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Best Practices for Succession Planning in Federal Government STEMM Positions

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Leadership Series 2014

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Table of Contents

Foreword

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, *Best Practices for Succession Planning in Federal Government STEMM Positions,* by Gina Scott Ligon, JoDee Friedly, and Victoria Kennel, the University of Nebraska at Omaha.

Daniel J. Chenok

Job growth in the science, technology, engineering, mathematics, and medicine (STEMM) professions is anticipated to increase faster than the supply of students studying in these fields. In fact, the President's Council of Advisors on Science and Technology estimates that, given present trends, there will be one million fewer science, technology, engineering, and mathematics graduates over the next decade than the nation is expected to need.

The federal government has developed a strategy to close this gap for the nation as a whole, but has yet to develop a plan to close the gap for itself. The federal government today is a major employer of STEMM graduates and will need more in the years ahead. For example, more than two-thirds of NASA employees are scientists and engineers, and NASA has one of the oldest workforces in the federal government, so many NASA employees are nearing retirement.

William M. Takis

Currently, there is no government-wide plan to recruit and train entry-level STEMM employees, nor is there a concerted effort to groom existing mid-career scientists, engineers, and doctors for senior leadership positions in their agencies. Responsibility for recruitment and succession planning is left to each agency.

This report outlines six steps for federal agencies dependent on STEMM employees to take now. The report also discusses how agencies' STEMM leaders and human capital staffs can work together to ensure that their agencies have the right mix of expertise to meet mission requirements today and in the future. These steps include:

- Formulating a strategy for succession planning
- Identifying, selecting, developing, and tracking leadership candidates
- Placing candidates into leadership positions
- Evaluating results

Because of the time urgency and criticality of ensuring continuity and leadership in key scientific and technical fields, we hope this report catalyzes conversations among leaders in many federal agencies to develop strategies that will ensure that their agencies and missions are prepared as today's STEMM leaders leave their positions over the next several years.

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Introduction

The Need to Focus on the Development of STEMM Human Capital: Four Drivers

The federal government's talent pool in science, technology, engineering, math, and medicine (STEMM) positions is drawing increased attention due to the importance of these positions and the need to recruit, retain, and develop highly qualified individuals to serve in federal scientific agencies.* While the need for STEMM succession planning is clear, there has been insufficient action on this challenge. It requires a great deal of forethought, planning, and adaptability, given the rapid changes and budget cuts faced by agencies.

Further, turnover of senior-level political appointees often stifles senior-level leadership support and accountability for succession planning efforts. Chris Mihm, managing director for strategic issues at the U.S. Government Accountability Office (GAO), says, "Political leadership comes to Washington to execute a policy and a program agenda," but they must "expand their time horizon and think about, and understand, the importance of fundamental management." Julie Brill, manager for training and executive development at the Office of Personnel Management, states that, "It's important to do succession management now." A series of forces now require increased focus on succession planning by federal agencies. These include:

> "A chief scientist at NASA cannot just be a leader. He/she must be a world-renowned scientist and a leader of other world-renowned scientists. The pool for succession planning for these people is not the same as it is for leaders in other positions or general management; succession planning for scientific and technical leaders requires intentional planning and opportunities, as well as ensuring there are cultural norms in place about scientific succession planning."
>
> – Jeri L. Buchholz,
> Chief Human Capital Officer, National Aeronautics and Space Administration

- **Driver One: The dramatic increase in members of the "baby boom" generation (those born in 1946–1964) eligible for retirement presents a significant need for succession management.** Many federal employees in this generation hold vital Senior Executive Service (SES) and mission-critical positions, and invested a significant amount of time and effort in developing their technical, organizational, and field-level expertise. Because of the anticipated increase in senior executive departures, development activities are now more crucial than ever in order to ensure knowledge and expertise transmittal to the next generation of leaders. As Craig Hughes, Deputy Director of Research at the Office of Naval Research (ONR), states, "If an agency is not ready for retirements, it is a failure in succession planning."

* STEMM is an acronym expanded for this study from the more common use of "STEM," to include medical professionals, who, according to one of our interviews with the Department of Health and Human Services, are also in high demand and short supply in senior levels of the federal government. In addition, a 2013 report by the Partnership for Public Service, *The Biggest Bang Theory: How to Get the Most Out of the Competitive Search for STEMM Employees,* also includes this important professional group.

- **Driver Two: Given budget cuts and sequestration, agencies are leaving positions vacant at many organizational levels.** Although practical in the short term, this delays development of the talent pipeline and sets the stage for a future talent crisis. Agencies must eventually fill the gaps and develop a workforce capable of fulfilling their mission, or face a lack of qualified successors to meet the mission-critical needs of the organization.
- **Driver Three: There are proportionately fewer new graduates entering the federal workforce than there are entering the private sector.** This poses a particular challenge because the federal government needs an influx of new agency employees with STEMM education and talent by 2020 to fill mission-critical needs. Thus, agencies must capitalize on the opportunity to recruit, hire, develop, and retain newly educated STEMM talent to fill critical voids in the organization. An option that is supported by OPM to recruit STEMM talent in an effort to better prepare agencies for turnover is the Federal Pathways Program.
- **Driver Four: Turnover is inherently built in at the top.** Agency leaders must constantly look for opportunities to groom the next organizational cohort of executives. However, the loss of many SES and agency directors to retirement, along with decreased emphasis on leadership development efforts, have left many agencies with talent gaps at the top. In many cases, there are more openings in leadership positions than there are qualified candidates.

As a result, the cumulative impact of generational trends, such as government employment boosts in the 1970s, federal downsizing in the 1990s after the Cold War, and lack of recruitment of the millennial generation, have created a need for strategic and effective succession management.

Four Challenges to STEMM Recruitment and Succession Planning

Recent reports on the future of STEMM positions suggest that the pipeline is leaky at best (Bayer, 2013). While task forces assemble to address the need for early education, college training, and early career entry for bench positions that will emerge in the next 10 years (Fifth Annual STEMM Diversity Forum, 2013), planning who will lead individuals in these positions, particularly in mission-critical government positions, poses four major challenges.

- **Challenge One: STEMM talent is difficult to recruit to the federal government.** STEMM workers are highly specialized in their domains (e.g., agriculture, engineering), and such expertise requires a great deal of training and experience to develop. These specialized positions are also the very ones that are mission-critical. For example, in 2014 the Nuclear Regulatory Commission intends to hire 280 individuals in the GS-0800 (engineering and architecture) and GS-1300 (physical sciences group) "job families" at entry and mid-levels in the organization. As of 2014, federal employees in these "job families" also have differentially higher pay scales than other "job families" have, to reflect demand across the public and private sectors. It is unclear, however, if the pay differential will be enough to compete against that offered in the private sector. Across federal agencies, there is a demand for top STEMM employees to lead innovative research and project implementation. See Table 1 for a list of federal agencies with a large proportion of STEMM employees.
- **Challenge Two: Federal agencies must retain leaders and create a pipeline for current employees to gain the knowledge needed to lead STEMM positions.** The importance of leaders is underlined by the OPM retirement/turnover projections that more than 50 percent of the 7,746 senior executives will either leave or retire from their government positions by the end of 2015. The GAO also estimates that 70 percent of senior executives are currently eligible to retire. The key scientific and technical, organizational, and field-level expertise that these top leaders will take with them highlights the need for agencies to invest resources in effective succession planning.

