Workforce Demand Forecast Model Analysis by PEO IWS

"Sea Power to the Hands of Our Sailors"

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Analysis by Brandy Tookes and Latasha Jacocks, Office of DCO

March 2017

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PEO IWS Overview Programs & Projects
Diverse Portfolio of Portfolios

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Deputy Major Program Manager
Undersea Systems

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PEO IWS

AEGIS
Zumwalt
SSDS
Above Water Sensors
RAM
NSPO
Surface Ship Weapons
Undersea Systems
Command Control

Aegis Combat Systems Integration into DDG 51 and CG 47 class ships
CPS
ATD/BFTT
AEGIS Ashore
AEGIS CSL
AEGIS SVS
CDS
USCG NT/NO
Cyber
Enterprise Test
ACB-16
SPQ-14/15
ACB-20/ FLT III DDG
FTIIP Integration
SPA-25
SDTS
NIFC-CA
ECDIS-N
MK 34 GWS: 3 Countries
SQQ-89: 2 Countries
• Radars: 1 Country
• Ammunition: 12 Countries
• WSN-7/9: 4 Countries
• NFCS: 1 Country
BFTT: 1 Country
SM-1/SM-2: 15 Countries
CIWS: 8 Countries
Aegis/ AWS: 5 Countries
MK 41 VLS:
CEC: 2 Countries
LCS 1 & LCS 2 Combat Systems Variant Integration
LCS 2
DDG 1000 Combat Systems (TSCE) Integration
SSDS Combat Systems Integration in the following classes:
CVN
LSD
LHA
LHD
LPD
AMDR
AN/SLQ-32
SPY-1A/B/ D/D(V)
AN/SPQ-9B
SEWIP
SPY-3
SPS-40
NULKA
SSQ-82
SPS-49
SPS-48
AOEW
SYS-2
SPS-64
SPS-55
SPS-67
SPS-73
MK-59
DBR
WLR-1
MMSP
CIWS
RAM GMLS
ESSM Blk 1
RIM-7/ MK57 NSSMS
ESSM Blk 2
NFCS
SeaRAM
VLS
MK 46 33mm
MK 75 76mm
MK 45
LRLAP
AGS
SM-6
MK 110 57mm
Griffin
SM-2 Blk IIIB/ Blk IV
MK 38
SQQ-89
UQN-4A
SQS-56
Surface ASW Systems Imp.
SDRW/ SRD/SCD
CV-TSC
CADRT
WQC-2A/6
USW DSS
MK-32
ASW Advanced Dev.
Sub Arctic Warfare Dev.
LCS ASW Mission Module

126 – Program & Projects
3 – ACAT I
8 – ACAT II
2 – ACAT III
4 – ACAT IV
4 – R&D
29 – Inactive
76 – Non ACAT

Mission: *To develop, deliver, and sustain operationally dominant combat systems to Sailors and Marines: "Sea Power to the Hands of our Sailors"*

WHAT IS THE PROBLEM TO SOLVE?

For organizational staffing decisions, we need to be able to answer the following:

1. If I have to ***reduce*** billets, what areas or programs should they come from?	2. If I can ***add*** billets, where could they be applied?	3. If I need to ***re-assign*** billets or re-structure, what is the most efficient way to do this?	If I look 5 years into the future what kind of KSAs should I be targeting now and perhaps where can I find them?

- Do we have **data** and **analysis** that supports current staffing levels?
- How do we **know** that we are **allocating** the correct billets to the correct programs?
- Is there a way we **shape** future staffing decisions?
- How much **rigor** is necessary to support leadership decisions?

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SCENE SETTER

- NAVSEA PEO IWS is applying Decision Lens software and dashboards to instill **rigor**, **granularity**, and **analysis** to understand the people we have and what we're doing

- As a result, for the first time, NAVSEA PEO IWS is **strategically applying resources**: e.g. assigning less experienced employees to specific programs, or having smaller teams of highly experienced professionals who are better suited based on program complexity

- Going forward, NAVSEA PEO IWS can decide where to apply resources to **tame complexity**, **manage risks**, and **execute efficiently** while fulfilling the mission

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HYPOTHESIS

- All programs are not created equal in terms of how to manage them **efficiently**
  - One program office per program does not work
- Portfolio based program offices can be most efficient at executing programs
  - New programs can be added to an existing infrastructure affordably
  - Cutting programs does not necessarily result in significant manpower savings

