS
  TO ACHIEVE COST-WISE & RESPONSIVE OUTCOMES. . . . . .

A BEHAVIORAL MODEL FOR THE GREATER GOOD

DoN LEAN SIX SIGMA (LSS) JOURNEY



STRIVING FOR: "LSS – BUSINESS AS USUAL"

NAVAL AVIATION ENTERPRISE AIR*SPEED* LEAN, SIX SIGMA, TOC

FOUR PROGRAMS: ONE GOAL, ONE METRIC

1999	2003	2004	2005
DEPOT	ENTERPRISE	NAVAIR	NAVICP
• DEPOT PRODUCTION PROCESSES • LED BY DEPOT CO's / AIR-6.0 • ROLLOUT TO 3 SITES	• FLEET-WIDE REPAIR SITES AND PROCESSES • LED BY O-6 ESC • O-I-D + SUPPLY CHAIN • LINKS TO NAVRIIP • ROLLOUT TO 59 SITES	• CORPORATE / COMPETENCY PROCESSES AND OTHER PRODUCTIVITY INITIATIVES • LED BY CCBU / EDB GUIDANCE • ENABLED BY CORE TEAM • LINKS WITH ENTERPRISE & DEPOT AIR*SPEED*	• CORPORATE / COMPETENCY PROCESSES AND OTHER PRODUCTIVITY INITIATIVES • LED BY NAVSUP GUIDANCE • ENABLED BY DEPLOYMENT TEAM • LINKS WITH ENTERPRISE & DEPOT AIR*SPEED*

SINGLE, FLEET-DRIVEN METRIC

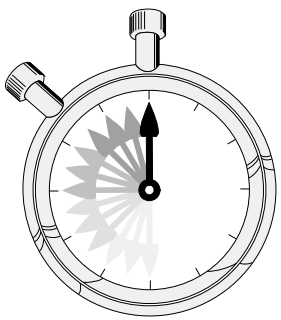
"AIRCRAFT AND CARRIERS READY FOR TASKING AT REDUCED COST . . .

TODAY AND IN THE FUTURE"

PROCESS IMPROVEMENT

- EQUIPMENT / FACILITIES
- PEOPLE
- SUPPLIERS
- PRODUCTS
- TECHNOLOGY
- FINANCING

CLASSIC
"ADD RESOURCES" APPROACH



- PROCESSES
- METHODS
- CULTURE
- METRICS
- BEHAVIOR
- STRATEGY

CYCLE-TIME APPROACH – PROCESS, PROCESS, PROCESS

NAVAIR AIR*SPEED*
INVESTMENT AND COST DATA SUMMARY – FY06

LABOR / TRAINING / TOOLS DATA FORECAST FOR FY06 – TYPE I / II SAVINGS DATA THRU 01 JUL 06

INVESTMENT

- **GEORGE GROUP CONTRACT** (NAVAIR ELEMENTS ONLY): **$ 12.30M**
- **AIR*SPEED* TOOLS** (INCLUDES TRAINING FACILITIES / *POWER STEERING / MINITAB / IGRAFX SOFTWARE*): **$ 0.89M**
- **BLACK BELT / GREEN BELT – LABOR / TRAVEL:** **$ 15.80M**

TOTAL $ 28.99M

NAVAIR AIR*SPEED* VALIDATED SAVINGS

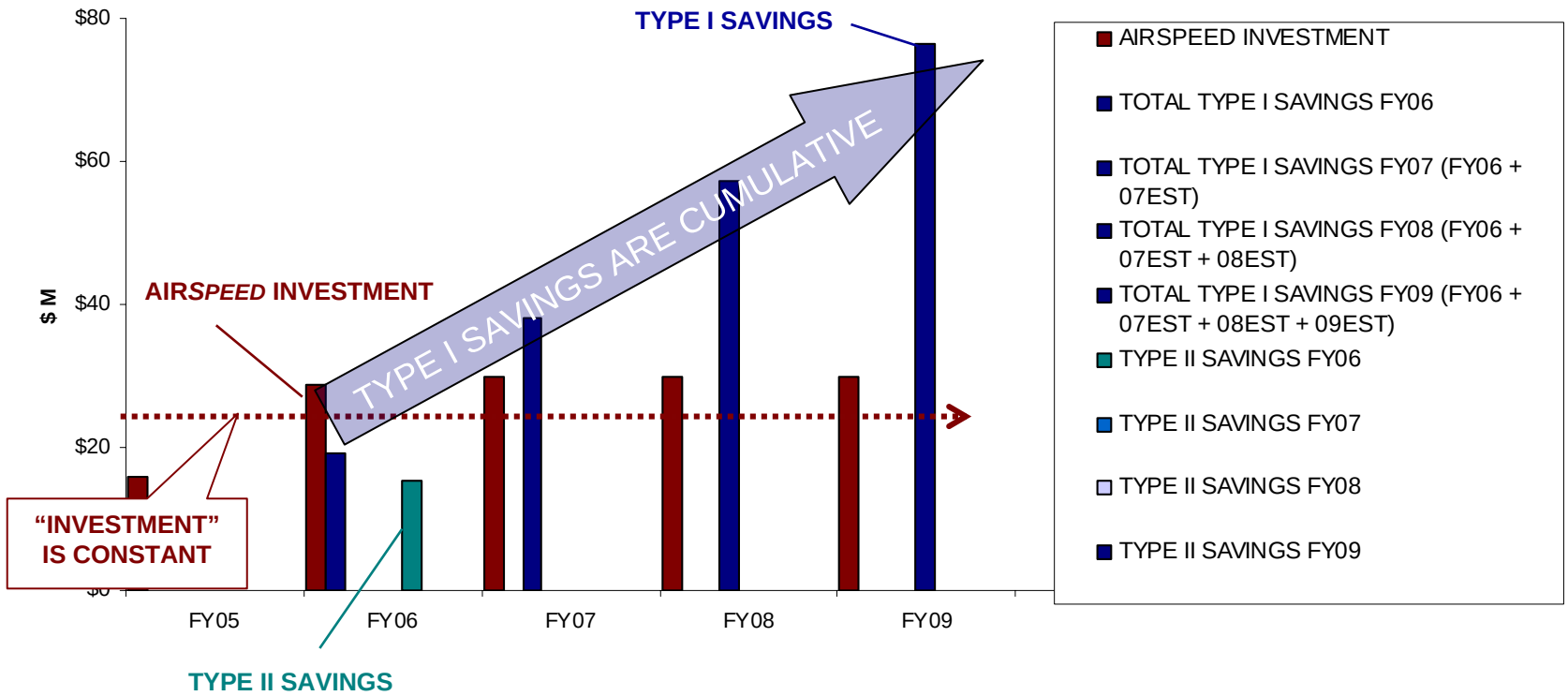
- **TYPE I** **$19.1M**
- **TYPE II** **$15.3M**