Table 1: Top Federal Agencies with the Highest Percentage of STEMM Employees

Federal Agency	Percentage of STEMM Employees
National Aeronautics and Space Administration	68%
Nuclear Regulatory Commission	63%
Department of Veterans Affairs	56%
Department of Health and Human Services	50%
Department of Agriculture	48%
Environmental Protection Agency	44%
Department of Commerce	42%
Department of the Interior	37%
Navy	35%
Department of Energy	32%

Source: Partnership for Public Service, *The Biggest Bang Theory,* 2013.

- **Challenge Three: There is significant competition from the private sector for these STEMM leaders.** In a recent study of Fortune 1000 companies that focused on recruiting and developing STEMM leaders in the private sector, Bayer USA found that 99 percent of the companies surveyed offered programs geared at recruiting and retaining qualified STEMM professionals during and immediately after college (Bayer, 2013). The private sector is working hard today to recruit STEMM employees, and has more tools available for recruiting than the federal government does. These include internships, tailored STEMM recruiting, mentoring, summer employment, and scholarship programs. The federal government is now working to add these tools to their recruitment portfolio for STEMM candidates.
- **Challenge Four: In rapidly changing fields where STEMM positions are housed, succession plans that merely target "continuity of leadership" are not sufficient.** The Corporate Leadership Council (2012) reports that best practices in rapidly changing industries require succession planning that can not only backfill vacant positions for continuity, but also fill new positions which can serve multiple or cross-functional roles in a changing organization. In these organizations, leadership bench strength is defined not only by an organization's capacity for continuity of operations, but also by the flexibility to define new roles and respond to change within roles.

How STEMM Work Differs from Other Work in the Federal Government

The Nature of STEMM Work

The nature of STEMM work requires a tolerance for ambiguity and complexity. STEMM positions require people to work with problems that are ill-defined, unstructured, and afford multiple pathways for generating novel, useful products and services (Mumford and Gustafson, 1988). Some of the activities associated with these ill-defined problems span two separate but related activities—idea generation and solution implementation.

- **Idea generation** involves problem finding, information gathering, idea formation, and conceptual combination.

Scientific Work in the Federal Government

This context for scientific and technical innovation yields at least five observations about the requirements for individuals engaging in such work in the federal government.

First, creative work requires the active generation and identification of ideas to solve complex problems in a particular domain, and these cognitive or "thinking work" activities require substantial amounts of technical "bench" knowledge. For example, the Office of Naval Research requires that its leaders develop this expertise by working five to 20 years in federal laboratories before joining ONR as a program manager. This results in STEMM workers at ONR having sufficient technical, process, and scientific expertise to know how to evaluate the innovative contributions of others. This also greatly reduces the pool of candidates for a succession plan. "There are only so many people who even have degrees in nanotechnology. When you think through how long it takes to develop expertise in that field, you have a much smaller talent pool than you have for other positions in management," says Jeri Buchholz.

Second, because the nature of STEMM-related problems addressed in the federal government can be ill-defined and complex, solving them creatively requires multiple types of expertise in addition to domain-specific STEMM knowledge. This issue is an important one; the context for innovation in the federal government demands collaboration among multiple types of experts, agencies, and stakeholders. Thus, for scientists to assume leadership positions as they advance in a career, they must have significant credibility with diverse constituencies and be able to foster effective collaboration among them.

Third, innovation in STEMM work is uncertain and resource-intensive. Given today's fiscal climate and sequestration, engaging in risky, expensive endeavors can be challenging at best. Groups of people devote time, effort, infrastructure, and other monetary resources during the idea development and implementation stages of innovation, and often these investments are met with unexpected time complications and setbacks. Given the turbulent fiscal context in which the federal government currently operates, scientific innovation leaders must be skilled at politically managing such uncertainty in dealings with stakeholders. One effective way STEMM leaders do this is through confident strategy formation during meetings and press briefings, even while faced with internal uncertainty about outcomes. An implication of this is that STEMM leaders need to project confidence to others, even when the leader may feel less certain about outcomes due to ambiguity inherent in the federal work environment.

Fourth, STEMM positions require creative people to execute them. There is a large body of research that profiles these unique individuals (Feist and Gorman, 1998; Mumford and Hunter, 2005). One characteristic they share is significant domain expertise (Ericsson, 2008), developed after years and hours of intense, focused practice. To persist at this type of expertise development, creative individuals often have high levels of intrinsic motivation for the nature of the work itself (rather than the organization requiring the work or the people collaborating about the work). While this helps them focus on developing tremendous expertise along the way, it also can interfere with such individuals paying adequate attention to relationship maintenance, both internal and external to the organization (Mumford, Scott, Gaddis, and Strange, 2002).

Fifth, the need for creative people has least two implications for leaders of STEMM workers.

- A STEMM leader, charged with managing such a unique workforce, should be skilled at fostering collaboration between diverse experts who often have limited motivation to work together.
- Because creative individuals have such high levels of intrinsic motivation to develop more domain expertise in a given area, any effort geared to develop them (e.g., succession planning) should be explicitly tied to accruing greater knowledge and skills related to the work. In other words, attempting to motivate a creative individual to engage in a succession plan's activities for the good of the organization will be more challenging for STEMM succession strategies than it is for other types of emerging leaders.

- **Solution implementation** includes idea evaluation, revision, and solution monitoring. In the federal government, these activities have another layer in that they are required to produce products (e.g., vaccines), services (e.g., technical platforms for grant idea development such as those found at the National Science Foundation), and social structures (e.g., interdisciplinary research teams found at the Centers for Disease Control and Prevention to respond to epidemics) that are valued as novel and useful to a wide variety of stakeholders in a highly visible way.

Another difference in STEMM positions versus other types of positions is the focus on science and technology—sometimes in lieu of the human capital—of these innovative efforts. At no time was this clearer than when Jeri Buchholz came on board as the chief human capital officer at NASA. "We were great at highlighting the innovative products at NASA. I remember a promotional video we made where an entire space station was shown coming together on its own in space. The bolts were magically floating to their places, the panels were affixed on their own. I remember thinking to myself, 'Where are the scientists and engineers who built this?'"

Characteristics of STEMM Leaders

Given that the nature of STEMM work is complex, costly, uncertain, and resource-intensive, it takes a certain type of individual to lead STEMM workers in the federal government. In our own research and that of others (see Ligon et al., 2013; Mumford and Hunter, 2005), we have identified a key differentiator between STEMM leaders and other types of leaders—the requisite expertise they need to evaluate the technical work of others. For example, program managers at ONR spend 10 to 20 years as bench scientists in one of the Navy labs before coming to the headquarters in Arlington. "This initial scientific training builds credibility that is needed to lead portfolios of scientific projects later in their career," says Craig Hughes, Deputy Director of Research at ONR.