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METHODOLOGY

1. Measure program **complexity** and the **importance** of program functions
2. Identify and capture **existing workforce data** and costing information from the large quantities of human capital data for NAVSEA
3. Leverage the software for **analytics** and key **insights** and incorporate expert **judgments** into the process
4. Allows Program Managers to **assess structure** on how to allocate and optimize resources through scenario planning

The software enables us to analyze risk management vs. program complexity based on program office workload demand

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PEO IWS WORKFORCE OPTIMIZATION OVERVIEW

OVERALL MODEL STRUCTURE AND INTEGRATION

Model 1 – Characterize programs based on their complexity

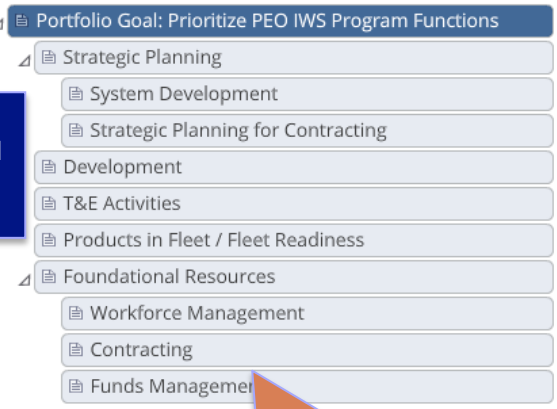
Impact Dashboard
Build workforce optimization scenarios through a user-defined, interactive display

Input #1: Programs and complexity scores

Input #2: Functions and importance scores

Input #3: FTEs + staffing strategies + cost data

Model 2 – Rank program functions based on their importance (1-n)



Data Required:
1. Determine criteria to characterize program complexity
2. Deputies weight the criteria and evaluate programs

Data Required:
1. Determine criteria that ranks the importance of functions for each program
2. Deputies weight the criteria and evaluate functions

Existing Workforce Data

Data Required:
1. Existing FTEs, experience level, and cost by billet series assigned to each function
2. Deputy-defined scenarios: Lean & Mean, Stovepiped, Matrixed, Farm Team, etc.

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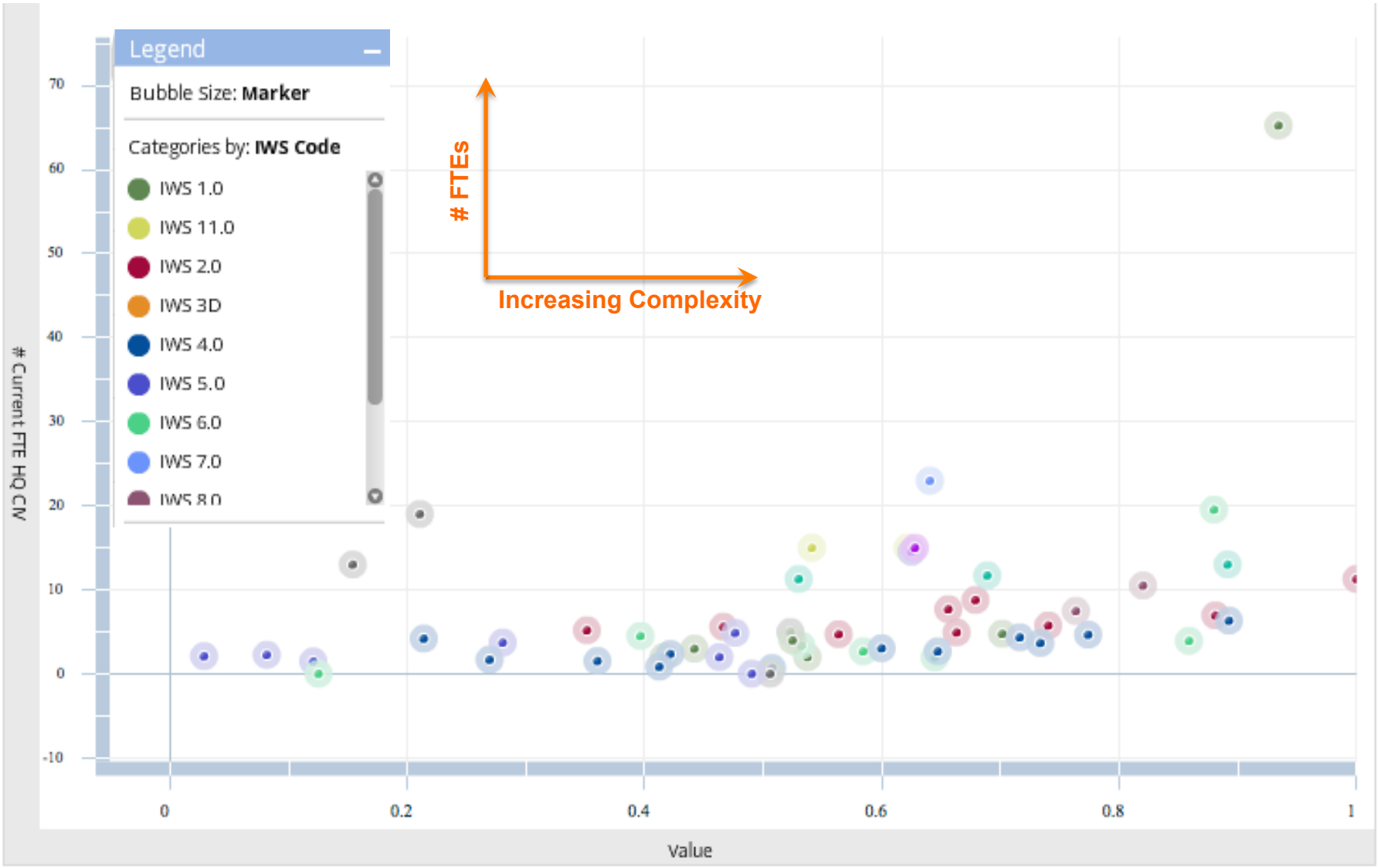
ENTERPRISE VIEW OF PROGRAMS



