Description of document:	Defense Nuclear Facilities Safety Board (DNFSB) Workforce Assessment and Analysis produced under Contract OGM12056 by Booze Allen Hamilton, Inc., Final Report, 2012
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Source of document:	FOIA Request Chief FOIA Officer Defense Nuclear Facilities Safety Board 625 Indiana Avenue, N.W., Suite 700 Washington, D.C. 20004 Email FOIA@dnfsb.gov

DEFENSE NUCLEAR FACILITIES
SAFETY BOARD
Washington, DC 20004-2901

December 6, 2018

Re: Freedom of Information Act Request FY 19-02: Final Response

This letter is the final response to your November 14, 2018, Freedom of Information Act request to the Defense Nuclear Facilities Safety Board, Tracking Number FY 19-02, for "a copy of the Workforce Assessment/Analysis for DNFSB produced under Contract OGM12056 to Booze Allen Hamilton, Inc., funded by DNFSB, a contract awarded in approximately August 2012."

We have located a copy of that document, and upon review, have determined that it should be provided to you in its entirety. Accordingly, you will find an unredacted copy of the report attached to this letter.

There are no fees associated with this request. If you have any questions about our response, please do not hesitate to contact our FOIA Public Liaison, Paul Wilson, by phone at (202) 694-7000 (toll free at (800) 788-4016) or by e-mail at FOIA@dnfsb.gov. Please be sure to provide the tracking number, FY 19-02, in any such communication.

Very truly yours,

Glenn Sklar
Chief FOIA Officer

Attachment

Final Report

Defense Nuclear Facilities Safety Board(DNFSB) Workforce Assessment and Analysis

PRESENTED BY:

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Human Capital, Booz Allen Hamilton

November 19, 2012

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The Defense Nuclear Facilities Safety Board's (Board) safety and oversight mission is significant

Background:

▶ The Board, an independent executive branch agency, is charged under its enabling statute with providing technical safety oversight of the DOE's defense nuclear facilities and activities in order to protect the health and safety of the public and workers. The Board is composed of five politically appointed experts in the field of nuclear safety with demonstrated competence and knowledge relevant to its independent investigative and oversight functions

▶ The Board's staff is organized into three Offices: Office of the Technical Director (OTD), Office of the General Counsel (OGC), and Office of the General Manager (OGM). All but 11 of the Board's 120 federal positions are located at its headquarters facility in Washington, D.C. The other 11 positions are located at various DOE sites in the continental United States and are assigned to the Office of the Technical Director. These site representatives are administratively supported from the headquarters

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The Board seeks to assess and analyze its current workforce and to better align its organization with anticipated skills and needs

Purpose

▸ The goal of developing a workforce assessment and analysis is to:
  - better align the organization with anticipated needs and skills now and for the next five years;
  - ensure that the Board is able to identify skill/competency gaps;
  - ensure responsiveness to changing priorities; and
  - improve organizational structure, flexibility and efficiency across the OGM, OGC, and OTD

Scope

▸ The scope of the workforce assessment and analysis is to provide a comprehensive assessment of the current workforce by leveraging existing Board artifacts, documents, reports, and personnel data, along with interviews with the Chairman, Vice Chairman, Offices' leadership and key internal stakeholders

▸ Our report focused specifically on documenting and analyzing the Board's current workforce to understand its current gaps in achieving its mission and to inform specific recommendations for mitigating workforce risk

Following our approach, we conducted rigorous data analysis and developed recommendations to help the Board meet its mission priorities in Phase 2:Data Analysis

DNFSB Workforce Analysis Technical Approach

Phase 0: Data Collection and Analysis Design

- Design data collection and analysis process and prepare written Work Plan in consultation with Office Directors in kick-off meeting
- Submit Work Plan within five days of the kick-off meeting
- Obtain approval of Work Plan

Deliverables:
- Initial Kick-off Meeting
- Work Plan

Phase1: Environmental Scan Analysis

- Conduct current state review and needs analysis through review of strategic documents, workforce data, position descriptions
- Conduct interviews with stakeholders
- Document current state and opportunities for improvement

Phase 2: Data Analysis

- Leverage Phase 1 information to assess current and future workforce requirements, to include:
  - SWOT analysis
  - Identification of mission critical occupations
  - Analysis of workforce competency gaps
  - Alignment of workforce in organizational structure
  - Strategy to recruit, develop and retain
- Develop Workforce Analysis Final Report

Deliverables
- Workforce Analysis Final Report
- Microsoft-compatible Database

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We also used quantitative data provided by the Division of Human Resources to develop graphical maps of the Board's current workforce

▶ Workforce Maps Analysis:
- Identified key positions with risk (e.g., retirement eligible, vacant, contractor positions)
- Determined how specific workforce attributes (primary job functions, GS levels, location of position, etc.) align
- Prioritized position needs

▶ HR provided Booz Allen with demographic data, employee data (including pay plan and level), and attrition data which substantially contributed to the workforce maps
- The current Board organizational chart also helped identify the distribution of retirement eligible, vacant, and contractor positions
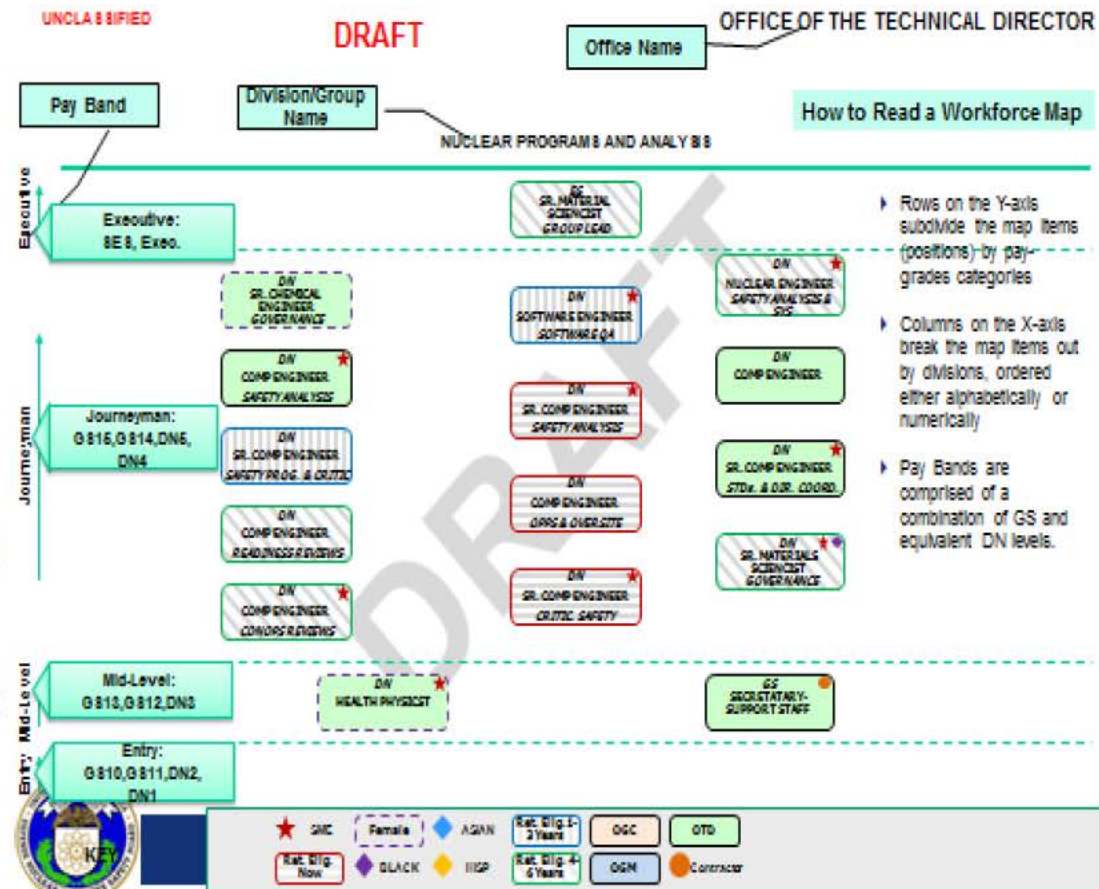
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The Board's most central workforce risk is knowledge loss which is predicated by six factors
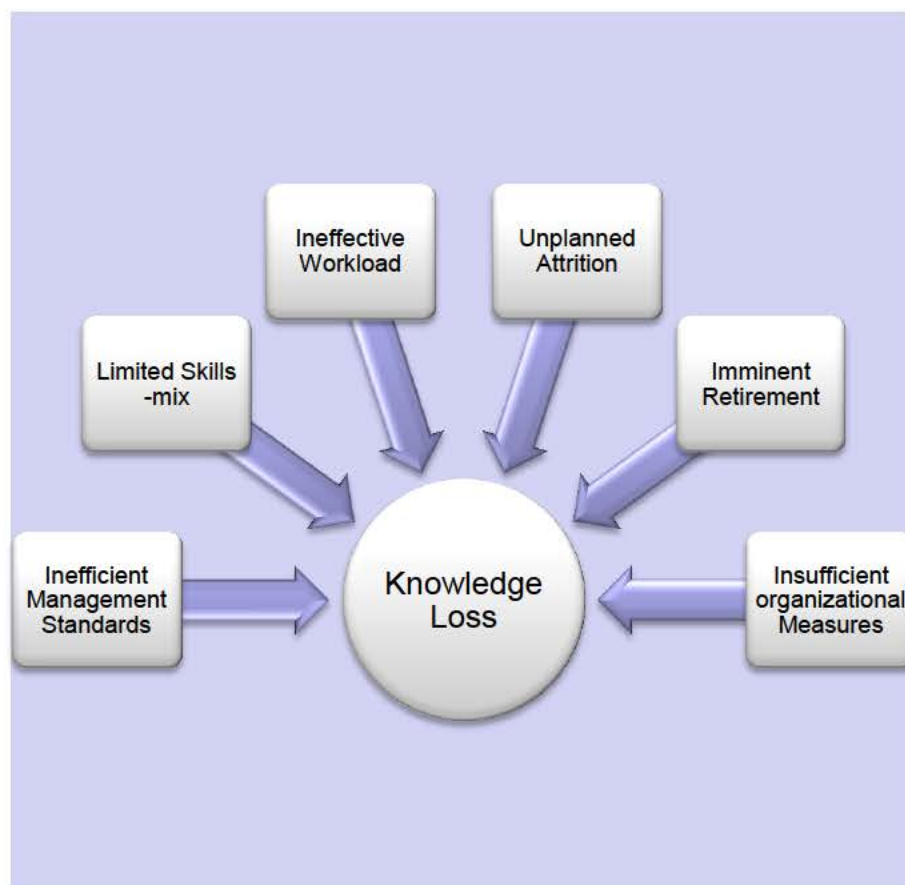
▶ Six key contributing risk factors:

1) Inefficient Management Standards

2) Limited Skills-Mix

3) Ineffective Workload Distribution

4) Unplanned Attrition

5) Imminent Retirement

6) Insufficient Organizational Measures

Based on this analysis, we developed five strategic recommendations to mitigate the Board's risk factors

Strategic Workforce & Succession Planning	Competency Modeling and Analysis	Knowledge Management	Talent Acquisition & Retention	Leadership &Employee Development

▶ These recommendations are summarized at a high level in the last section

▶ The following slides describe in greater detail the six key contributing risk factors, their potential threats to the Board's mission, and mitigation strategies

Summary Finding 1: Inefficient management standards risk factor highlights a critical knowledge management gap within OTD

Key Findings

▸ Matrixed technical staff are shared across interdisciplinary projects, but line-of-sight across groups and to the Technical Director is currently limited

▸ Technical staff development and training is highly individualized and flexible, which can also lead to inconsistent sharing of resources and growth of rising talent

▸ Limited management expectations for work processes and standards set against accountability measures

▸ Internal process documentation is ad hoc and decentralized; time-to-grow from a PDP into an early senior-level employee is estimated to take 10-13 years

▸ Among OTD's senior SMEs, only three actively mentor outside of the PDP program (there are eight mentors for the PDP program)

OTD Potential Mission Threats

▸ Difficulty completing current programs /projects portfolio due to competency and knowledge gaps within few years

▸ Unable to ensure that the embedded safety oversight culture at the Board is sound, technically competent and risk aware

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OTD can mitigate this risk factor by bolstering knowledge transfer activities and building operating procedures

▸ Bolstering knowledge transfer activities (such as enhancing mentoring relationships and creating shared competencies) and building operating procedures to standardize processes and set management expectations

▸ Integrating standard operating procedures (SOPs) to detail requirement, and relevant step by step processes and activities. SOPs can be used by employees (and Board members) to answer questions or understand internal processes, saving managers and other employees time that can be spent on mission activities

▸ If implemented, these solutions could measurably aid in the mid-level staff retention, and improve overall performance

Summary Finding 2: The Board's limited skills-mix risk factor relates to existing knowledge management concerns within OGC

Key Findings

▸ Only one attorney (Deputy GC) has a technical background, making complex technical inquiries difficult for other attorneys to undertake

▸ Only two attorneys (including the Deputy) have senior-level institutional knowledge relevant to technical inquiries

▸ OGC is limited in personnel law skills

▸ Time-to-learn in OGC is exacerbated by limited involvement in and understanding of OTD's day-to-day activities

OGC's Potential Mission Risk

▸ Inability to minimize any inquiry backlog and meet legal obligations with technical accuracy

▸ Cyclically inefficient distribution and completion of technical and site-specific inquiries

▸ Loss of historical knowledge and understanding of the Board's legal needs

OGC can mitigate this risk by establishing knowledge transfer activities between senior and junior staff, and with technical staff

▶ Improved knowledge management will create opportunities for mid- and junior-level attorneys to develop site-specific expertise before retirement eligible attorneys leave the workforce

▶ Evening the distribution of the OGC workload (in particular, of technical inquiries) will ultimately result in a more balanced skills-mix and enriched succession among attorneys

▶ Implementing these solutions can create efficiencies in the way OGC does business, build a succession pipeline, and grow technical skills

Summary Finding 3: The Board's ineffective workload distribution risk factor relates to OGM's workforce imbalance and dependence on contractor support

Key Findings

▸ Each division within OGM relies on outsourced support for at least one core function – travel in Acquisitions and Finance, data and reporting within HR, and IT support within IT and Security

▸ The current IT Services are not sufficiently able to meet the technology demands of the technical staff

▸ Time-to-learn and time needed to distribute workload to newer hires within the Division of Human Resources is taking longer than anticipated

▸ OGM has two Contracting Officers, and only one who is fully warranted

▸ Records and document management is currently supported by two FTE, who are responsible for all library, subscription, records, printing, imaging, and marketing services support

OGM Potential Mission Threats

▸ Loss of agency historical knowledge due to large dependency on contractor support/services in the IT, HR and Acquisition offices

▸ Incapable to meet the Board's need to formulate a strategic recruiting and retention plan and It will also continue to stymy OGM's efforts to stimulate change and effectiveness across Offices

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OGM can mitigate this risk by creating new and deepening existing knowledge transfer activities and developing strategic functions

- ▶ Knowledge transfer of three types should occur in OGM: knowledge of systems, processes and routines within functional offices (e.g., embedded); knowledge about how OGM conducts business and interacts with other Board offices (e.g., embodied); knowledge of the skills, abilities, and experience needed to perform work successfully (e.g., embrained) and to mitigate this risk

- ▶ Developing strategic and less transactional functions which will allow OGM to positively affect OTD activities, employee satisfaction, and significantly stimulate OGM's effectiveness across the Board

- ▶ Implementing these solutions will take supportive leadership and time, but best practices show they can lead to improved performance within functional offices as well as programmatic offices such as OTD

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Summary Finding 4: Unplanned attrition is another contributing risk factor that highlights the Board's knowledge loss risk

FTE Attrition Trending
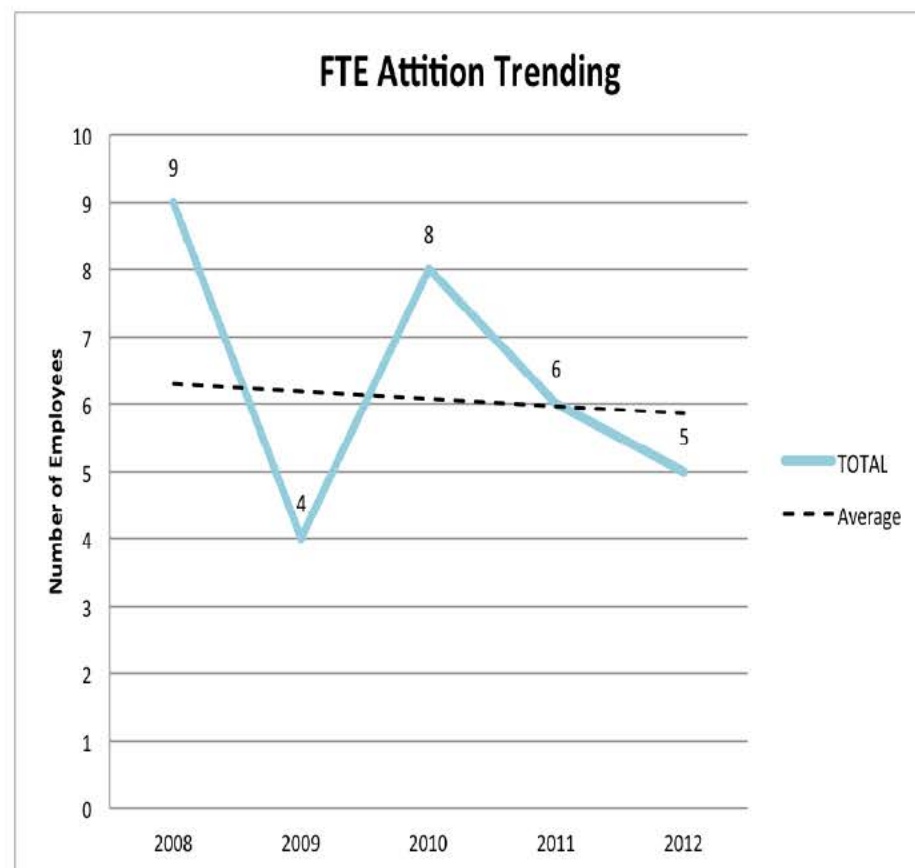
Board Attrition Trend (FY2008-FY2012)

Key Findings

▶ Total attrition was at its peak in FY2008 with nine employees (nearly 10% of the 2008 FTE workforce)

▶ The agency is losing an average of 6.4 FTE annually, meaning that by FY2018 the Board can expect to lose around 38 employees (not including summer interns)

▶ Since FY2008, two-thirds of GS-employee attrition and 50.0% of DN-employee attrition occurred among mid- and early senior-level staff

Board's Overall Potential Mission Threats

▶ Jeopardizing the Board's ability to meet its mission in a timely, effective manner; loss of the Board's 23-year old historical knowledge

▶ Unable to prepare for and meet potential attrition both as the economy recovers and as more staff becomes retirement eligible

The Board can mitigate its attrition risk factor by employing strategic recruiting techniques to build its workforce capabilities

▸ Thorough succession management planning and practice will help the Board mitigate attrition by enabling the Board to prepare for and meet potential attrition both as the economy recovers and as more staff becomes retirement eligible

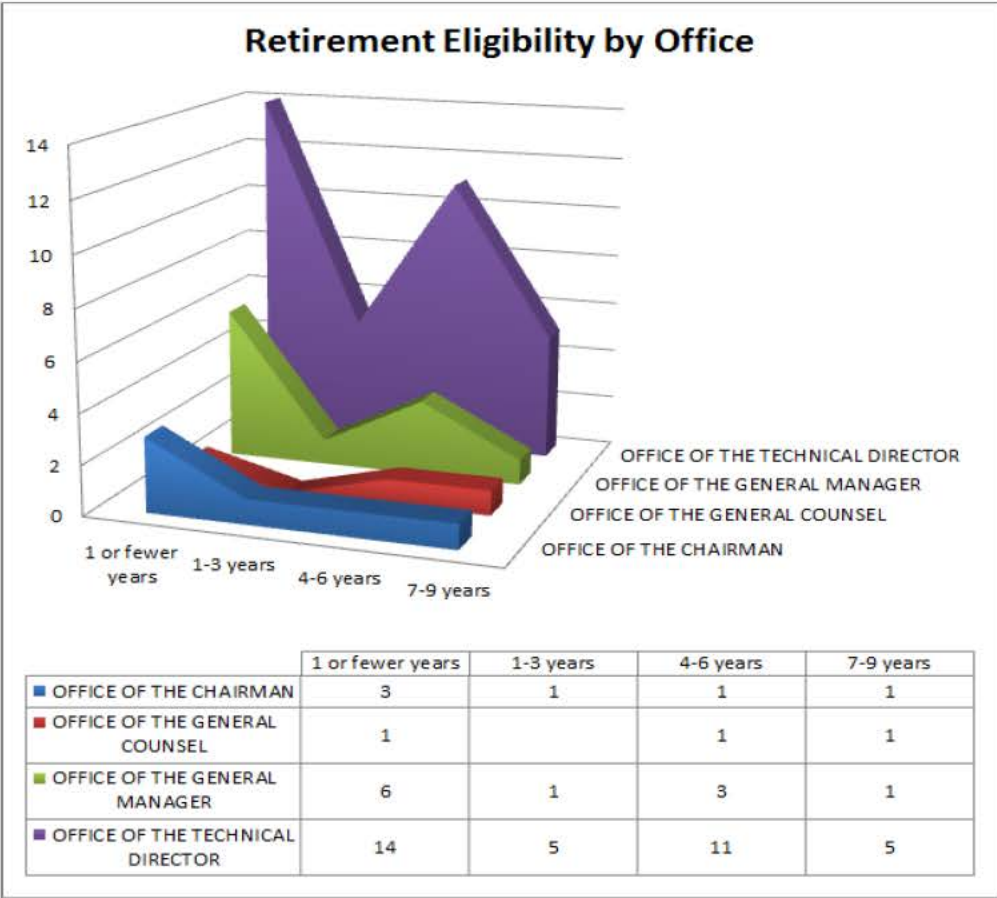▸ Provides an opportunity to more fully utilize the Board's DN hiring authorities to fill vacancies by strategically recruiting top talent to refresh and sustain the talent pipeline and in accordance with mission priorities

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Summary Finding 5: Imminent retirement eligibility is another contributing risk factor that emphasizes the Board's knowledge loss risk

Retirement Eligibility by Office

	1 or fewer years	1-3 years	4-6 years	7-9 years
■ OFFICE OF THE CHAIRMAN	3	1	1	1
■ OFFICE OF THE GENERAL COUNSEL	1		1	1
■ OFFICE OF THE GENERAL MANAGER	6	1	3	1
■ OFFICE OF THE TECHNICAL DIRECTOR	14	5	11	5

Key Findings

▸ More than one-third of the current workforce is retirement eligible by or before FY2018

▸ Of the 24 staff eligible for retirement now, 50% are over the age of 65

▸ By FY2020, 55 employees will be retirement eligible

▸ Attrition due to retirement among technical (DN)-employees over the past five years is 35.7%

▸ Since FY2008, only four GS-employees have retired

Board's Overall Potential Mission Threats

▸ Loss of critical skills and organizational history when senior staff eventually retire from the agency

▸ Difficulty attracting and retaining talented technical employees

The Board can mitigate its imminent retirement risk factor by capturing critical Board knowledge and expertise of all employees

▸ Capturing and storing critical corporate memories and expertise of all its employees; special focus should be place on those employees that are retirement eligible now and within the next five years

▸ Implementing effective succession planning to maintain and ensure the Board's competitive environment that attracts and retains talented people who have technical acumen and are well suited for an oversight role

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Summary Finding 6: Insufficient organizational measures are another key risk factor that emphasizes the Board's knowledge loss risk

Key Findings

▸ Limited mechanisms exist for external "customers" (ex., DOE, NNSA) to provide feedback about the oversight relationship

▸ OTD is concerned about maintaining objectivity above the field operations

▸ Measures associated with organizational performance do not appear to exist (outside of mandatory reporting metrics)

▸ Previous Office of the Chairman leadership deemphasized a relationship with DOE and its implementation of Board recommendations

Board's Overall Potential Mission Threats

▸ Unable to gauge external input and analyses of internal processes and procedures in an effort to improve customer relationships and external oversight image
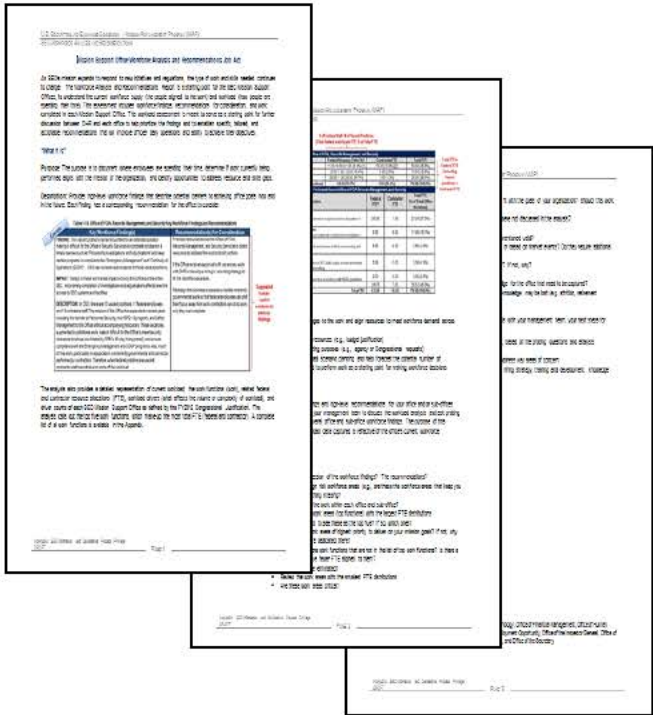
The Board can mitigate its organizational measures risk factor by building external relationships and analyzing internal processes

▶ Leverage Site Representative positions to develop feedback mechanisms with external stakeholders and build safeguarded transparencies around unclassified processes

▶ Engage external experts to analyze internal processes and procedures in an effort to improve the Board's organizational design and alignment with respect to customer relationships and external oversight

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Our overall workforce recommendations span five strategic areas that, if implemented, will enable the Board to meet its mission more effectively and sustainably