TOTAL $34.4M

AS OF 01 JUL 06: RETURN ON INVESTMENT (ROI) = 1.2

AIR*SPEED* INVESTMENT AND RETURN ($M)

- **FY07-09 INVESTMENT IN PEOPLE / TOOLS / TRAINING IS "EXAMPLE BASELINED" ~$30M –** (FY05-06 ACTUAL BUDGET)
- **TYPE I SAVINGS ARE CUMULATIVE OVER THE FYDP . . . IF $19.1M IS SAVED IN AS A RESULT OF A PROJECT COMPLETED IN FY06, THEN IT IS ALSO SAVED FY07 THRU FY09 . . . SAVINGS ESTIMATES FOR FY07-09 ARE BASELINED AT $19.1M TO SHOW CUMULATIVE POWER OF AIR*SPEED* . . . FY09** [FY06-$19.1M + FY07-$19.1M(EST) + FY08-$19.1M(EST) + FY09-$19.1M(EST) = $76.4M]
- **TYPE II SAVINGS ARE NOT CUMULATIVE OVER THE FYDP . . . VARY YEAR-TO-YEAR BASED ON PROJECT SELECTION**
- **EXPECTATION IS THAT BASELINED SAVINGS INCREASE . . . AIR*SPEED* IS SELF SUFFICIENT IN OUT YEARS**



ACHIEVE ENTERPRISE COST EFFICIENCIES

AIR*SPEED* PRINCIPLES OF OPERATION:

- PLACE THE RIGHT INVENTORY AT THE RIGHT SPOT
- TRADE SPEED FOR WIP
- OPTIMIZE MATERIAL / LABOR CONSUMPTION
- DRIVE VARIANCE OUT OF THE ENTERPRISE
  - THEORY OF CONSTRAINTS
  - LEAN MANUFACTURING
  - SIX SIGMA

SHIFT REFLEX BEHAVIOR FROM "BUY MORE STUFF AND PEOPLE" TO "BUY MORE SPEED"

WHAT WE'VE LEARNED

. . . "OR WHAT I WISH I'D KNOWN FROM THE START"

- **A TOTAL ENTERPRISE APPROACH IS REQUIRED FOR BEST RESULTS**
- **CHANGE REQUIRES COMMITMENT / WILLINGNESS TO DRIVE**
- **THROWING MONEY AT BROKEN PROCESSES IS PRETTY CLOSE TO A CRIME**
- **ESTABLISHING THE RIGHT METRICS (OUTPUT / CUSTOMER) IS ESSENTIAL**
- **NOT EVERYTHING CAN BE FIXED INTERNALLY—OUTSIDERS CAN IDENTIFY, DRIVE AND ACCELERATE CULTURAL CHANGE—NEED HELP IN MANAGING PROCESS AND DISCIPLINE IN EXECUTION**

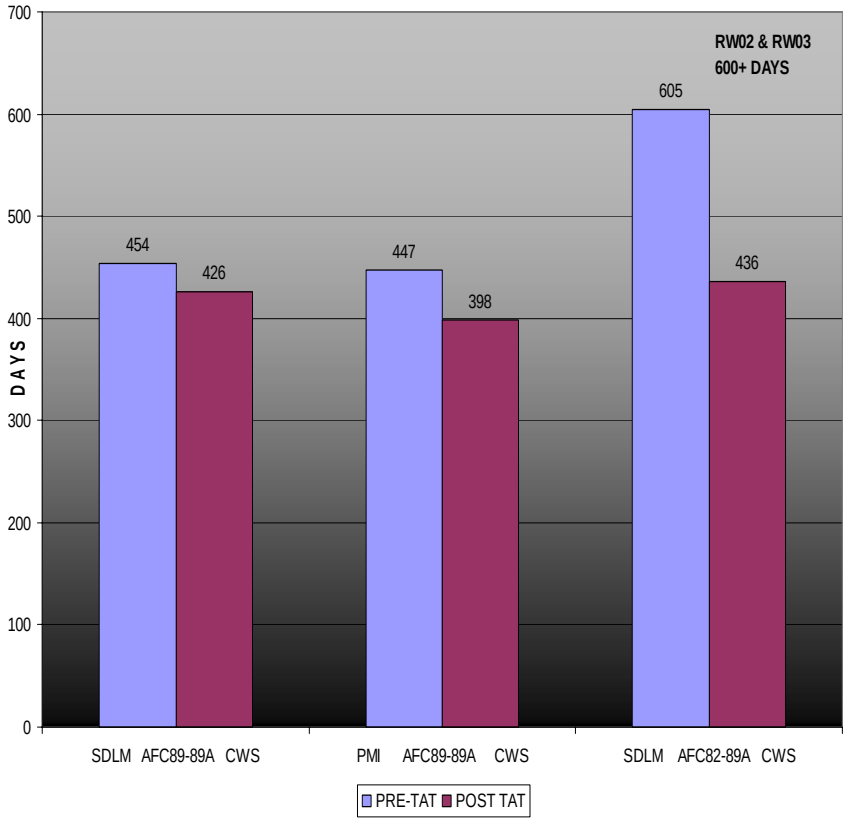
PROCESS DIMENSION:	**AS MEASURED BY:**
• PROCESS *SPEED:*	INVENTORY ON HAND
• PROCESS *QUALITY:*	FIRST-PASS YIELD
• PROCESS *EFFECTIVENESS:*	TURNAROUND TIME
• PROCESS *EFFICIENCY:*	COST PER UNIT