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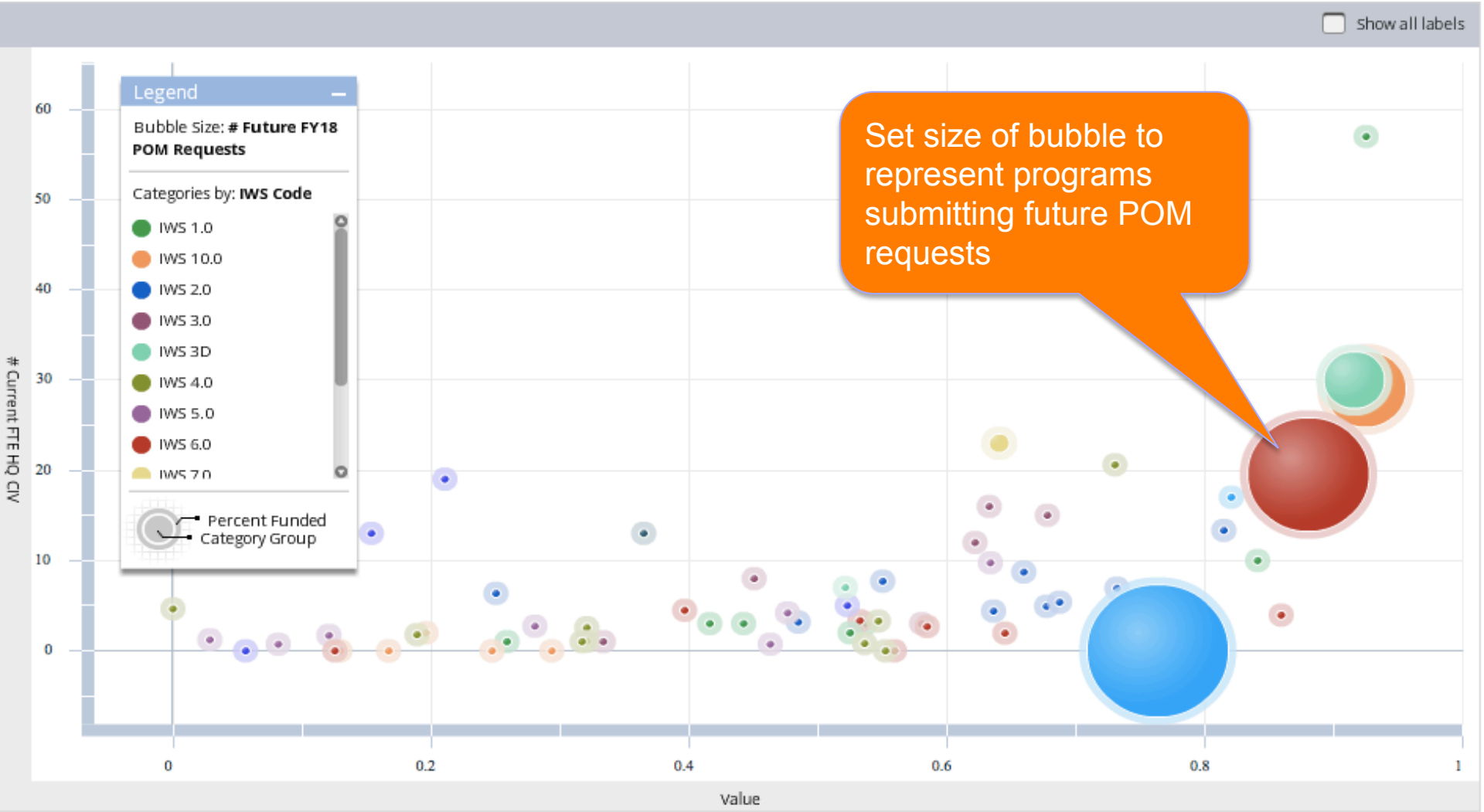