▸ The purpose of these recommendations is to present the Board with a set of practical solutions steeped on best practice, SME input, and Booz Allen's years of experience

▸ These recommendations can be used to inform a path forward that will better enable the Board to meet its mission, identify opportunities for efficiency and improve performance

▸ The following slides describe the recommendations for the Board's consideration, along with their likely potential impact to the organization and specific recommended actions (in no particular order)

▸ If our recommendations are implemented, the Board's most central workforce risk will be alleviated and its future workforce state would be more collaborative

To effectively optimize its existing workforce, the Board should consider conducting Strategic Workforce and Succession Planning

DNFSB Overall Workforce Recommendation(s) for Consideration

RECOMMENDATION 1: Conduct Strategic Workforce and Succession Planning

DESCRIPTION: Strategic workforce and succession planning will provide the Board with a clear picture of its workforce supply and demand, and succession risk/readiness

IMPACT: Smooth leadership transitions, anticipated skills gaps, minimized risk to mission execution, proactive workforce development

Recommended Actions:
- Identify attrition "pain points" and potential causes
- Plan for retirement eligibility among DN-Vs, SES, GS-15s, and Board members
- Assess strategic value of PDPs
- Evaluate contractor v. FTE mix in the OGM

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The Board should consider performing Competency Modeling and Analysis

DNFSB Overall Workforce Recommendation(s) for Consideration

RECOMMENDATION 2: Perform Competency Modeling and Analysis

DESCRIPTION: Competency modeling and analysis will provide the Board with specific knowledge, skills, and abilities standards and a structure for employee development

IMPACT: Transparency in performance expectations, clear organizational values and standards, accountability for individual and employee development

Recommended Actions:
- Review Industry-Specific Technical Competency Models from similar agencies and OPM's Competency Models
- Develop organizational core competencies and an OTD technical competency model
- Conduct a competency assessment to identify strengths and gaps among the current workforce
- Apply competency model and competency goals to Individual Development Plans (IDPs)
- Integrate Work Plans and IDPs into comprehensive development plan with on-the-job competency and training goals for each employee
- Link competencies to new performance appraisal systems

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Additionally, the Board should consider prioritizing its Knowledge Management

DNFSB Overall Workforce Recommendation(s) for Consideration

RECOMMENDATION 3: Prioritize Knowledge Management

DESCRIPTION: Knowledge Management will provide the Board with processes for the effective transfer, capture and storage of specialized skills and expertise, as well as corporate history and procedures

IMPACT: Efficiencies in onboarding/use of staff time, improved quality of work products and deliverables, effective communication among offices

Recommended Actions:
- Create a procedure for the effective documentation of processes in OTD
- Reevaluate specific administrative service activities (specifically imaging and library programs) This action is already being contemplated and represents a "Quick Win" opportunity!
- Establish a formal mentoring program across OTD for all levels of employees
- Pair attorneys with OTD technical "technical buddies"
- Develop more effective knowledge transfer mechanisms from top-down and across agency offices(ex. invest in SharePoint upgrade)

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The Board should also consider creating Talent Acquisition and Retention Strategies

DNFSB Overall Workforce Recommendation(s) for Consideration

RECOMMENDATION 4: Create Talent Acquisition and Retention Strategies

DESCRIPTION: Talent acquisition and retention strategies will provide the Board with targeted sourcing information, leverage existing relationships with institutions, and set a direction for the composition of the workforce

IMPACT: Improved quality and retention of new hires, diversification of the workforce, access to broader talent pools, Increased employee engagement, presence among strategic partners/targeted institutions

Recommended Actions:
- Examine current talent sources and any trends related to quality and retention of new hires
- Explore alternatives to traditional recruitment strategies to increase efficiencies
- Promote low-cost employee engagement activities, particularly for younger technical hires(e.g. existing seminar series, Lunch & Lean, etc.) -"Quick Win" opportunity!
- Partner strategically with source institutions to identify more diverse talent pools
- Accelerate trend of increasing workforce diversity at the Board
- Revise PDs jointly-HR and Hiring Managers meet before each job announcement-"Quick Win" opportunity!

Lastly, the Board should consider targeting investments in Leadership and Employee Development

DNFSB Overall Workforce Recommendation(s) for Consideration

RECOMMENDATION 5: Target Investments in Leadership and Employee Development

DESCRIPTION: Leadership and employee development (including internal and external trainings, coaching, certification courses, and professional membership/association activities) will provide the Board with a market-competitive, technically competent and engaged workforce

IMPACT: Cutting-edge skills among workforce, government and industry competitive talent, effective leadership

Recommended Actions:
- Provide training to improve communication and feedback skills among managers and directors
- Create packages of Board required and/or suggested trainings for groups of employees (ex., new hires, program/project managers, criticality safety specialists)
- Identify/Evaluate Board endorsed trainings and certifications -"Quick Win" opportunity!
- Collaborate with DOE and NRC to identify developmental opportunities for staff (such as rotations, shadowing, joint-committees)

In summary, below are recommended actions

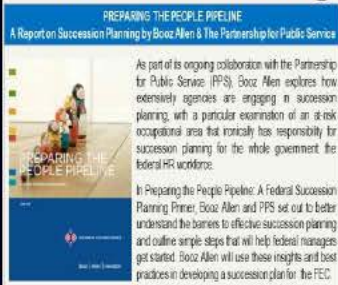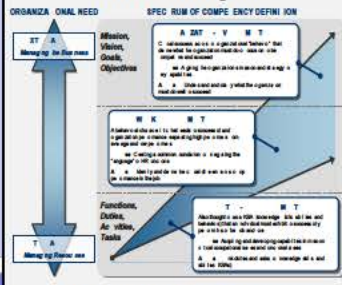| Strategic Workforce & Succession Planning	Competency Modeling and Analysis	Knowledge Management	Talent Acquisition & Retention	Leadership &Employee Development
o Identify attrition "pain points" and potential causes o Plan for retirement eligibility among DN-Vs, SES, GS-15s, and Board members o Assess strategic value of PDPs o Evaluate contractor v. FTE mix in the OGM	o Review Industry-Specific Technical Competency Models from similar agencies and OPM's Competency Models o Develop organizational core competencies and an OTD technical competency model o Conduct a competency assessment to identify strengths and gaps among the current workforce o Apply competency model and competency goals to Individual Development Plans (IDPs) o Integrate Work Plans and IDPs into comprehensive development plan with on-the-job competency and training goals for each employee o Link competencies to new performance appraisal systems	o Create a procedure for the effective documentation of processes in OTD o Reevaluate specific administrative service activities (specifically imaging and library programs) *QUICK WIN!!* o Establish a formal mentoring program across OTD for all levels of employees o Pair attorneys with OTD technical "technical buddies" o Develop more effective knowledge transfer mechanisms from top-down and across agency offices(ex. invest in SharePoint upgrade)	o Examine current talent sources and any trends related to quality and retention of new hires o Explore alternatives to traditional recruitment strategies to increase efficiencies o Promote low-cost employee engagement activities, particularly for younger technical hires(e.g. existing seminar series, Lunch & Lean, etc.) *QUICK WIN!!* o Partner strategically with source institutions to identify more diverse talent pools o Accelerate trend of increasing workforce diversity at the Board o Revise PDs jointly-HR and Hiring Managers meet before each job announcement *QUICK WIN!!*	o Provide training to improve communication and feedback skills among managers and directors o Create packages of Board required and/or suggested trainings for groups of employees (ex., new hires, program/project managers, criticality safety specialists) o Identify/Evaluate Board endorsed trainings and certifications *QUICK WIN!!* o Collaborate with DOE and NRC to identify developmental opportunities for staff (such as rotations, shadowing, joint-committees)

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Glossary of Terms

- **Accountability measures:** Well-defined, observable and measurable behaviors that indicate whether responsibility and ownership expectations are being met

- **Knowledge management** :The systematic or structured capture, storage, and transfer of institutional knowledge, processes, skills and expertise for future users

- **Line-of-sight** :A line of governance along which leadership has a clear view of how resources are being deployed and used

- **Matrix structure**: The design of organizational (people) resources for deployment across a range of complex or interdisciplinary problem areas

- **Management standards**: Clearly defined governance and process expectations (often relating to chain of command, bottom-up communication, workload allocation, and resource sharing) regardless of individual leadership preferences.

- **Organizational alignment**: The degree to which an organization is designed to optimally meet its mission goals and work requirements.

- **Standard Operating Procedures (SOPs)**: Written documents or instructions that detail the required or relevant activities and steps of a process (including quality control measures, institutional best practices, etc)

- **Workload distribution**: A process and an outcome by which work is evenly allocated among employees in a fair manner (including balancing costs associated with time to learn and time to complete activities, establishing rules for work assignments, and ensuring that all employees understand their unique roles on a given task)

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    - Background, Purpose & Scope
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- Phase 2: Workforce Data Analysis
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- Recommendations for Consideration

- Appendix: Workforce Maps

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In support of Board's larger strategic planning effort, Booz Allen used *Workforce Mapping* to conduct a baseline analysis of the current workforce

▸ As part of a comprehensive strategic planning effort, the Board is currently leading an agency-wide workforce assessment and analysis initiative to align the organization with anticipated needs and skills now and in the next five years

▸ To implement this strategic initiative, the Board sought greater insight into the alignment and evaluation of its workforce, enlisting the support of Booz Allen Hamilton to conduct a high level workforce assessment and analysis of the Board 's workforce through development of Workforce Maps and final report

▸ The Workforce Maps provide a comprehensive description of the Board's workforce that can serve as a strong foundation for additional workforce planning, succession planning, and organizational design efforts such as:
  – Workload Modeling: a structured process that forecasts how changes to work requirements will impact the workforce (e.g., changes in numbers, type, level or attributes of workforce needed)
  – Benchmarking, Competency and Skills Assessments, or Organizational Restructuring

Workforce Mapping provides:

– **A visual depiction of the workforce structure**	– **A basis to enable comparisons across the workforce**
– **A visual depiction of the alignment of people to work in each department**	– **A basis for identifying workforce risks across the organization (e.g., insufficient pipeline, areas of functional overlap or duplication)**
– **A common, structured format for analysis**	

Several assumptions were made to complete the Maps within constraints afforded by the project schedule and quality of data

▸ Maps reflect data as of October 11, 2012 positions are depicted with the greatest accuracy possible, given available data

- Missing or incomplete data may result in a few individuals and/or positions not being depicted (e.g., not all records have a full demographic designation)
- Logical assumptions were applied to fill in the gaps (e.g., contractor positions placed in a grade range based on titles such as Manager or Assistant)
- Where data was missing (e.g., retirement, age), the information was left blank

▸ Meetings were held with key stakeholders and leadership

- As a result, Maps data were validated by stakeholders and leadership

▸ HR data was the primary data source

- Contractor data will be estimated based on stakeholder interview and org chart

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DNFSB Workforce Maps highlight four main areas of potential workforce risk across the Board

Findings

▸ Employees within OTD tend to have similar functional tags, signifying a good degree of interchangeability of skills within a group

▸ Several senior technical staff, SMEs and Executives across the Board (OGM,OTD,OGC) are retirement eligible

▸ There is a proportionately large contractor workforce within OGM's IT & Sec. division

▸ OTD's professional development program (PDP) is used to fill the technical talent pipeline

Conclusions

▸ Understanding how interchangeable FTEs are across the technical groups in OTD will be critical to effectively respond to work surges

▸ Losing senior managers due to retirement will significantly impact the agency, the Board will lose leadership and level of effort, and potentially critical institutional knowledge that are instrumental in helping the Board accomplish its strategic goals and critical mission

▸ A large contractor workforce within OGM's IT& Sec. division can be a potential risk, if there is insufficient ability to manage and technically complete the work of contractors should their level of effort be reduced or removed

▸ By persistently replenishing the PDP with promising top talented recruits, the OTD can continue to refresh and sustain its technical talent pipeline

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Each map item contains several pieces of data, noted by color, pattern, border, icon, and text notes

▸ Each map item contains several pieces of data:

- The upper-left text shows the **Pay Plan**

- The middle text shows **job title** associated with each position; map items are **grouped** by their job titles

▸ **Additional variables are identified in the map key located at the bottom of the map:**

- **Background color shows the Office**

- **Border color and patterned background shows the retirement eligibility status of the employee in the position**

- **Different icons on upper-right of map item denotes: SME (star), contractor(circle)**

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SAMPLE

OFFICE OF THE TECHNICAL DIRECTOR

Office Name

Pay Band

Division/Group Name

How to Read a Workforce Map

NUCLEAR PROGRAMS AND ANALYSIS

Executive: SES, Exec.

ES SR.MATERIAL SCIENCIST GROUP LEAD

DN SR.CHEMICAL ENGINEER GOVERNANCE

DN SOFTWARE ENGINEER SOFTWARE QA ★

DN NUCLEAR ENGINEER SAFETY ANALYSIS & SYS ★

DN COMP ENGINEER SAFETY ANALYSIS ★

DN SR.COMP ENGINEER SAFETY ANALYSIS ★

DN COMP ENGINEER

Senior: GS15,GS14,DN5, DN4:Mid &Sr.

DN SR.COMP ENGINEER SAFETY PROG. & CRITIC.

DN COMP ENGINEER OPPS & OVERSITE

DN SR.COMP ENGINEER STDs. & DIR. COORD. ★

DN COMP ENGINEER READINESS REVIEWS

DN SR.MATERIALS SCIENCIST GOVERNANCE ★◆

DN COMP ENGINEER CONOPS REVIEWS ★

DN SR.COMP ENGINEER CRITIC. SAFETY ★

Mid-Level: GS13,GS12,DN3, DN4:Jr.

DN HEALTH PHYSICST ★

GS SECRETATARY-SUPPORT STAFF ●

Entry: GS10,GS11,DN2, DN1

- ▸ Rows on the Y-axis subdivide the map items (positions) by pay-grades categories

- ▸ Columns on the X-axis break the map items out by divisions, ordered either alphabetically or numerically

- ▸ Pay Bands are comprised of a combination of GS and equivalent DN levels.

Executive | Senior | Mid-Level | Entry

KEY:

★	SME
Ret.Elig.4-6 Years	
● Contractor	
OGC	
Comp Engineer= Generalist	
Ret.Elig.1-3 Years	Ret. Elig. Now	OGM	OTD

OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 1

NUCLEAR FACILITY DESIGN AND INFRASTRUCTURE

NUCLEAR MATERIALS PROCESSING AND STABILIZATION

Executive

Most SMEs and Senior Engineers are retirement eligible now

ES SR. ENVIRONMENTAL ENGINEER *GROUP LEAD*

ES SR.NUCLEAR ENGINEER *GROUP LEAD* ★

Senior

DN ★
DN SR.STRUCTURAL ENGINEER ★

DN
DN SR.COMP ENGINEER *PROJECT MANAGER*

DN COMP ENGINEER *DSGN & CONST.*

DN HEALTH PHYSICST *HANFORD COG.* ★

DN GEOLOGIST *WASTE ISO.P.P. COG.* ★

DN FIRE PROTECTION ENGINEER ★

DN SR.MECHANICAL ENGINEER

DN SR.ELECTRICAL ENGINEER *POWER DIST.* ★

DN SR.CHEMICAL ENGINEER ★

DN COMP ENGINEER *HANFORD COG.*

DN SR.CHEMICAL ENGINEER *FLUID DYNAMICS*

DN SR ELECTRICAL ENGINEER *INST. & CONTL* ★

DN CHEMICAL ENGINEER *FLUID DYNAMICS* ★

DN SR.MATERIALS SCIENTIST

DN SR.COMP ENGINEER *IDAHO COG.*

DN FIRE PROTECTION ENGINEER ★

DN SR.SEISMOLOGIST/GEOTECHNICAL ENGINEER ★

Mid-Level

DN STRUCTURAL ENGINEER ★

GS SECRETARY-SUPPORT STAFF ●

DN MECHANICAL ENGINEER *FAC. DSGN REVIEW*

DN COMP ENGINEER *SAV RVR COG.*

GS SECRETARY-SUPPORT STAFF ●

DN MECHANICAL ENGINEER *FAC. DSGN REVIEW*

DN ELECTRICAL ENGINEER *DSGN REVIEW*

DN COMP ENGINEER

DN MECHANICAL ENGINEER *DSGN REVIEW* ★

DN NUCLEAR ENGINEER *COG ENGINEER**

Entry

DN ELECTRICAL ENGINEER *POWER DIST.*

DN CHEMICAL ENGINEER *PROJECT MANAGER**

DN CHEMICAL ENGINEER

DN ENVIRONMENTAL ENGINEER *W.P.& NEW FAC.DSGN*

DN COMP ENGINEER

KEY:
★ SME	Ret.Elig.4-6 Years	● Contractor	OGC	Comp Engineer= Generalist
Ret.Elig.1-3 Years	Ret.Elig.Now	OGM	OTD	

OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 2

NUCLEAR PROGRAMS AND ANALYSIS

Employees have similar functional tags, signifying a good degree of interchangeability of skills within groups

Executive

ES
SR.MATERIAL SCIENCIST
GROUP LEAD

Senior

DN
SR.CHEMICAL ENGINEER
GOVERNANCE

DN
COMP ENGINEER
SAFETY ANALYSIS ★

DN
SR.COMP ENGINEER
SAFETY PROG. & CRITIC.

DN
COMP ENGINEER
READINESS REVIEWS

DN
SOFTWARE ENGINEER
SOFTWARE QA ★

DN
SR.COMP ENGINEER
SAFETY ANALYSIS ★

DN
SR.COMP ENGINEER
CRITIC. SAFETY ★

DN
COMP ENGINEER
CONOPS REVIEWS ★

DN
NUCLEAR ENGINEER
SAFETY ANALYSIS & SYS ★

DN
COMP ENGINEER

DN
SR.MATERIALS SCIENCIST
GOVERNANCE ★

Mid-Level

DN
ELECTRICAL ENGINEER

DN
HEALTH PHYSICST ★

DN
COMP ENGINEER
OPPS & OVERSITE

GS
SECRETARY-SUPPORT STAFF ●

DN
SR.COMP ENGINEER
STDs. & DIR. COORD. ★

Entry

KEY:

★ SME	Ret.Elig.4-6 Years	● Contractor	OGC	Comp Engineer =Generalist
Ret.Elig.1-3 Years	Ret.Elig.Now	OGM	OTD	

OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 3

NUCLEAR WEAPONS PROGRAMS

Executive

ES
SR.NUCLEAR ENGINEER
GROUP LEAD ★

Senior

DN
SR.NUCLEAR WEAPONS
ENGINEER ★

DN
SR.COMP ENGINEER
LOS ALAMOS COG.

DN
COMP ENGINEER
*CRITIC. SAFETY**

DN
SR.NUCLEAR WEAPONS
ENGINEER
PANTEX COG. ★

DN
SR.COMP ENGINEER

Mid-Level

DN
COMP ENGINEER
LIVERMORE COG.

DN
ELECTRICAL ENGINEER
Y12 COG. ★

DN
COMP ENGINEER

DN
CHEMICAL ENGINEER
SANDIA COG.

DN
COMP ENGINEER
SAFETY ANALYSIS

GS
SECRETARY-SUPPORT
STAFF ●

Entry

DN
MECHANICAL
ENGINEER

DN
NUCLEAR ENGINEER

KEY:

| ★ SME | Ret.Elig.4-6 Years | ● Contractor | OGC | Comp Engineer= Generalist |
| Ret.Elig.1-3 Years | Ret.Elig.Now | OGM | OTD | |

OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 4

OFFICE OF THE TECHNICAL DIRECTOR

PROFESSIONAL DEVELOPMENT PROGRAM

Executive

Mid-Level Senior

Entry

ES
SR.COMP ENGINEER
TECHNICAL DIRECTOR

ES
SR.COMP ENGINEER
DEPT. TECH. DIRECTOR

OTD's PDP is used to fill the technical talent pipeline

DN
DN
DN
CHEMICAL ENGINEER

DN
SEIMOLOGIST/GEOTECHNICAL ENGINEER

GS
GS
EXECUTIVE OFFICE ASSISTANT (OA)

DN
NUCLEAR ENGINEER
*CRITIC. SAFETY**

DN
NUCLEAR ENGINEER

DN
DN
STRUCTURAL ENGINEER

KEY:

★ SME	Ret.Elig.4-6 Years	● Contractor	OGC	Comp Engineer= Generalist
Ret.Elig.1-3 Years	Ret.Elig.Now	OGM	OTD	

OFFICE OF THE TECHNICAL DIRECTOR
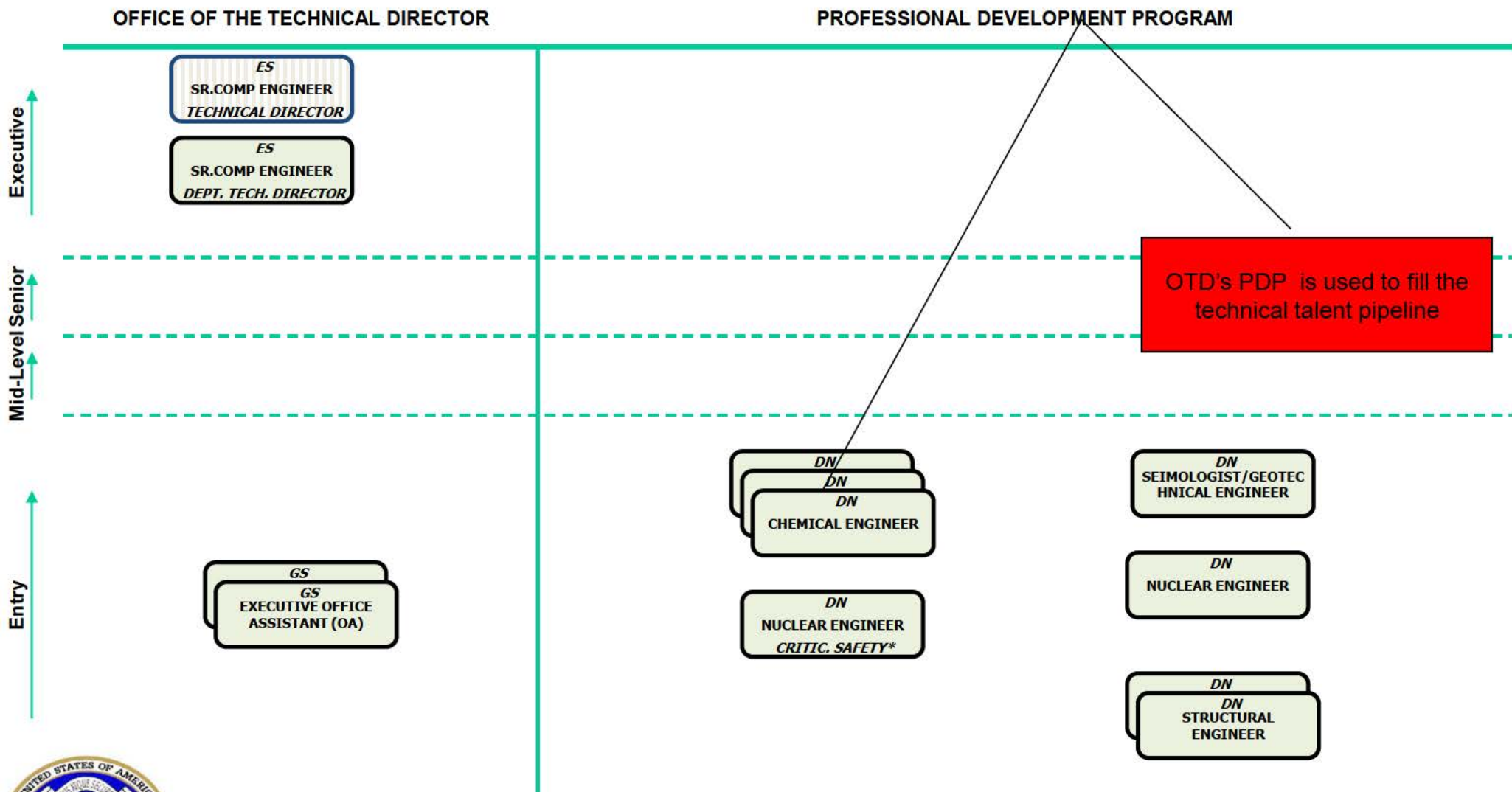
Partial OTD Workforce Map 5

SITE REPRESENTATIVES

Executive

Senior

Mid-Level

Entry

DN
ELECTRICAL ENGINEER
INST.&CONTL -HANFORD.REP

DN
GENERAL ENGINEER
*OPPS SAFETY –
LOS.A.REP*

DN
ELECTRICAL ENGINEER
LOS.A.REP

DN
HEALTH PHYSICST
SAVANANNAH REP. ★

DN
SR.COMP ENGINEER
SITES LEAD-SAVAN.REP

DN
STRUCTURAL ENGINEER
OAK RIDGE REP.

DN
NUCLEAR ENGINEER
*NUCLEAR CHEMIST
LIVERPOOL . REP*

DN
SR. NUCLEAR
WEAPONS ENGINEER
PANTEX .REP.

DN
SR.CHEMICAL
ENGINEER
HANFORD REP.

DN
CHEMICAL ENGINEER
EXPLOSIVES –OAK R.REP ★

KEY:

| ★ | SME | | Ret.Elig.4-6 Years | ● | Contractor | | OGC | | Comp Engineer= Generalist |
| Ret.Elig.1-3 Years | | Ret.Elig.Now | | OGM | | OTD | | |

OFFICE OF THE TECHNICAL DIRECTOR

OTD Retirement Eligible Now by technical groups

1 or fewer years

NUCLEAR MATERIALS PROCESSING AND STABILIZATION	NUCLEAR PROGRAMS AND ANALYSIS	NUCLEAR WEAPONS PROGRAMS	NUCLEAR FACILITY DESIGN AND INFRASTRUCTURE	SITE REPRESENTATIVES

Executive

ES
SR. ENVIRONMENTAL ENGINEER

Senior

DN
GEOLOGIST
WASTE ISO.P.P. COG. ★

DN
SR.COMP ENGINEER
IDAHO COG.

DN
HEALTH PHYSICST
HANFORD COG.