Another key differentiator for STEMM leaders is the high level of involvement they should play in succession planning initiatives. For example, current STEMM leaders possess the field expertise needed to guide human capital experts in identifying emerging technologies and disciplines. They also should direct succession planners' recruiting efforts, as they have more knowledge of research advances at universities where core skills are developed. For example, HR was recently decentralized to work with various technical directorates at the Department of Health and Human Services to partner more closely with scientists on human capital processes in their areas of expertise.

The partnership between STEMM leaders and human capital staff happens at each phase of the succession planning process. This partnership model for succession planning separates important roles for each party in planning for emerging leader transitions and long-term human capital strategy.

Overview of Report

Given the rapidly changing nature of STEMM work, coupled with the small pool from which to draw STEMM leaders, this report argues:

- It is important to intentionally and proactively design succession planning for STEMM leaders. These leaders are difficult to find and cannot be grown overnight.
- Second, while there is much literature about succession planning in general, succession planning for STEMM leaders requires adjustments to the current government process.

- Third, because scientific work requires a unique organizational context and leaders when compared with other positions in the federal government, agencies need to share best practices and learn from each other.

The next section of the report describes six steps in succession planning, and provides specific roles and responsibilities for both human capital staff and STEMM leadership. Best practices identified in STEMM succession planning include the following six steps:

- **Step One:** Strategy formulation for succession planning
- **Step Two:** Identification and selection of leadership candidates
- **Step Three:** Development of individuals
- **Step Four:** Tracking and validation of individual development
- **Step Five:** Placement into leadership positions
- **Step Six:** Evaluation of succession planning

The final section of the report offers two key recommendations on STEMM succession planning, as well as future directions for research and practitioners.

The Appendix provides resources from the Office of Personnel Management for those engaged in succession planning.

Succession Planning for STEMM Positions in the Federal Government

Framework for STEMM Succession Planning

Figure 1 depicts a framework for succession planning. For this report, we have delineated specific tasks associated with human capital experts and tasks for incumbent STEMM leaders. While Figure 1 presents the framework, this section shares specific best practices identified in the STEMM succession planning.

Prerequisite for Successful STEMM Succession Planning: A Partnership between Human Capital Staff and STEMM Leaders

Our interviews revealed the importance of early, frequent partnership with human capital staff within an agency. Agency chief human capital officers (CHCOs) and other HR professionals are trusted advisors in the succession management process, although it is also important for a STEMM leader to ensure succession planning for his position.

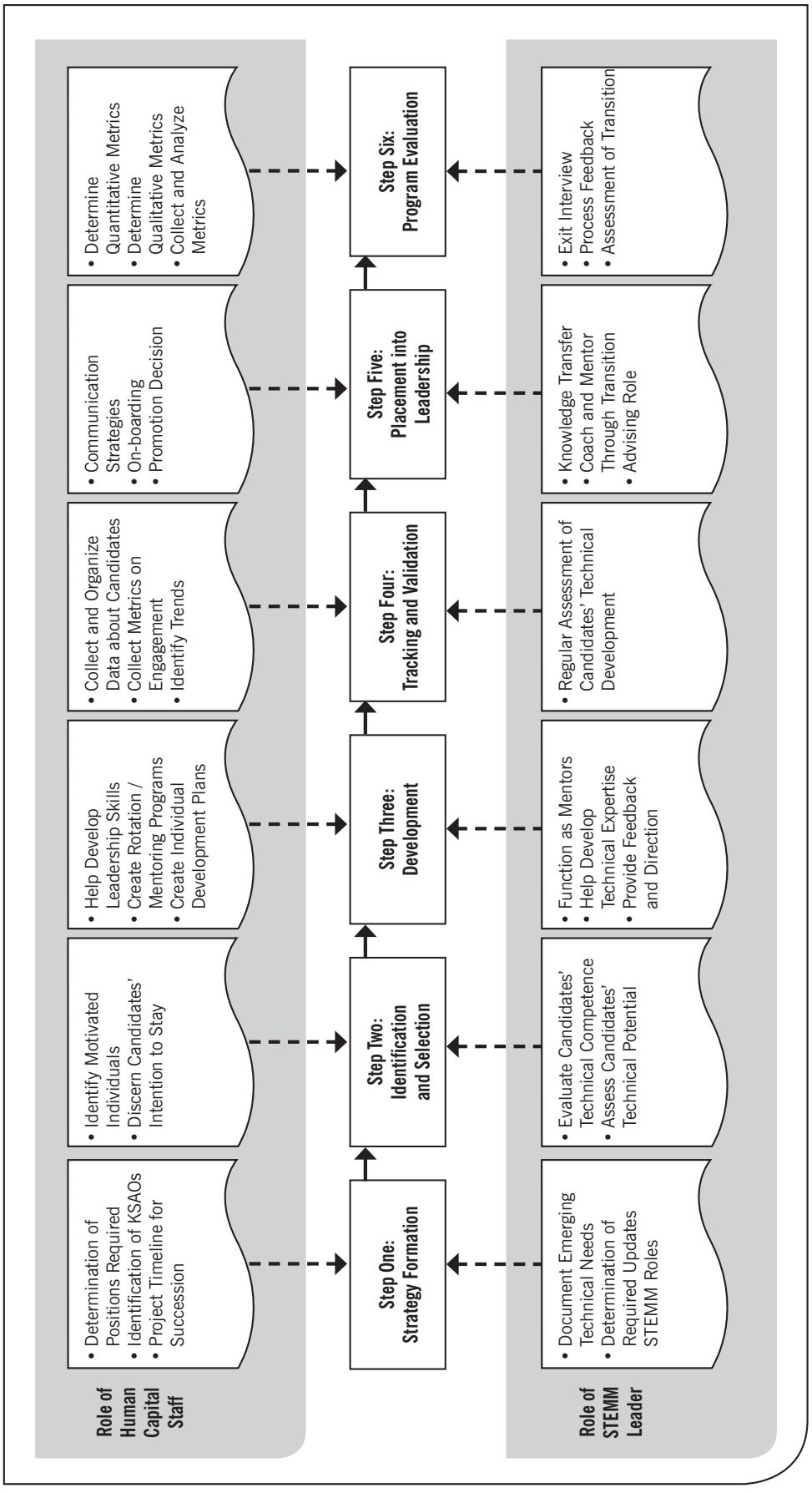
To improve an agency's talent pipeline and meet mission-critical human capital needs, HR professionals oversee federal workforce planning through hiring, talent management, training and development, and succession planning programs. Managing such programs comes with challenges. In a 2012 report by the Partnership for Public Service, federal agency CHCOs indicated that budget cuts, inadequate succession planning, and gaps in agency leadership skills were some of their top human capital challenges. Notably, although HR professionals are charged with developing successful succession management programs, CHCOs admitted their struggle to keep up with rapid changes in agency needs and their ability to maintain a strong talent pipeline.