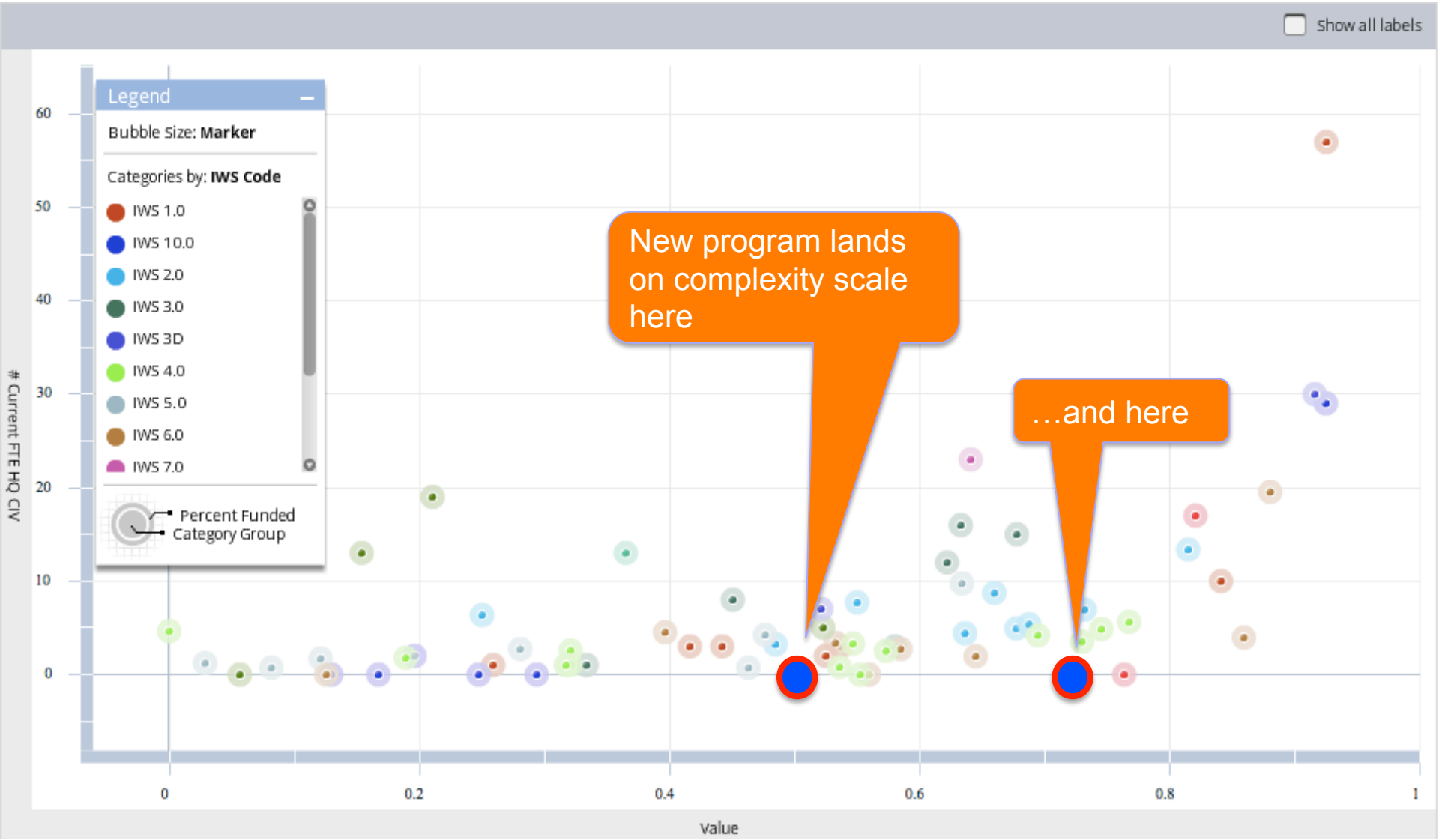
ADDITIONAL APPLICATIONS: FUTURE POM REQUESTS