DN
SR.CHEMICAL ENGINEER ★

DN
COMP ENGINEER
OPPS & OVERSITE

DN
SR.COMP ENGINEER
CRITIC. SAFETY ★

DN
SR.COMP ENGINEER
SAFETY ANALYSIS ★

DN
SR.NUCLEAR WEAPONS ENGINEER ★

DN
SR.COMP ENGINEER
PROJECT MANAGER

DN ★
DN
SR.STRUCTURAL ENGINEER ★

DN
SR.ELECTRICAL ENGINEER
POWER DIST. ★

DN
FIRE PROTECTION ENGINEER ★

DN
HEALTH PHYSICST
SAVANNAH REP ★

Mid-Level

Entry

KEY:

★ SME	Ret.Elig.4-6 Years	● Contractor	OGC	Comp Engineer= Generalist
Ret.Elig.1-3 Years	Ret.Elig.Now	OGM	OTD	

KEY

OFFICE OF THE TECHNICAL DIRECTOR

1-3 years

OTD Retirement Eligible 1-3 years by technical groups

	NUCLEAR FACILITY DESIGN AND INFRASTRUCTURE	NUCLEAR PROGRAMS AND ANALYSIS	OFFICE OF THE TECHNICAL DIRECTOR	NUCLEAR WEAPONS PROGRAMS
Executive			ES SR.COMP ENGINEER *TECHNICAL DIRECTOR*	
Senior	DN SR.SEISMOLOGIST/GEOTECHNICAL ENGINEER ★	DN SR.COMP ENGINEER *SAFETY PROG. & CRITIC.* / DN SOFTWARE ENGINEER *SOFTWARE QA* ★		DN SR.COMP ENGINEER *NAVADA REP.*
Mid-Level				
Entry				

KEY:

★	SME	Ret.Elig.4-6 Years	●	Contractor	OGC	Comp Engineer= Generalist
Ret.Elig.1-3 Years		Ret.Elig.Now	OGM		OTD	

Full OGM Workforce Map

OFFICE OF THE GENERAL MANAGER

Senior leaders are retirement eligible now

AQUISITION AND FINANCE

HUMAN RESOURCES

INFORMATION TECHNOLOGY & SECURITY

OFFICE OF THE GENERAL MANAGER

Senior Executive

ES
DEPUTY GENERAL MANAGER

Senior

GS
DIRECTOR, DIV OF ACQ.& FINANCE

GS
DIRECTOR DIVISION OF H.R.

GS
ASSISTANT DIRECTOR OF H.R.

GS
DIR, DIV OF INFOR. TECH AND SEC

GS
IT SPEC (POLICY AND PLANNING/SEC)

Large contractor footprint across OGM

Mid-Level

GS
SECRETATARY-SUPPORT STAFF

GS
FISCAL AND ADMIN. SUPPORT SPEC

GS
FISCAL AND ADMIN. SPECIALIST

GS
CONTRACT SPECIALIST

GS
SECRETATARY-SUPPORT STAFF

GS
HUMAN RESOURCES SPECIALIST

GS
IT ONSITE SUPERVISOR

GS
SECURITY OFFICER

GS
IT HELP DESK

GS
RECEPTIONIST

GS
IT SPECIALIST (CUSTOMER SUPPORT)

GS
IRA/IMAGING SYSTEM

GS
FACILITIES & ADMIN SUPPORT SPECIALIST

GS
MAILROOM

GS
IT SME

GS
RADIATION EXPOSURE PROG. ADMIN.

GS
SUPERVISORY EXECUTIVE ASSISTANT

GS
LEAD EXECUTIVE SECRETARY (OA) BOARD SUPPORT

GS
EXECUTIVE SECRETARY (OA) BOARD SUPPORT

Entry

GS
HUMAN RESOURCES SPECIALIST

GS
RECORDS MANAGEMENT SPECIALIST

GS
LIBRARY MANAGEMENT SPECIALIST

GS
EXECUTIVE OFFICE ASSISTANT (OA)

KEY:

★ SME	Ret.Elig.4-6 Years	● Contractor	OGC	Comp Engineer= Generalist
Ret.Elig.1-3 Years	Ret.Elig.Now	OGM	OTD	

Full OGC Workforce Map

OFFICE OF THE GENERAL COUNSEL

GENERAL COUNSEL

OFFICE OF THE GENERAL COUNSEL

Executive

ES
GENERAL COUNSEL

ES
DEPUTY GENERAL COUNSEL

Senior

GS
GS
ATTORNEY-ADVISOR (GENERAL)

Senior leader with most historical knowledge and technical expertise is retirement eligible now

Mid-Level

GS
ATTORNEY ADVISOR (GENERAL)

GS
LEGAL SERVICES ASSISTANT

Contractor
SECRETARY-SUPPORT STAFF

Entry

GS
SECRETARY(OA)

KEY:

★	SME
Ret.Elig.4-6 Years	
●	Contractor
OGC	
Comp Engineer= Generalist	

Ret.Elig.1-3 Years	
Ret.Elig.Now	
OGM	
OTD	

OFFICE OF THE CHAIRMAN

Full Office of the Chairman Workforce Map

BOARD

OFFICE OF THE CHAIRMAN

Executive

EX
MEMBER

EX

EX

EX
CHAIRMAN

EX
VICE CHAIRMAN

Senior

Mid-Level

GS
LEAD EXECUTIVE
SECRETARY (OA)
OGM STAFF

Entry

GS
EXECUTIVE SECRETARY
(OA)
OGM STAFF

KEY:

★ SME	Ret.Elig.4-6 Years	● Contractor	OGC	Comp Engineer= Generalist
Ret.Elig.1-3 Years	Ret.Elig.Now	OGM	OTD	

Defense Nuclear Facilities Safety Board

Workforce Assessment and Analysis Final Report

November 19, 2012

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Executive Summary

The Defense Nuclear Facilities Safety Board's (Board) safety and oversight mission is significant. Providing oversight to ten nuclear facilities and ensuring that DOE site activities meet all governmental- and industry-standards, the Board keeps its 117 full-time equivalent (FTE) staff very busy. There is varied work for technical staff that are among the top performers and/or high potential employees in their fields, and customer-service oriented support services for its professional/administrative staff. The small size of the Board allows for employees to have flexibility, autonomy and creativity in their work, which are features that could be leveraged to attract top talent. Small organizations also allow for clearer lines of sight from the top-down and bottom-up, and open communication channels that may normally be clogged in larger, more bureaucratic organizations.

However, a small workforce does not mean it is easy to manage and develop staff, plan for workforce changes and fluctuations, or effectively document and transfer knowledge. In particular, nearly 73% of the workforce resides in the Office of the Technical Director (OTD), where highly specialized skills run only two or three people deep at best. Within the Office of the General Manager (OGM) and the Office of the General Counsel (OGC), an even smaller staff is stretched thin managing the core operations that support OTD activities. Day-to-day pressures, competing priorities, and the studied nature of oversight work means that management and strategic functions often take a backseat. Yet, management and strategic activities can actually foster efficiencies and improve overall performance.

Workforce Analysis: Workforce analysis is a multi-faceted exercise that provides organizations with the information necessary to make proactive decisions about workforce strategy, design, and composition to deliver on changing mission requirements. Documenting and understanding the fundamental workforce data is a key step in planning for the Board's present and future workforce. The workforce analysis focuses on major points within the employee lifecycle, such as onboarding, retirement eligibility, promotions and separations, with breakouts provided by Offices, pay plan, and employee level. The Board workforce analysis effort that took place from September through October 2012 included three phases:

> Phase 0 – Data Collection and Analysis Design;
>
> Phase 1 – Environmental Scan; and
>
> Phase 2 – Workforce Data Analysis and Report.

In Phase 1, the Environmental Scan provided a snapshot of organizational conditions, culture, and requirements, as well as incorporated existing workforce data to generate hypotheses and identify high-level trends that may be impacting the current state of the workforce. The Environmental Scan was triangulated with the subsequent analysis of the current workforce in Phase 2, Workforce Data Analysis. This allowed for hypothesis validation, the results of which were used to develop workforce recommendations.

Findings: The following findings describe the key areas of potential workforce risk based on the current Board's personnel data.

> **Finding 1 (OTD) –** OTD's overall knowledge management risks relate to the absence of management standards.

- Matrixed technical staff members are shared across interdisciplinary projects, but line-of-sight across groups and to the Technical Director is currently limited.
- Technical staff development and training is highly individualized and flexible, which can also lead to inconsistent sharing of resources and growth of rising talent.
- Group leads have not historically had established management expectations for work processes and standards set against accountability measures.
- Internal process documentation is ad hoc and decentralized.
- Among OTD's senior SMEs, only three are actively mentoring more staff outside of the PDP program (although there are eight mentors for the PDP program).
- Time-to-grow from a PDP into an early senior-level employee is estimated to take 10-13 years.

Risk 1 (OTD) – Without prioritizing knowledge transfer activities, OTD may face difficulty meeting its mission requirements due to competency and knowledge gaps within a matter of years. Currently, OTD is experiencing inefficiencies related to onboarding and time-to-learn, performance expectations, and internal quality assurance / quality control which could be minimized by establishing a clear set of management standards.

Finding 2 (OGC) – OGC's overall knowledge management issues relate to its current skills-mix.

- Only one attorney (Deputy GC) has a technical background, making complex technical inquiries difficult for other attorneys to undertake.
- Only two attorneys (including the Deputy) have senior-level institutional knowledge relevant to technical inquiries.
- OGC is limited in personnel law skills.
- Time-to-learn in OGC is exacerbated by limited involvement in and understanding of OTD's day-to-day activities.

Risk 2 (OGC) – Unless OGC builds clear position descriptions for specific skills-needed among attorneys and actively participates in knowledge transfer activities with senior attorneys and OTD, it will struggle to minimize any inquiry backlog and meet legal obligations with technical accuracy.

Finding 3 (OGM) – OGM's overall workload distribution problems relate to its workforce balance and dependence on contractor support.

- Each division within OGM relies on outsourced support for at least one core function – travel in Acquisitions and Finance, data and reporting within HR, and IT support within IT and Security.
- The current IT Services are not sufficiently able to meet the technology demands of the technical staff.
- Time-to-learn and time needed to distribute workload to newer hires within the Division of Human Resources is taking longer than anticipated.
- OGM only has two Contracting Officers, but only one who is fully warranted.
- Records and document management is currently supported by two FTE, who are responsible for all library, subscription, records, printing, imaging, and marketing services support.

Risk 3 (OGM) – Although the size of OGM necessitates a unique balance of leadership focus on both operations and strategy, if OGM does not invest in and implement knowledge transfer activities as well as reorient towards strategic functions, it will be difficult to deliver high-quality and efficient services to the Board. It will also continue to stymy OGM's efforts to stimulate change and effectiveness across Offices.

Finding 4 (Board) - For a small agency like the Board, attrition that is too high, unexpected or too concentrated will be difficult to absorb.

- Total attrition was at its peak in FY2008 with nine employees (nearly 10% of the FTE workforce).
- The agency is losing an average of 6.4 FTE annually, meaning that by FY2018 the Board can expect to lose around 38 employees (not including summer interns).
- Since FY2008, two-thirds of GS-employee attrition and 50.0% of DN-employee attrition occurred among mid- and early senior-level staff.
- Taking into account retirement eligibility and average turnover, the Board can expect to need to recruit between 100 and 110 FTE by 2020.

Risk 4 (Board) - If succession management is not routinely practiced and mid-level recruiting strategies are not put into place, the Board will not be prepared to meet attrition as the economy recovers and more staff become retirement eligible. The Board is a 23-year old agency that has not yet had to absorb or plan for major turnover due to its retention rate of original technical employees.

Finding 5 (Board) - Retirement eligibility is not yet the key factor in major attrition at the Board, but it is an imminent one.

- More than one-third of the current workforce is retirement eligible by or before FY2018.
- Of the 24 staff eligible for retirement now, 50% are over the age of 65.
- Attrition due to retirement among technical (DN)-employees over the past five years is 35.7%.
- Since FY2008, only four GS-employees have retired.

Risk 5 (Board) – Unless the Board begins capturing and storing institutional knowledge and expertise now, it will lose critical skills and organizational history when senior staff do eventually separate from the agency. Without succession planning also, the Board will have difficulty ensuring its competitive environment that attracts and retains talented people who have technical acumen and are well suited for an oversight role.

Finding 6 (Board) – Metrics related to organizational and process efficacy are not explicit or robust, making it difficult for the Board to evaluate how successfully it is delivering on its mission and working with its customers.

- External "customers" (ex., DOE, NNSA) are not consulted about the oversight relationship.
- OTD is concerned about maintaining objectivity above the field operations.
- Monitored activities between the Board and Congress, based on Booz Allen's independent research of publicly available information, indicate that the Board's mission delivery is not viewed as consistently practicable.
- Measures associated with organizational performance do not appear to exist (outside of mandatory reporting requirements).
- Previous Office of the Chairman leadership deemphasized collaboration with DOE and its implementation of Board recommendations.

Risk 6 (Board) – Without external input and analyses of internal processes and procedures, changes to the Board's organizational design might result in sub-optimal alignment with respect to customer relationships and external oversight.

Based on Phase 1 and Phase 2 of the workforce analysis, Booz Allen identified two action areas that will address the need for the Board to recruit, develop, and retain top talent, mitigate existing risks, and leverage its workforce strengths: (a) identifying and measuring Board needed skills and attributes (i.e., competencies), and (b) strategic recruiting.

These action areas encompass the five core strategic recommendations for the Board to: (1) conduct strategic workforce and succession planning; (2) perform competency modeling and analysis; (3) prioritize knowledge management; (4) create talent acquisition and retention strategies; and (5) target investments in leadership and employee development. These recommendations can be used to inform a path forward that will better enable the Board to meet its mission, identify opportunities for efficiency and improve performance.

1. Introduction

The Defense Nuclear Facilities Safety Board (Board), an independent executive branch agency, is charged under its enabling statute with providing technical safety oversight of the DOE's defense nuclear facilities and activities in order to protect the health and safety of the public and workers. The Board is composed of five respected experts in the field of nuclear safety with demonstrated competence and knowledge relevant to its independent investigative and oversight functions.

The Congress established the Board in September 1988 in response to growing concerns about the level of health and safety protection that DOE was providing the public and workers at defense nuclear facilities. In so doing, Congress sought to provide the general public with added assurance that DOE's defense nuclear facilities are being safely designed, constructed, operated, and decommissioned. The Board commenced operations in October 1989 with the Senate confirmation of the first five Board Members.

The Board's staff organized into three Offices: Office of the Technical Director (OTD), Office of the General Counsel (OGC), and Office of the General Manager (OGM). All but eleven of the Board's120 federal positions are located at its headquarters facility in Washington, D.C. Non-headquartered positions are located at various DOE sites in the continental United States and are assigned to the Office of the Technical Director. Site representatives are administratively supported from the headquarters.

Purpose
The goal of developing a workforce assessment and analysis is to:

(1) better align the organization with anticipated needs and skills now and for the next five years;
(2) ensure that the Board is able to identify skill/competency gaps;
(3) ensure responsiveness to changing priorities; and
(4) improve organizational structure, flexibility and efficiency across the Office of the General Manager, the Office of the Technical Director, and the Office of the General Counsel.

Scope
The scope of the workforce assessment and analysis is to provide a comprehensive assessment of the current workforce by leveraging existing Board artifacts, documents, reports, and personnel data, along with interviews with the Chairman, Vice Chairman, Offices' leadership and key internal stakeholders. The report focused specifically on documenting and analyzing the Board's current workforce to understand its current gaps in achieving its mission and to inform specific recommendations for mitigating workforce risk.

1.1 Assumptions and Constraints
Assumptions are statements or events accepted as true for the purposes of this review. Constraints are conditions outside the control of the review that may limit or affect its outcome. This workforce assessment and analysis was prepared based on the following assumptions and constraints:

Assumptions

- The data and reports related to workforce provided by the Board is assumed to be comprehensive and current
- Data for FY2012 includes data through October 11, 2012 for all data sets
- Figures from FedScope are accurate as of June 2012 (2nd quarter)
- Interviews conducted were truthful and accurate to the best of the participants knowledge

Constraints

- The Board data did not separate temporary and full-time staff, and did not include contractor information

- Employee data from FY2008-FY2012 was inconsistently coded, limiting the ability to fully quantify the Board's staffing pipeline, recruitment and retention capabilities
- Employee agency length of service data was inaccurate, preventing certain types of analysis to be completed such as retirement projections
- Attrition data was inaccurately coded, and although cleaned through this analysis, is limited in its reliability
- Lack of an employee competency model (GS and DN employees) and up-to-date position descriptions prevents competency baselining for the Board

2. Methodology

Booz Allen Hamilton conducted an in-depth assessment of the current workforce, key work areas, and strategies to document and quantify the current workforce baseline. The workforce analysis leveraged existing strategic and performance accountability reports and documents, personnel and trending data, and interviews with key internal stakeholders at the Board. Figure 2-1 illustrates a three-phased workforce analysis approach.

Figure 1. Workforce Analysis Approach

Phase 1: Environmental Scan

The first step within Phase 1 was aimed at understanding the DNFSB and the environment within which it operates. A meaningful workforce analysis effort is grounded in an understanding of the work and organizational performance expectations of the workforce. It was imperative to ground the analysis with a comprehensive knowledge of the Board's work, including special characteristics and critical work functions, the structure of the agency and how its workforce is deployed, the composition of resources and an understanding of the workforce management practices that govern its operations.

Booz Allen deepened its knowledge of the agency by conducting a comprehensive review of several DNFSB documents, including:

- DNFSB FY2010-FY2016 Strategic Plan, FY2011 Performance and Accountability Report (PAR), FY2013 Budget Request to the Congress and Annual Congressional Reports
- 2006-2011 Federal Employee Viewpoint Survey (FEVS) Results
- DNFSB Enabling Legislation
- DNFSB Position Descriptions
- DNFSB Twenty Year Report (Federal Research Division, Library of Congress)
- FY2008 - 2nd Quarter 2012 DNFSB FedScope Data

Phase 2: Workforce Data Analysis

The workforce analysis was intended to understand the current and historical staffing levels, and workforce mix and trends to identify risks and opportunities. Specifically, Booz Allen evaluated the existing workforce composition and developed a current state snap shot. Using personnel data provided by the Director of Human Resources on October 11, 2012, Booz Allen examined the data set (e.g., position title, occupational series, grade level, vacancy status, years of service, retirement eligibility, age, gender, race, education level, etc.) to generate tables, charts, and graphs depicting, among other factors, workforce composition and distribution between Offices and growth of the workforce. In addition to analyzing agency-wide demographic and historical data, Booz Allen developed and provided Workforce Maps in Appendix D.

To validate and deepen Booz Allen's understanding of the Board's current state of the workforce and how it conducts its business, interviews were held with every SES and Division Director. These interviews included questions about workload distribution decisions and time spent on work, as well as multiple questions to clarify the position descriptions (PDs) (such as questions about mission-critical occupations, required skills, and competencies). The results of these interviews are synthesized with the Office findings in Section 5 and in the organizational alignment analysis in Section 3.

3.   Board Organizational Alignment and Mission Critical Functions

During the Environmental Scan activities, the Board's mission, strategic goals, functional activities, and organizational structures were reviewed to understand position requirements from the top down. This approach was used to indicate whether there is alignment between organizational strategic goals, what functional activities are at the core of the Board's business, and the skills needed in the workforce for success. Position descriptions (PDs), and vacancy announcements were also reviewed for the same purpose. The PDs and vacancy announcements are clearly linked to the strategic documentation of the Board. However, they do not list well-defined or targeted skill-sets and competencies that are needed for the job announcement and will attract talent beyond traditional Board talent sources.

3.1   Technical Mission Critical Occupation Functions

This brief analysis showed that the Board's oversight functions are tactically grouped to reflect the various phases within DOE's nuclear weapons and facilities lifecycle. The functional skills and competencies required for each phase of the facilities and weapons lifecycle are wide-based and interchangeable. So in part, the PDs appear vague because the majority of OTD occupations require a wide range of engineering skills (broad knowledge, core skills, and perhaps some specialty skills). In fact, it does not appear to be in the best interest of the Board to hire engineers with deep specialty expertise, at least without a wide range of engineering skills as well. Rather, engineers develop through experience over the course of their careers at the Board, and it is on-the-job learning that most shapes their applied expertise within technical oversight.

However, the Board has determined that its technical staff requires a mix of scientists and engineers trained in these technical areas:

  (1) Nuclear-Chemical Processing;
  (2) Conduct of Operations;
  (3) Standards and Quality Assurance;
  (4) Facility Safety and Hazards Analysis;
  (5) Conventional and Nuclear Explosive Technology;
  (6) Nuclear Weapons Safety;
  (7) Storage of Nuclear Materials;
  (8) Nuclear Criticality Safety; and
  (9) Waste Management.

Written into the Board's enabling legislation, the OTD staff mix must be able to meet the following mission-critical functions:
- (1) Review and Evaluation of Standards;
- (2) Investigations;
- (3) Analysis of Design and Operational Data;
- (4) Review of Facility Design and Construction; and
- (5) Recommendations to the Secretary of Energy.

Of the current technical workforce, critical expertise includes: Fire Safety Protection, Nuclear Explosive and Explosive Safety, Occupational Safety and Industrial Hygiene, Radiological Protection, Nuclear Chemistry, Chemical Systems, Electrical Systems, Mechanical Systems, Structural and Civil Systems, and Seismology.

3.2 Technical Workforce Structure

The Board's organizational structure clearly reflects programs within DOE and functions outlined in the enabling legislation. A line could be drawn from strategic and policy documents to the organizational chart. In day-to-day practice, however, the Board's OTD workforce is matrixed, with teams that perform tasks crossing technical groups.

Matrix structures work particularly well in organizations that operate in complex environments. The matrix structure within OTD optimizes the use of specialty skills that exist within the technical workforce and creates flexibility in how projects get staffed as complexity fluctuates. In most matrix structures, there is a functional supervisor and a project supervisor for each employee. At the Board, the functional, or technical, supervisor would be the Group Lead who is responsible for developing employees. The project supervisors are those technical staff-members who are coordinating and managing a team for a specific project over a set time-period. When executed properly, this arrangement of staff allows each technical group to share information and personnel across the various stages of DOE nuclear defense activities and site reviews. It also enables interdisciplinary technical teams to address crosscutting issues.

3.3 Alignment of Technical Work Performed

Based on Booz Allen's understanding of the work needing to be performed at the Board, particularly within the OTD, there does not appear to be a pressing need to redesign the Offices. Although there are Congressional rumblings associated with the scope of the Board's oversight role, the stability of the mission is intact as are the programs within DOE that the Board oversees. The growth experienced internally since FY2007 is significant, but can be managed through other activities rather than shifting boxes on the organizational chart. However, it is important to note that best practices would suggest the Board conduct a full organizational design review coupled with an analysis of processes to better understand how work and occupations are aligned for efficiency and effectiveness.

For example, it was suggested in a few Phase 1 interviews that the day-to-day roles of the Technical Director (TD) and Deputy Technical Director seemed backwards with respect to direct oversight (i.e., Site Representatives report directly to the Deputy TD). However, it appears from the internal input received during this assessment that the arrangement works well. Due to the Board's historically small size, individual strengths and preferences have been able to be accommodated in the current role arrangement. However, a more thorough analysis of processes, as suggested above, should be undertaken to attain a balanced command and control perspective. Critical to further analyses will be obtaining input from the Board's external customers (e.g. NNSA, DOE). These sources of input will allow the Board to better evaluate the effectiveness of its organizational structure and the way it collaborates to ensure recommended technical solutions are implemented and implementable.

4. Workforce Current State Strength Weakness Opportunity Threat (SWOT) Analysis

A SWOT analysis is a strategic planning method that examines external and internal factors that could enhance or prohibit successful organizational outcomes. More often than not, a SWOT analysis identifies a fit between an organization's strengths and immediate/upcoming opportunities. In many cases, a SWOT can also help an organization locate weaknesses it should work to overcome or mitigate.

The SWOT analysis synthesizes data from the environmental scan and workforce analysis to validate and summarize conclusions. It provides information that is useful in matching the Board's resources and capabilities against the competitive environment in which it operates. The following Figure 4.1 is a 4-box SWOT analysis for all of the Board.

Figure 2. SWOT Analysis (Agency-Wide)

	Strengths	Weaknesses
Internal Origin — Attributes of the organization	▸ **Tenure of technical excellence and deep pool of SMEs.** *The Board underpins its longstanding oversight reputation by maintaining and recruiting top-talent technical SMEs and high potentials* ▸ **Transparency and visibility to Congress and the public.** *The Board posts oversight interactions with DOE via its public website, and other platforms to elucidate its position on safety and health matters* ▸ **Interdependency of the Board's strategic goals.** *This interdependency provides a framework for the Board to allocate resources and plan workload efficient* ▸ **Resiliency.** *The Board's resilient nature enables it to succeed in periods of uncertainty and weather political climates*	▸ **Lack of effective and timely communication across the Board.** *The workload demands placed on the Board's small workforce create agency-wide communication issues* ▸ **Lack of knowledge management and right/automated systems.** *Legacy records technology and narrow management standards, creates shortage of and inefficient onboarding, development and retention issues* ▸ ***Top-heavy*** *composition of DNFSB workforce. Top-heavy composition contributes to turnover among junior and mid-level employees* ▸ **Retirement.** *Most senior staff-members with institutional knowledge are at or close to retirement*
	Opportunities	**Threats**
External Origin — Attributes of the environment	▸ **Accelerated Retirement.** *Retirements will create an opportunity for the Board to hire more junior to mid-level technical personnel to build it talent pipeline* ▸ **Technical reputations and relationships.** *Leveraging existing technical reputations and relationships to enhance and broaden the recruiting strategies, such as strategic partnerships, etc.* ▸ **New Technology.** *Use of technology resources to increase efficiency and internal collaboration* ▸ **SES and technical SME skills.** *Leveraging existing technical SMEs and SES to develop and maintain a robust knowledge management repository*	▸ **Board's statutory authority and responsibilities.** *Changes to the Board's legislative mandate could affect the Board's ability to achieve it's oversight mission* ▸ **Limited Science, Technology, Engineering Mathematics (STEM) talent pool.** *Competition for the limited STEM-educated talent pool across federal agencies and private sector could affect the Board's ability to recruit* ▸ **Changes in U.S. national security policy regarding nuclear defense activities and weapons stockpile.** *Changes concerning the size or composition of the aforementioned will increase the Board's oversight workload* ▸ **Sequestration.** *Threatens excepted service hiring, awards, bonuses, an the ability to retain essential personnel*

The threats to the Board are external and essentially, out of the Board's control. However, the key recommendations in Section 6 (which were informed by the SWOT findings) would help the Board enhance organizational strengths, minimize weaknesses and take advantage of its opportunities. By implementing the recommendations that are within its realm of control, the Board will be better positioned to respond to and mitigate threats to its mission.