AIR*SPEED* SUCCESS STORIES

EA-6B PMI-1 WITH MODS

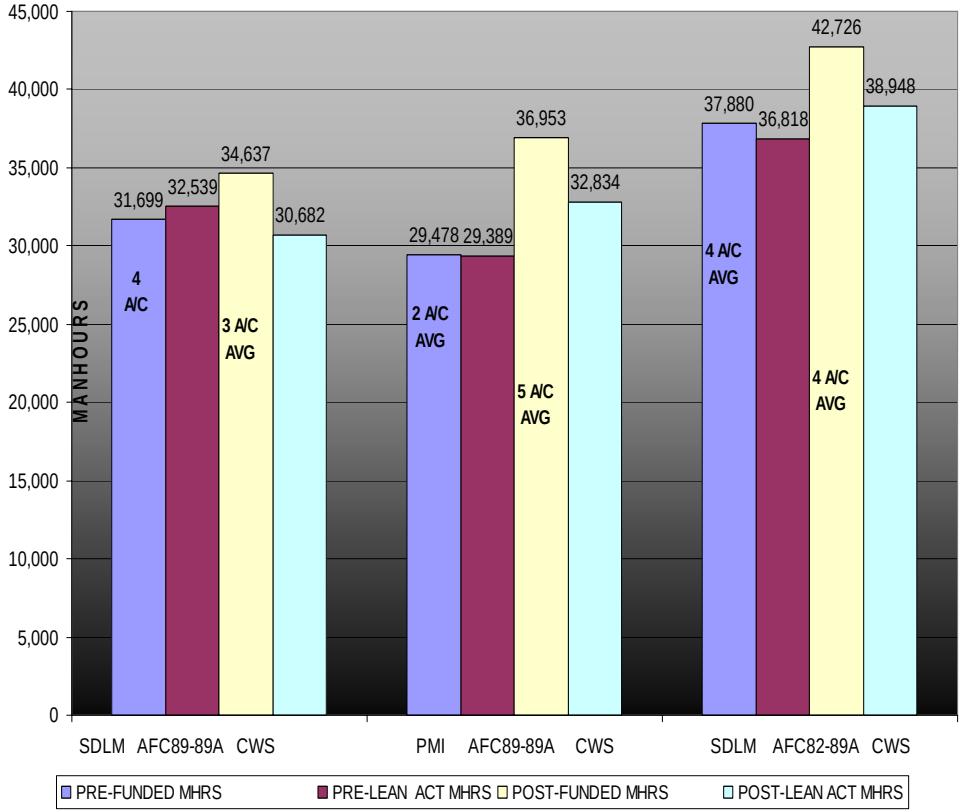
CYCLE-TIME REDUCTION

EA6B
PRE/POST LEAN
TAT



FUNDED vs. ACTUAL LABOR HOURS

EA6B
PRE/POST LEAN
MANHOURS



AIR*SPEED* IMPROVEMENTS TO P-3 *ORION* AIRCRAFT MAINTENANCE & REPAIR, NAVAIR DEPOT JAX

SBT LEAD: RICK THEILACKER

AIR*SPEED* CHAMPION: BILL UPDEGRAFF

DEPOT AIR*SPEED* INITIATIVE

- BECOME "DEPOT OF CHOICE" BY REDUCING WIP AND CYCLE TIME, IMPROVING ON-TIME DELIVERY AND IMPROVING QUALITY
- 5S ENTIRE FACILITY AND CREATE SINGLE-PIECE FLOW MOVING-LINES UTILIZING CELLULAR WORK CENTER DESIGN
- FACILITIES IMPROVEMENTS – FACILITIES PAINTING, LIGHTING, ELECTRICAL SERVICE UPGRADE, ROOF REPAIR, ARTISAN BREAK AREA, OFFICE SPACE
- 100% OF WORKFORCE TRAINED IN AIR*SPEED*

AIR*SPEED* ACCOMPLISHMENTS

PAST SUCCESS

- DEFINING WORK CELLS BY TRADE
- SETTING UP QTS SPOT FOR FUELED A/C
- DEFINING SHORED AND NON-SHORED SIDES OF HANGAR FOR EASE OF A/C MOVES

NEXT…

- OPERATIONAL MATURITY MATRIX ASSESSMENTS
- STANDARD WORK PACKAGES
- KITTING
- KAN BAN FOR MINI-SHOPS

Area of Improvement	FY04 Pre-AIR*Speed*	FY06 Post-AIR*Speed*
On Time Delivery	43%	87%
WIP	11	8

HOSHIN GOALS

SAFETY	• HIGHEST SAFETY OF ALL GOVERNMENT INDUSTRIAL FACILITIES • ZERO AVIATION MISHAPS
QUALITY	• HIGHEST QUALITY OF ANY MRO FACILITY
CUSTOMER	• ON-TIME DELIVERY TO OUR CUSTOMER
FINANCIAL	• TOTAL COST REDUCTION
PROCESS	• CONTINUOUS PROCESS IMPROVEMENT THRU AIR*SPEED*
PEOPLE	• OPERATIONAL MATURITY LEVEL 3.0 • EMPLOYER OF CHOICE • TRAINING, EMPOWERMENT AND INVOLVEMENT

AIR*SPEED* ACTIVITIES

Apr-04	Lean Deployment Commenced
May-04	Fuel Leaks - Quick Turn Spot, Hazmat Carts
Jun-04	Foam Install - Quick Turn Spot, Hardware Cage
Oct-04	G3 Metal Tank Repairs - Metals Cell established
Dec-04	Flow Infrastructure - Induction Scheduling, REI/TEI Process, Kitting
Jan-05	Disassembly - Disassembly Cell established, Kitting continued, Metals/NDI Process
Mar-05	Assembly - Assembly Cell established, G2 Sheet Metal, Minishop
Apr-05	Assembly / Finals - Kitting Design
Apr-06	AIRSpeed Champion assigned