Methodology

For this report, we used two sets of sources:

- We reviewed publicly available sources (e.g., academic journal articles, OPM resources, technical reports) to gain an understanding of the current issues facing those charged with succession planning for STEMM leaders.
- We conducted a series of interviews with subject matter experts who either execute the succession plan of the agency or are STEMM employees within the agency. The information gathered from these interviews and from external research resulted in insights for others engaging in STEMM leader succession planning. These insights are meant to create an outline for both leaders and department heads to ease the process of succession planning, and to provide concrete examples for each of the best practices.

Figure 1: STEMM Succession Planning Framework



One strategy for partnering with STEMM leaders involves how an organization unifies the HR function in succession planning. For example, the United States Strategic Command (STRATCOM) recently centralized HR's role in the succession management process. STRATCOM's Chief Learning Officer T.J. Hammond states that the organization has a "need to communicate with HR about high potential employees" to help build a strong talent pipeline ready for integration into leadership roles.

In contrast, the Department of Health and Human Services (HHS) chose to decentralize various HR functions to get HR "side by side" with the scientists whom they support. Dale Colbert, deputy director for the HR division of HHS, believes that this move allowed HR partners to better understand recruiting strategies, organizational needs, and even professional jargon to increase credibility with the scientists they supported.

One approach to HR does not fit all. Rather than making a broad decision to centralize or decentralize HR's entire role in succession management, John Palguta, vice president of policy at the Partnership for Public Service, suggests agency leaders consider which succession planning tasks and functions to centralize or decentralize. Mr. Palguta notes that agency leaders must consider organization needs, agency mission, and the knowledge and expertise of HR professionals and incumbent supervisors when allocating responsibility for each task and function.

For example, consider the level of technical and domain expertise needed to hire and develop a STEMM leader. Dale Colbert of HHS states that it often takes years of expertise in a technical domain to know what skills to recruit for in a STEMM-based position. Under these circumstances,

National Nuclear Security Administration Makeover of its Hiring Process for STEMM Recruitment

The Department of Energy's National Nuclear Security Administration (NNSA) is charged with maintaining the safety and security of U.S. nuclear weapon stockpiles and overseeing weapons of mass destruction in over 70 different countries. In the last decade, the organization struggled to attract talented and skilled entry- and mid-level scientists who were willing to work at laboratories in remote locations. With a high demand for talented scientists, competition for such talent in the private sector, and a need to replace up to one-third of their "eligible-to-retire" workforce, NNSA partnered with the Partnership for Public Service's "Extreme Hiring Makeover" (EHM) program to identify workable solutions.

NNSA's HR team and the EHM team found that job announcements for scientist and engineer positions were too technical and detailed to excite a potential applicant about the mission and needs of the NNSA. Under the guidance of the EHM team, the hiring managers and HR team collaborated to create a simple questionnaire for hiring managers to complete to provide HR with the essential competencies for the job, the nature of the work, and why a candidate would want to work in the role. The teams then developed and implemented a stronger recruiting and targeting strategy to attract highly talented and qualified scientist and engineers.

These conversations opened the door for a collaborative partnership between hiring managers and the HR team. The HR team developed a stronger knowledge of the strategic and talent needs of the NNSA, and the hiring managers learned to communicate their technical needs to HR professionals. As a result of these efforts, NNSA's HR team launched a larger workforce planning effort to identify and improve competency and skill gaps across the agency. These efforts will facilitate the development of a strong scientist and engineer talent pipeline to advance the mission and efforts of the agency.

Source: http://www.ourpublicservice.org/OPS/publications/viewcontentdetails.php?id=85

incumbent leaders must be involved in the interviewing and hiring decisions to ensure a job candidate has the technical skills needed for success. STEMM positions often necessitate atypical employee development opportunities to effectively transfer technical, organizational, and leadership skills. In these situations, incumbent leaders must ensure that developmental activities improve desired skills and expertise, while HR helps to create the development framework and track leader improvement and competency development over time.

To adequately plan for future needs, STEMM leaders must partner with human capital experts to the degree that this partnership enhances departments' functional needs and overall agency needs. Integrating the technical and domain expertise of HR professionals and incumbent leaders will help deliver a strong talent pipeline and succession management program. The box, *National Nuclear Security Administration Makeover of its Hiring Process for STEMM Recruitment,* on the preceeding page, provides a case example on how the NNSA organized their HR department to create the most effective departmental structure for their organization, with specified roles and responsibilities for each partner.

Steps in Implementing the STEMM Succession Planning Framework

Step One: Strategy Formulation for Succession Planning

Succession management strategy challenges STEMM leaders to simultaneously address the current organization needs while planning and forecasting future needs. Nowhere is this truer than in the STEMM fields, the majority of which have positions that did not exist a decade ago. Dr. Tim Persons, chief scientist at the U.S. Government Accountability Office, says, "When we're just hiring the skills that made us successful today, our implicit assumption has to be that the key to our future success is to be more like we are today. I am not sure this is true for the sciences, which change more rapidly than other fields change."

To ensure agency sustainability and success, it is imperative to plan for future skills needed to meet the agency's mission and vision several years down the road. The challenge lies in how to plan and use development efforts with the uncertainty and rapid changes in future skill needs. The pace of change within the operating environment demands innovation and an adaptable workforce. These changes in environment often move faster than the ability to formally change job descriptions and adapt formal succession planning programs. This means dyadic knowledge transmission, mentoring and job rotations, and project-based learning are critical.

For example, STRATCOM implements a three-year cycle "high potential" leadership development program. In this program, candidates gain exposure to different positions. This rotation also provides an opportunity to understand an employee's capability, commitment, and aspiration for a leadership role. T.J. Hammond notes that too often, current leaders get stuck on the point that junior staff lacks the capability to be a leader "right now." Instead, current leaders should look for opportunities to identify those who will excel in a leadership position with development. These types of development programs help agency leaders identify which managers and high potential leaders can more readily and easily adapt to the changing nature of future roles and job responsibilities.

Although the responsibility to develop future skills often falls on the shoulders of incumbent leaders and HR professionals, individuals interested in career growth must also play an active role in their own development. Agencies should encourage early career employees to seek out informal mentors, additional responsibilities, and professional development programs. High-potential leadership candidates can supplement formal development interventions with self-identified opportunities to improve their technical, field, and organizational expertise.