5. Office Findings

The following section integrates quantitative workforce data and interviews with key internal stakeholders to identify the most critical findings for each office (e.g., office specific weaknesses, risks, and opportunities). The findings synthesize data into realistic solutions that, if implemented, could be expected to improve employee performance and overall organizational effectiveness.

For each office, findings are summarized into a flow graphic. The large circles indicate major weaknesses that correspond to one another (e.g., as one weakens so does the other, as one strengthens so does the other). The dotted lines and blue boxes link solutions to these weaknesses, which, if implemented or enhanced effectively, will create a correcting and restorative process loop.

5.1 OTD Key Findings

The Office of the Technical Director (OTD) provides technical support to the Board. This office is authorized up to 84 federal engineers and scientists, and two federal secretaries for administrative support to the Technical Director and the Deputy Technical Director. OTD is organized into four Groups, each of which has an on-site contractor providing administrative support. Additional technical support is provided ad hoc using niche SMEs on retainer.Figure 5.1 is a flow chart that synthesizes the major workforce findings related to OTD. Quantitative workforce data indicates that the workforce is highly educated, but facing knowledge management gaps due to attrition of mid-level employees and pending retirements of retirement eligible now senior technical experts. Although the PDP program has a track record of success in placing hi-potentials in stretch assignments, there is not enough data to support the claim that PDP alumni will remain with the Board as long as their senior colleagues have, or even that they will develop into experts by the time senior roles are vacated.

Finding: OTD's overall knowledge management risks relate to the absence of management standards.

- Matrixed technical staff members are shared across interdisciplinary projects, but line-of-sight across groups and to the Technical Director is currently limited.
- Technical staff development and training is highly individualized and flexible, which can also lead to inconsistent sharing of resources and growth of rising talent.
- Group leads have not historically had established management expectations for work processes and standards set against accountability measures.
- Internal process documentation is ad hoc and decentralized.
- Among OTD's senior SMEs, only three are actively mentoring more staff outside of the PDP program (although there are eight mentors for the PDP program).
- Time-to-grow from a PDP into an early senior-level employee is estimated to take 10-13 years.

Figure 3. OTD Findings Chart

STANDARD OPERATING PROCEDURES (SOPS)

MANAGEMENT STANDARDS

KNOWLEDGE MANAGEMENT

- INCONSISTENT USE OF SOPS
- MISSING DOCUMENT-ATION
- WORKLOAD DISTRIBUTION
- MINIMAL LINE OF SIGHT
- COMPETING PRIORITIES

KNOWLEDGE TRANSFER ACTIVITIES

- ANTICIPATED RETIREMENT
- TURNOVER OF JUNIOR- & MID-LEVEL STAFF
- TIME TO GROW STAFF FROM JUNIOR TO SENIOR
- PROMOTION PROCESS & MEASURES
- RECORDS MANAGEMENT DELAYS
- TURNOVER OF MENTORS

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Imminent Risks: Without prioritizing knowledge transfer activities, OTD may face difficulty completing its current programs and projects portfolio due to competency and knowledge gaps within a matter of years. Currently, OTD is experiencing inefficiencies related to onboarding and time-to-learn, performance expectations, and internal quality assurance/quality control which could be minimized by establishing a clear set of management standards.

Inherent Risks: Over time, OTD will be unable to ensure and sustain that- the embedded safety oversight culture at the Board is sound, technically competent and risk aware. Without knowledge transfer and SOPS (related to workload distribution, accountability and performance measures, etc.), OTD will face the loss of, inconsistent or inefficient transfer of lessons learned, expertise, and best practices.

Opportunity: However, OTD can mitigate these risks by bolstering knowledge transfer activities (such as enhancing mentoring relationships and creating shared competencies) and building operating procedures to standardize processes and set management expectations. If implemented, these solutions could measurably aid in the retention of mid-level staff, as well as overall performance improvements.

Solution 1: Knowledge transfer activities are the processes by which knowledge, expertise and skilled people are shared to contribute to effectiveness, improvement, and/or competitiveness. Knowledge transfer organizes, captures, and distributes organizational expertise to ensure its availability for future users.

Solution 2: Standard operating procedures (SOPs) are written documents or instructions that detail the required or relevant activities and steps of a process. SOPs can be used by employees (and Board members) to answer questions or understand internal processes, saving managers and other employees time that can be spent on mission activities.

5.2   OGC Key Findings

The Office of the General Counsel (OGC) provides legal advice to the Board, responds to inquiries from concerned members of the public, and leads technical investigations if an issue has been escalated.

Figure 5.2 is a flow chart that synthesizes the major workforce findings related to OGC. Quantitative workforce data indicates that the OGC workforce is almost at an appropriate FTE, but facing a significant knowledge management gap due to the pending retirements of two retirement eligible senior attorneys. The time needed for more junior staff to learn the Board's business and conduct technical inquiries properly could result in knowledge gaps if senior attorneys vacate the Board in the near future. This is why OGC will need to prioritize knowledge transfer activities, which can accelerate time to learn among attorneys.

Finding: OGC's overall knowledge management issues relate to its current skills-mix.

- Only one attorney (Deputy GC) has a technical background, making complex technical inquiries difficult for other attorneys to undertake.
- Only two attorneys (including the Deputy) have senior-level institutional knowledge relevant to technical inquiries.
- 2 of 7 (28.6%) employees are retirement eligible now
- OGC is limited in personnel law skills.
- Time-to-learn in OGC is exacerbated by limited involvement and understanding of OTD's day-to-day activities.

Figure 4.OGC Findings Chart
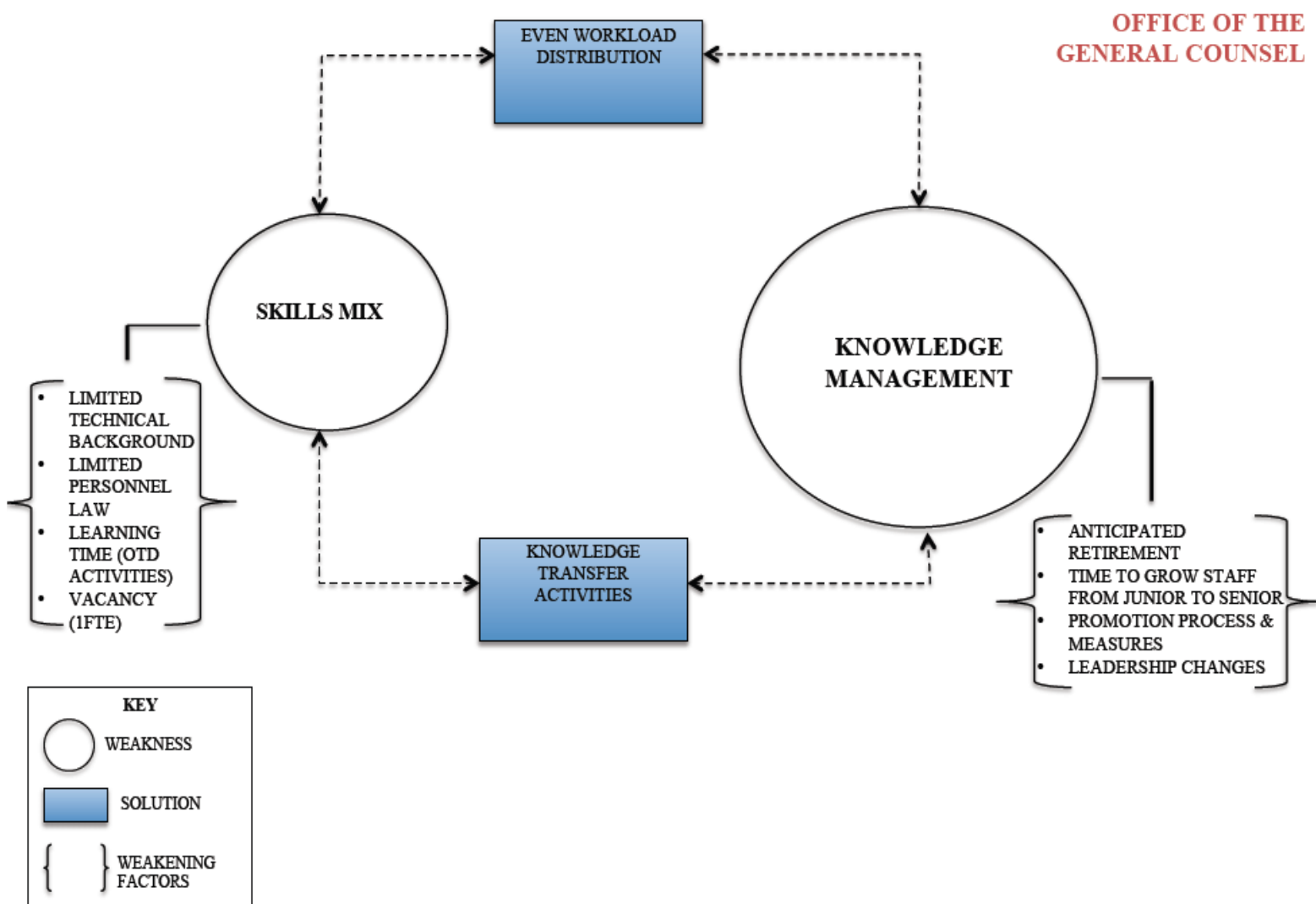
Imminent Risks: Unless OGC builds clear position descriptions for specific skills-needed among attorneys and actively participates in knowledge transfer activities with senior attorneys and OTD, it will struggle to minimize any inquiry backlog and meet legal obligations with technical accuracy.

Inherent Risks: Without undertaking knowledge transfer and workload distribution activities, OGC faces a loss of historical knowledge and understanding of the Board's legal needs, and a cyclically inefficient distribution and completion of technical and site-specific inquiries.

Opportunity: However, OGC can mitigate these risks by establishing knowledge transfer activities between senior and junior staff, and with technical staff. Improved knowledge management will be furthered with a more even distribution of the workload, creating opportunities for mid- and junior-level attorneys to develop site-specific expertise before retirement eligible attorneys leave the workforce. Implementing these solutions can create efficiencies in the way OGC does business, build a succession pipeline, and grow a legal staff with unique technical skills.

Solution 1: Knowledge transfer organizes, captures, and distributes organizational expertise to ensure its availability for future users. In the case of OGC, knowledge transfer should be included in the process through with OGC and OTD work together.

Solution 2: Distributing the workload among staff involves balancing costs associated with time to learn and time to complete activities, establishing fair rules for work assignments, and ensuring that all employees understand their unique roles. Evening the distribution of the OGC workload (in particular, of technical inquiries), will ultimately result in a more balanced skills-mix and enriched succession among attorneys.

5.3   OGM Key Findings

The Office of the General Manager (OGM) provides all administrative support to the Board through a combination of federal employees, contractors, and service agreements with other government agencies. This support includes the functions of acquisition and finance, travel services, human resources, information technology security, facilities management, mailroom operations, records management, and information management. OGM also is responsible for administrative support to the Board members and programs such as Occupational Radiation Exposure Monitoring, equal employment opportunity, internal controls, Freedom of Information Act, public affairs and congressional liaison.

Figure 4.3 is a flow chart that synthesizes the major workforce findings related to OGM. Interviews shed light on the actual volume of work facing each division within OGM. Although employees are capable of completing and balancing varied work priorities, the distribution of work needs balancing as does the FTE-to-contractor and employee-to-supervisor ratio. This will require effective communication, unified leadership, and (potential) investments in the workforce/FTE. Additionally, OGM sits at the same level as OTD and OGC in the organization, but has no ownership over any programs or strategic goals. One strategic goal relates to OGM – "Management Excellence" – but OGM's support functions are currently transactional, rather than strategic. OGM needs to create different processes (automated and strategic), which will help shift its work activities to encompass more strategic functions.

Finding: OGM's overall workload distribution problems relate to its workforce balance and dependence on contractor support.

- Each division within OGM relies on outsourced support for at least one core function – travel in Acquisitions and Finance, data and reporting within HR, and IT support within IT and Security.
- The current IT Services are not sufficiently able to meet the technology demands of the technical staff.
- Time-to-learn and time needed to distribute workload to newer hires within the Division of Human Resources is taking longer than anticipated.
- OGM only has two Contracting Officers, but only one who is fully warranted.
- Records and document management is currently supported by two FTE, who are responsible for all library, subscription, records, printing, imaging, and marketing services support.

Figure 5. OGM Findings Chart

STRATEGIC FUNCTIONS

WORKFORCE BALANCE

WORKLOAD DISTRIBUTION

- OUTSOURCED IT FUNCTIONS
- LACK OF OR OUTMODED SYSTEMS
- SMALLER BUDGETS
- RETIREMENT ELIGIBILITY

KNOWLEDGE TRANSFER ACTIVITIES

- DNFSB GROWING WORKFORCE
- NEW HIRE ONBOARD TIME
- CHANGING FUNCTIONAL NEEDS & REQUIREMENTS
- LEADERSHIP VACANCY
- BACKLOG
- COMPETING PRIORITIES
- SILOED COMMUNICATIONS

KEY

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Imminent Risk: If OGM does not invest in and implement knowledge transfer activities as well as reorient towards strategic functions, it will continue to contend with service quality and efficiency issues. In particular, OGM will find it challenging to meet the Board's need to formulate a strategic recruiting and retention plan.

Inherent Risks: Without implementing changes to the overall structure of the workload and evaluating the workforce balance in OGM, it will experience a loss of agency historical knowledge due to large dependency on contractor support/services in the IT, HR and Acquisition offices. In the long term, ongoing efficiency and effectiveness issues will stymy OGM's efforts to stimulate management excellence and effectiveness across Offices.

Opportunity: However, OGM can mitigate these risks by creating new, and deepening existing, knowledge transfer activities (for example, the current office-wide and one-on-one meetings), as well as performing critical organizational exercises to develop strategic, less transactional functions. Implementing these solutions will take supportive leadership and time, but best practices show they can lead to improved performance within functional offices as well as programmatic offices such as OTD.

Solution 1: Knowledge transfer of three types should occur in OGM: knowledge of systems, processes and routines within functional offices (e.g., embedded); knowledge about how OGM conducts business and interacts with other Board offices (e.g., embodied); knowledge of the skills, abilities, and experience needed to perform work successfully (e.g., embrained). Activities to improve the knowledge management of OGM should speed onboarding time, allowing division offices to fully-

utilize the staff skills available. This will also free more senior staff to partake in organizational exercises (like strategic planning and policy development) that facilitate and guide strategic service offerings.

Solution 2: Strategic functions are organizational operations that provide impact across all offices (including the plan to implement the goals of the Board, monitoring strategic planning activities, and conducting work-related data gathering and analysis). Building OGM into a sustainable, strategic functions office will positively affect OTD activities and employee satisfaction, as well as stimulate OGM's presence and effectiveness across the Board.

6. Recommendations for Consideration

The environmental scan, workforce analysis, interviews, and SWOT analysis were triangulated to build data reliability when identifying solutions and recommended actions for the Board. What resulted are the following Overall Workforce Recommendations, which span five strategic areas.

The purpose of these recommendations is to present the Board with a set of practical solutions steeped on best practice, SME input, and Booz Allen's years of experience. These recommendations are all inclusive, and recommended actions will be best achieved through joint-ownership and collaboration among Offices. Strategic workforce decisions impact the whole of the Board.

The table below describes the recommendations for the Board's consideration, along with their potential impact to the organization and specific recommended actions (in no particular order). Quick Wins indicate where the Board is already conducting activities or undertaking efforts related to a recommended action. Recommended actions have varying levels of significance for the Board based on its current realities and constraints. So actions will need to be evaluated and prioritized. It is also important to understand that organizational effectiveness and threat mitigation takes time – immediate return on investment will be hard to see. With time however, performance improvements should measurably increase if recommended actions are implemented effectively and practiced consistently.

Figure 6. DNFSB Overall Workforce Recommendations

DNFSB Overall Workforce Recommendation(s) for Consideration	
Strategic Recommendation and Potential Impact	**Recommended Actions**
RECOMMENDATION 1: Conduct Strategic Workforce and Succession Planning **DESCRIPTION:** Strategic workforce and succession planning will provide the Board with a clear picture of its workforce supply and demand, and succession risk/readiness **IMPACT:** Smooth leadership transitions, Anticipated skills gaps, Minimized risk to mission execution, Proactive workforce development	1: Identify attrition "pain points" and potential causes 2: Plan for retirement eligibility among DN-Vs, SES, GS-15s, and Board members 3: Assess strategic value of PDPs each cohort year 4: Evaluate contractor v. FTE mix in the OGM

DNFSB Overall Workforce Recommendation(s) for Consideration	
Strategic Recommendation and Potential Impact	**Recommended Actions**
RECOMMENDATION 2: Perform Competency Modeling and Analysis **DESCRIPTION:** Competency modeling and analysis will provide the Board with specific knowledge, skills, and abilities standards and a structure for employee development **IMPACT:** Transparency in performance expectations, Clear organizational values and standards, Accountability for individual and employee development	1: Review Industry-Specific Technical Competency Models from similar agencies and OPM -- 2: Develop organizational core competencies and an OTD technical competency model -- 3: Conduct a competency assessment to identify strengths and gaps among the current workforce -- 4a: Apply competency model and competency goals to Individual Development Plans (IDPs) 4b: Integrate Work Plans and IDPs into comprehensive development plan with on-the-job competency and training goals for each employee -- 5: Link competencies to new performance appraisal systems
RECOMMENDATION 3: Prioritize Knowledge Management **DESCRIPTION:** Knowledge Management will provide the Board with processes for the effective transfer, capture and storage of specialized skills and expertise, as well as corporate history and procedures **IMPACT:** Efficiencies in onboarding/use of staff time, Improved quality of work products and deliverables, Effective communication among offices	1: Create a procedure for the effective documentation of processes in OTD -- 2: Reevaluate administrative service activities in records and documents (specifically the imaging and library programs) This action is already being contemplated and represents a "**Quick Win**" opportunity**!** -- 3: Establish a formal mentoring program across OTD for all levels of employees -- 4: Pair attorneys with OTD technical "buddies" -- 5: Develop more effective knowledge transfer mechanisms from top-down and across agency offices (ex., invest in SharePoint upgrade)

DNFSB Overall Workforce Recommendation(s) for Consideration	
Strategic Recommendation and Potential Impact	**Recommended Actions**
RECOMMENDATION 4: Create Talent Acquisition and Retention Strategies **DESCRIPTION:** Talent acquisition and retention strategies will provide the Board with targeted sourcing information, leverage existing relationships with institutions, and set a direction for the composition of the workforce **IMPACT:** Improved quality and retention of new hires, Diversification of the workforce, Access to broader talent pools, Increased employee engagement, Presence among strategic partners/targeted institutions	1: Examine current talent sources and any trends related to quality and retention of new hires --- 2: Explore alternatives to traditional recruitment strategies to increase efficiencies (ex., Ambassador Program for heavily retirement eligible staff) --- 3: Promote low-cost employee engagement activities, particularly for younger technical hires (e.g., existing seminar series, Lunch & Learn, etc.) This action is already being contemplated and represents a "**Quick Win**" opportunity**!** --- 4: Partner strategically with source institutions to identify more diverse talent pools --- 5: Revise position descriptions (PDs) jointly – HR and Hiring Managers meet before each job announcement
RECOMMENDATION 5: Target Investments in Leadership and Employee Development **DESCRIPTION:** Leadership and employee development (including internal and external trainings, coaching, certification courses, and professional membership/association activities) will provide the Board with a market-competitive, technically competent and engaged workforce **IMPACT:** Cutting-edge skills among workforce, Government and industry competitive talent, Effective leadership	1: Provide training to improve communication and feedback skills among managers/directors (and consider executive coaching) --- 2: Create packages of Board required and/or suggested trainings for groups of employees (ex., new hires, program/project managers, Criticality Safety specialists) --- 3: Identify/Evaluate Board endorsed trainings and certifications This action is already being contemplated and represents a "**Quick Win**" opportunity**!** --- 4: Collaborate with DOE and NRC to identify developmental opportunities for staff (such as rotations, shadowing, joint-committees)

7. Next Steps to Recruit, Develop and Retain Talent

The following section outlines suggested strategies and approaches that Board could invest in to recruit, develop and retain the workforce needed to accomplish mission demands of the future.

7.1 Identifying and Measuring Board Needed Skills and Attributes (i.e., Competencies)

One of the ways the Board can begin to shape and ensure success among employees is to identify skills, attributes, and knowledge (i.e., competencies) needed to perform at the Board and within specific positions:

(1) Organization-wide competencies related to oversight integrity, self-management, and multitasking can help level-set expectations of new and seasoned employees, as well as better communicate to potential candidates what qualities are needed to achieve satisfaction and recognition in the workplace.

(2) Technical job competencies for OTD staff related to engineering expertise and core technical functions (i.e., safety analysis, standards evaluation, etc.) would standardize expectations of technical performance and skill proficiency, as well as create transparency about career pathways within OTD.

Figure 7. Spectrum of Competency Definition
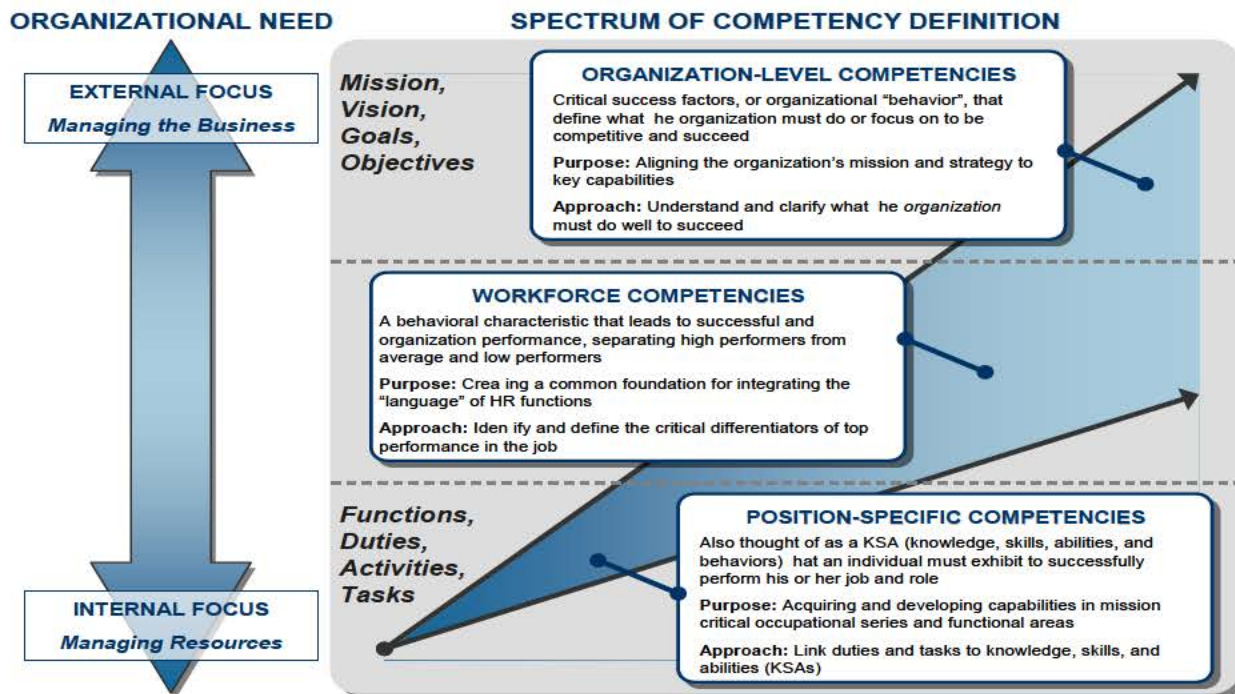
By adopting the consistent and centralized approach to the development of competencies for mission critical positions, the Board will be better positioned to quickly and effectively respond to the demands of the nuclear technical oversight environment by isolating proficiency gaps in the workforce and targeting training at the individual and organizational level. In addition, the Board will be able to better align future workforce and performance development investments against identified gaps, maximizing the return on those investments.

Develop Competency Models

Developing competency models for each mission critical position/function will require participation from a core group of internal SMEs who can articulate the unique capability requirements for each position being modeled. Identifying core SMEs for each position is a competency modeling best-practice and will facilitate development planning and coordination, enable a consistent methodology application across the development schedule, and is a critical component in building documentation that supports the credibility of the competency models for integration with related human capital initiatives (e.g., recruitment and selection, development, workforce and succession planning).

The purpose of competency modeling is to define broader characteristics of people's behavior associated with successful performance. This is especially helpful for jobs with ill-defined boundaries, jobs that continue to change and evolve with the organization, and in modern organizational environments where employees have a variety of roles and responsibilities with cross-functional areas of expertise.

Competency Models Can Link Workforce Solutions
✓ **Recruitment & Selection:** A competency model will help to determine the best marketplaces for sourcing talent, establish the capability requirements for entry into this mission critical occupation, and identify the best qualified candidates
✓ **Learning, Development, & Training:** A competency model for a particular role will link to learning and developmental opportunities to guide individual advancement within and across occupational series to develop qualified personnel from within, and inform the development of training (through multiple channels) to ensure continuous capability improvement in required areas of expertise
✓ **Performance Management:** A competency model for a will align learning and development with performance management (e.g., metrics and measures), rewards, and recognition practices to cultivate a workforce that supports the organization's mission and strategic objectives
✓ **Workforce & Succession Planning:** A competency model for a particular role will help to understand the current capacity (numbers) and capability (proficiency) of the workforce to ensure program sustainability and proactively plan for short- and long-term organizational and workforce growth

Conduct a Competency Assessment

The purpose of the competency assessment will be to determine the current-state capabilities of the workforce as it relates to short- and long-term workforce requirements. The results of the competency assessment survey will be compared to the "demand scenario" to identify potential current and future capability gaps. This information can be used by the Board to develop targeted competency-based recruitment, selection, development, and succession plans to ensure a robust pool of talent is available to perform critical occupational functions and work activities.