ENGINE REPAIR CONSOLIDATION AND PRODUCT ENTERPRISE TEAMS (PET)

F404 ENGINE I-LEVEL CONSOLIDATION

- **EFFORT BEGAN EARLY '04**
- **IDENTIFIED EXCESS CAPACITY (57%)**
- **SIGNIFICANT SAVING PROJECTED**
  - 9-5 SITES (FY05)
  - 5-3 SITES (FY06)
  - $161M SAVINGS THROUGH FY11
- **SPOTLIGHTED THE POTENTIAL OF PROCESS IMPROVEMENT ACTIVITIES**
  - AIR*SPEED*, LEAN, TOC, SIX SIGMA
- **NAE-WIDE APPROACH**
- **NOV 04: NAE PROCESS LAUNCHED**

THE PET PROCESS BRINGS:

- **STANDARD PROCESSES & METRICS**
- **PRIORITIZATION OF WORK AND INVESTMENT**

TO MAXIMIZE

  - RELIABILITY, CYCLE TIME, INVENTORY, COST, AND SAFETY
- **INTEGRATION OF OTHER TOOLS**
  - (AIR*SPEED*, BLACK BELTS, ETC.)
- **FOUNDATION FOR NAE-LEVEL PRIORITIZATION**

A NEW WAY OF DOING BUSINESS

PARDON OUR DUST WHILE WE GROW!

SBT LEAD: JOHN CRUMPLY

AIR*SPEED* CHAMPION: CHRIS KOPP

FUTURE F-18 INNER WING SHOP, NAVAIR DEPOT JAX (GREENFIELD PROJECT)

CHALLENGE

- HANGAR 122 DEMOLITION 83K SQ FT
  - CURRENT WING SHOP 29K SQ FT
  - FLIGHT LINE 34K SQ FT
  - PAINT BOOTH 20 SQ FT
- FUTURE F/A-18 WING WORKLOAD?

OPPORTUNITY

- MFG BB EVENT RECOVERED 13K SQ FT
- LEAN EVENTS RECOVERED 10K+ SQ FT
- A/C KITTING EVENTS
- A/C WIP REDUCTION
- REMOVED AIRCRAFT ASKARS (WIP REDUCTION)

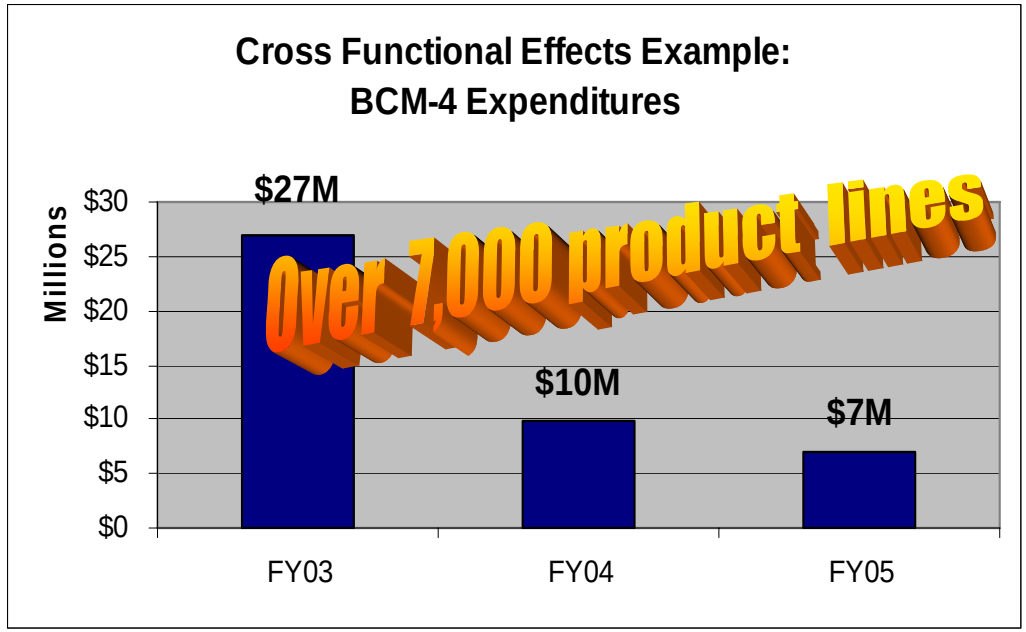
RESULTS: RECOVERED OVER 23K SQ FT

GOODNESS: FOOTPRINT REDUCTION RESULTING FROM PREVIOUS AIR*SPEED* EVENTS IS ALLOWING US TO ABSORB LOSS OF HANGAR 122 WITHOUT NEW CONSTRUCTION

CURRENT READINESS CFT SUCCESS

F404 I-Level Consolidation

- Effort began early '04
- Identified excess capacity (57%)
- Significant saving projected
  - 9-5 Sites (FY05)
  - 5-3 Sites (FY06)
  - $161M savings through FY11
- Spotlighted the potential of process improvement activities
  - AIRSpeed, LEAN, TOC, SIX SIGMA
- NAE wide approach implemented Fall '04