A key to strategy formulation is incorporating organizational mission, cultural change, and career paths into the succession strategy:

- **First, organizational mission and strategy should dictate what skills will be needed in future leaders.** For example, Dr. Tim Persons, chief scientist at the U.S. Government Accountability Office, shares a story of the changing mission of the Environmental Protection Agency (EPA) dictating a need for different types of scientific leaders. As the EPA's mission shifted toward education and community outreach, so did the need for scientists to be able to communicate the nature of issues they faced in town hall meetings and with state and local stakeholders. This emphasis on communication skills did not diminish the requirements for highly trained scientific expertise, but instead added an additional requirement on which to focus while undertaking leader succession planning initiatives.
- **Second, when the organizational culture emphasizes camaraderie and organizational identity, succession planning becomes ingrained into leaders as part of their job requirements.** For example, in the Coast Guard, individuals understand the importance of shaping their replacements from day one. The culture makes transition part of the job, and leaders are continually evaluated on their capacity to groom their successors. This is also a strategy at NASA, where leaders see grooming the next generation as everyone's responsibility. "I am confident that succession planning would still continue at NASA even in a devastating budget crisis for our organization. Here, leaders developing leaders is simply part of our organizational strategy and culture," says CHCO Jeri Buchholz.
- **Third, another strategy in succession planning is the recognition that career advancement should not always mean promotion or vertical movements.** At ONR, Will Brown says that not all of his STEMM leaders desire vertical movements, "You have to plan on a broader view of succession planning with government agencies. These scientists need to know all career options that are available to them, not just the one their supervisor holds."

Summary of roles and tasks. While partnering is key for the first stage in STEMM succession planning, there are different roles to be played and tasks to be performed that can be led by either HR or STEMM leaders. Given the need to integrate STEMM leaders with the overall organizational strategy, HR should "own" the overall schedule and plan for the succession planning strategy to integrate activities across the organization.

Office of Naval Research: Knowledge Growth at all Levels

One program designed to involve STEMM leaders in their own succession planning is Career Day at ONR. The goal of this popular event is to expose employees at all levels to different departments and leaders. All speakers are internal to ONR, and program coordinators vet each participating leader to ensure the program is engaging and maintains a high level of demand.

The program was originally designed to onboard new employees, but has since expanded to involve any employee who wishes to attend the one-day seminar held at ONR. According to Brown and Beich, there are at least three important outcomes:

- First, attendees learn how their department functions on a larger scale across the entire agency.
- Second, employees form a network with other attendees and the speakers, a network that lasts beyond the hours of the actual Career Day itself via the shared experiences of the program.
- Third, Career Day highlights a variety of career trajectories for scientists, and provides a contact for interested candidates to explore with a present incumbent.

Given that STEMM leaders are closest to the work and have the most field expertise, they should be consulted early on as to the emerging technologies required to execute the changing organizational mission. Since STEMM leaders likely have connections with field-level experts in academia, they will also need to partner with HR early on to identify a recruiting strategy for the specific talent needed to do the work now and in the future.

In sum, the following division of responsibility is most effective in strategy formulation:

- **Human capital staff should take responsibility for:**
  - Determination of positions required
  - Identification of knowledge, skills, abilities, and other characteristics (KSAOs)
  - Project timeline for succession
- **STEMM leaders should take responsibility for:**
  - Documentation of emerging technical needs
  - Determination of required updates of STEMM roles

Step Two: Identification and Selection of Leadership Candidates

Succession planning begins with:

- Identifying the mission-critical positions to fill in the event of attrition
- Identifying the knowledge, skills, and abilities necessary for success in the role
- Finding candidates with the potential and motivation to fill such roles

Incorporating a candidate's motivation to lead often appears trivial when compared to the time and resources required to create the succession framework and development strategy. As a result, personal career aspirations may easily be overlooked or even disregarded once an employee establishes a track record of outstanding success in their current role.

In STEMM field positions, an employee's career aspirations are an essential criterion to consider when identifying and selecting candidates for development. The organization may feel that there is a key person to step up to a leadership position, but if this decision is made prematurely there could be a loss of training and development efforts with a poor candidate-position match. Identification and selection of leadership candidates involves the following considerations:

- **The first consideration is the candidate's personal career aspirations.** If he/she simply wishes to remain in the role of STEMM expert versus management or leader of that particular department, it would be a mistake to force them into a promotion track. Forcing a candidate into a role they do not wish to attain is usually ineffective and ultimately, the agency runs the risk of losing a valued employee. For many scientific and technical innovators their hands-on innovation is where they wish to remain. Therefore, planning must begin with identifying employees who want to move to a leadership position.
- **Second, succession plans must assess employee leadership potential and job skills as two separate components.** A superior scientific or technical innovator within the agency does not necessarily possess the skills necessary to lead subordinates. Individuals with strong technical expertise are considered valuable assets to federal agencies, but leadership or managerial competencies are equally valuable and must be a significant part of the equation when looking to promote candidates. For example, tying the environmental analysis competency development to fostering greater field expertise is one way to encourage these leaders to participate in succession planning programs.

> "You have to make sure the candidate *wants* to take on a leadership position"
>
> –T.J. Hammond
> U.S. Strategic Command

Across multiple interviews of succession planning subject matter experts, this theme was emphasized as the first consideration when selecting leader candidates. STRATCOM's T.J. Hammond emphasizes the importance of matching a candidate's career goals to the desired promoted position. When he is looking to vet candidates for leadership development, he tries to look beyond the skills that can be trained, matured, and developed over time. Rather than focusing on the readiness for the job at the current time, he concentrates on the match of aspirations and potential for leadership when selecting candidates.

Summary of roles and tasks for identification and selection. While current STEMM leaders are best at evaluating the technical proficiency of emerging leaders, HR might be best at assessing the candidates' motivation to lead and commitment to the organization. Both of these components are required to enter into a succession plan.

Because technical competence is required to evaluate the work of others, as well as garner credibility from other scientists, peers, and direct reports, identifying individuals who have potential for this technical reputation should be the responsibility of current STEMM leaders who are best suited to evaluate such expertise. However, these scientists might not be able to assess the other requirements of leadership, including motivation to lead, assertiveness, and planning skills. HR should lead the identification of and selection of individuals with these personal characteristics.

In sum, the following division of responsibility is most effective in the identification and selected of leadership candidates:

- **Human capital staff should take responsibility for:**
  - Identifying motivated individuals
  - Discerning candidates' intention to stay
- **STEMM leaders should take responsibility for:**
  - Evaluating candidates' technical competence
  - Assessing candidates' technical potential

Step Three: Development of Individuals

Extensive training to prepare employees for career movement frequently occurs during two phases of a career. Employees typically receive broad-spectrum training at the start of their career or in a new position. Succession efforts for many of these employees are often overlooked in the middle of their careers until they are expected to move into senior leadership roles. At this time, employees participate in comprehensive leadership development and training programs to prepare them for the responsibilities and demands inherent in senior leadership and high-level organizational roles.

If an organization postpones career development until they are in need of a leader to fill a specific position, they will be left with a deficit of knowledge and skills necessary to fully accomplish the job. We argue that for STEMM employees especially, mid-career development is important not only to prepare candidates for job promotions, but to convey to these candidates that they are part of the organization's leadership goals.