An end-to-end competency solution for the Board will:

- Reflect the desired capabilities and skills proficiency of mission critical positions in support of improved performance at the Board;

- Assess and report on the current competency levels of the Board workforce, identifying critical gaps that may be targeted for closure;

- Closely link available learning opportunities to competencies, permitting self-directed selection by staff; and

- Possess inherent flexibility to support future workforce needs that impact existing or future competencies deployed by the Board.

7.2 Strategic Recruiting (including improved Diversity)

The outlined strategy that follows presents a series of data-driven, tailored best practices that support improved recruiting and retention practices for the Board. If implemented, strategic recruiting will offer short- and long-term solutions to workforce supply and demand issues facing the Board. Strategic recruiting recommendations for the Board include:

(1) Focus on Mid- and Senior-Level Recruiting and Retention, and

(2) Leverage Targeted Partnerships and Consortia.

This strategy for the Board includes activities such as bolstering existing recruiting practices, engaging in boarder community outreach, building mid-career networking forums, using social networks in recruitment, and establishing enduring pipelines within unique candidate sources.

Figure 8. Recruitment and Hiring Lifecycle
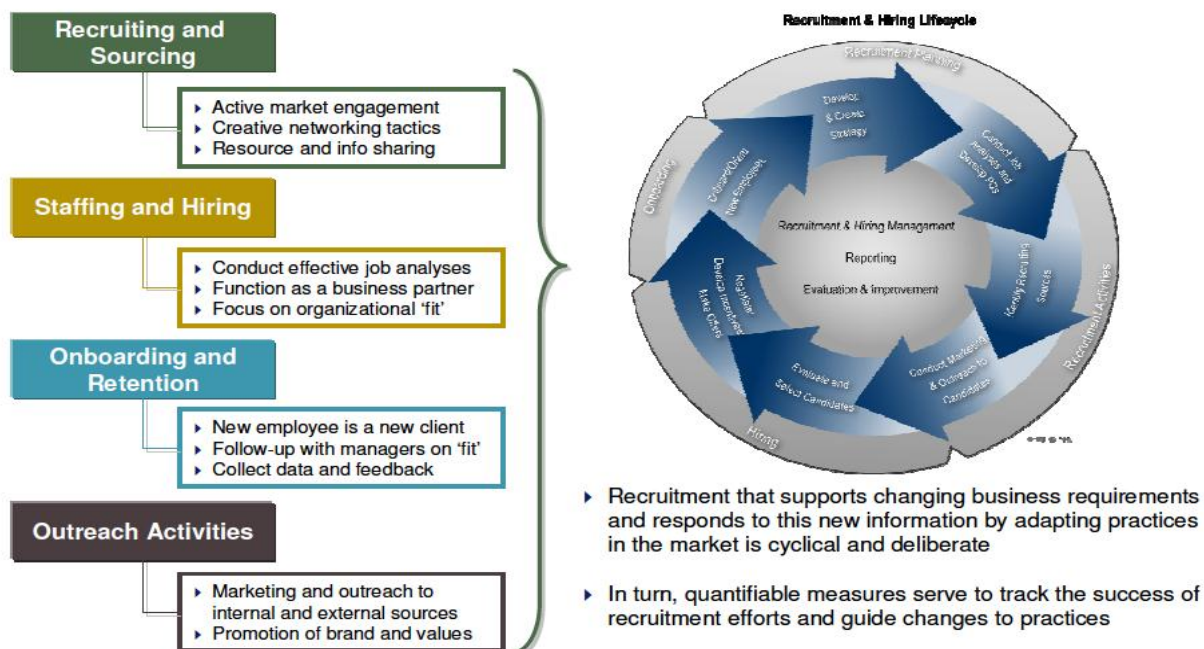
Focus on Mid- and Senior-level Recruitment and Retention

This recruitment focus areas targets programs that facilitate the recruitment and career transition of mid- and senior-level professionals into the Board. Building attractive recruitment pipelines for experienced and business-savvy professionals requires the development of clear, creative career pathways and of immediate onboard assignments that provide a rich professional experience.

Government agencies are becoming more aware of the need for alternative work arrangements for returning retirees, such as through Career Patterns, OPM's effort to promote alternative work arrangements to attract cross-generational talent. To fill its mid-level and early-senior pipeline gap, the Board should engage in encore programs for retiring boomers that facilitate the entry of talented mid- and senior-level staff from industry into key roles. Similar to the Department of Treasury's partnership with IBM in the Fed Experience Transitions to Government pilot program that is endorsed by OPM, the Board could capitalize on similar existing relationships and with its own contractors to develop pipelines for experienced and retiring staff to join the organization. Developing such a program involves identifying managers within the Board who are willing to assist with its

design, partnering with OPM, and establishing program objectives, parameters and pilot policy requirements that are reasonable and within required regulatory bounds.

Retaining more experienced talent requires slightly different incentives than what is currently offered to junior staff. Establishing formal avenues and forums for rising managers and engineers in the organization may be accomplished by:

- Creating competency-specific networks and Communities of Practice that allow teams of professionals to exchange ideas and information;

- Developing and deploying mentoring and coaching programs in specific competency areas that allow managers time to develop rising professionals in one-to-one settings;

- Encouraging managers and staff in mission-critical positions to develop desk guides for their functions/roles to document key work tasks and activities, particularly for roles that are one-deep; and

- Coordinating outreach activities by professionals in specific functions that target specific labor markets, institutions and organizations through peer-to-peer networks.

Leverage Targeted Partnerships and Consortia

It is our recommendation that the Board explores recruitment consortia with other employers or sources of Science, Technology, Engineering and Math (STEM) graduates to share insights, resources and leading practices. In particular:

(1) The Board should dedicate a percentage of one HR FTE's time to liaise with Career Transition Program Centers, university alumni associations, community and civic groups, professional institutions and uniformed military outplacement offices.

(2) The Board should conduct more deliberate outreach into academic and civic organizations, research institutions, and career transition or outplacement centers in order to build relationships with key administrators and advisors to build awareness of opportunities within the organizations. Working directly with key contacts allows the Board entry into a network of other organizations that will broaden the pool of qualified candidates.

(3) The Board should build relationships with universities specifically connected with Hispanic Serving Institutions (HSIs), Historically Black Colleges and Universities (HBCUs), and the Hispanic Association of Colleges and Universities (HACU).

Strategic Recruiting at Naval Sea Systems Command (NAVSEA)
NAVSEA Problem
✓ Majority of workforce between ages of 47 and 50
✓ Armed services are Federal employer with greatest number of employees in engineering and mathematics
✓ Needed to retain intellectual capital, as well as backfill mission-critical positions before retirees vacated them for training purposes
Partnerships and Consortia Solutions
✓ Working with other federal organizations employing math and science graduates to increase the pipeline of talent across schools
✓ Building long-term relationships with universities specifically targeted to provide a diverse pipeline of engineers
✓ Expanding university outreach via personal relationships, individual liaisons from the workforce building inroads into university departments/programs, alumni associations, and academic organizations

The caliber of candidates reaching an organization through referral channels has been historically better than those identified through mass recruitment in nearly every industry and market segment. A university, professional institution or community organization able to provide a consistent pipeline of top-tier candidates is an invaluable asset to any employer. Long-term relationships that serve to build reliable recruitment pipelines for an organization are among the single most important aspects of an effective recruiting strategy.

Appendix A. Glossary of Terms

Accountability measures
Well-defined, observable and measurable behaviors that indicate whether responsibility and ownership expectations are being met.

Knowledge management
The systematic or structured capture, storage, and transfer of institutional knowledge, processes, skills and expertise for future users.

Line-of-sight
A line of governance along which leadership has a clear view of how resources are being deployed and used.

Matrix structure
The design of organizational (people) resources for deployment across a range of complex or interdisciplinary problem areas.

Management standards
Clearly defined governance and process expectations (often relating to chain of command, bottom-up communication, workload allocation, and resource sharing) regardless of individual leadership preferences.

Organizational alignment
The degree to which an organization is designed to optimally meet its mission goals and work requirements.

Standard Operating Procedures (SOPs)
Written documents or instructions that detail the required or relevant activities and steps of a process (including quality control measures, institutional best practices, etc).

Workload distribution
A process and an outcome by which work is evenly allocated among employees in a fair manner (including balancing costs associated with time to learn and time to complete activities, establishing rules for work assignments, and ensuring that all employees understand their unique roles on a given task).

Appendix B. Phase 1: Environmental Scan (Summary)

An environmental scan involves considering the factors that will influence the direction and goals of an organization both in the present and future. Understanding both external and internal environmental factors will help the Board examine what the organization will need in the future to achieve its mission, goals, and direction. To that end, major secondary data sources were analyzed to establish the environmental context of the Board.

B-1.   The Board's Enabling Legislation[1] and History

The Board is a relatively young agency within the Federal government. The Department of Energy, created under the Carter Administration, restructured the distribution of government resource and energies projects. Within a matter of years during the Cold War era, the need to formalize independent oversight of nuclear facilities was apparent and the Board has since been performing that function for over 25 years.

Because of its niche and critical mission, DNFSB is typically buffered from the major Congressional battles over government spending. The Board functions that require funding are very explicitly written into legislation: (1) Review and Evaluation of Standards; (2) Investigations; (3) Analysis of Design and Operational Data; (4) Review of Facility Design and Construction; (5) Recommendations to the Secretary of Energy.

The narrowness of mission and technical function allows for clear visioning and value-setting, but could potentially make it difficult for the Board to recruit new individuals into the organization. The right talent pools are small. Engineers with an interest or background in oversight are perhaps even fewer and far between.

B-2.   Board Strategic and Budgetary Reports Fiscal Years 2010 – 2016

To help manage against those risks, the Board is able to competitively hire through an excepted service authority (DN). Aside from focusing on hiring senior technical experts, the Board instituted a Professional Development Program (PDP) for recent graduates from the top engineering programs across the nation. The PDPs learn oversight functions while attending school to attain advanced degrees in related technical fields. This recruiting solution appears to have been a successful way to build a future technical workforce.

Currently, pay-banded staff account for 75-80% of overall spending. Between FY2007 and FY2011, technical staff increased by 21. Overall, the workforce grew from 90 to 120 in FY12 (e.g., adding 1/3 to its original size), which could contribute to a need to shift investments in and the design of the DNFSB workforce.

Although all current technical programs and projects will remain a part of the Board portfolio for the next several decades, largely due to the nature of nuclear work, a number of projects have been delayed. This delay in work may also contribute to the need to reevaluate the current design of the technical staff. The Los Alamos CMRR funding request for FY2013 was $0 due to a delay of approximately five years, and the Uranium Processing Facility (UPF) at Oak Ridge could also be delayed in the near future.

For the past few years, the Board has been working to meet new OPM requirements related to the performance management. The new performance appraisal system for DN employees was instituted in Summer 2011, with initial positive feedback from DN employees. A new SES performance management system is currently being introduced, and a new GS system will launch in Summer 2013. Effective performance appraisal systems can create transparency in the awards and promotions process, standardize metrics, and facilitate individual performance improvements among staff. This is a good opportunity for

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[1] Major Legislation: ENABLING STATUTE OF THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD 42 U.S.C. § 2286 et seq.; NATIONAL DEFENSE AUTHORIZATION ACT, FISCAL YEAR 1989 -2009; FEDERAL REPORTS ELIMINATION ACT OF 1998 (Pub. L. No. 105-362, November 10, 1998); ENERGY POLICY ACT OF 1992 (Pub. L. No. 102-486, October 24, 1992),

the Board to identify work competencies, revise position descriptions (PDs), and better prepare current and future staff for success.

B-3.   Board Personnel Data from FedScope FY2011

An important part of the Environmental Scan includes identifying potential future risks based on historical and current workforce trends. To ensure an informed understanding of the state of the Board's FTE before conducting interviews, personnel data was pulled from OPM's FedScope in September 2012 (before 2nd quarter 2012 data was posted). The following three hypotheses were developed based upon this data:

Hypothesis 1: Site Representatives are stretched thin in terms of skills and workload.

Currently, 84% of the workforce is located in DC, which means that around 17 employees are spread across the remainder of the United States. The reps are managing six sites with significant mission activities. Management of these staff is most likely limited, and workload of the site-based workforce could potentially exceed that of HQ staff.

Hypothesis 2a: DNFSB faces a significant pipeline problem.

Nearly 2/3 of the workforce is over the age of 45, 58% of whom are over the age of 55. In 2011, DNFSB experienced a turnover of nine employees (nearly 12% of the DNFSB workforce). Of those nine employees, four of them were full-time and permanent employees. One of these individuals separated at an early age (40-44), two of the employees separated between the ages of 55-59, and one separated at the age of 60-64. What this tells us is that retirement eligibility is a possible turnover factor.

Hypothesis 2b: DNFSB will need to bolster the technical workforce skills and knowledge management.

In 2011, there were ten professional/administrative hires. However, there were zero technical new hires or transfers-into DNFSB. Given what we know about the age of the agency workforce, it is fair to anticipate some sort of looming competency gap related to technical skills. Moreover, while the average length of service (ALS) for the agency hovers around 14 years, the ALS of the technical workforce is 21 years. This means that the technical workforce is older and closer to retirement, but not quite leaving. Knowledge management will be critical for DNFSB once the original technical staff finally retire.

Hypothesis 3: Diversity of the workforce is lacking.

Trend data shows that the ratio of men to women in the DNFSB workforce is approximately 9:3 or 9:2. When DNFSB focuses on building the workforce pipeline through recruitment and talent sourcing, diversity and special hiring authorities associated with diversification should be taken into consideration.

The Board's short existence and narrow mission allows for remarkable retention among skilled technical staff. However, limited turnover poses potential knowledge management and pipeline risks.

B-4.   Board Federal Employee Viewpoint Survey (FEVS) Results

Conducted annually by the Office of Personnel Management (OPM), the Annual Employee Viewpoint Survey (previously FHCS, now FEVS) is designed to measure employee satisfaction and engagement. Satisfaction data is historically unreliable. However, the size of the Federal workforce helps flatten FEVS trends to show more accurate snapshots about the state of the workforce in a given year and there are certain items in the FEVS that have been validated, correlating to employee satisfaction. The Board participated in *The Best Places to Work in the Federal Government* rankings last year, placing 2nd among 35 small agencies with its satisfaction score.

Some FEVS items of particular interest include the following:

"Creativity and innovation are rewarded." Already scoring about an average of 7 percent-positive points above the government-wide average from 2006-2010, DNFSB improved by 11% in 2011. This double-digit leap is significant. Especially in agencies with major STEM functions, creativity and innovation is something that has been encouraged by the White House (*U.S. Innovation Policy* and *A Strategy for American Innovation*) of which science and technology investments play a major role.

"I feel encouraged to come up with new and better ways of doing things." Between 2006-2010, DNFSB experienced a steady decrease in percent-positive response to this question item. In 2011, there was a percent-positive increase of about 6%. This question measures whether employees feel satisfied with the flexibility and creativity they can bring to their work, which may be an important factor in performance.

"My talents are used well in the workplace." DNFSB has seen a slow, but steady increase in percent-positive responses for this data item. This suggests that job-fit/skills-match is improving at the agency. However, there still is about a quarter of the workforce that feel negatively or neutrally about how they are being utilized on the job.

"My performance appraisal is a fair reflection of my performance." "In my most recent performance appraisal, I understood what I had to do to be rated at difference performance levels." AND "I am held accountable for achieving results." These three data items are interesting when looked at as a group. Overall, DNFSB scores much higher than the government-wide average for performance management. However, they are nearly 10% below the government-wide average for being results-oriented and having a clear accountability structure. The manager-employee performance appraisal process is viewed as working, but the line-of-sight/reporting and results-orientation that should be clarified by the top of the organization does not seem to be successful. In addition, DNFSB dropped between 2010 and 2011 in employees' understanding of how to get promoted, which corresponds to the beginning development of the new DN performance appraisal system.

"In my work unit, steps are taken to deal with a poor performer who cannot or will not improve." It is worth noting that this question historically scores low. The fact that DNFSB is not only double-digits above the government-wide average but has also increased the percent-positive response consistently between 2006-2011 means that something right is happening.

Overall, the Board has experienced a positive change since 2010 on the FEVS scores. Looking at trends from 2006-2011, data items tell a story of leadership shifts and cultural rejuvenation between 2009 and 2010. Items about pay, knowledge and skills improvements, investments in development/training and perceptions of management all went up a couple percentage points. Recommending the Board as a place to work also experienced a percent-positive increase during that time, which is a key indicator of employee satisfaction.

Appendix C.Phase 2: Workforce Data Analysis (Highlights)

Booz Allen gathered workforce data in October 2012 to conduct an organization-wide analysis of the Board. Conducting a workforce analysis is a significant part of understanding an organization's workforce supply, which refers to the workforce available to perform the work. It also contributes to understanding an organization's workforce demand, meaning the workforce needed to perform the work.

Figure C-1 shows the Board's latest organizational chart, which informed Booz Allen's understanding of how the workforce aligns to offices. However, workforce analysis is not about moving boxes on an organizational chart. It is about identifying work being performed, work needs and the individuals with the skills required to meet those needs. It is about locating gaps in an organization's ability to perform work, areas of surplus and projecting future workforce requirements based on past trends and the current organizational environment.

Figure 9. Board Organizational Chart (as 9/5/2012)
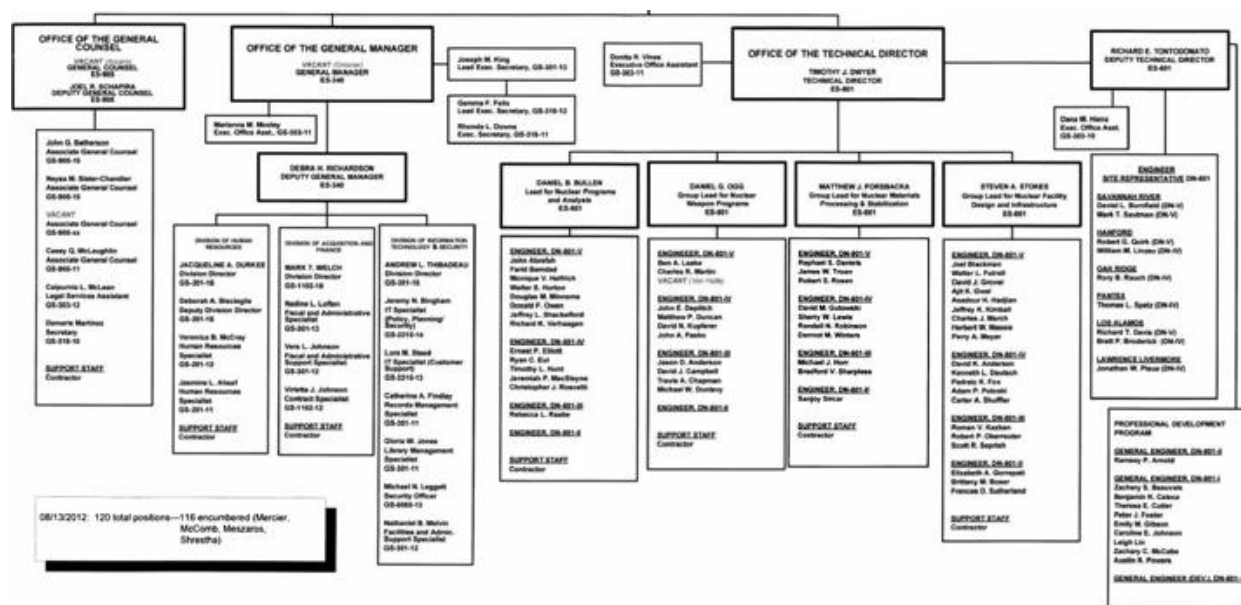
Figure 10.On-board Employees by Fiscal Year (Agency-wide)

C-1.   Board-wide Workforce Snapshot

The Board workforce is composed of GS-employees and SES in OGM and OGC, DN-employees and SES in OTD, and political appointees in the Office of the Chairman. For the purposes of this analysis, political appointees are not included.

The Board's workforce in FY2012 is the largest it has ever been. This creates an opportunity for the agency to reevaluate its way of working, assess leading practices in managing comparable workforces, and build a pipeline of
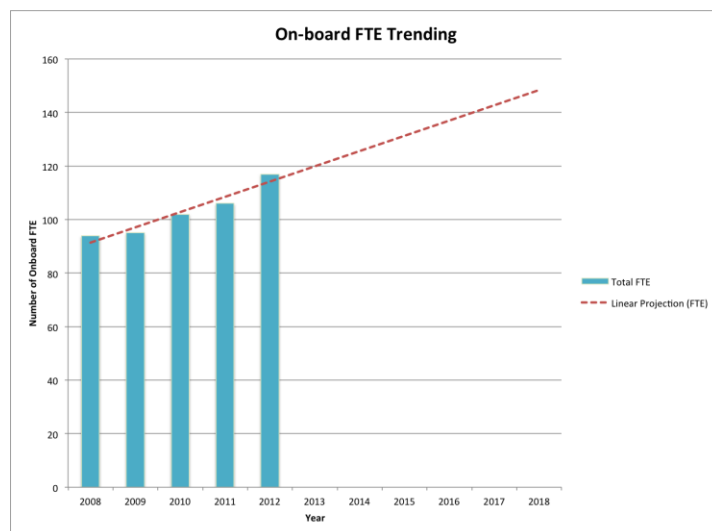
future technical experts and leaders. The following figures describe the current state of the Board's full-time employees.

On-board from FY2008 to present (Agency-wide)

The number of employees at an organization at a point in time can be measured in terms of on-board employees, or FTE. Figure 3.2 shows the Board's steady growth in headcount. Since 2008, there have been 23 FTE additions to the workforce – over 85% of which have been DN hires. If the Board continued hiring FTE at a similar rate, the agency would hit its 150-person cap by 2018.

Accessions from FY2008 to Present (Agency-wide)

Accession is defined as personnel actions that result in the addition of employees to an agency. Figure C.3 shows the Board's count of new hires[2] and agency transfers from FY2008 to FY2012.

Figure 11. Accessions by Fiscal Year

Accounting for summer intern hires, accession patterns tend to mimic FTE turnover counts. This implies that hiring is a reaction to lost talent, rather than a plan or strategy to build the capabilities of the workforce. However, the recent staffing surge that took place from 2011 to the summer of 2012 might be an exception to this trend.

Attrition from FY2008 to Present (Agency-wide)

Attrition, or agency separations, include voluntary attrition (which encompasses transfers to other agencies, resignations, and retirements), expiration of appointments, terminations, death and removal. For a small agency like the Board, attrition that is too high, unexpected, or too concentrated could be difficult to absorb. Unplanned losses place workload burdens on the remaining workforce and potentially jeopardize the Board's ability to meet its mission in a timely, effective manner.

As seen in Figure C.4, total attrition was at its peak in FY2008 with 9 employees (over 10% of the workforce). The Board experienced a turnover of 32 FTE (non-seasonal) employees in a five-year period. Overall, this means that the agency is losing an average of 6.4 FTE annually.

Figure 12.Turnover Rates by Fiscal Year
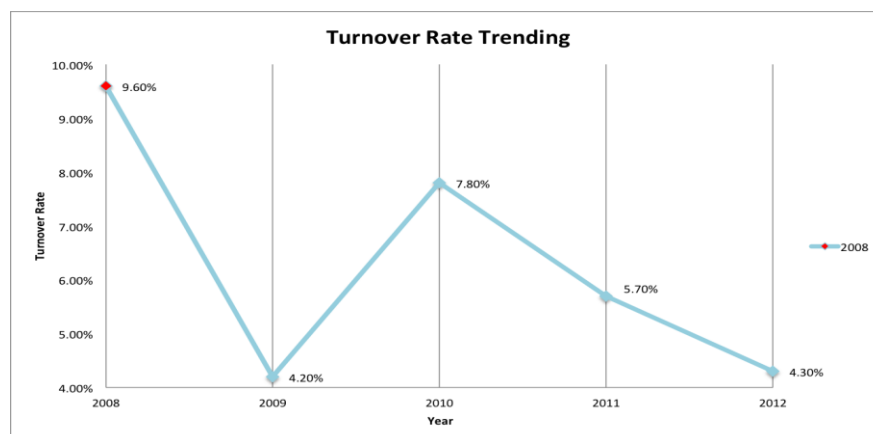
While this does not sound like an overwhelming loss, it is the equivalent of losing in one year:
   (1) Over half of the Site Reps; or
   (2) Every OTD SES.

If succession management is not routinely practiced, the Board may not be able to prepare for and meet attrition once the economy improves and more staff becomes retirement eligible.

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[2] Federal employees hired through excepted service are counted as new hires rather than agency transfers.

Retirement Eligibility (by Board Office)

Retirement eligibility is a key factor in attrition at most agencies. Fortunately for the continuity of activities at the Board, this is less true. Of the 24 staff eligible for retirement now, 50% are over the age of 65. By FY2020, 47% of the Board's workforce (55 employees) will be retirement eligible.

