The Department of the Air Force (DAF) has placed a strategic focus on improving talent management, including how to build a more diverse, equitable, and inclusive workforce. To support the DAF’s efforts, RAND Project AIR FORCE was asked to (1) provide targeted benchmarks and a planning tool that will allow the DAF to evaluate the demographic composition of the active duty workforce overall and functional areas in this workforce and (2) identify practices and opportunities that the DAF can use to support diversity in critical career fields.

As part of the second objective, we conducted a qualitative review of talent management programs and practices in the DAF and in the private sector. This report describes private-sector efforts to address talent management through a diversity, equity, and inclusion (DEI) lens. Specifically, we describe examples of DEI efforts taken by several private-sector organizations that were identified as being among the top employers for diversity, supplemented by a review of available scholarly literature on promising practices in DEI talent management. The goal of this report is to share what private-sector organizations and academic literature have identified as promising practices regarding DEI and talent management that should
be relevant to DAF efforts. A separate companion report provides a review of internal DAF efforts to address talent management through a DEI lens and identifies ongoing efforts in various career fields or accession sources that the DAF could consider applying more widely.

It was beyond the scope of the project to evaluate the effectiveness of the organizational practices identified from our interviews and outlined in this report. We label these practices as promising based on trends reported by the company representatives we interviewed and support for some practices in the wider academic literature. We further acknowledge that outcomes and the success of these practices are self-reported and suggest that there is more be done to evaluate their effectiveness. As Lisa M. Leslie (2019) suggests, future evaluations should go beyond relying on the most-commonly used measure to gauge DEI initiative success—increased demographic representation—and include measurements of engagement, extrinsic diversity motivation, climate perceptions, and others to assess the value of DEI practices more holistically. Finally, organizations can focus on various dimensions of diversity (e.g., gender, race and ethnicity, and disability). In this report, we consider diversity broadly, but with gender and race and ethnicity as a foundational goal.

**Methodological Approach**

We conducted a qualitative review of promising practices for fostering DEI in private-sector organizations using two primary sources of information: (1) interviews with representatives from select organizations’ DEI offices and (2) a systematic review of scholarly literature on talent management practices related to fostering DEI. In this section, we outline our methodological approach. Additional details are included in Appendix A.
Interviews with Top-Rated Organizations for Diversity

To help identify potential organizations to target for interviews, we developed an initial list of private-sector organizations, specifically including defense and aerospace organizations that had been recognized for their DEI-related practices. From March through July 2021, we were able to conduct virtual interviews with representatives of the chief diversity offices of seven private-sector organizations. The organizations we were able to interview are:

- Boeing
- Comcast NBCUniversal
- Lockheed Martin
- Marriott International
- Northrop Grumman
- Progressive
- A multinational aerospace company that asked not to be identified.

We used a semistructured interview approach to guide our discussions with these organizations. Questions focused on policies and practices for improving the organization’s DEI across the talent management life cycle (e.g., outreach and recruiting, training and development, and retention). We then used a structured coding approach to identify themes and findings across the organizations, applying a DEI lens to their talent management policies and practices.

Review of Empirical Literature

We conducted a systematic literature review to identify effective DEI practices through review of empirical findings in academic literature. We limited our initial search to peer-reviewed sources published within the past 10 years (2010–2020) as well as relevant book chapters published in the same time frame. We focused on studies of adults in paid employment settings, excluding children and education settings unless the study was about employees in the education field, and unpaid labor. We then supplemented this initial search using snowball sampling methods to identify additional literature that might have been outside our initial time frame but that met other criteria and are frequently cited.

We incorporate key findings from the literature in the sections below to highlight when organizational practices identified through our interviews are supported with empirical evidence. We also note any additional talent management practices that show empirical support for their use but that might not have been specifically discussed during our interviews.

Organizations Provide Definitions of Key Terms to Build Foundations for Their Diversity, Equity, and Inclusion Culture

As more organizations have recognized the importance of diversity to their missions, there has been a shift from focusing primarily on ensuring diverse demographic representation in an organization to ensuring that an organization also has an equitable and inclusive environment. Thus, most organizations now focus on diversity, equity, and inclusion as intertwined concepts and efforts. In the following sections, we provide an overview of how scholars and organizations define each of these concepts.