The beginning of a new career includes a surge of learning, adapting, and excelling in the hired position. By mid-career, many employees lose momentum from their "new job learning" and often contemplate their desire to advance and take on additional responsibilities. If these needs are not addressed, the organization risks losing the employee due to burnout or lack of fulfillment. While most do not wish to leave their technical domain, they do want to advance in their career in some way.

Agencies must directly address the desire for mid-career growth opportunities. Specifically relating to leadership succession planning, this is an ideal time to seek out leader candidates because of their proficiency at their current job and capacity to take on training and added responsibility.

To retain these high potential mid-careerists, the agency must offer opportunities for those who seek to expand their knowledge. There must be collaboration between the agency and the employee about career projections and how they could reach that level. The collaboration between employees and program directors creates a transparent pipeline that will reenergize candidates and secure a plan that facilitates career goals.

This is also a critical time to develop breadth and organizational expertise in emerging leaders. At STRATCOM, succession planners developed a customized program for high potential GS-12/13 employees with highly specialized skill sets. This program has at least one employee from each of the directorates at STRATCOM, and sends the individuals to an offsite program on a college campus to increase breadth of mission awareness in these emerging leaders. The STRATCOM Leadership Fellows Program is intended to provide a cohesive set of leader development exercises with graduate-level education in a variety of mission areas for emerging leaders. This investment in skill development and professional expertise sends a message that these leaders are valued by the organization.

It should be emphasized that career development is more than professional development. It addresses the whole person versus simply providing training to fill job requirements. Career development grows the employee with initiatives such as mentoring, coaching, redesigning job descriptions, and promotions that provide more autonomy and leadership opportunities. Internal efforts must be used to improve mid-career development, which requires greater listening, inquiry, and follow-up by managers of these mid-careerists. It is not simply an understanding about what these individuals desire to be, but also what they dislike about their current job and what factors might drive them out of the agency to external positions. The tailoring of future work assignments will facilitate professional development and leadership skills that will prepare potential leaders, as well as keep them engaged in their current job.

The movement of employees to candidacy and ultimately to a leadership position is not the only mission for succession planning. Agencies must also focus on the transfer of knowledge from current leaders to subordinates. Creating a mentor-protégé model to facilitate knowledge transfer can be an invaluable experience for the protégé. This type of dyadic relationship facilitates not only career growth and education, but can also grow the personal attributes necessary for leadership. The primary functions of a mentor are to:

- Relate with their protégé by maintaining a relationship based on trust and professionalism
- Assess the protégé's career goals and progress
- Serve as a role model
- Guide the protégé toward independence

Each of these functions facilitates a personal and professional growth experience. The key to a successful mentor program is not simply in relaying information, but in finding the right dyadic fit. Matching a mentor and protégé without assessing the degree of fit leaves both individuals

disappointed by the experience and resistant to future matches. Informal development through a mentor program is invaluable. Protégés acquire knowledge from current leaders which allows them to grow, but also to retain this knowledge when that leader leaves the agency. Federal agencies that use these types of programs are making an effort to move beyond traditional leadership training, as well as using the knowledge within the organization, which requires less money and time. As discussed in the box, *Office of Naval Research Mentoring Program*, ONR refined the mentor-protégé model in order to make it the most beneficial experience for both parties.

Summary of roles and tasks. Key responsibilities of HR during the developmental phases of succession planning involve creating a systematic program to continue development in early, mid, and late-stage career. While focusing efforts on new hires or senior-level leaders is the norm in most organizations, programs that target mid-career development send important messages to emerging leaders that they are valued and expected to develop greater organizational expertise than they may hold currently.

From the STEMM leader's perspective, developmental tasks primarily take the form of dyadic mentoring of identified emerging leaders. Current STEMM leaders can help shape the mental models of emerging leaders in the pipeline so they have a better understanding of how the work fits into the broader organization and field. This high-level view of organizational and field level expertise is best transmitted through informal, experiential developmental activities such as mentoring and project-based learning.

In sum, the following division of responsibility is most effective in the development of individuals:

- **Human capital staff should take responsibility for:**
  - Helping individuals develop leadership skills
  - Creating rotation/mentoring programs
  - Creating individual development plans (IDPs)

Office of Naval Research Mentoring Program

The traditional view of formal mentoring programs is that they are not effective, and these relationships are forced. The Office of Naval Research chose to take on a revised model of mentor-protégé programs in order to employ the internal knowledge of the agency. They believed the current trajectory for leader candidates needed to be expanded to consider alternative avenues for growth.

ONR revamped the program, which starts with a mentoring handbook that frames the relationship for both the protégé and mentor and discusses issues such as the behaviors that facilitate a good relationship. Following a thorough understanding of what is expected from both ends of the mentorship, the protégé develops their career objectives, and a rigorous matching of protégé to mentor is completed that works to achieve the protégé's career objectives.

ONR does not restrict matches within departments. Most matches are made across departments. Once the match is made, they complete mentorship training. As the relationship progresses, ONR checks in with both the mentor and protégé to assess the match. It is emphasized that they can be re-coupled without repercussion. This seems to be an extremely valuable message because often protégés will remain in a mentoring relationship that is not functional, which is simply time spent in vain. ONR also designates that 100 percent of the responsibility is on the protégé to set up meetings and connect with their mentor. More people are willing to be mentors because this takes some of the burden off them.

- **STEMM leaders should take responsibility for:**
  - Functioning as mentors
  - Helping to develop technical expertise
  - Providing feedback and direction to STEMM professionals

Step Four: Tracking and Validation of Individual Development

Once candidates are in the succession pool and participating in developmental programs (e.g., the STRATCOM Leadership Fellows), their progress should be monitored and data should be gathered to validate that performance, with an objective of eventual leadership goals tracking against strategic organizational goals. This particular phase requires a close partnership between STEMM leaders and HR professionals. Competencies for given succession planning positions should be developed in a way that is measurable, observable, and specific to STEMM leadership competencies. This requires that STEMM leaders develop behavioral indicators of specific goals. For example, if one competency needed to move into STEMM leadership is strategic thinking, STEMM leaders should partner with HR to develop indicators of strategic thinking that can be observed and measured. This is often done via a 360 feedback survey, where emerging leaders are evaluated by their peers, supervisors, and other stakeholders on competencies valued by the organization.

Where STEMM positions differ from other types of positions is the emphasis on highly technical skills. For example, high levels of strategic thinking competency in computer network defense leaders would be evaluated by an individual's capacity to synthesize and determine policy regarding what might be exposed to public interfaces on computer systems. It would be difficult for someone without domain expertise to develop this kind of behavioral indicator, much less evaluate it in an emerging leader.