Figure 13. Retirement Eligibility – by Office (FY2012):

Retirement Eligibility by Office

	1 or fewer years	1-3 years	4-6 years	7-9 years
■ OFFICE OF THE CHAIRMAN	3	1	1	1
■ OFFICE OF THE GENERAL COUNSEL	1		1	1
■ OFFICE OF THE GENERAL MANAGER	6	1	3	1
■ OFFICE OF THE TECHNICAL DIRECTOR	14	5	11	5
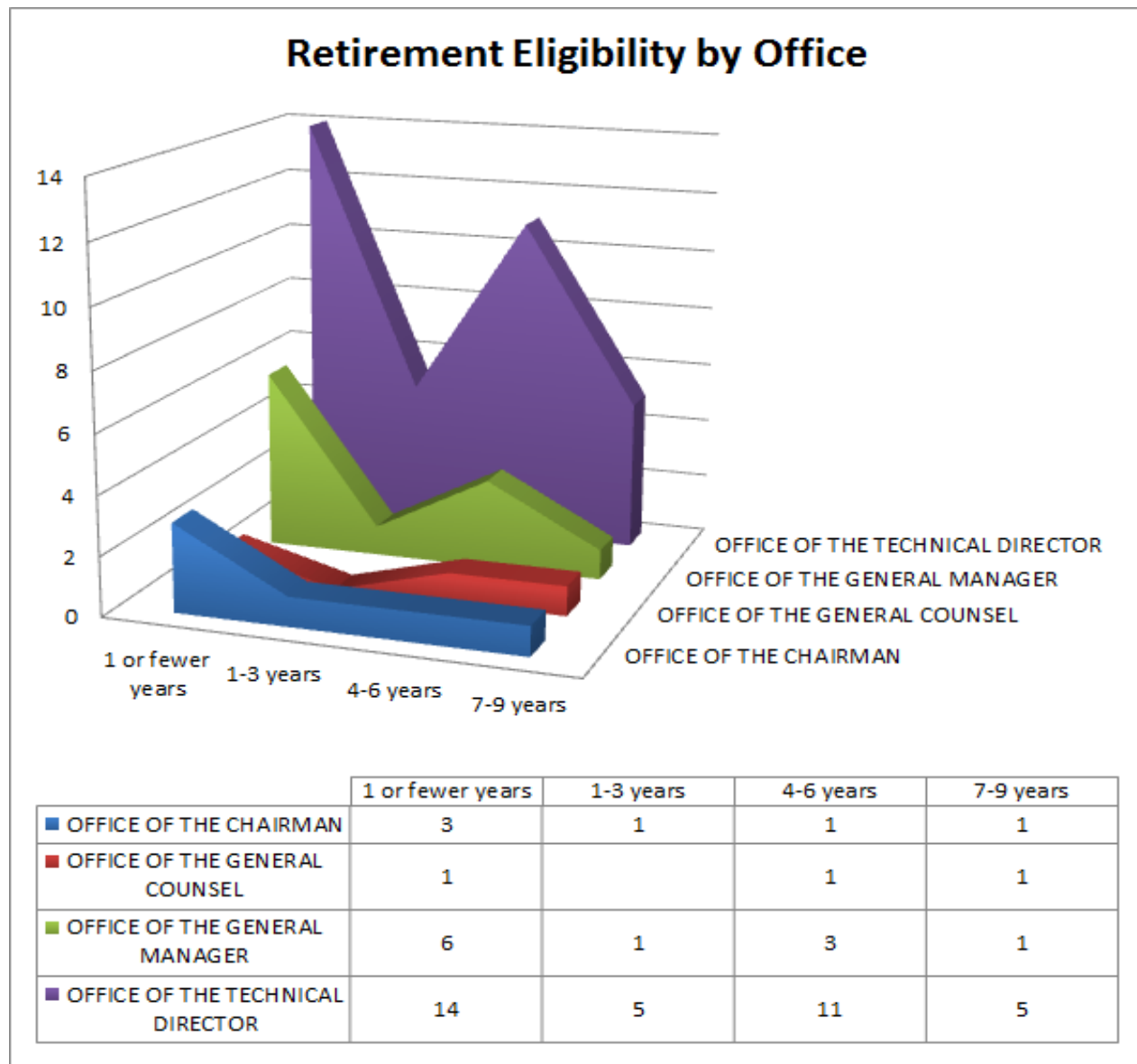
Retention of these seasoned employees provides the Board with an opportunity to capture and store critical corporate memories and expertise. It also means that the most senior people at the Board are not leaving, even after being retirement eligible for at least 10 years. Although this pattern may partially be attributed to the economy and type of work performed by the Board, it is an unfortunate trend for rising mid-level and early-senior professionals looking to grow into the most senior roles at the agency.

Figure 14.Average Years of Service – Comparable (FY2012)

Comparable Average Length of Service (Years) by Occupational Group
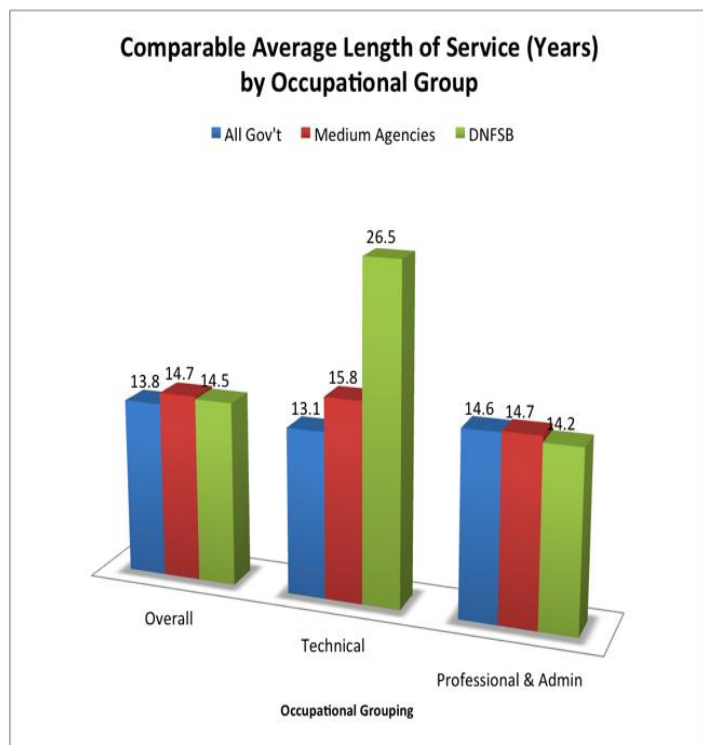
Average Length of Service (2012 Comparable)

Figure C.6 shows the average length of service (ALS[3]) for employees at the Board in 2012. Compared to other medium-size agencies the government average, the Board's overall ALS falls within the norm.

However, the Board's technical workforce ALS is 13.4 years longer than the government-wide average for technical employees. This ALS difference supersedes the idea that retirement eligible technical staff remain with the agency due to the economic downturn. Instead, it suggests that technical staff at the Board have a strong service orientation, utilize their skills, and are engaged by the work in a relatively well-protected environment.

C-2. DN Workforce Analysis

DN-employees account for 72.6% of the Board's workforce. Including OTD's six SES (4 Group Leads, Deputy Technical Director, and the Technical Director), 86% of the technical staff possess a Master's degree or higher.

To be able to compete with industry for technical talent, the Board is sanctioned for excepted service hiring using the DN pay-banded system. Entry-level engineers and technical staff pay levels range from DN-I to DN-V (limited to the rate for Level III of the Executive Schedule). It makes sense that the Board invests 75-80% of its overall funding into the technical staff based on their education levels, seniority, and number of SES leaders. Because of this substantive investment in the technical workforce, it is not cost-effective to reactively make hiring decisions. It is in the best financial interest of the entire Board to manage, track and plan the DN hiring and retention lifecycle carefully.

Attrition from FY2008 to Present (DN Employees)

Most separations among DN-employees taking place over the last five years are due to resignations (particularly of mid-level employees, DN-III and DN-IV) or retirement (as expected, of senior DN-IV and DN-V employees). But attrition due to retirement is low (35.7%) relative to attrition due to resignations (64.3%).

When technical staff choose to leave the Board, they tend to be in the mid- to early-senior stage of their career. This may be related to any number of factors: generational differences, clogged pay-bands, desire for field work/applied engineering, or simply finding more employment opportunities. Regardless, OTD will need to plan for non-retirement eligible attrition in their organization.

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[3] ALS values indicate years of overall Federal service, not years of service within an agency.

Figure 15.DN Attrition from FY2008-FY2012 (by Level)

DN Attrition Type and Employee Level (2008-2012)

	DN-I	DN-II	DN-III	DN-IV	DN-V
RESIGNATION	1	1	2	3	3
RETM VOLUNTARY				3	2
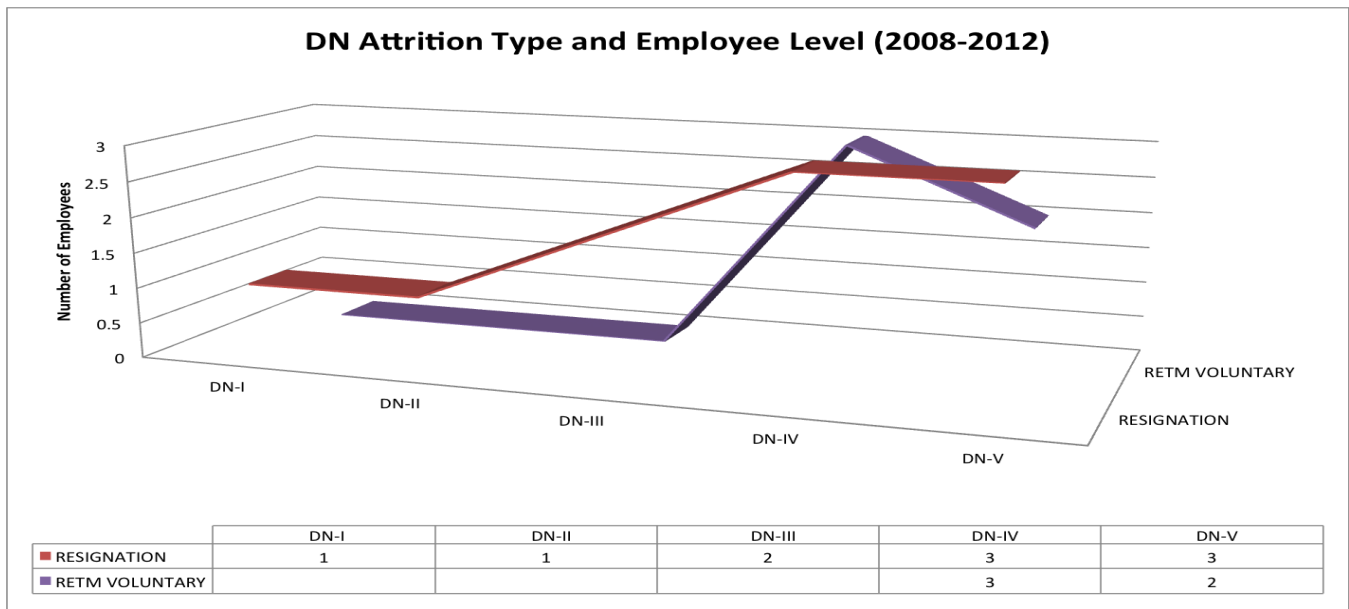
PDP Retention and Distribution

One of the programs OTD is implementing to fill the talent pipeline is the Professional Development Program (PDP). The PDP is a 3-year recruitment and training program designed to bring new talent into professional positions within the Board. New employees are placed in permanent entry-level positions. After completion of the 3-year program, the employee is considered a full professional staff member.

Figure 16.Current/Former PDPs by Group (FY2012)
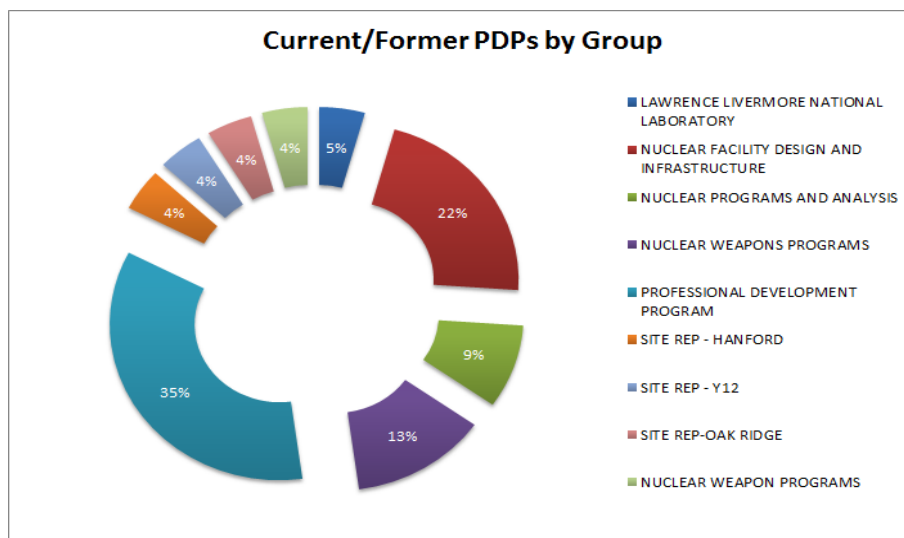
Figure C.8 breaks down the location of current and former PDP participants within the OTD. The PDP is composed of high potential entry-level employees that have been recruited out of the top engineering programs in the nation. Of the current technical staff, 24% have been or currently are in the PDP. About half of those are PDP alumni, the bulk of whom are working as site representatives (i.e., site reps) or in the Nuclear Facility Design and Infrastructure Group. PDP retention and placement after the program indicates that it provides incentives for continued service and high-performance at the Board.

C-3. GS Workforce Analysis

In 2012, there were a total of 26 General Schedule (GS) employees and 3 SES within OGM and OGC deployed across the Board. The OGC is currently authorized for 6 federal attorneys, 3 federal support personnel and 1 administrative support contractor. The OGM staff currently includes 21 full-time federal employees and 11 full-time on site contractors (e.g., 34.4% of the overall OGM FTE and contractor workforce). The OGM staff includes the Front Office staff that directly supports the Board members. Both OGM and OGC have experienced leadership turnover within the last year.

Attrition from FY2008 to Present (GS Employees)

Among the GS workforce, the greatest attrition experienced is due to resignations, not retirement. Of the resignations experienced in the last five years, two-thirds have been among mid-level employees. Similar to technical staff, the mid-level workforce at the Board is separating from the agency. Leadership turnover, limited career growth due to small size of the agency, and pay may be contributing factors to OGM and OGC attrition.

Figure 17.GS Attrition from 2008-2012 (by Level)

	GS-7	GS-9	GS-10	GS-11	GS-12	GS-15
RESIGNATION	1	2			2	
RETM DISABILITY					1	
RETM VOLUNTARY			1	2		2
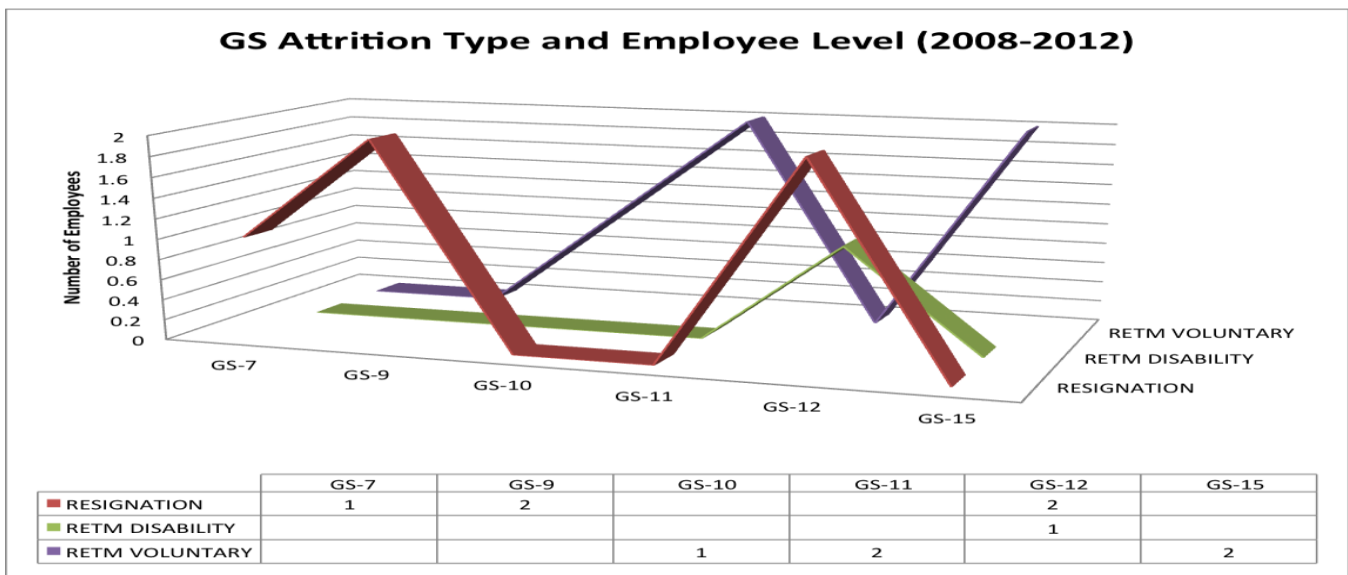
Appendix D.**Workforce Maps**

As part of a comprehensive strategic planning effort, the Board is currently leading an agency-wide workforce assessment and analysis initiative to align the organization with anticipated needs and skills now and in the next five years. To implement this strategic initiative, the Board sought greater insight into the alignment and evaluation of its workforce, enlisting the support of Booz Allen Hamilton to conduct a high-level workforce assessment and analysis of the Board 's workforce through development of Workforce Maps and final report.

The Workforce Maps provide a comprehensive description of the Board's workforce that can serve as a strong foundation for additional workforce planning, succession planning, and organizational design efforts such as:

(1) Workload Modeling: a structured process that forecasts how changes to work requirements will impact the workforce (e.g., changes in numbers, type, level or attributes of workforce needed)
(2) Benchmarking, Competency and Skills Assessments, or Organizational Restructuring

Workforce Mapping provides:
- A visual depiction of the workforce structure
- A visual depiction of the alignment of people to work in each department
- A common, structured format for analysis
- A basis to enable comparisons across the workforce
- A basis for identifying workforce risks across the organization (e.g., insufficient pipeline, areas of functional overlap or duplication)

D-1.   Assumptions

Several assumptions were made to complete the Maps within constraints afforded by the project schedule and quality of data. Thus, the workforce maps were prepared based on the following assumptions:
- Maps reflect data as of October 11, 2012, positions are depicted with the greatest accuracy possible, given available data
- Missing or incomplete data may result in a few individuals and/or positions not being depicted (e.g., not all records have a full demographic designation)
- Logical assumptions were applied to fill in the gaps (e.g., contractor positions placed in a grade range based on titles such as Manager or Assistant)
- Where data was missing (e.g., retirement, age), the information was left blank
- Meetings were held with key stakeholders and leadership
- As a result, maps data were validated by stakeholders and leadership
- HR data was the primary data source
- Contractor data will be estimated based on stakeholder interview and org chart

D-2.   DNFSB Workforce Maps Findings & Conclusions
Findings
The workforce maps highlight four main areas of potential workforce risk across the Board. These areas are:
(1) Employees within OTD tend to have similar functional tags, signifying a good degree of interchangeability of skills within a group;
(2) Several senior technical staff, SMEs and Executives across the Board (OGM,OTD,OGC) are retirement eligible;
(3) There is a proportionately large contractor workforce within OGM's IT and Security division; and
(4) OTD's professional development program (PDP) is used to fill the technical talent pipeline.

Conclusions

(1) Understanding how interchangeable FTEs are across the technical groups in OTD will be critical to effectively respond to work surges;

(2) Losing senior managers due to retirement will significantly impact the agency; the Board will lose leadership and potentially critical institutional knowledge that are instrumental in helping the agency accomplish its strategic goals and critical mission;

(3) A large contractor workforce within OGM's IT and Security division can be a potential risk, if there is insufficient ability to manage and technically complete the work of contractors should their level of effort be reduced or removed; and

(4) By consistently replenishing the PDP with promising top talented recruits, the OTD can continue to refresh and sustain its technical talent pipeline.

D-3. Workforce Maps Description & Workforce Maps

Each map item contains several pieces of data, noted by color, pattern, border, icon, and text notes. Each map item contains several pieces of data:

- The upper-left text shows the **Pay Plan**.
- The middle text shows **job title** associated with each position; map items are **grouped** by their job titles.

Additional variables are identified in the map key located at the bottom of the map:

- Background color shows the Office
- Border color and patterned background shows the retirement eligibility status of the employee in the position
- Different icons on upper-right of map item denotes: SME (star), contractor (circle)

SAMPLE

OFFICE OF THE TECHNICAL DIRECTOR

Office Name

Pay Band

Division/Group Name

How to Read a Workforce Map

NUCLEAR PROGRAMS AND ANALYSIS

Executive: SES, Exec.

SR. MATERIAL SCIENCIST GROUP LEAD

SR. CHEMICAL ENGINEER GOVERNANCE

DN SOFTWARE ENGINEER SOFTWARE QA

DN NUCLEAR ENGINEER SAFETY ANALYSIS & SYS

DN COMP ENGINEER SAFETY ANALYSIS

DN COMP ENGINEER

Senior: GS16, GS14, DN6, DN4:Mid, Sr.

DN SR. COMP ENGINEER SAFETY PROG. & CRIT'L

DN SR. COMP ENGINEER SAFETY ANALYSIS

DN SR. COMP ENGINEER STDS. & DIR. COORD.

DN COMP ENGINEER READINESS REVIEWS

DN COMP ENGINEER OPRS & OVERSITE

DN SR. MATERIALS SCIENCIST GOVERNANCE

DN COMP ENGINEER CONOPS REVIEWS

DN SR. COMP ENGINEER CRIT'L SAFETY

Mid-Level: GS13, GS12, DN3, DN4:Jr.

DN HEALTH PHYSICST

GS SECRETATARY-SUPPORT STAFF

Entry: GS10, GS11, DN2, DN1

KEY:
- ★ SME
- Ret. Elig. 4-6 Years
- ● Contractor
- OGC
- Comp Engineer=Generalist
- Ret. Elig. 1-3 Years
- Ret. Elig. Now
- OGM
- OTD

- Rows on the Y-axis subdivide the map items (positions) by pay-grades categories
- Columns on the X-axis break the map items out by divisions, ordered either alphabetically or numerically
- Pay Bands are comprised of a combination of GS and equivalent DN levels.

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OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 1

NUCLEAR FACILITY DESIGN AND INFRASTRUCTURE

NUCLEAR MATERIALS PROCESSING AND STABILIZATION

Most SMEs and Senior Engineers are retirement eligible now

GS SR. ENVIRONMENTAL ENGINEER GROUP LEAD

GS SR. NUCLEAR ENGINEER GROUP LEAD

DN SR. STRUCTURAL ENGINEER

DN SR. COMP ENGINEER PROJECT MANAGER

DN COMP ENGINEER DSGN & CONST.

DN HEALTH PHYSICST HANFORD COG.

DN GEOLOGIST WASTE ISO. P.P. COG.

DN FIRE PROTECTION ENGINEER

DN SR. MECHANICAL ENGINEER

DN SR. ELECTRICAL ENGINEER POWER DIST.

DN SR. CHEMICAL ENGINEER

DN COMP ENGINEER HANFORD COG.

DN SR. CHEMICAL ENGINEER FLUID DYNAMICS

DN SR. ELECTRICAL ENGINEER INST. & CONT'L

DN CHEMICAL ENGINEER FLUID DYNAMICS

DN SR. MATERIALS SCIENTIST

DN SR. COMP ENGINEER IDAHO COG.

DN FIRE PROTECTION ENGINEER

DN SR. SEISMOLOGIST / GEOTECHNICAL ENGINEER

DN STRUCTURAL ENGINEER

GS SECRETARY-SUPPORT STAFF

DN MECHANICAL ENGINEER FAC. DSGN REVIEW

DN COMP ENGINEER SAV RVR COG.

GS SECRETARY-SUPPORT STAFF

DN MECHANICAL ENGINEER FAC. DSGN REVIEW

DN ELECTRICAL ENGINEER DSGN REVIEW

DN MECHANICAL ENGINEER DSGN REVIEW

DN NUCLEAR ENGINEER COG ENGINEER *

DN COMP ENGINEER

DN ELECTRICAL ENGINEER POWER DIST.

DN CHEMICAL ENGINEER PROJECT MANAGER *

DN CHEMICAL ENGINEER

DN ENVIRONMENTAL ENGINEER W.P.& NEW FAC. DSGN

DN COMP ENGINEER

KEY:
- ★ SME
- Ret. Elig. 4-6 Years
- ● Contractor
- OGC
- Comp Engineer=Generalist
- Ret. Elig. 1-3 Years
- Ret. Elig. Now
- OGM
- OTD

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OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 2

NUCLEAR PROGRAMS AND ANALYSIS

Employees have similar functional tags, signifying a good degree of interchangeability of skills within groups

Executive

SR. MATERIAL SCIENCIST
GROUP LEAD

Senior

DIN
SR. CHEMICAL ENGINEER
GOVERNANCE

DIN
COMP ENGINEER
SAFETY ANALYSIS

DIN
SR. COMP ENGINEER
SAFETY PROG. & CRITIC

DIN
COMP ENGINEER
READINESS REVIEWS

DIN
SOFTWARE ENGINEER
SOFTWARE QA

DIN
SR. COMP ENGINEER
SAFETY ANALYSIS

DIN
SR. COMP ENGINEER
CRITIC. SAFETY

DIN
COMP ENGINEER
CONOPS REVIEWS

DIN
NUCLEAR ENGINEER
SAFETY ANALYSIS & PHS

DIN
COMP ENGINEER

DIN
SR. MATERIALS SCIENCIST
GOVERNANCE

Mid-Level

DIN
ELECTRICAL ENGINEER

DIN
HEALTH PHYSICST

DIN
COMP ENGINEER
OPPS & OVERSITE

GS
SECRETARY-SUPPORT STAFF

DIN
SR. COMP ENGINEER
STDs. & DIR. COORD.

Entry

KEY:
| ★ | SMC | | Ret. Elig. 4-6 Years | | ● Contractor | OGC | | Comp Engineer = Generalist |
| Ret. Elig 1-3 Years | | Ret. Elig. Now | | OGM | | OTD | |

OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 3

NUCLEAR WEAPONS PROGRAMS

Executive

GS
SR. NUCLEAR ENGINEER
GROUP LEAD

Senior

DIN
SR. NUCLEAR WEAPONS ENGINEER

DIN
COMP ENGINEER
CRITIC. SAFETY

DIN
SR. COMP ENGINEER
LOS ALAMOS COG.

DIN
SR. NUCLEAR WEAPONS ENGINEER
PANTEX COG.

DIN
SR. COMP ENGINEER

Mid-Level

DIN
COMP ENGINEER
LIVERMORE COG.

DIN
ELECTRICAL ENGINEER
Y12 COG.

DIN
COMP ENGINEER

DIN
CHEMICAL ENGINEER
SANDIA COG.