Definitions of Diversity Have Evolved Beyond Traditional Demographic Descriptions

The way organizations define diversity has evolved over the decades. The focus on diversity has progressed from looking at traditional demographic categories—such as race and ethnicity, gender, and age—to focusing on a variety of attributes that reflect the different backgrounds and experiences that personnel bring to the organization (Lim, Cho, and Curry Hall, 2008). One 2015 review noted that millennials, in particular, were more likely to define diversity in cognitive terms—the individual mix of unique experiences, identities, ideas, and opinions—rather than the purely demographic terms of older generations (Smith and Turner, 2015). Consistent with this evolution, all the organizations included in
this study defined diversity broadly. Three examples of such definitions follow:

“A collective mixture of differences that includes, but [is] not limited to, individual and organizational characteristics, values, beliefs, experiences, backgrounds, preferences, and behaviors.” —Northrop Grumman

“All dimensions and characteristics that make people unique such as race, gender, sexual orientation, gender identity, ethnicity, veteran status, generation, ability, experiences, thinking and working styles.” —a multinational aerospace company

“At Lockheed Martin, we define diversity as the various attributes we each possess based on characteristics from birth, experiences we have had, and decisions we have made.” —Lockheed Martin

However, as we discuss in later sections, most organizations still focus primarily on measuring representation in their organization based on the more-traditional categories of race, ethnicity, and gender. This continued focus on more-traditional categories of diversity when tracking actual representation in an organization aligns with previous recommendations for the U.S. Department of Defense, which note that diversity initiatives can be hard to track and can make accountability difficult if definitions are too broad and do not focus on specific characteristics that should be fostered in a workforce (Lim, Cho, and Curry Hall, 2008).

It should be noted that, when organizations focus on tracking certain perspectives, it is important that they comply with various legal protections of individuals.

**Equity Focuses on Fair Treatment of Employees Based on Need**

Definitions become particularly important when organizations seek to discuss the concept of equity, which is often confused with, but is distinct from the concept of, equality. Indeed, definitions of equity and equality are frequently used by researchers, policymakers, academics, analysts, and others as if they are interchangeable (Espinoza, 2007). Equity is associated with fair or just treatment of people, recognizing that individuals have had different life experiences and come from circumstances that might either better prepare them for success or curtail their exposure to opportunities that could help them succeed in an organization. Equity, thus, focuses on fairly treating individuals based on their needs (see Espinoza, 2007). Equality is the concept that all people are treated the same, regardless of individual circumstances. There is some subjectiveness involved in delineating the concepts, for example, what is considered fair, just, or fair treatment. This subjectiveness underscores the importance of defining the concept of equity and, perhaps, using it as a point of conversation about what an equitable culture looks like in an organization. One organization’s definition of equity included ensuring equality of opportunity for all in company policies, practices, and behaviors, noting that success is achieved when employees feel that there are no barriers to reaching their full potential. A direct example of an organizational definition of equity follows:
Inclusion Focuses on Individuals Feeling Welcome and Valued While Contributing to the Organization

There have been a variety of definitions for inclusion in academic literature (see Shore, Cleveland, and Sanchez, 2018). However, following a well-accepted conceptual model (Shore et al., 2011), definitions often focus on the importance of valuing uniqueness or diversity and providing a sense of belonging for all individuals. For example, Bernardo M. Ferdman (2017) broadly defines inclusion as when “people of all identities and many styles can be fully themselves while also contributing to the larger collective, as valued and full members.” Definitions of inclusion from the organizations in our study reflect similar themes. We note that although belonging is often conceptualized as a key aspect of inclusion, Northrop Grumman designates it as a fourth key focus area, separate from inclusion, defining it as “the perception that you belong to a work group and you are an accepted and essential member of that group.” Three examples of organizational definitions of inclusion are as follows:

“The company’s commitment to diversity means providing a work environment for all employees that is welcoming, respectful and engaging, with opportunities for personal and professional development.” —Boeing

“Inclusion is the daily commitment we make to consciously and actively exhibit behaviors that ensure the people around us feel valued, welcomed, and respected for who they are as individuals.” —Progressive

“Viewing diversity as an asset that enriches the organization and allows all employees to bring their whole, authentic selves to work every day, contributing diverse ideas, perspectives and talents to help solve our customers’ toughest challenges.” —Northrop Grumman

These definitions are important for organizations to ensure that their workforces have a common understanding of the problems that they are trying to solve. This provides a foundation on which DEI practices can be built. In our research, we learned that organizations share their definitions of these concepts with their employees in a variety of ways, including posting them on internal and external websites. In the following sections, we discuss some of the promising practices that organizations shared with us when describing their efforts to build more-inclusive cultures and improve talent management.