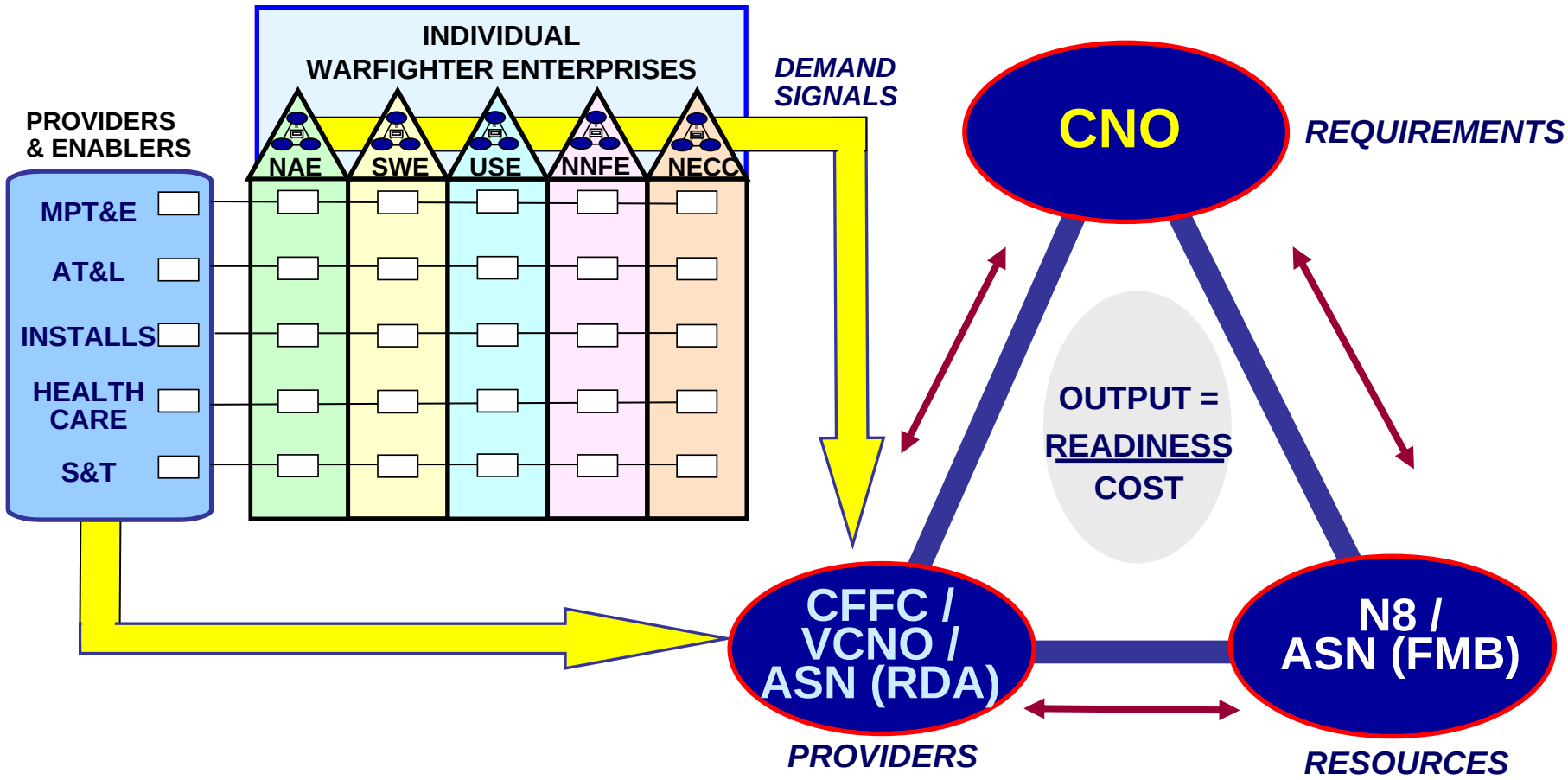
- **EFFICIENCIES: FY05-EXECUTED FHP TO 6+2 DESPITE INITIAL $122M SHORTFALL**
- **GENERATED ADDITIONAL $160M BY UNDERSPENDING TO PLAN TO COVER ADDITIONAL GNFPP HOURS, 2ND FUEL INCREASE, DEPOT NNOR, PACFLT SHIP OPERATIONS**

CULTURE CHANGE: CROSS-FUNCTIONAL DELIVERY OF COST-WISE READINESS

- **FUTURE READINESS: BOUGHT 111 AIRCRAFT VICE 100 IN FY05 . . . CHALLENGE IS TO BUY RIGHT NUMBER OF AIRCRAFT . . .**

NAVY ENTERPRISE:
THE WAY AHEAD

NAVY ENTERPRISE



PRODUCTIVITY DRIVERS:

- PRIORITIES
- BEHAVIORAL CHANGES
- SINGLE PROCESSES / OWNERS
- COMMON METRICS
- INTEGRATED CAPABILITIES
- TRANSPARENCY OF INFORMATION