LARGER BUBBLES = REQUESTING POM RESOURCES



ADDITIONAL APPLICATIONS: STAFFING NEW PROGRAMS

RATE NEW PROGRAMS AGAINST CRITERIA TO GAUGE STAFFING NEEDS



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ACTUAL COMPLEXITY/FTE

(ASSUMES CORRECT COMPETENCY APPLIED TO CORRECT TASKS W/IN PROGRAM)

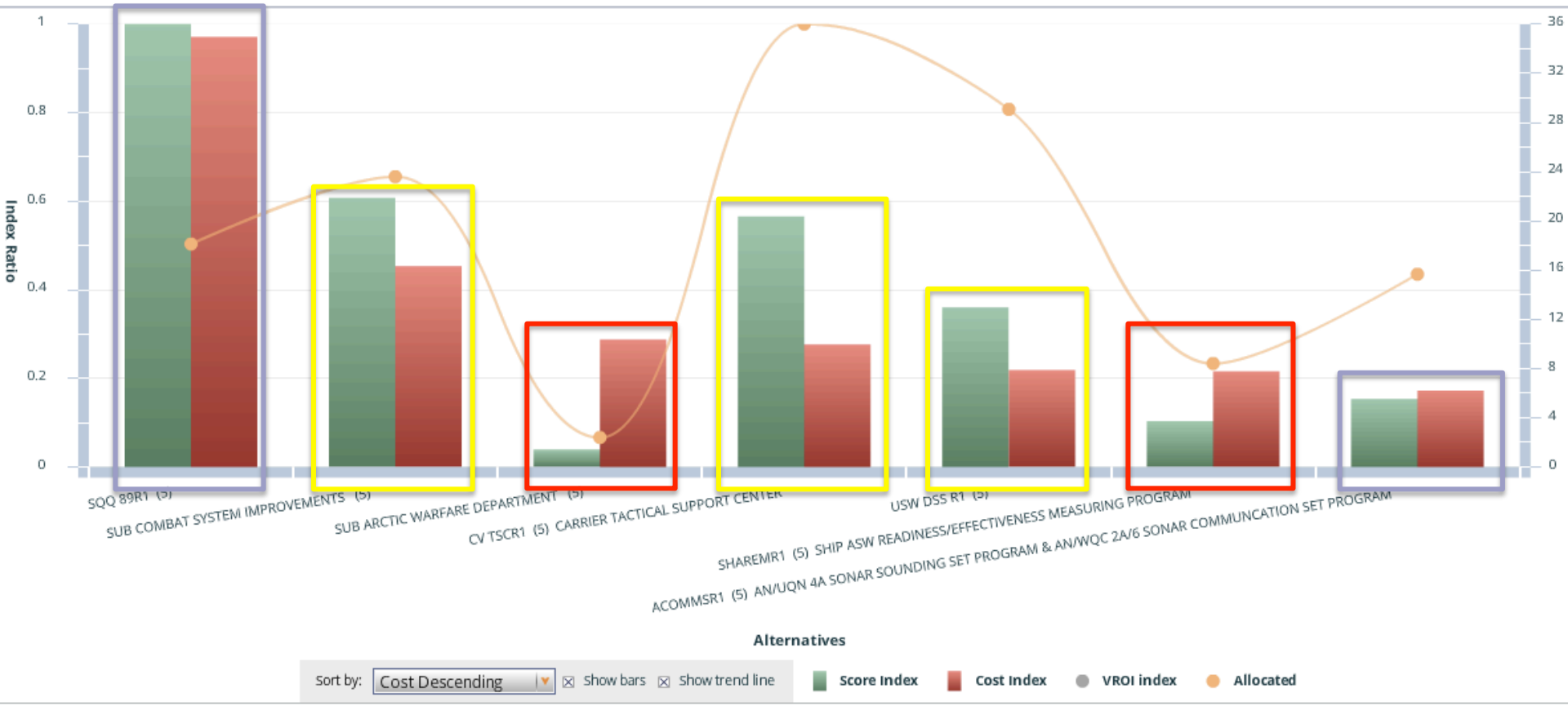
Don't Jump to conclusions ….Are there other ways to tame the complexity?