Organizations Strive to Develop an Organizational Climate and Culture in Support of Diversity, Equity, and Inclusion

Organizations Have Overarching Strategies to Guide Their DEI Activities

As part of our interviews with industry representatives, we asked whether their organization has a strategy for DEI, an oversight structure, and associated measures of progress. All organizations discussed having an overarching DEI strategy, with most describing specific DEI goals or pillars that they focus on. In general, the DEI strategies focus on increasing diversity in the form of demographic representation, ensuring equal opportunity in their policies and practices, and fostering an inclusive workplace environment. In many cases, representatives discussed having specific demographic representation goals that they have committed to over the next years and highlighted specific programs or initiatives to help ensure equity and inclusion.

For example, Boeing states that its strategy is based on the three principles of “equity for all, team of all, and inclusion for all” with specific actions that are aligned with each of these principles. Progressive...
describes four key pillars: (1) an inclusive work environment, (2) representation in its workforce (i.e., the company wants to be representative of its customer base), (3) leadership who are representative of the people they lead, and (4) support for the communities in which employees work. Like Progressive’s focus on local communities, other organizational representatives also described strategies that went beyond the internal organization or workforce. For example, one multinational aerospace company highlighted the following four pillars for action: (1) workforce diversity (e.g., setting specific goals on gender and people of color in leadership roles), (2) community engagement (e.g., sponsoring scholarship, mentorship, and fellowship programs), (3) public policy (e.g., establishing defense fellowships with the Congressional Black Caucus Foundation), and (4) supplier diversity (e.g., committing to direct more spending to minority-owned suppliers).

There is support of the need for strategies or plans to guide organizational change. One review cited Kurt Lewin’s three-phase change process of unfreezing, transitioning to a new stage, and refreezing (Stouten, Rousseau, and De Cremer, 2018). The first stage involves establishing a vision and change plan to prepare for the transition to new systems, structures, or procedures before putting those changes in place and consolidating them. Jeroen Stouten, Denise M. Rousseau, and David De Cremer (2018) summarize several other change management models that place emphasis on the importance of developing a plan that aligns reforms with strategic objectives to help employees understand an organization’s decisionmaking.

**Governance Boards Help Oversee Organizations’ Diversity, Equity, and Inclusion Activities**

To help guide and monitor progress related to their DEI strategy and associated initiatives, all the organizations we spoke with described having some sort of board that provides oversight of the organization’s DEI efforts. All organizations have an executive-level board that usually includes the chief executive officer (CEO) and other senior-level leaders. In the case of Marriott, the board committee is chaired by a member of its board of directors and includes all direct reports to the CEO. In addition to an executive-level board, all the organizations included in our review have several additional levels of boards or committees to further support their DEI activities. For example, most of the organizations have additional separate councils or teams to represent different sectors or parts of their business. In some cases, organizations described having boards or councils that focused on specific aspects of DEI. Boeing described having a separate racial equity task force to focus on equity issues. Comcast described having an external Joint Diversity Advisory Council that includes national civil rights leaders and other political and business members that represent different demographic communities. The external council provides advice to Comcast’s senior leaders. In addition to these oversight boards, all the organizations included in our interviews had designated chief DEI officers or managers who were responsible for overseeing and coordinating efforts related to DEI across their organization.

The importance of these types of oversight structures has some support in the literature. For example, Frank Dobbin, Alexandra Kalev, and Erin Kelly (2007) indicate that creating a diversity manager position or task force leads to the promotion of both women and minorities, as these positions help to create solutions that are customized to the barriers for promotion that arise in an organization. Kalev, Dobbin, and Kelly (2006) indicate that diversity committees help to increase the proportion of women and minorities in an organization’s management, indicating that these structures help to promote diverse candidates to management positions. The study also noted that appointing a manager or committee with responsibility for guiding change was likely more effective than other programs, such as diversity training, mentoring programs, or diversity evaluations, alone. In another study, diversity managers or boards were found to have some impact on retention efforts, which are discussed below. These boards and structures help to create solutions to issues that underrepresented minorities face, which, when addressed, can remove factors that lead to staff turnover (Dobbin, Kalev, and Kelly, 2007). Research also
finds that having diversity managers helps ensure accountability in an organization, particularly among hiring managers, which can improve the effectiveness of diversity-related reforms that an organization puts into place (Dobbin, Schrage, and Kalev, 2015).