DESIRED NAVY ENTERPRISE OUTPUT

- ✓ READINESS OVER COST TODAY
- ✓ READINESS OVER COST TOMORROW
- ✓ READINESS OVER COST IN THE FUTURE

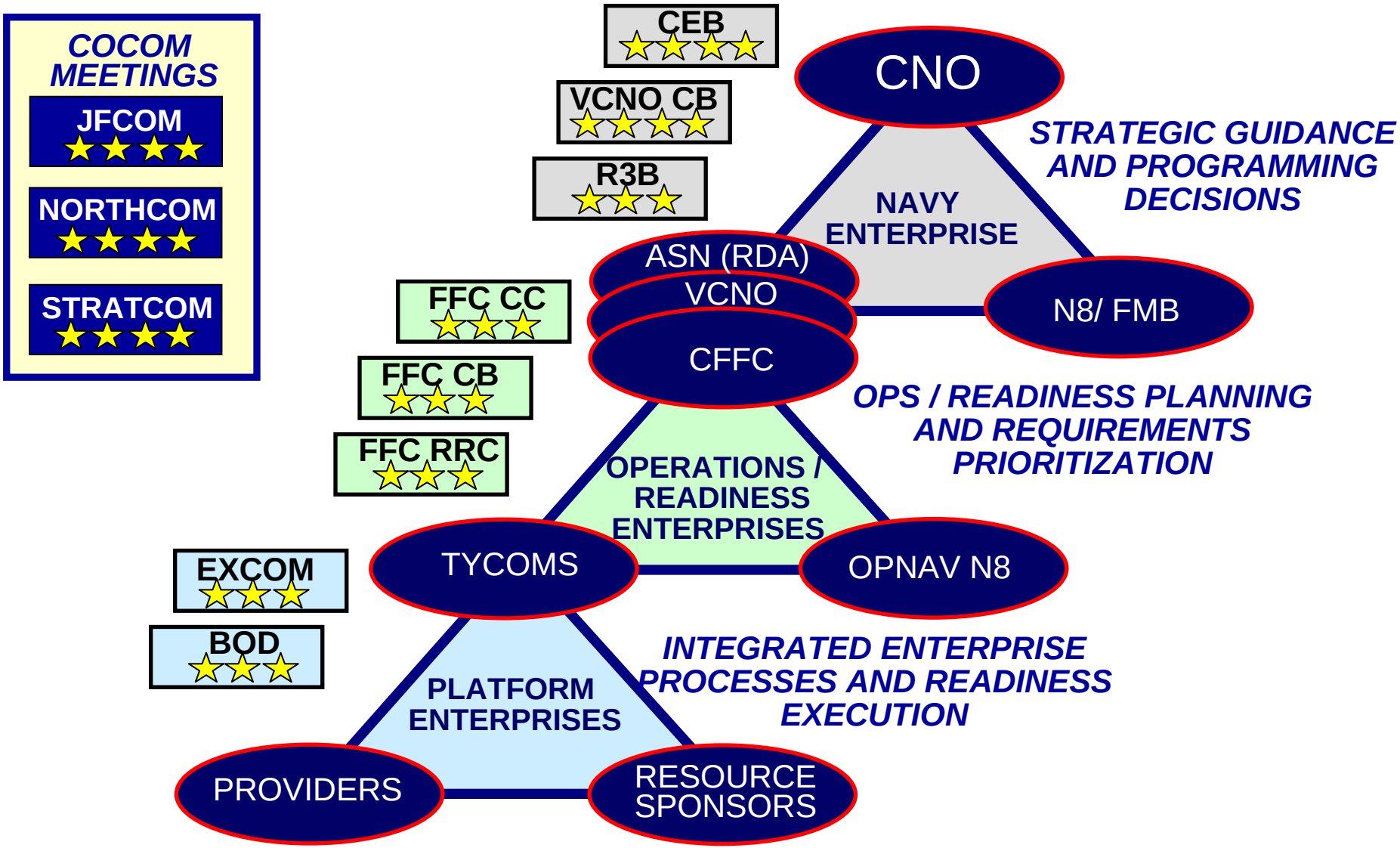
ACHIEVED THROUGH BEHAVIORAL MODEL (INTERDEPENDENT CONCEPT OF OPERATIONS):

- **NAVY ENTERPRISE (GOVERNANCE BOARD):**
  - SENIOR NAVY STRATEGIC DECISION FORUM FOCUSED ON IMPROVING PRODUCTIVITY FOR CURRENT AND FUTURE READINESS THROUGH INTEGRATION OF SUPPORTED WARFIGHTER ENTERPRISES
- **WARFIGHTER ENTERPRISES (FIVE SUPPORTED TEAMS; LED BY "SUPER TYCOMs"):**
  - COLLABORATIVE TEAMS FOCUSED ON DELIVERING WARFIGHTING CAPABILITY TO NAVY COMPONENTS AND COMBATANT COMMANDERS; AND INCREASING PRODUCTIVITY ACROSS THEIR DOMAIN AT REDUCED COST
- **PROVIDERS / ENABLERS (SUPPORTING ELEMENTS; WITH DESIGNATED LEADS):**
  - OPERATE AS PROVIDERS / ENABLERS TO MANAGE VALUE STREAMS (PEOPLE, DOLLARS, AND STUFF), SUPPORTING TYCOM-LED WARFIGHTER ENTERPRISES, WITH LINKED AND COMMON PROCESSES / METRICS
- **DOMAIN: DOLLARS, PEOPLE, & STUFF ASSOCIATED WITH EACH WARFIGHTER ENTERPRISE**
- **DEMAND SIGNAL: DERIVED FROM THE WARFIGHTER ENTERPRISES (I.E., READINESS REQUIRED AND NO MORE)**
- **ENTITLEMENTS: WHAT'S NEEDED, WHEN, HOW MUCH, AND NO MORE**
- **OUTPUT: READINESS OVER COST**

CRITICAL NAVY ENTERPRISE PROCESSES AND BEHAVIORS

- **IDENTIFY DOMAINS AND ASSIGN SINGLE PROCESS OWNERS**
- **ASSEMBLE THE RIGHT ENTERPRISE TEAMS AND GAIN COMMITMENT**
- **OPERATE IN SUPPORT OF A SINGLE FLEET-DRIVEN METRIC *(WHAT THE ENTERPRISE VALUES)***
  - ***AGREEMENT ON SCOPE, OUTPUTS, AND LINKED METRICS***
  - ***TRANSPARENCY OF DATA TO PROMOTE TRUST AND MONITOR PERFORMANCE***
  - ***SHARED KNOWLEDGE ON ISSUES AND KEY PROBLEMS AFFECTING THE DOMAIN***
  - ***RECOGNIZE, NURTURE AND RESPECT TECHNICAL AUTHORITY***
  - ***IDENTIFIED ENTITLEMENTS (WHAT'S NEEDED, WHEN, HOW MUCH, AND NO MORE)***
- **AGREE ON DESIRED OUTPUT (E.G., READINESS OVER COST), WITH FOCUS / TRADE-SPACE INVOLVING CURRENT AND FUTURE READINESS**
- **OPERATE WITH DISCIPLINE, GOVERNANCE, AND A REGULAR (TIMELY) DRUMBEAT**
- **BASELINE EVERY DOLLAR, ALL THE PEOPLE, ALL THE STUFF, AND ALL THE CAPABILITY WITHIN THE DOMAIN, WITH ASSIGNED ACCOUNTABILITY FOR OUTCOMES**
- **ESTABLISH ENTITLEMENTS; CONTINUALLY MEASURE GAPS-TO-ENTITLEMENT**
- **REMOVE BARRIERS TO PRODUCTIVITY**