= Too Many People Per Complexity

= Too Many People Per Complexity

ACTUAL COMPLEXITY/FTE

(ASSUMES CORRECT COMPETENCY APPLIED TO CORRECT TASKS W/IN PROGRAM)



= Near/At Equilibrium

= Super efficient?? Few senior staff

= Less complex program can be staffed with Junior members as learning opportunities

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THE INTEGRATED MODEL

- Characterize programs based on their complexity
- Rank program functions based on their importance to the success of the program
- Develop risk based scenarios for each program/function
  - Current baseline, Farm team, Lean and mean, Matrixed, Stovepiped

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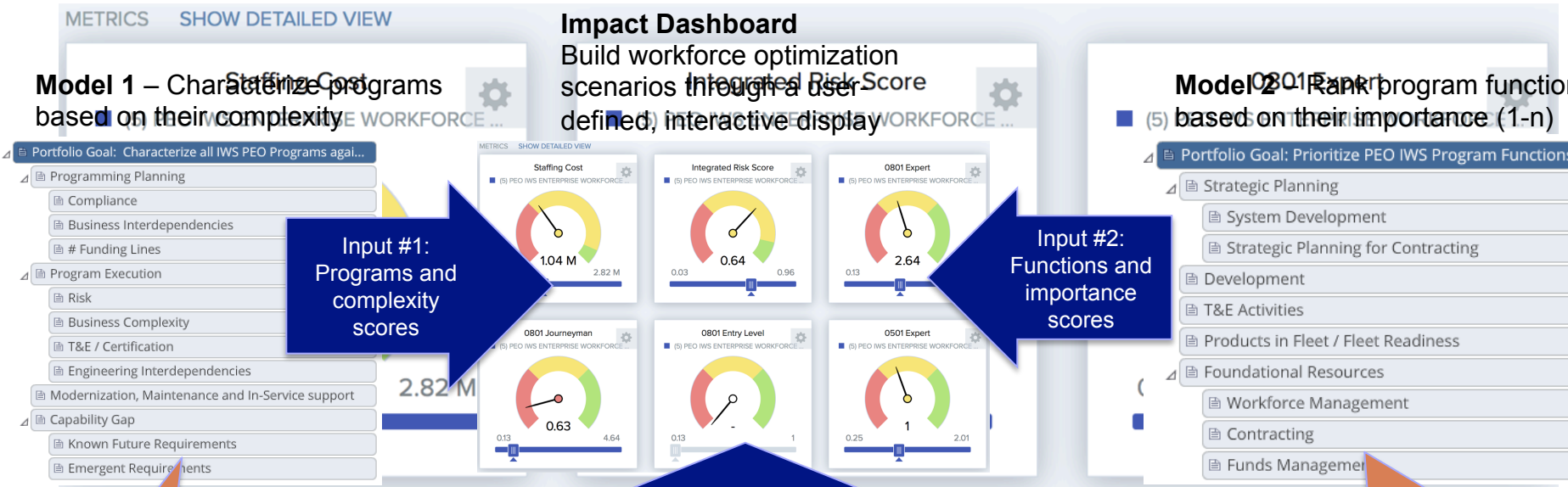

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WHAT IF……

- We could strategically place people based on experience and talent levels
- Develop an organization that grows individuals in a farm team
- Prepare them to become highly skilled lean and mean employees
- …..and still manage our risk