**Measures of Effectiveness**

**Focus Primarily on Demographic Representation and Employee Perceptions of the Work Environment**

As part of our interviews, we asked whether each organization has specific performance metrics to help evaluate its progress on DEI goals. Previous work in this area notes that many diversity initiatives fail because they lack evidence of their effectiveness (Lim, Cho, and Curry Hall, 2008). Across the organizations we spoke with, the focus is not only on demographic representation and assessing the extent to which they have diverse demographic representation overall but also on who is being brought into the organization, compared with availability in the general workforce; who is brought into leadership teams; and even such areas as supplier diversity. Several organizations described having internal scorecards, and most organizations reported information on demographic representation to the public through external reports, often put out annually. To assess their overall workplace climate in support of DEI, more than one organization also described a focus on measuring employee perceptions of an inclusive work environment through survey methods and feedback from town halls, ERGs, and other groups. Detailed results from these measures are not included in public-facing reports but are instead described as part of their managerial measurement and engagement efforts.

As we discuss in the next several sections, metrics assessing the effectiveness of specific organizational practices or programs that aim to improve DEI often tend to focus on participation instead of measuring whether there was a change in knowledge, skills, or behaviors.

**Metrics assessing the effectiveness of organizational practices that aim to improve DEI often tend to focus on participation instead of measuring whether there was a change in knowledge, skills, or behaviors.**

increased focus on using data to try to assess the impact of certain programs. For example, Progressive reported that it looks at how quickly individuals who went through the program move up to the next-level role compared with their peers of similar experience and background.

**Organizations Use Multiple Strategies to Foster an Inclusive Organizational Culture**

In addition to asking about clear strategies, oversight, and measures of progress, we asked representatives about how their organizational culture helps support DEI. We were able to discuss some aspects of organizational culture with all seven organizations we interviewed. Four interviewees noted that having an inclusive culture was critical to their ability to be top-performing companies and that the importance of ensuring that culture was tied to the company’s core values; they also mentioned the need to ensure the buy-in of all employees. However, practices to build those cultures varied and are not easily generalizable.

For example, Marriott’s representative said this about the culture at the company: “[We] have a
strong culture tied to core values. For DEI, it is putting people first; that is foundational to our history and our culture of inclusion, and we are very people-oriented in everything we do.” Boeing’s representative spoke at length about the company’s push to change the culture at an enterprise level. This change involved ensuring that leaders and employees build habits to seek out DEI issues that might be uncomfortable to talk about; have the confidence to speak about ethics and ideas, challenge problematic behaviors, and be creative in finding solutions; and listen to those around them without judgment. This representative noted that these steps sounded easy but were difficult to practice consistently.

**Employee engagement in DEI efforts is viewed as critical to socializing values and creating a shared sense of culture.** Five interviewees spoke about ensuring employee engagement as part of their efforts to socialize their values and create a shared sense of their internal culture. Engagement activities included supporting DEI focus sessions, town halls, and conferences, among other happenings. For example, Northrop Grumman provides a leadership series that promotes inclusivity by raising awareness of unconscious bias and inequities while allowing for a discussion of proactive practices to foster inclusion. All five interviewees also spoke about their company’s support for ERGs that allow employees to be better heard, valued, and engaged.

There is literature that suggests that ERGs can help organizations accomplish strategic objectives and achieve their missions, but many authors note that more research can be done in this area. One review found that ERGs can have a direct effect on business operations, help attract and develop employees, and contribute to a diverse and broad employee base (Hastings, 2011). ERGs have also been found to be critical to creating a culture of inclusion, beneficial in leadership development, and helpful in supporting individual employees’ personal and professional development opportunities (Welbourne, Rolf, and Schlachter, 2015).

Finally, Marriott and Lockheed Martin interviewees spoke to the importance of measuring employee engagement and feelings about inclusivity. One noted that it was part of their culture that what was measured was achieved. They also noted that data points on recruiting, retention, attrition, and representation helped inform the further development of goals and future business goals.

**Empirical literature confirms the importance of developing positive climates for diversity and inclusion.** Research on organizational climate and culture in DEI has focused on climate for diversity and, more recently, climate for inclusion (Dwertmann, Nishii, and van Knippenberg, 2016). Overall, research shows several positive effects on work outcomes, including a correlation with improved job satisfaction, organizational commitment, employee engagement, and performance, when a positive climate for diversity or inclusion exists (Holmes...
et al., 2021). In a meta-analytic review of 25 years of research on diversity climate, Oscar Holmes IV and colleagues (2021) conclude that organizations that value diversity will benefit from investments in diversity management initiatives that help build a positive climate for diversity. They recommend that these initiatives include such efforts as adopting human resource policies that promote fairness across all aspects of the organizational life cycle, investing in identity-focused groups (e.g., ERGs), holding management personnel accountable for diversity-related outcomes, and working to improve demographic representation across all levels of the organization.