DIN
COMP ENGINEER
SAFETY ANALYSIS

GS
SECRETARY-SUPPORT STAFF

Entry

DIN
MECHANICAL ENGINEER

DIN
NUCLEAR ENGINEER

KEY:
| ★ | SMC | | Ret. Elig. 4-6 Years | | ● Contractor | OGC | | Comp Engineer = Generalist |
| Ret. Elig 1-3 Years | | Ret. Elig. Now | | OGM | | OTD | |

OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 4

OFFICE OF THE TECHNICAL DIRECTOR

PROFESSIONAL DEVELOPMENT PROGRAM

OTD's PDP is used to fill the technical talent pipeline

Executive

ES
SR. COMP ENGINEER
TECHNICAL DIRECTOR

ES
SR. COMP ENGINEER
DEPT. TECH. DIRECTOR

Mid-Level/Senior

Entry

GS
EXECUTIVE OFFICE
ASSISTANT (OA)

DN
DN
DN
CHEMICAL ENGINEER

DN
NUCLEAR ENGINEER
CRITIC. SAFETY*

DN
SEISMOLOGIST / GEOTEC
HNICAL ENGINEER

DN
NUCLEAR ENGINEER

DN
DN
STRUCTURAL
ENGINEER

KEY:

| ★ SME | Ret. Elig. 4-6 Years | ● Contractor | OGC | Comp Engineer* Generalist |
| Ret. Elig. 1-3 Years | Ret. Elig. Now | OGM | OTD | |

OFFICE OF THE TECHNICAL DIRECTOR

Partial OTD Workforce Map 5

SITE REPRESENTATIVES

Executive

Senior

DN
ELECTRICAL ENGINEER
INST. & CONTL - HANFORD REP.

DN
GENERAL ENGINEER
ORG SAFETY -
LOS A REP.

DN
ELECTRICAL ENGINEER
LOS A REP.

DN ★
HEALTH PHYSICST
SAVANNAH REP.

DN
SR. COMP ENGINEER
SITES LEAD - SAVAN. REP.

DN
STRUCTURAL ENGINEER
OAKRIDGE REP.

DN
NUCLEAR ENGINEER
NUCLEAR CHEMIST -
LIVERPOOL. REP.

DN
SR. NUCLEAR
WEAPONS ENGINEER
PANTEX REP.

Mid-Level

DN
SR. CHEMICAL
ENGINEER
HANFORD REP.

DN ★
CHEMICAL ENGINEER
EXPLOSIVES - OAKR. REP.

Entry

KEY:

| ★ SME | Ret. Elig. 4-6 Years | ● Contractor | OGC | Comp Engineer* Generalist |
| Ret. Elig. 1-3 Years | Ret. Elig. Now | OGM | OTD | |

OFFICE OF THE TECHNICAL DIRECTOR

OTD Retirement Eligible Now by technical groups

1 or fewer years

	NUCLEAR MATERIALS PROCESSING AND STABILIZATION	NUCLEAR PROGRAMS AND ANALYSIS	NUCLEAR WEAPONS PROGRAMS	NUCLEAR FACILITY DESIGN AND INFRASTRUCTURE	SITE REPRESENTATIVES
Executive				ES SR. ENVIRONMENTAL ENGINEER	
Senior	DN GEOLOGIST WASTE ISO. P.P. COG. ★	DN COMP ENGINEER OPPS & OVERSITE	DN SR. NUCLEAR WEAPONS ENGINEER ★	DN SR. COMP ENGINEER PROJECT MANAGER	DN HEALTH PHYSICST SAVANNAH REP ★
	DN SR. COMP ENGINEER IDAHO COG.	DN SR. COMP ENGINEER CRITIC. SAFETY ★		DN SR. STRUCTURAL ENGINEER ★	
	DN HEALTH PHYSICST HANFORD COG.	DN SR. COMP ENGINEER SAFETY ANALYSES ★		DN SR. ELECTRICAL ENGINEER POWER DIST. ★	
	DN SR. CHEMICAL ENGINEER ★			DN FIRE PROTECTION ENGINEER ★	
Mid-Level					
Entry					

KEY:
- ★ SMC
- Ret. Elig. 4-6 Years
- Ret. Elig. 1-2 Years
- Ret. Elig. Now
- Contractor
- OGC
- OGM
- OTD
- Comp Engineer = Generalist

43 Booz | Allen | Hamilton

OFFICE OF THE TECHNICAL DIRECTOR

OTD Retirement Eligible 1-3 years by technical groups

1-3 years

	NUCLEAR FACILITY DESIGN AND INFRASTRUCTURE	NUCLEAR PROGRAMS AND ANALYSIS	OFFICE OF THE TECHNICAL DIRECTOR	NUCLEAR WEAPONS PROGRAMS
Executive			ES SR. COMP ENGINEER TECHNICAL DIRECTOR	
Senior	SR. GEOLOGIST / GEOTECHNICAL ENGINEER ★	DN SR. COMP ENGINEER SAFETY PROG. & CRITIC		DN SR. COMP ENGINEER NAVADA REP.
		DN SOFTWARE ENGINEER SOFTWARE QA ★		
Mid-Level				
Entry				

KEY:
- ★ SMC
- Ret. Elig. 4-6 Years
- Ret. Elig. 1-2 Years
- Ret. Elig. Now
- Contractor
- OGC
- OGM
- OTD
- Comp Engineer = Generalist

Full OGM Workforce Map

OFFICE OF THE GENERAL MANAGER

Senior leaders are retirement eligible now

AQUISITION AND FINANCE	HUMAN RESOURCES	INFORMATION TECHNOLOGY & SECURITY	OFFICE OF THE GENERAL MANAGER

Senior Executive

DIRECTOR, DIV OF ACQ. & FINANCE

DIRECTOR, DIVISION OF H.R.

ASSISTANT DIRECTOR OF H.R.

DIR., DIV OF INFOR. TECH AND SEC

DEPUTY GENERAL MANAGER

IT SPEC (POLICY AND PLANNING / SEC)

Large contractor footprint across OGM

Mid-Level

SECRETATARY-SUPPORT STAFF

FISCAL AND ADMIN. SUPPORT SPEC

FISCAL AND ADMIN. SPECIALIST

CONTRACT SPECIALIST

SECRETATARY-SUPPORT STAFF

HUMAN RESOURCES SPECIALIST

IT ONSITE SUPERVISOR

SECURITY OFFICER

IT HELP DESK

RECEPTIONIST

IT SPECIALIST (CUSTOMER SUPPORT)

IRA / IMAGING SYSTEM

FACILITIES & ADMIN SUPPORT SPECIALIST

MAILROOM

IT SME

RADIATION EXPOSURE PROG. ADMIN.

SUPERVISORY EXECUTIVE ASSISTANT

LEAD EXECUTIVE SECRETARY (OA) BOARD SUPPORT

EXECUTIVE SECRETARY (OA) BOARD SUPPORT

Entry

HUMAN RESOURCES SPECIALIST

RECORDS MANAGEMENT SPECIALIST

LIBRARY MANAGEMENT SPECIALIST

EXECUTIVE OFFICE ASSISTANT (OA)

KEY: ★ SME | Ret. Elig. 4-6 Years | ● Contractor | OGC | Comp Engineer= Generalist | Ret. Elig. 1-3 Years | Ret. Elig. Now | OGM | OTD

Full OGC Workforce Map

OFFICE OF THE GENERAL COUNSEL

GENERAL COUNSEL	OFFICE OF THE GENERAL COUNSEL

Executive

GENERAL COUNSEL

DEPUTY GENERAL COUNSEL

Senior leader with most historical knowledge and technical expertise is retirement eligible now

Senior

ATTORNEY ADVISOR (GENERAL)

Mid-Level

ATTORNEY ADVISOR (GENERAL)

LEGAL SERVICES ASSISTANT

Contractor SECRETARY-SUPPORT STAFF

Entry

SECRETARY (OA)

KEY: ★ SME | Ret. Elig. 4-6 Years | ● Contractor | OGC | Comp Engineer= Generalist | Ret. Elig. 1-3 Years | Ret. Elig. Now | OGM | OTD

Full Office of the Chairman Workforce Map

OFFICE OF THE CHAIRMAN

BOARD	OFFICE OF THE CHAIRMAN

Executive

EX
EX
EX
MEMBER

EX
CHAIRMAN

EX
VICE CHAIRMAN

Senior

Mid-Level

GS
LEAD EXECUTIVE SECRETARY (OA)
OGM STAFF

Entry

GS
EXECUTIVE SECRETARY (OA)
OGM STAFF

KEY:

★ SMC

Ret. Elig. 4-6 Years

Ret. Elig. 1-3 Years

Ret. Elig. Now

Contractor

OGM

OGC

OTD

Comp Engineer= Generalist
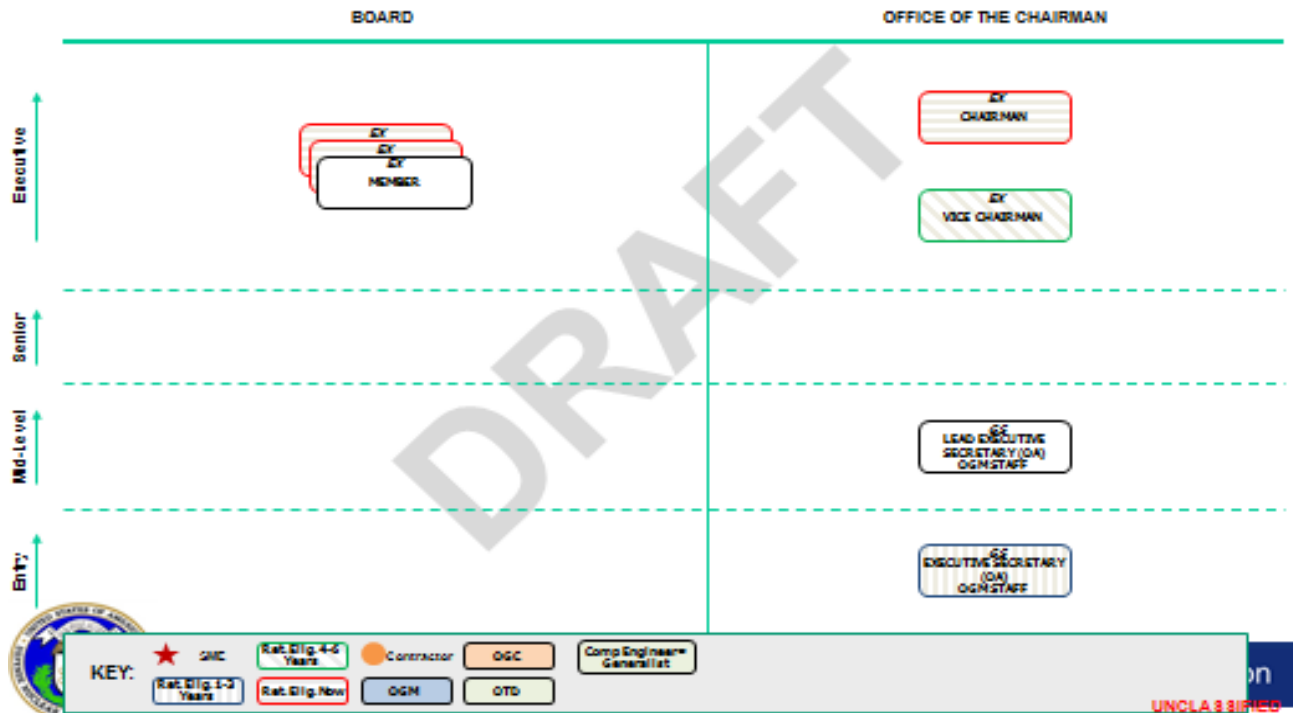
Appendix E. Additional Workforce Graphics

The following appendix includes additional workforce data related to the composition of the Board's current workforce and workforce trends.
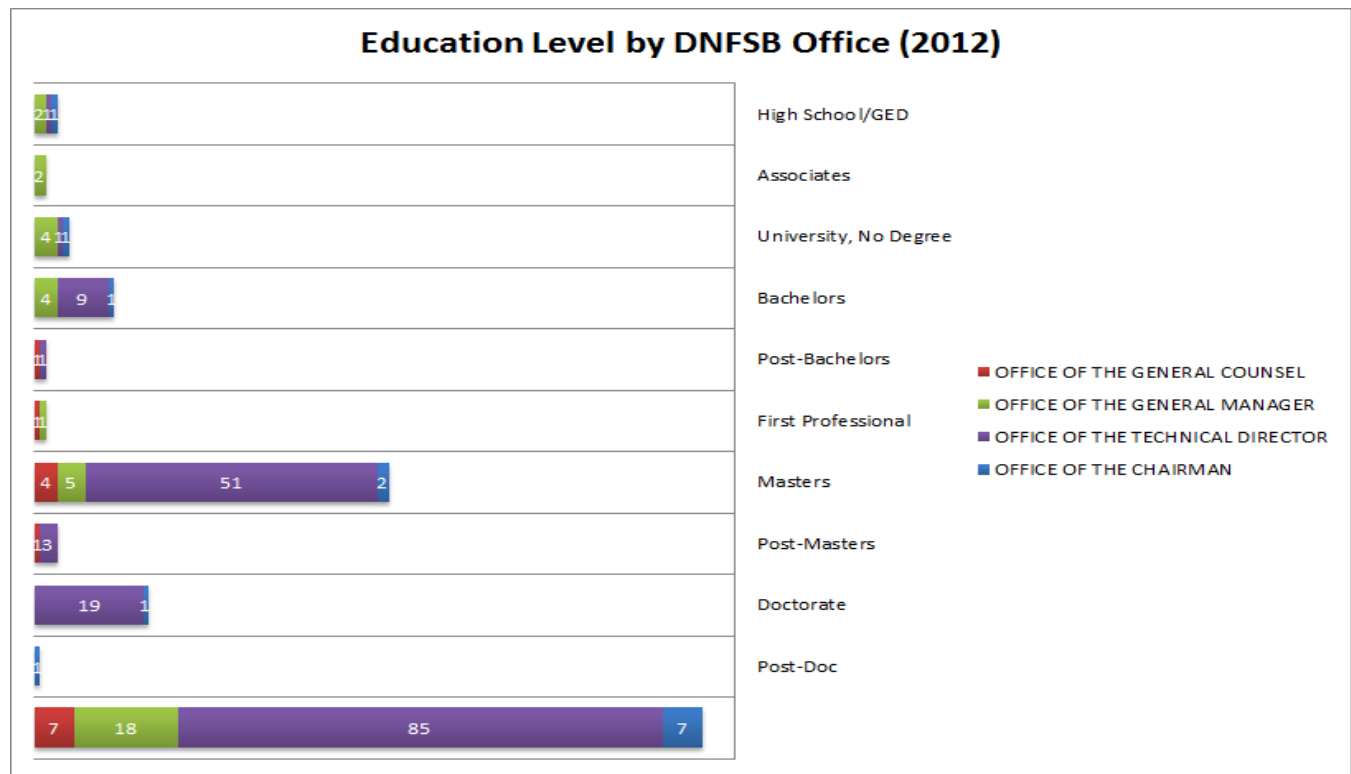
E-1. On-Board Employees from FY2008 to FY2012 (by Pay Plan)

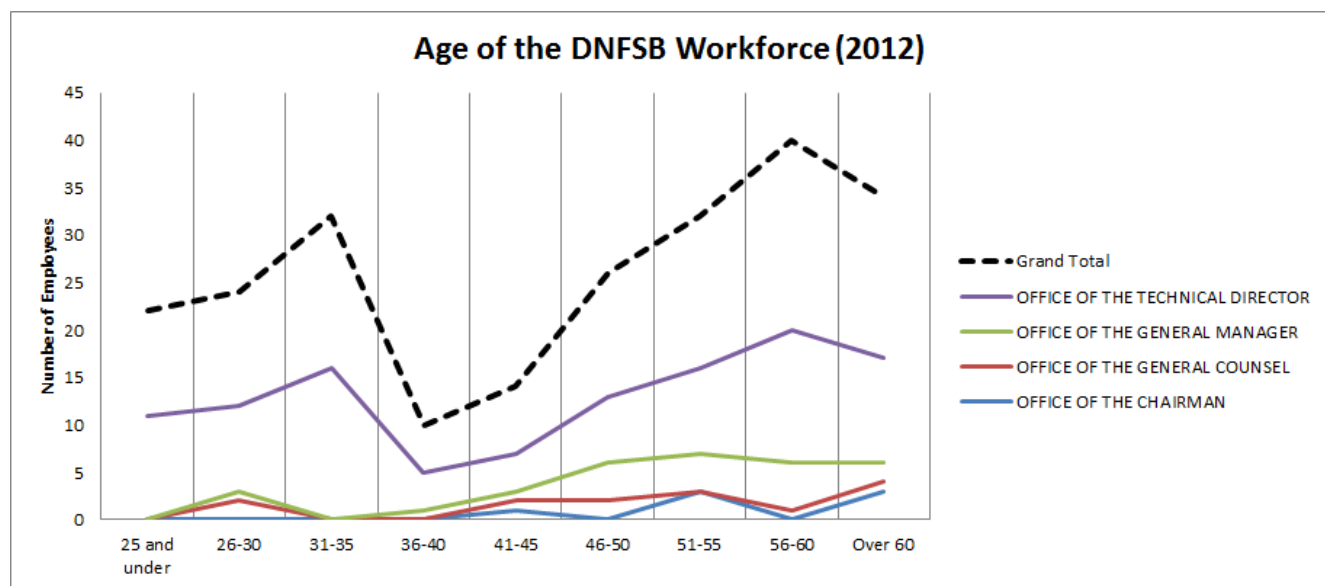**Table 1.On-board Employees by Pay Plan (FY2008-FY2012)**

DNFSB On-Board Trending (2008-2012)

	2008	2009	2010	2011	2012
SL	1	1	1	1	0
SES	10	9	10	10	9
GS	26	24	24	26	26
Exec	5	5	4	5	5
DN	52	56	63	64	77
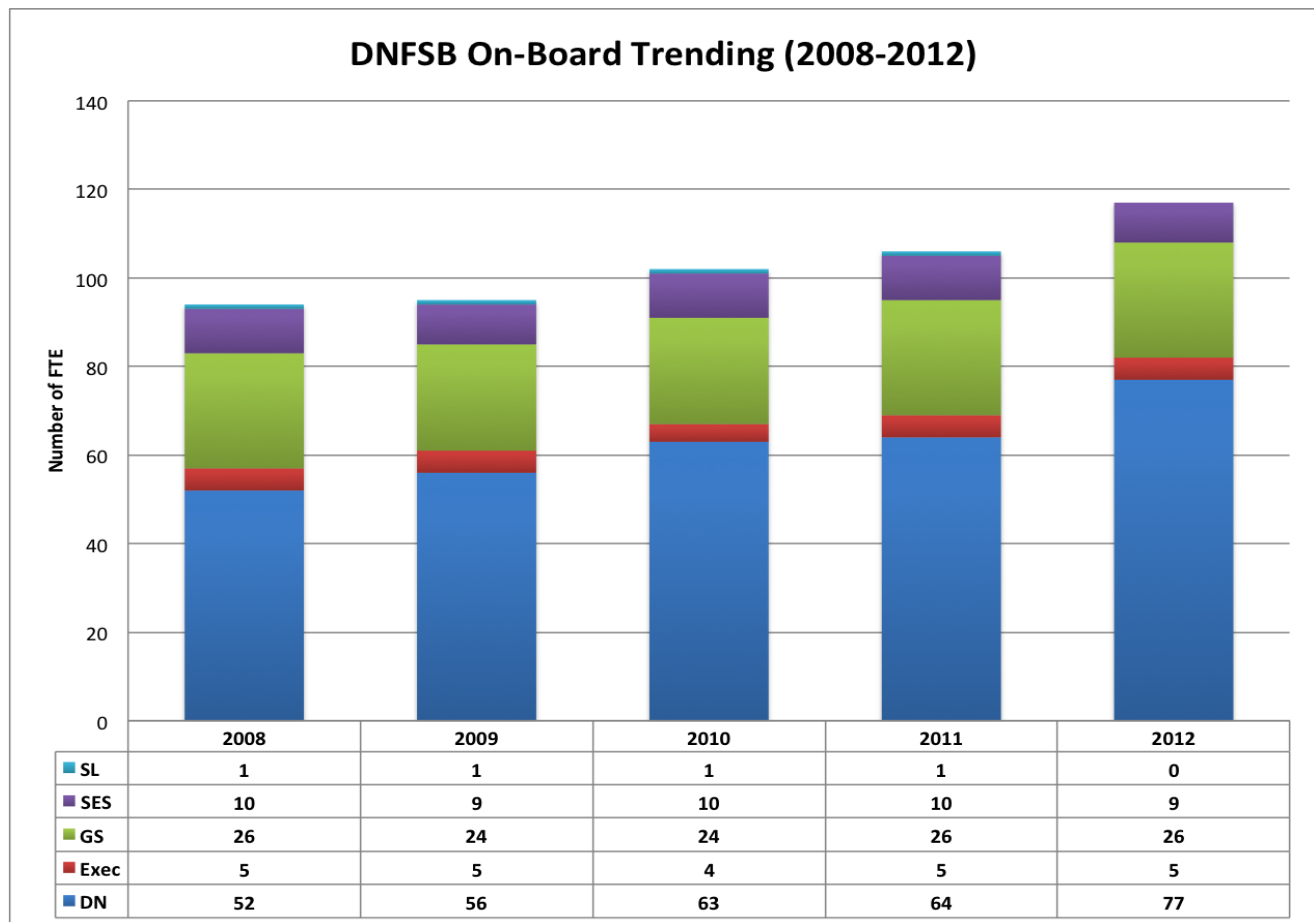
E-2. Education Level in 2012 (by Office)

Table 2. DNFSB Employee Education by Office (FY2012)

E-3. Age of the Workforce in FY2012 (by Office and Agency-wide)

Table 3. Age Distribution (Agency-wide) (FY2012)

E-4.   DNFSB Comparable Diversity (Ethnicity/Race & Gender)
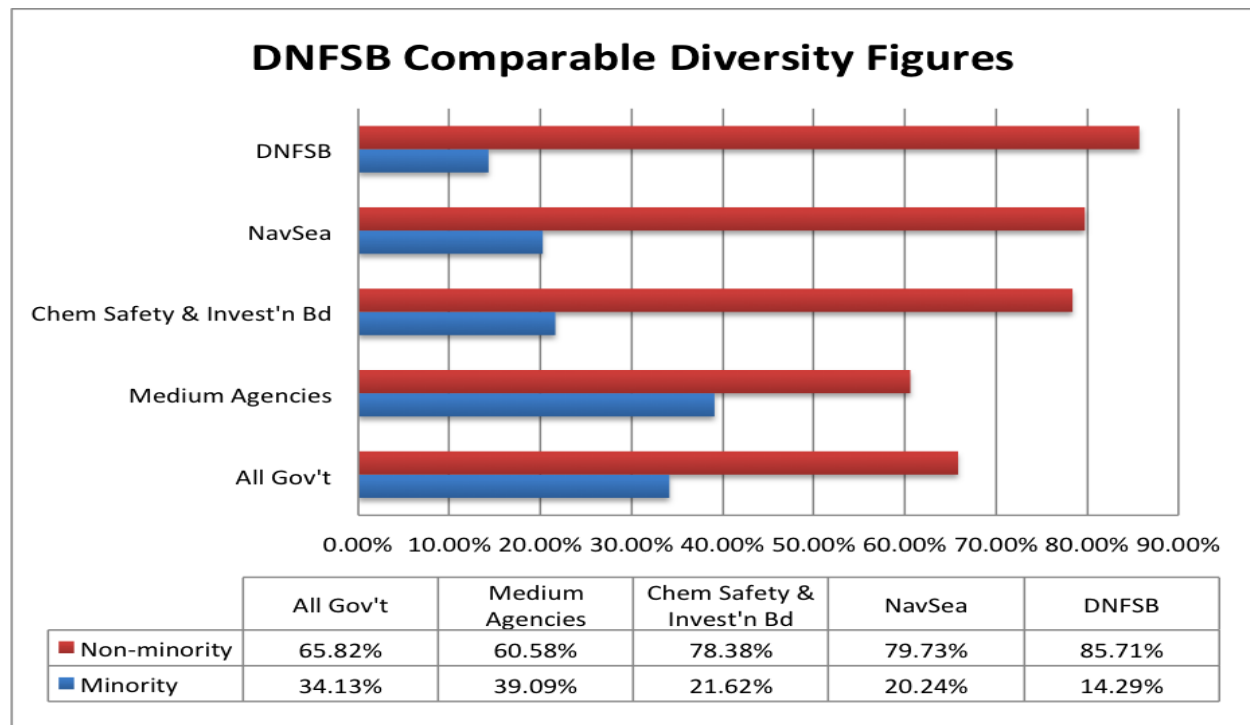
Table 4. Comparable Diversity (FY2012)

DNFSB Comparable Diversity Figures

	All Gov't	Medium Agencies	Chem Safety & Invest'n Bd	NavSea	DNFSB
Non-minority	65.82%	60.58%	78.38%	79.73%	85.71%
Minority	34.13%	39.09%	21.62%	20.24%	14.29%

Table 5. Comparable Gender Trends (FY2007-FY2012)