How HR professionals add value to this stage is through their knowledge of HR analytics and metrics that can be used to describe the status of the STEMM leader "bench." Most HR information systems have the capacity to track development via competency management systems, which are housed in the broader context of learning management systems (LMS). LMS has been adopted by most government organizations. Our interviews demonstrated that most human resource leaders in STEMM organizations have plans to include self-assessment in their LMS to capture courses and learning obtained outside the organization (degrees earned, conferences attended). This is particularly important in STEMM roles, as much of the expertise development is field-specific rather than organization-specific. In short, scientists, technology researchers, engineers, and other STEMM professionals need to engage in developmental activities outside the organization, and competency management assessments for succession planning should capture this outside learning.

Partnering with current STEMM leaders to help steer emerging leaders to these enrichment activities can be a key role. For example, in the STRATCOM Fellows Program, senior scientist Pat McKenna encouraged emerging leaders to actively seek out professional service leadership positions outside of STRATCOM. He shared that his time on the Military Operations Research Society Director Committee afforded him more leadership responsibility earlier than his position at STRATCOM would have, as well as developing a network outside the "STRATCOM fence" with other defense researchers.

Summary of roles and tasks. While the human capital team should lead the predominant data collection and analytics around how succession planning candidates are progressing, current STEMM leaders should also play important roles in tracking candidate development. Specifically, as they serve as mentors for emerging leaders, they will likely have insights into

how individuals' technical and leadership skills develop over time. This can create a challenging conflict of interest if current STEMM leaders serve as mentors and are asked to evaluate the succession planning effectiveness. One way to handle this is to separate selection and development conversations and metrics. While separating personnel from learning and development functions can require more meetings to coordinate succession planning, half the organizations examined here have this delineation; this requires more planned coordination between these functions, particularly for validating developmental activity effectiveness in the context of STEMM succession planning.

In sum, the following division of responsibility is most effective in the tracking and validation of individual development:

- **Human capital staff should take responsibility for:**
  - Collecting and organizing data about candidates
  - Collecting metrics on engagement
  - Identifying trends
- **STEMM leaders should take responsibility for:**
  - Regular assessments of candidates' technical development

Step Five: Placement into Leadership Positions

The main objective of these succession planning meetings is the placement of an emerging leader into an actual STEMM leadership position. In our interviews, we identified that most organizations in STEMM fields have a mix of internal versus external hires for SES positions, but promote from within for other high-level leadership positions (e.g., GS-15). Thus, focusing on unique aspects of strategic mission is central to STEMM succession planning success. In order to expose STEMM leaders early to the mission of the agency, STRATCOM uses an onboarding program that gets new hires up to speed on the organizational mission and culture as soon as they begin working. This not only provides new employees with an intensive picture of where the agency is going and how they fit into that picture, but it also allows HR to hire based on technical expertise and leadership potential, knowing that the organizational knowledge training is built into new hire's orientation.

At NASA, the mid-level leader program (MLLP) is geared to develop leaders' capacity to lead across organizations. "The MLLP is highly competitive to enter, and it sends a message that developing leadership is everyone's job. One of the key pieces of this program is the emphasis that career succession management belongs to everyone, that this is something you should work on doing as soon as you are placed into a leadership position," says NASA CHCO Jeri Buchholz.

Creating an orientation-specific session for executive level new hires not only gets them up to speed on what the organization is doing, but it also provides them with a realistic overview of what to expect from their career at that agency. OPM offers an outline of executive onboarding programs for a variety of needs, and could be used as a resource to develop agency-specific onboarding programs.

Summary of roles and tasks. One key role for HR professionals is the communication plan between STEMM leaders and the rest of the organization when a succession event has taken place. At NASA, Jeri Buchholz emphasizes this: "Rockets don't build themselves. We have improved our workforce communication to highlight the human beings—the leaders—with the vision and sometimes wrenches duct taped to a hockey stick who build the innovations at NASA." When a succession event occurs, her team ensures that the communication strategy

Executive Onboarding Program Outlined by OPM

The importance of getting employees up to speed on the agency's mission is critical for alignment with mental models, and improves performance expectations by educating employees on the greater impact of their work within the organization. The National Science Foundation studies have found that the success of incoming executives largely depends on the following:

- Understanding the unique aspects of the organizational culture
- Understanding the dynamics of the teams the executive is entering
- The personality, knowledge, and leadership skills of the incoming executive

By addressing these components through a strategic onboarding program, agencies have centralized and standardized mission, organizational culture, and team knowledge. For more information about OPM's programs and other agency programs visit http://www.opm.gov/wiki/training/New-Employee-Orientation.ashx.

is in place to convey why and how the decision was made to advance the STEMM leader's career. In addition, a communication strategy needs to be in place for the individuals who were not selected for the leadership position, as the organization has invested a great deal in their development and likely wishes to retain them for future leadership roles.

In addition, former STEMM leaders, if available, can serve as transition mentors for the new leader. This will ensure greater continuity of leadership, as well as knowledge management beyond what formal documents and organizational records can convey. Informal mentoring programs are a key element during a succession event for each organization studied here.

In sum, the following division of responsibility is most effective in placing individuals in leadership positions:

- **Human capital staff should take responsibility for:**
  - Communication strategies
  - On-boarding
  - Promotion decisions
- **STEMM leaders should take responsibility for:**
  - Knowledge transfer
  - Coaching and mentoring through transition
  - Advising

Step Six: Evaluation of Succession Planning

Given the challenges of succession management, many agencies consider simply having a succession plan and program in place a success for leadership development. However, budget cuts, hiring freezes, and sequestration necessitate the collection of meaningful and easy-to-understand data to indicate the organizational value of succession management efforts. Thus, agency leaders must develop metrics to track and measure the progress, effectiveness, and significance of mission-critical leadership development and succession programs.

These efforts begin with collecting and organizing data regarding the available talent pipeline for mission-critical positions and current strengths and weaknesses in succession and development efforts. This information identifies current and future organizational skills and needs to create targeted goals in the succession program. Once succession goals are clarified, agency leaders must develop meaningful metrics and collect and analyze data on these metrics. This information clarifies development progress, trends in leadership training effectiveness, and attainment of specific milestones required for promotion. In total, this process creates a framework to determine the success of development efforts and valuable information to guide succession decisions. Further, well-formed success metrics with supportive data allow for return-on-investment (ROI) estimates. ROI estimates can inform budget formulation and execution, and provide justification for the value of succession management and development expenditures. STRATCOM provided us with examples of metrics and analyses for program effectiveness and satisfaction that relay their return-on-investment.

In a report by PricewaterhouseCoopers about federal government succession planning (2011), researchers indicated that factors to consider in establishing an evaluation of STEMM succession planning are the capacity to:

- Store and retrieve data longitudinally
- Capture qualitative information about the talent pipeline
- Track when information was added, by whom, and for what purpose
- Ensure security and access to the data (e.g., create a virtual talent room)
- Validate against overall agency performance

STRATCOM's Analytics and Metrics Program

STRATCOM has a comprehensive analytics and metrics program to capture meaningful and actionable metrics for their talent management and workforce development programs. STRATCOM's metrics are aligned to their organizational mission and strategic objectives, provide meaningful data, and lead to actionable results.