**All Organizations Use Diversity-Specific Training to Help Foster a More-Inclusive Organization and Are Trending Toward Trainings That Might Have Empirical Support**

As part of organization-wide efforts to develop a culture and climate in support of DEI, organizations also discussed the use of diversity-specific training. Mandatory diversity trainings, which typically include strategies to reduce unconscious bias, combat microaggressions, and improve cultural competencies, have been relied on for decades and have often been deployed as a way for organizations to prevent costly discrimination claims. However, a study of over 800 medium and large U.S. firms over five years found that these efforts are correlated with less racial and ethnic minority representation among managers (Dobbin and Kalev, 2016). In another study of 317 business schools, mandatory diversity trainings were found in 20 percent of the less-diverse schools whereas only 5 percent of the more-diverse schools had mandatory training (Moshiri and Cardon, 2019). That study confirmed the authors’ assumption that diversity training was correlated with less diversity overall but stopped short of recommending ceasing diversity training. Instead, the authors caution against using diversity training without careful planning and evaluation. They also note that training was the default approach that administrators took to build urgency around diversity initiatives, perhaps indicating that less-diverse schools might be working hard to address known demographic shortcomings but are not seeing improvements (Moshiri and Cardon, 2019). Additional research indicates that the effects of training tend to last, at best, two days and did not actually change the practices of executives, particularly when hiring was involved. Training was too often seen as remedial rather than developmental (Dobbin and Kalev, 2016).

Reviews of diversity training research suggest that certain features might improve outcomes. Those features include training sessions held over multiple sessions and over longer periods of time or those that allow for more social interaction. These features might be more successful at changing participant attitudes about valuing diversity than one-time training events (Kalinoski et al., 2013). Trainings are also more likely to be effective at changing organizational norms when managers actively support training and when participants set goals for training (Phillips, et al., 2016).

**Organizations indicated a trend toward more voluntary, self-learning options for DEI training.** We discussed training with all the interviewees. All the organizations we spoke with offered insights on the types and methods of DEI-related training that they have deployed in recent years. Although they continue to mandate some diversity trainings, there appears to be a trend in some organizations toward providing access to self-guided and voluntary training tools. This trend could be a response to evi-

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**Employee resource groups have been found to be critical to creating a culture of inclusion and beneficial in leadership development.**
dence that most diversity training has been found to have limited effectiveness and might decrease, not increase, workplace diversity. Virtual learning tools were discussed as being especially useful.

There was some broad agreement among organizations that self-learning tools have proven more helpful in changing employee behaviors. Although mandatory trainings continued to some degree or another, some organizations had or were building virtual hubs that allowed their employees to learn at their own pace. These tools and resources served to help managers, in particular, build their own awareness about cultural differences that individuals bring to the workplace. This practice could be bolstered by research. One study found that voluntary diversity training evoked more-positive responses from participants compared with the anger or resistance that can be induced by mandatory trainings (Dobbin and Kalev, 2016).

Our Comcast contact spoke about their belief that letting employees guide their own self-learning journeys was more valuable than the required, check-the-box trainings. This interviewee discussed online learning tools that were developed nationwide but could be tailored to local offices and local DEI needs. The organization’s learning hub was described as an à la carte feature housing short talks, webinars, guides, and other tools for people to pick from when the time is best for them. Although using the hub was not necessary, the interviewee did say usage and user feedback can be broadly tracked quarterly to identify high-visibility courses. Spikes in usage were detected and correlated with external events.

Boeing’s DEI representative noted a desire to move to more-experiential learning using virtual reality and machine learning to better drive outcomes and change behaviors. The goal is to allow more interaction among an ever-more-diverse employee base to expose individuals to viewpoints that they might not have encountered face to face. An immersive learning experience for first-line leaders was recently deployed to Boeing’s major area of operations. The experience featured eight learning modules with a focus on creating and sustaining diverse and inclusive work environments.