DNFSB Comparable Gender Trending

	Sep-07 Female	Male	Sep-08 Female	Male	Sep-09 Female	Male	Sep-10 Female	Male	Sep-11 Female	Male
All Gov't	44.17%	55.82%	44.36%	55.64%	44.25%	55.75%	44.01%	55.99%	43.70%	56.30%
Medium Agencies	52.90%	47.10%	52.71%	47.29%	52.06%	47.94%	52.05%	47.95%	51.57%	48.43%
DNFSB	25.56%	74.44%	20.43%	79.57%	20.79%	79.21%	24.04%	75.96%	24.32%	75.68%
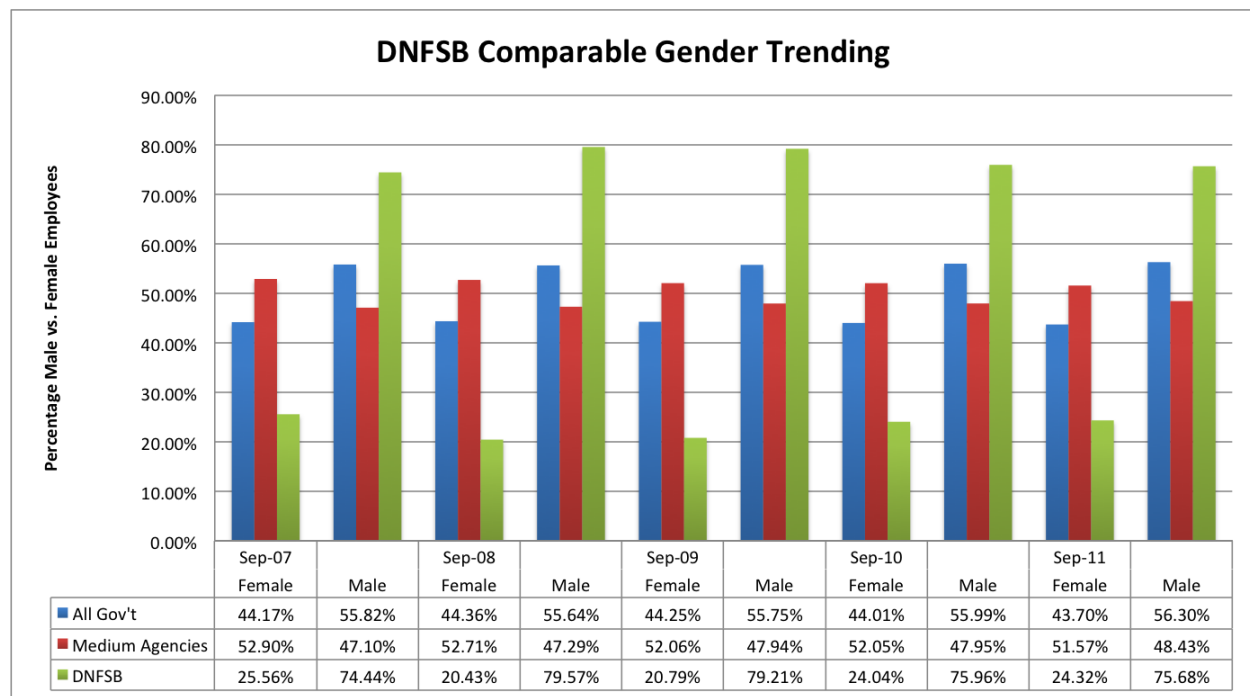
Table 6. Gender Trends (Agency-wide) (FY 2007-FY2011)
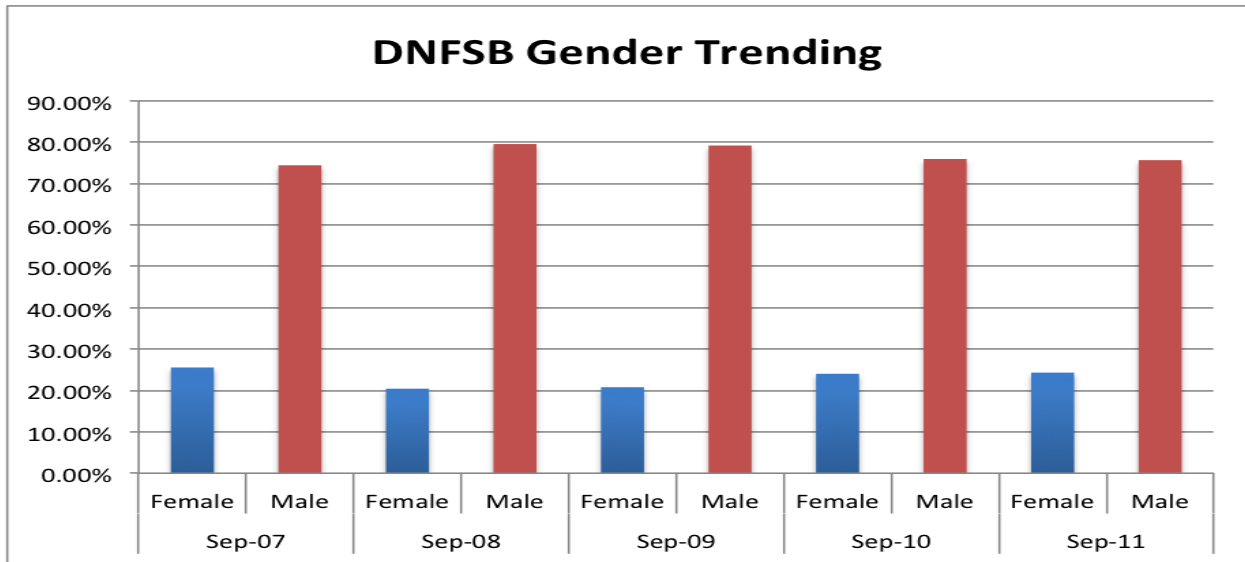
E-5. Diversity in 2012 (by Offices, Pay Plans)

Table 7. On-board Employees by Gender (Agency-wide) (FY2012)

Gender	Number of Employees	Percent of Total
Male	85	73.0%
Female	32	27.0%
Total	**117**	**100.0%**

Table 8.Gender Distribution by Pay Plan (FY2012)

	DN	Exec	GS	SES
F	11	1	19	1
M	66	4	7	8
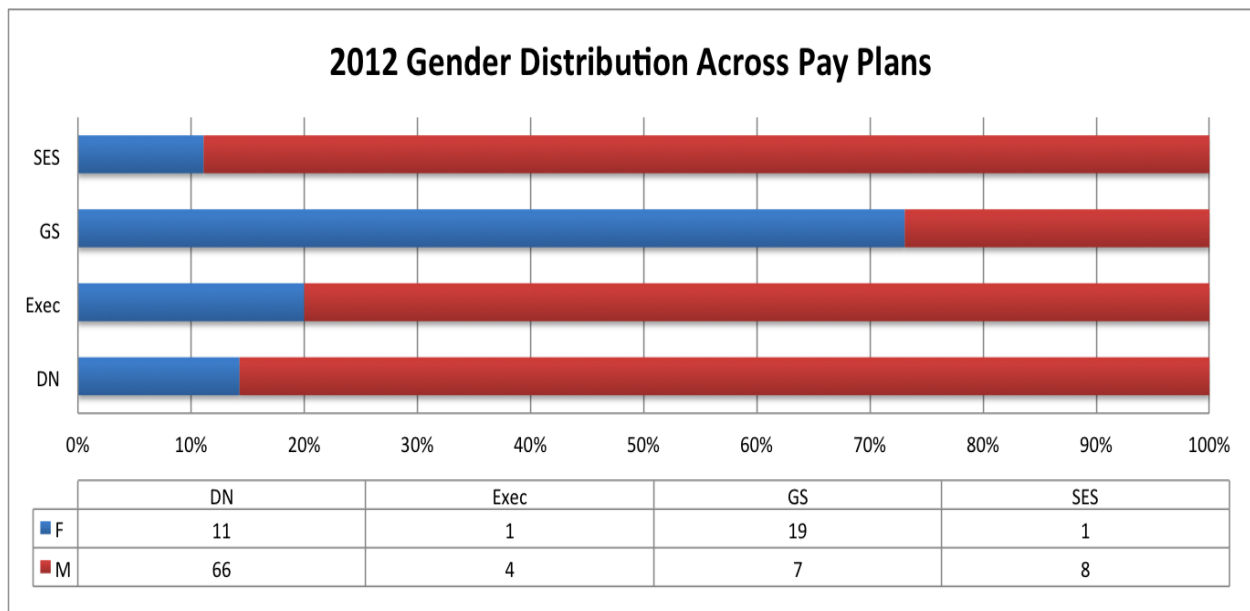
Table 9.On-board Employees by Race (Agency-wide) (FY2012)
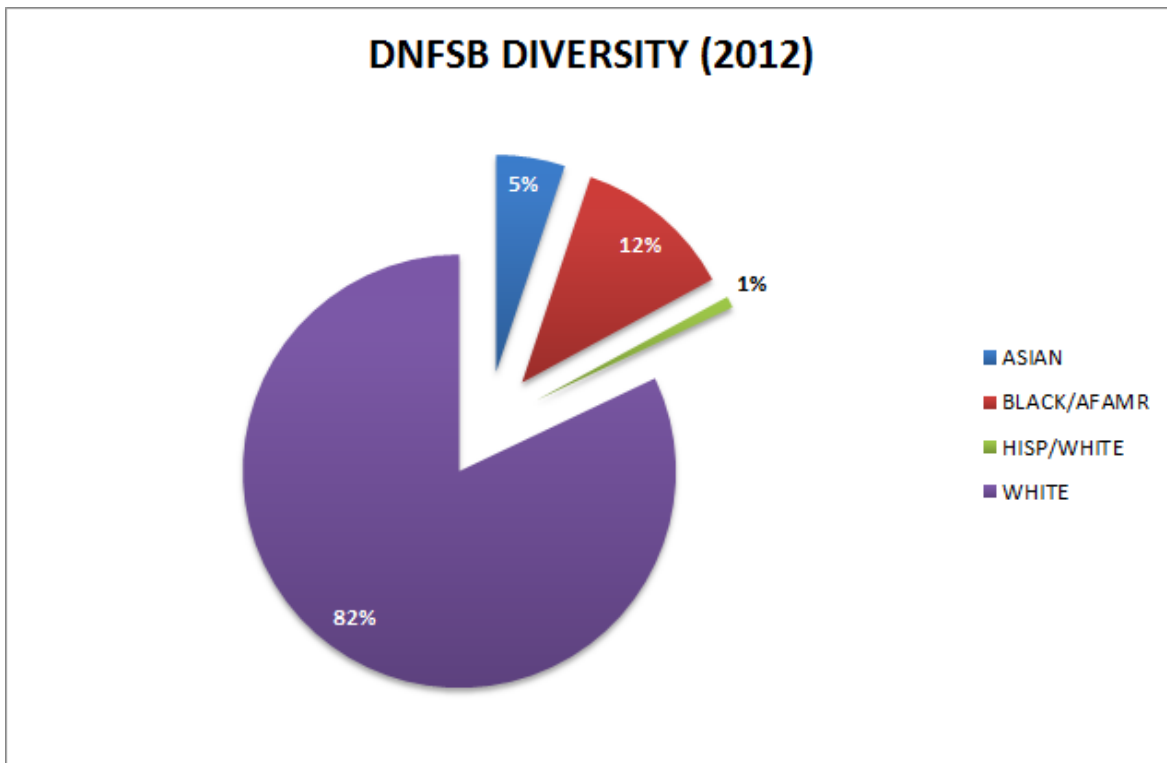
Table 10.Veteran Status Employees (Agency-wide) (FY2012)
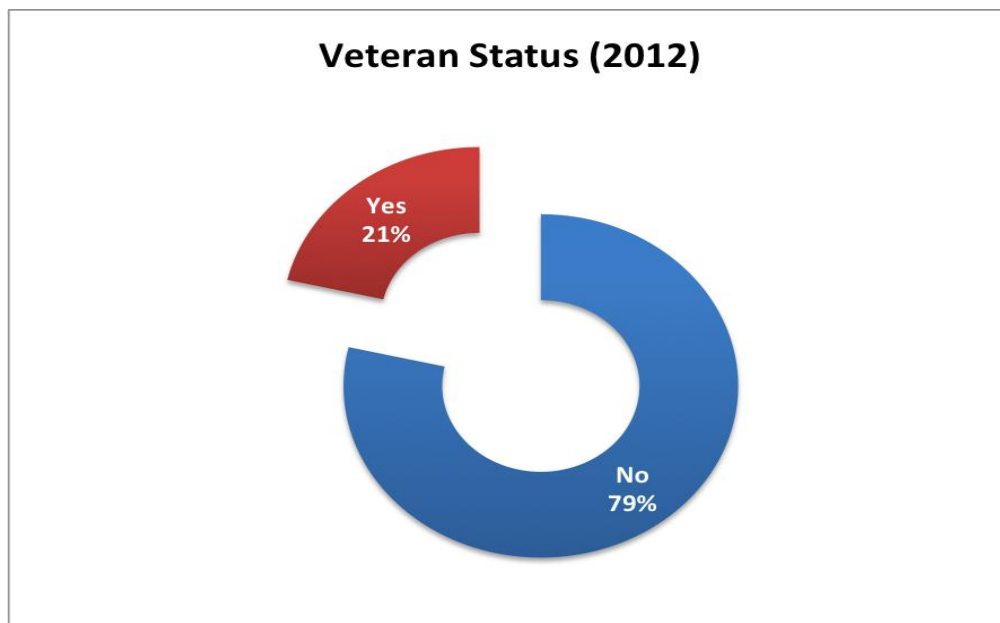
E-6.   Accessions from FY2008 to Present (by Agency-wide)

Figure 18.Accessions by Fiscal Year (Compared Government Wide) (FY2008-2nd Quarter 2012)
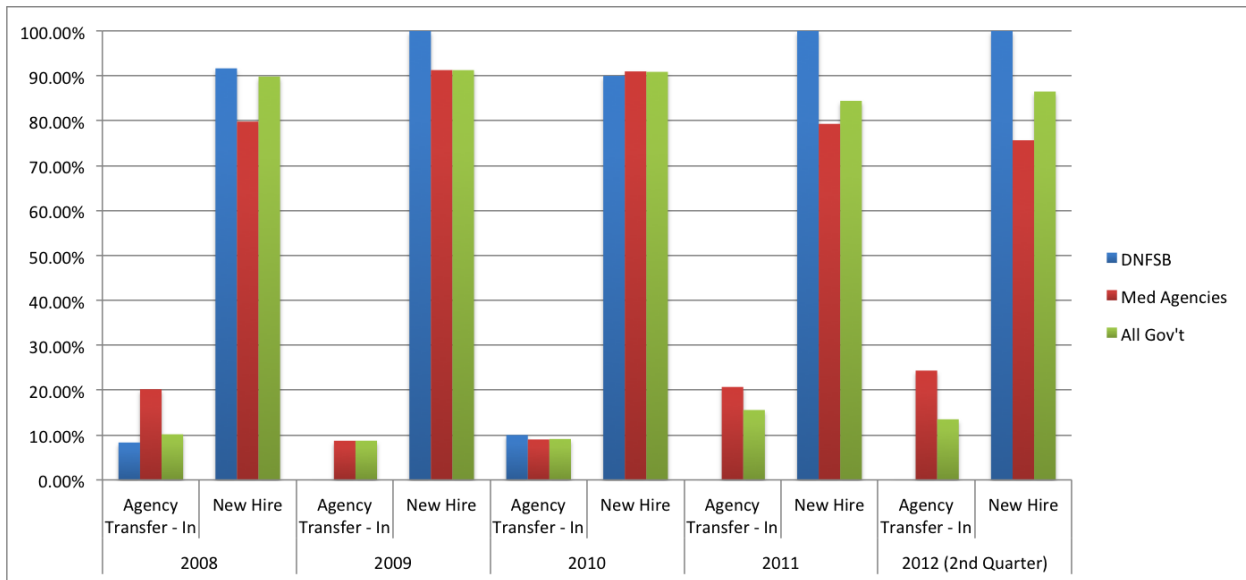
E-7.   Separations and Attrition from FY2008 to Present (by Government-wide and Agency-wide)

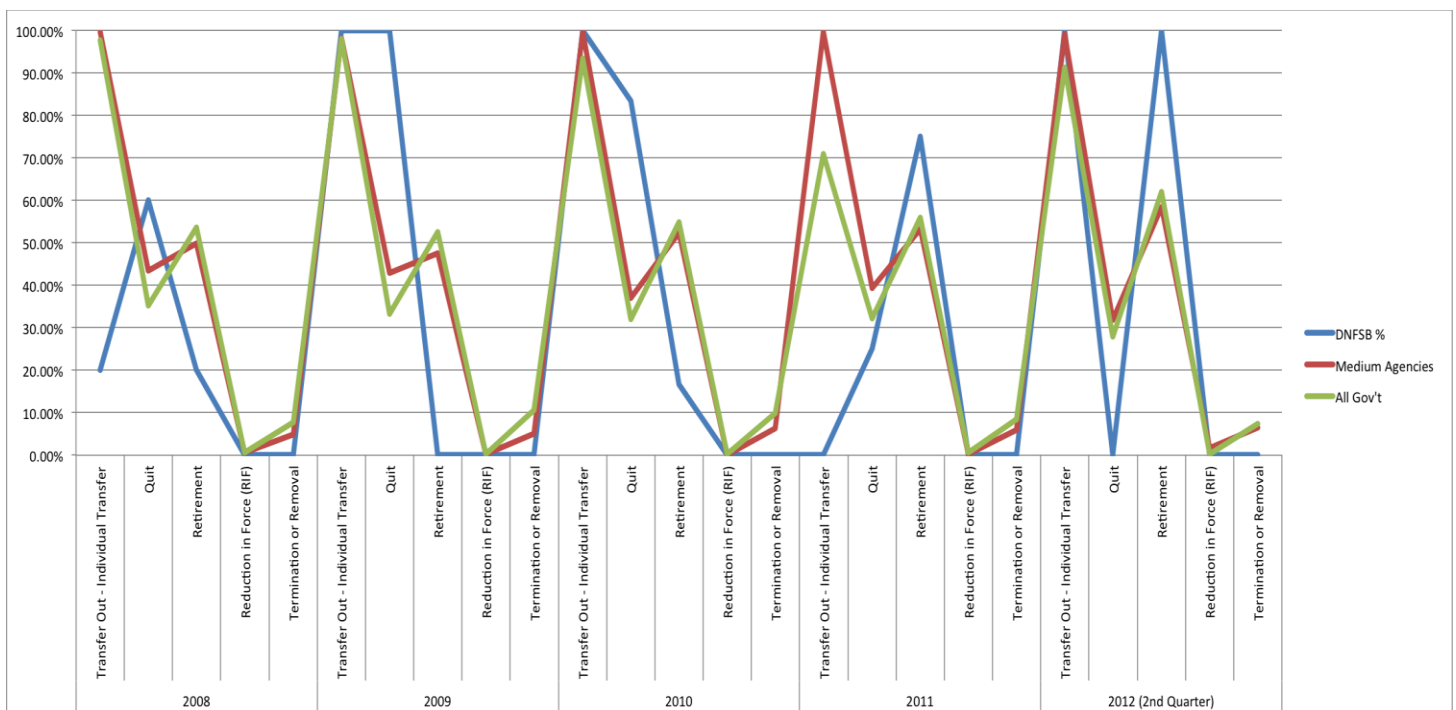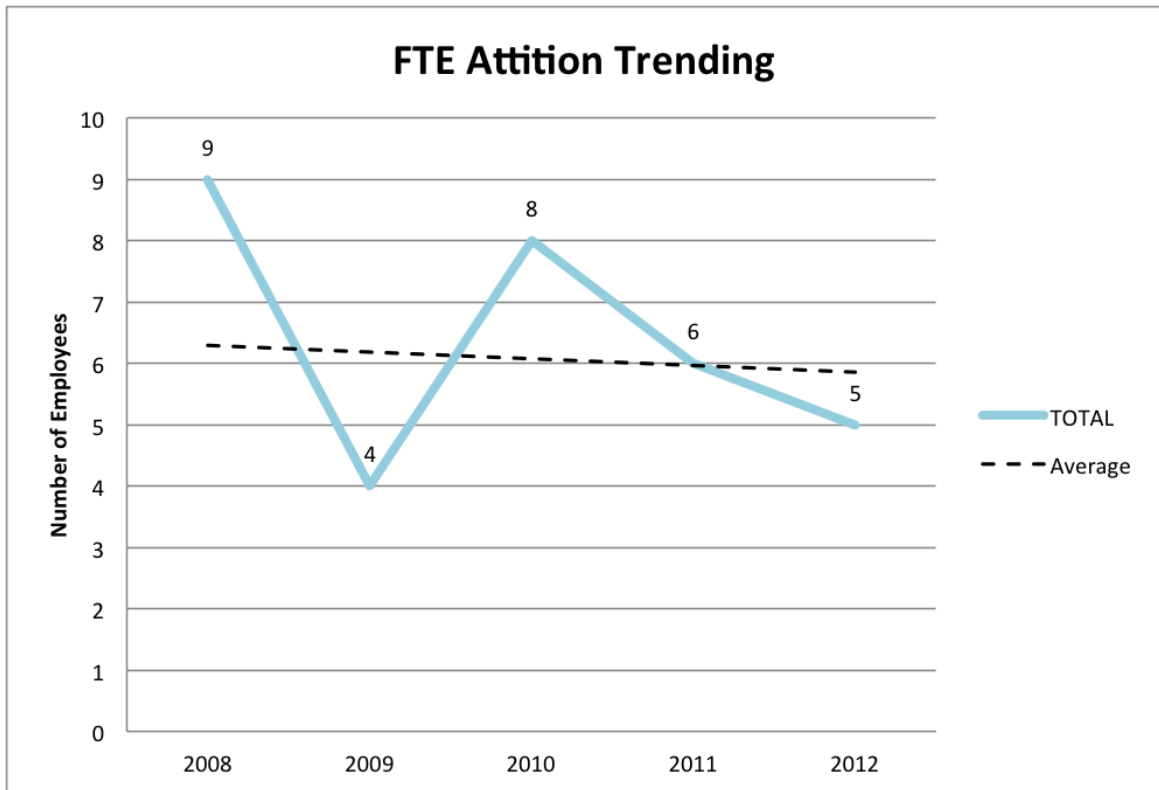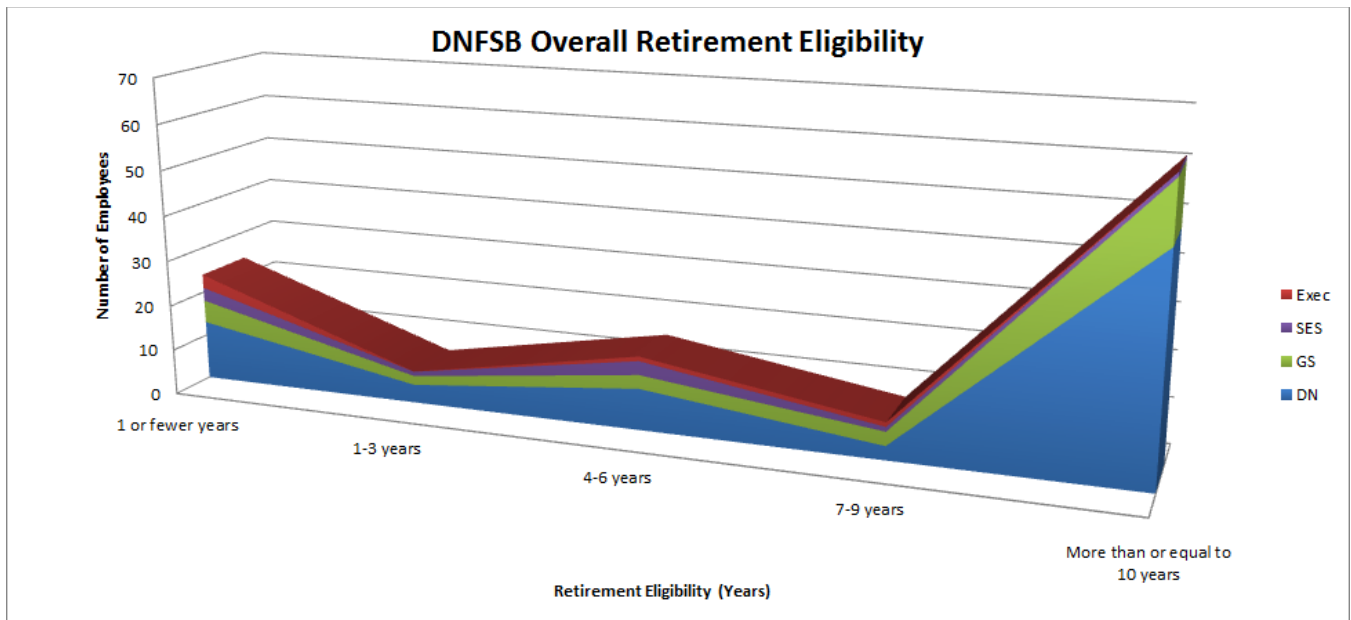**Figure 19.Comparable Separations by Fiscal Year (FY2008-2nd Quarter 2012)**

Figure 20. Board Attrition Trend (FY2008-FY2012)

E-8. Retirement Eligibility of 2012 Workforce (Agency-wide)

Figure 21.Cumulative Retirement Eligible by Employees by Pay Plan (DN, GS, SES, Exec)

E-9.   Promotions from FY2008-Present (by Pay Plan)
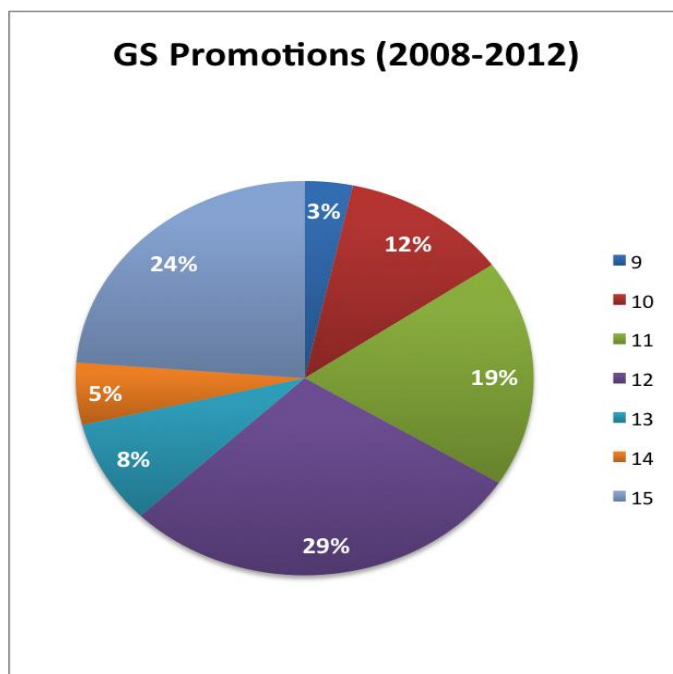
Figure 22. GS Promotions (FY2008-2012)

Figure 23. DN Promotions (FY2008-2012)