NAVY ENTERPRISE CONSTRUCT



HOW SENIOR LEADERSHIP CAN HELP:
AREAS OF EMPHASIS

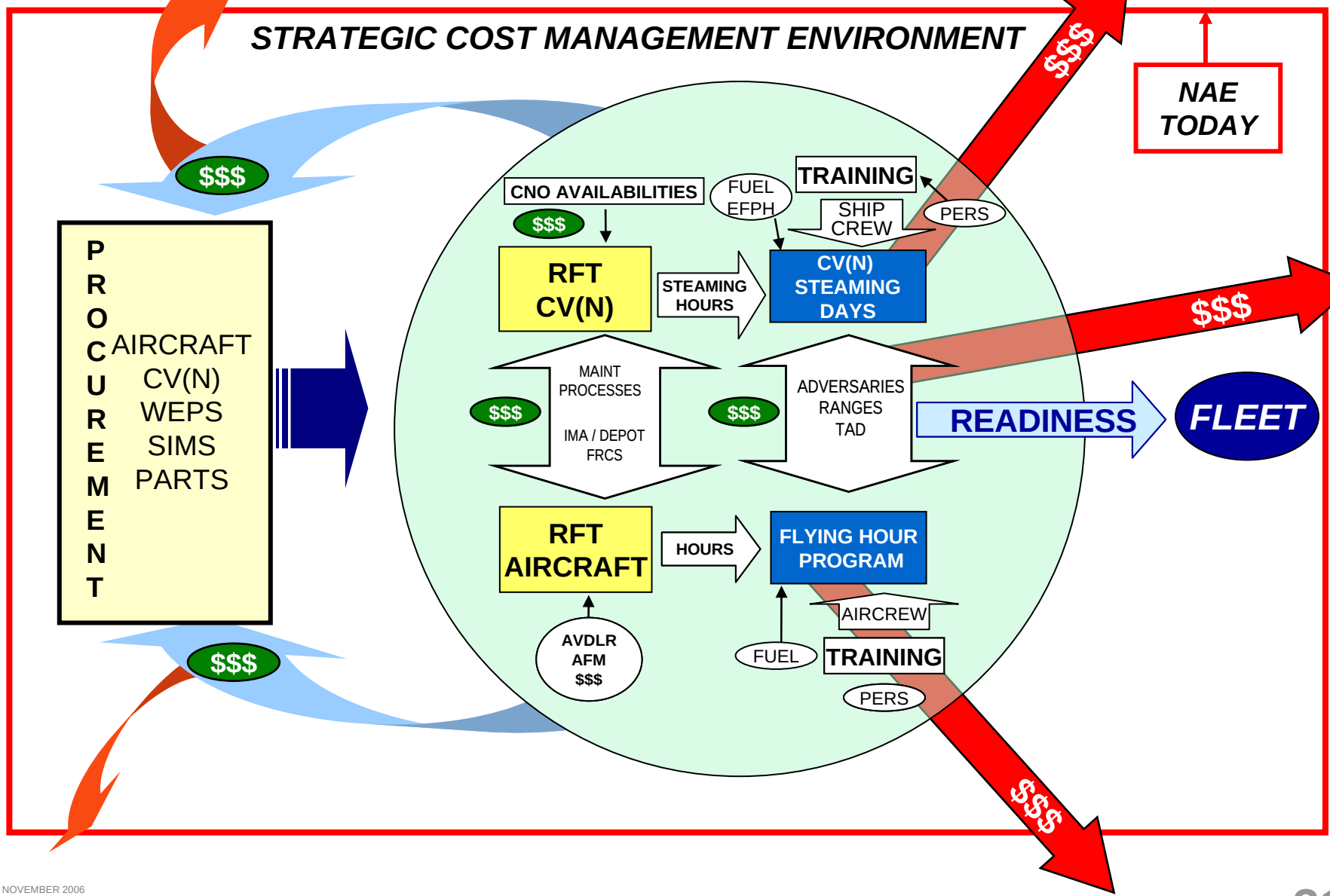
- **COMMIT TO THE CHANGE – MAKE IT LAST THROUGH LEADERSHIP TURNOVER**
  - INCLUDE IN PERFORMANCE EVALUATIONS / FITNESS REPORTS (FITREPs)
  - INCENTIVIZE GROUP PERFORMANCE GOALS FOR SENIOR LEADERSHIP
  - INCLUDE PRODUCTIVITY IMPROVEMENT TRAINING IN LEADERSHIP DEVELOPMENT PROGRAMS
- **PARTICIPATE IN THE EFFORT**
  - PROVIDE EXECUTIVE SPONSORSHIP FOR PROJECTS
  - GET TRAINED AS A GREEN BELT
  - DEMAND DATA AND METRICS . . . STAMP OUT OBFUSCATION
- **PROVIDE RESOURCES – VISION WITHOUT MONEY EQUALS HALLUCINATION**
  - PROVIDE STABLE FUNDING TO ENSURE SUCCESS
  - DEMAND VALIDATED RETURN ON INVESTMENT

LEADERSHIP COMMITMENT AND ACCOUNTABILITY MAKE CULTURAL CHANGE A REALITY


THE FLEET
NAVAL AVIATION ENTERPRISE
LEADERSHIP
QUESTIONS?
NAVAL AVIATION VISION
2020

BACKUP

NAE "SYSTEM" SCM



NAVAIR SOFTWARE PRODUCTIVITY IMPROVEMENT EXAMPLES

(COMPARISONS OF TEAM'S SW-CMM LEVEL 1 PERFORMANCE VERSUS SW-CMM LEVEL 4 PERFORMANCE)