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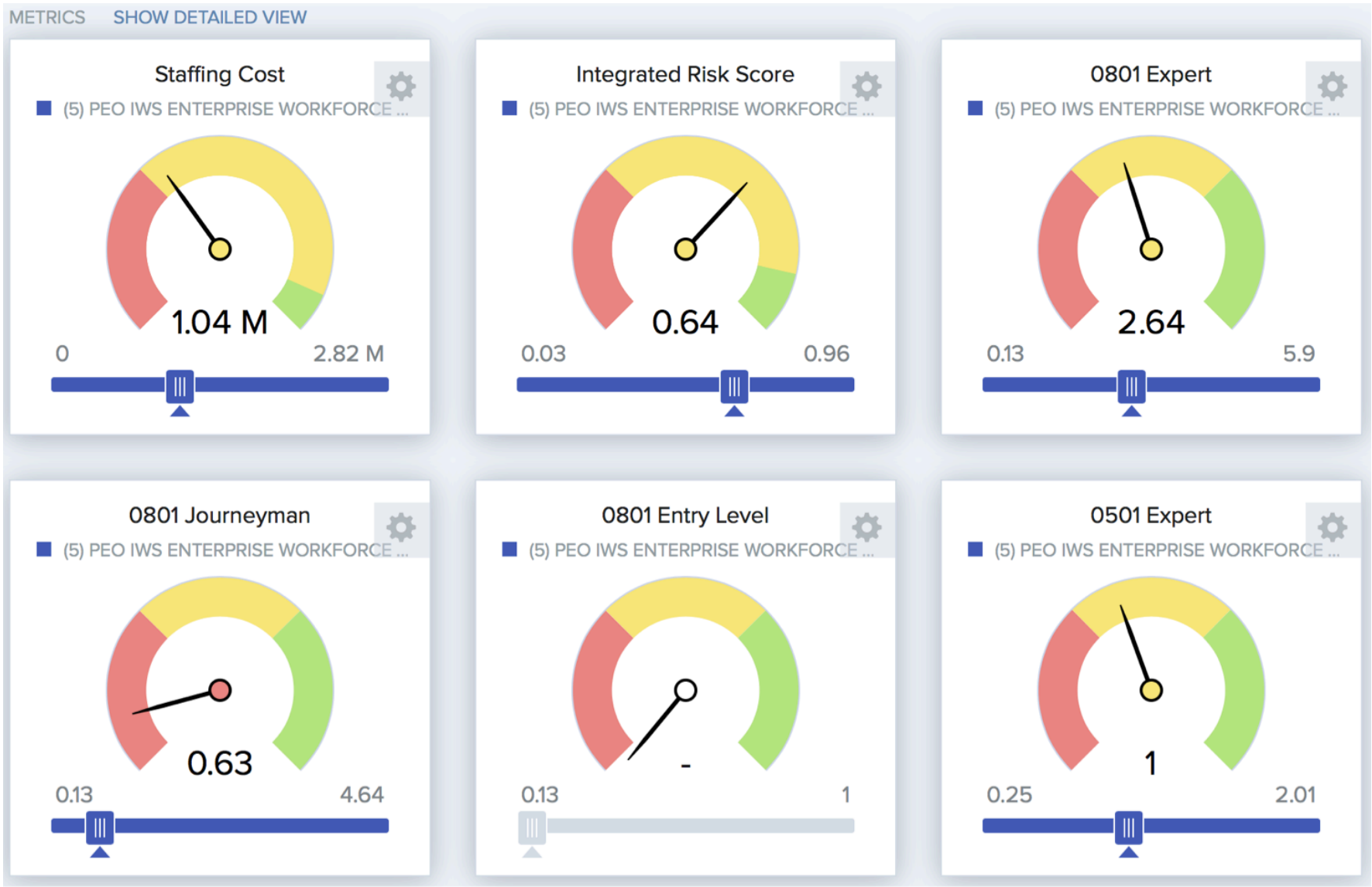
SIMULATIONS AND VIGNETTES



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WHAT IF……

- We could set policy based on impact to the workforce
- Quantify for policy makers, the impact of policy changes
- Do a better job of change management by analyzing workload
- Quantify value of tools to improve quality or minimize workload
- ……and still manage our risk

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WHAT IF……

- We could shape recruiting efforts
- Based on detailed analysis of future needs
- …..and still manage our risk