Each metric has a clear and detailed description along with a defined purpose for the metric, specific measurement information, distinct collection frequencies, and information regarding the ease of collection. For example, STRATCOM's Chief Learning Officer T.J. Hammond examines the percentage of the workforce eligible for and projected to retire over the next five years and contrasts this against their available "bench strength." This metric provides a ratio to look at future workforce requirements and potential shortfalls. Mr. Hammond notes they strive for a 3-to-1 ratio of civilians in development programs to those eligible to retire, and adjust their development efforts accordingly to reach this ratio.

STRATCOM also uses metrics to examine the talent distribution throughout the organization and workforce engagement. Specific to leadership development, they developed metrics to examine employee development performance and potential and incumbent leader involvement in development efforts. They track the frequency of senior leadership and SES workforce development discussions, the percentage of development discussions completed within 90 days of individual development plan (IDP) delivery, and the percentage of supervisor time spent on employee development. These metrics provide an indication of the use of available development programs. Further, STRATCOM evaluates the success of "talent incubators"—those leaders with a track record of developing future leaders. This metric indicates "hot spots" where internal talent may be leveraged to facilitate successor development.

In addition, an analysis of succession planning pipeline demographics can inform decisions about program effectiveness. Assessing type of domain expertise available in mission-critical fields (e.g., engineering) among women and minorities, as well as other demographics (e.g., time in position, highest degree earned, age) can help synthesize efforts between overall organizational human capital and STEMM strategies.

Summary of roles and tasks. The primary roles for evaluation fall to HR, as human capital experts should design a strategic plan to gather qualitative and quantitative metrics to determine if succession planning actually results in more capable STEMM leaders. This requires a focus on process as well as outcomes, and diligent reporting across the organization. Across our research, we found that there was a central person in charge of talent management who merged this kind of data, which required an overall view of development activities, promotion decisions, and knowledge management.

Former STEMM leaders mainly serve roles by participating in exit interviews to discuss continuity assessments and provide feedback about the process timeline. Because developing STEMM leaders is a timely process, these individuals also helped identify bottlenecks where the talent pipeline became "clogged." For example, in one agency, because senior positions are so scarce in STEMM fields, non-selected emerging leaders could sometimes lose motivation after a succession event given limited future prospects. This type of insight can help organizational leaders find other mechanisms to keep emerging leaders engaged.

In sum, the following division of responsibility is most effective in the evaluation of succession planning:

- **Human capital staff should take responsibility for:**
  - Determining quantitative metrics
  - Determining qualitative metrics
  - Collecting and analyzing metrics
- **STEMM leaders should take responsibility for:**
  - Exit interviews
  - Process feedback
  - Assessment of transition

Recommendations

What does an agency with time, budget, and personnel constraints do to start now on succession planning efforts? The following two recommendations present a starting point for agencies.

Recommendation One: Agencies should not have to reinvent the succession planning wheel. Instead, they should borrow best practices from other agencies and customize procedures to meet their unique needs. Cross-agency collaboration also fosters opportunities to learn from and develop proven development activities. A report published by the IBM Center for The Business of Government, *Implementing Cross-Agency Collaboration: A Guide for Federal Managers* (Fountain, 2012), offers a variety of examples that use cross-agency programs and initiatives to improve communication lines and streamline practices. Agencies must also take advantage of the wealth of leadership succession planning resources and support provided by OPM. See the Appendix on Office of Personnel Management Resources for more information.

Succession planning programs already in place throughout federal agencies are an underused resource. The needs and mission of agencies are a common foundation that can initiate sharing and program development. The case examples in this report can be borrowed and customized to another agency's specific needs. In some of the interviews, it was acknowledged that even within an agency, there is knowledge that is not being used because of a lack of communication and time constraints.

Succession planning programs should begin by finding joint needs across agencies and departments so efforts are not duplicated. By doing this, agencies can refine their programs instead of reinventing everything from scratch. Implementing current programs and tweaking according to specific needs will save scarce resources and allow a mutual connection to continue as the programs develop.

There is great benefit to networking via borrowing succession planning programs. Our hope is that this report will assist agencies in sharing best practices that will facilitate this across the federal government. Agencies can build internal and external knowledge by partnering with other organizations or departments whose programs can be implemented in the second agency's specific area. This creates a more government-wide workforce by building connections between people who would not normally interact.

Recommendation Two: Agencies should capitalize on mentoring relationships, job rotations, and project-based learning experiences. These development opportunities take less time and effort, and can be integrated into the work already conducted within the organization. For example, the Office of Naval Research uses internal rotations with promising program officers and new hires to provide them with a view of how the entire agency works together through separate departments. These rotations allow all personnel to understand how their work fits in with the greater organization mission and to learn how other members of the organization use their products.

The following case example from ONR illustrates one synergistic program implementing an agency-wide academy, which shares agency best practices and also fosters interagency employee networking.

Office of Naval Research Education and Networking Programs

The Office of Naval Research has created a learning academy that invites employees to a training program three times a year. This program exposes employees to senior leadership, contracting processes, and financial procedures. The academy exposes personnel from various departments and commands to courses, presenters, and even colleagues they would not normally connect with. The atmosphere of development brings together people who normally interact with friction and begins an understanding of what other departments do.

ONR has also created an intra-agency resource called iConnect. iConnect acts like a social media hub or Facebook within ONR. Its function is to act as a social source that enables people to meet, see common connections, view connections that might be useful, and designate overarching share points. In addition, iConnect also tracks the people employees have worked with at ONR, and tracks what the different codes and departments do for a broader understanding of how everything connects. This social resource provides a more personal connection between employees, as well as making networking between departments more available and transparent.

Appendix: Office of Personnel Management Resources

Key Resources Offered on the OPM Website for Leadership Development and Succession Planning		
Center for Leadership Development	Supports the development of current and future supervisors, managers, and SES/ Executive leaders	http://www.leadership.opm.gov/
Federal Leadership Portal	Provides an online community where public service leaders collaborate and share ideas, best practices, initiatives, and resources on leadership	http://cldcentral.usalearning.net/mod/page/view.php?id=259
Online Guide to Succession Planning	Best practices in developing and measuring the success of your succession management program	https://www.opm.gov/services-for-agencies/workforce-succession-planning/
CHCO Council Training Academy	OPM recently held a program on succession planning geared toward senior HR leaders partnered with the Chief Human Capital Officers Council	http://www.chcoc.gov/meetings/index.aspx#CHCOAcademy
HR University	Managers can find and take courses on a variety of HR topics	www.hru.gov
Manager's Corner	Managers can gather HR resources and sign up for HR related courses	http://hru.gov/mgr_corner/mgr_corner.aspx
Personnel Policy Information	Provides federal policies for a wide range of personnel topics such as documentation, hiring, performance management, SES, etc.	http://www.opm.gov/policy-data-oversight/

For more information about the OPM, visit their website at www.opm.gov, or contact an OPM representative via e-mail at HRStrategy@opm.gov.

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