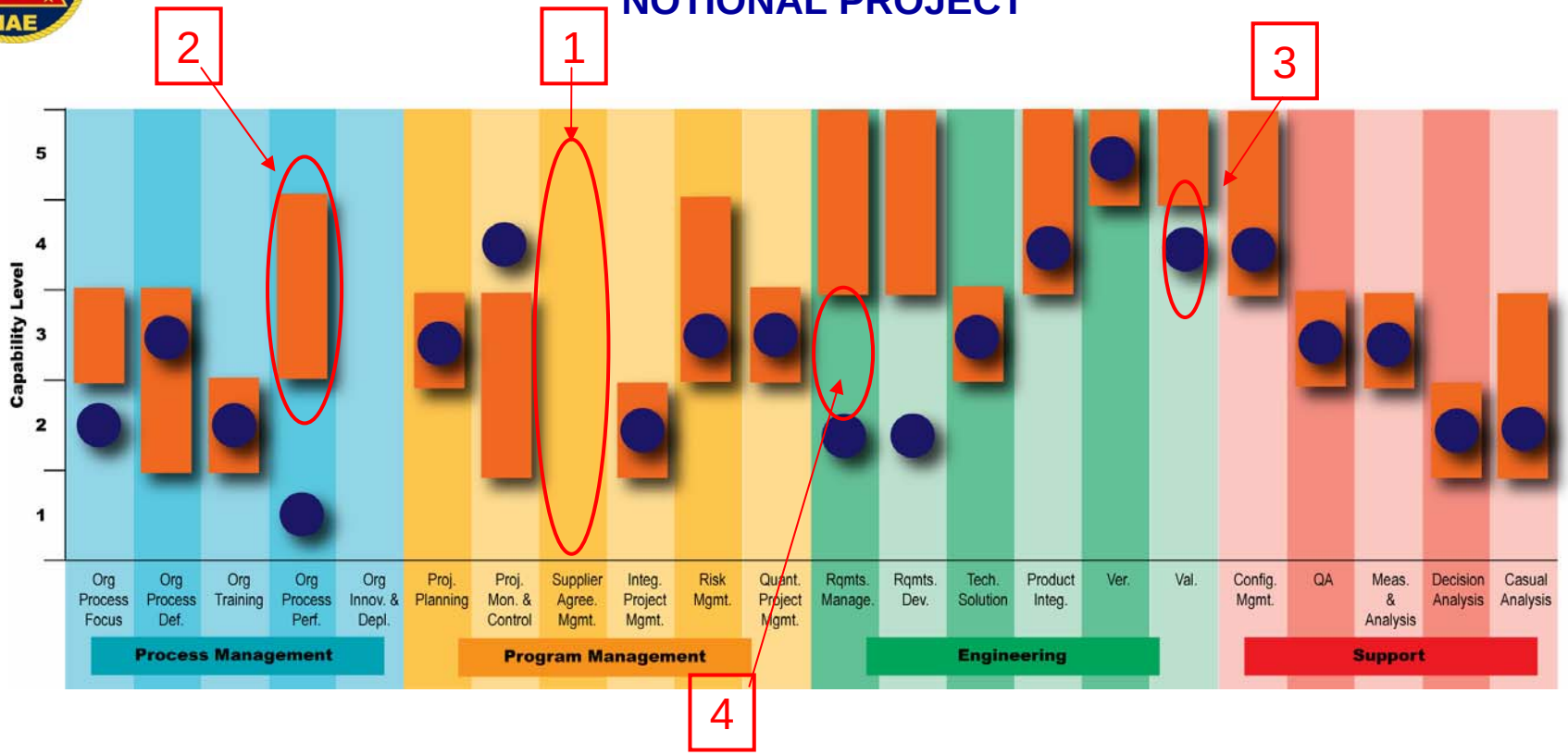
SSA	Productivity (MH/SLOC)	Cost ($/SLOC)	Quality Increase (Defects/KSLOC @OTRR)
P-3 (Design Only)	46%	35%	78%
AV-8B	37%	56%	46%
F/A-18	34%	68%	45%

NOTES:

- ABOVE DATA IS PROVIDED TO SHOW GAINS REALIZED BY NAVAIR ORGANIZATIONS THAT HAVE IMPROVED THEIR PROCESSES BY MEANS OF CARNEGIE-MELLON SOFTWARE ENGINEERING INSTITUTE CAPABILITY MATURITY MODELS.
- DATA IS BASED ON ACTUAL OFP COSTS UP TO OTRR FOR F/A-18 AND AV-8. P-3 DATA IS BASED ON ACTUAL DESIGN COSTS.
- DATA ***SHOULD NOT*** BE USED TO COMPARE ONE ORGANIZATION AGAINST ANOTHER, SINCE VARIATIONS IN SOFTWARE COMPLEXITIES AND REQUIREMENTS WOULD MAKE SUCH COMPARISONS INVALID; FOR EXAMPLE:
  - REAL-TIME EMBEDDED APPLICATIONS VS. DESKTOP MISSION SUPPORT APPLICATION;
  - LEGACY SOFTWARE DEVELOPMENT (ASSEMBLY LANGUAGE) VS. NEW LANGUAGE DEVELOPMENT (C++ OBJECT-ORIENTED).

BUSINESS-BASED CMMI APPROACH

NOTIONAL PROJECT



- **ADOPTING CONTINUOUS REPRESENTATION OF CMMI MODEL**
- **FOUR STEP PROCESS:**
  - **1) DETERMINE WHICH CMMI PROCESS AREAS ARE GERMANE TO THE PROJECT TEAM**
  - **2) DETERMINE PROCESS CAPABILITY LEVELS NEEDED TO DELIVER REQUIRED FLEET PRODUCTS (AND NO MORE)**
  - **3) ASSESS PROJECT TEAM'S CURRENT CAPABILITY LEVEL IN EACH PROCESS**
  - **4) PERFORM BUSINESS CASE ANALYSIS TO DETERMINE BEST INVESTMENT AREAS**
- **WILL DETERMINE CMMI MATURITY VIA EQUIVALENT STAGING AT MAT LEVEL**