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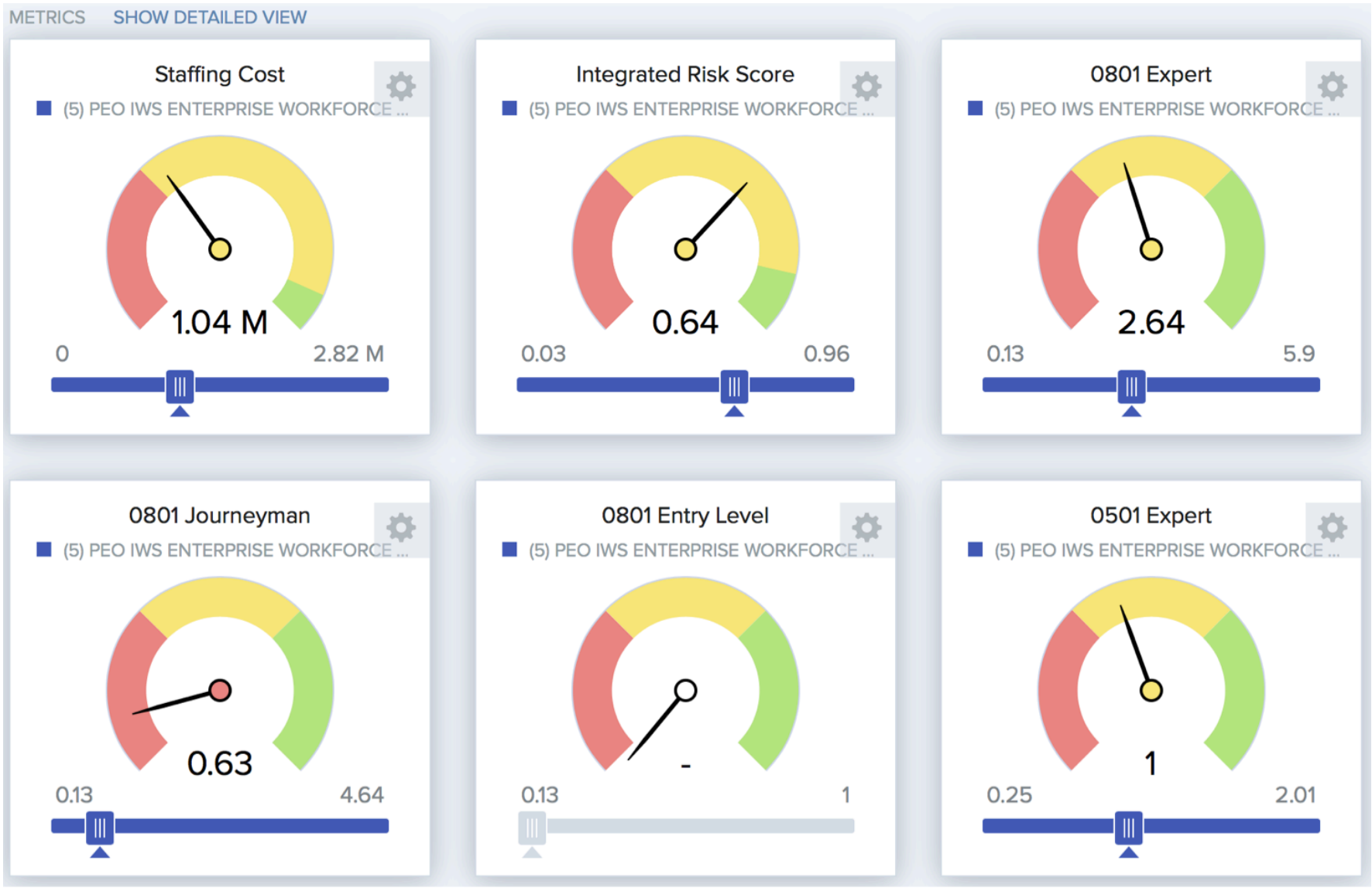
SIMULATIONS AND VIGNETTES



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FINDINGS

- We now have the **data** and the **tools** to help decide where do we apply resources to **tame the complexity**, to manage risks, to execute efficiently
- Leverage existing data to capture **all of the parameters** that correlated to FTE and determine **what drives workload** AND **efficiency** in our current state
- We can use this type of analysis to justify current and future staffing levels.
  - Balancing risk/cost/complexity and human capital planning
  - Analytics tell us where we should **consider** improving: hiring, policy, structure, training, tools, etc.

*This framework has **major** implications for resource optimization and program success*

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Thank you for your time!

QUESTIONS?

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