These private-sector organizations also spoke about the need to properly market the online tools that they had developed to ensure usage. Our Marriott interviewee said that initiatives to keep people in touch during the pandemic were used to remind employees of online DEI learning options. The interviewee believed that just knowing the option was available helped make a difference. Comcast used what it called soft promotional tactics, such as including notes in emails on other subjects or mentioning the learning hub in other forums, to engage employees, without making the courses a requirement.

The trend toward more voluntary, experiential, and self-guided DEI trainings has some support in literature (Dobbin and Kalev, 2016), but research is limited on whether face-to-face or computer-delivered training is more effective. These online training hubs can be monitored for usage and feedback, but no formal individual assessment of knowledge gained or changed behavior was mentioned in our discussions with organizations.

Some organizations appear to offer diversity leadership trainings that are different from the trainings offered to all employees. In our discussions, diversity trainings for all employees tended to include aspects that helped sustain inclusive, tolerant working environments while building awareness on DEI topics. Diversity leadership trainings went further to build such competencies as creating and managing diverse and inclusive teams, creating inclusive environments, leading by example on DEI topics, and integrating an organization’s DEI practices into wider business practices. Two organizations also described trying to integrate some aspect of DEI awareness into leadership training for employees from early career through executive programs. At Progressive, DEI is thought of as a leadership competency; training on creating inclusive workspaces, what it means to be an inclusive leader, intercultural competence, and applying lessons to everyday business responsibilities is provided to all leaders. A representative from Marriott spoke about a recently built online hub with DEI educational tools that allowed leaders and associates to learn how to build and manage inclusive teams.
Common Policies and Practices for Promoting Diversity, Equity, and Inclusion Across the Talent Life Cycle

To identify specific DEI practices across the talent life cycle, we also asked organizational representatives about promising practices in the areas of outreach and recruiting, interviewing, training and professional development, and retention. We highlight key findings from our interviews and our review of empirical literature for each of these aspects of the career life cycle in the sections below.

Outreach and Recruiting

A key aspect of increasing diversity in any organization is ensuring that the organization is attracting and hiring diverse talent. Overall, the organizations included in our review seem to take a broad and multipronged approach to outreach and recruiting, starting with engagement at the K–12 level through targeted recruiting efforts that involve partnerships with educational institutions and professional organizations to help attract new graduates and more-experienced talent. Many of the organizational representatives we spoke with also discussed the importance of engaging the broader communities where they are located to help build a reputation as a desired place to work and as an organization that values and supports a diverse workforce. Finally, some organizations also described specific efforts focused on improving their interviewing practices related to ensuring DEI. We provide a brief overview of each of these areas below as well as examples of specific programs and practices.

Some organizations we spoke with actively engage in outreach to K–12 students, often with a focus on science, technology, engineering, and mathematics (STEM) education. We were told that the goal of this outreach is to help strengthen the future workforce that’s available and to start building a recruiting pipeline. For example, Lockheed Martin described partnering with various organizations, such as Girls Inc., a national, nonprofit organization offering girls-only programming, to help strengthen the diversity of its talent pipeline. It also has a high school program in which it partners with Project Lead the Way, where students get an opportunity to work alongside Lockheed Martin engineers in an internship program. Students are then invited back to be college interns in future summers, so that they might join the organization upon graduation from college. One of Northrop Grumman’s signature programs for engaging youth in STEM is its sponsorship of the Air Force Association’s CyberPatriot program. This program involves a series of initiatives, such as camps and competitions, to help get K–12 students more interested in cybersecurity and STEM in general.5

All organizations describe partnering with educational institutions and professional organizations that represent members of underrepresented groups. For example, organizations described partnerships that target historically black colleges and universities and other MSIs to help attract new graduates through internship programs and entry-level career programs. They also described supporting such professional organizations as the National Society of Black Engineers, Society of Hispanic Professional Engineers, and Society of Women Engineers. These partnerships also often include sponsorship of and a presence at various conferences administered by those organizations and others. A Marriott representative stated that the conferences provide an avenue to not only develop its current talent but to also recruit new talent.

ERGs are often used to help outreach and recruiting efforts. Beyond formal partnerships with organizations that represent members of underrepresented groups, some organizational representatives also described other recruiting efforts that are designed to increase the diversity of applicants for open positions. For example, Northrop Grumman uses its ERGs to help with recruiting using a family-and-friends referral model. It also recently started a program in which ERGs take turns as the lead to push out critical skills that the organization is trying to hire. The ERG is responsible for sharing the desired critical skills and job openings with other ERGs in the hopes that members will use their networks to reach out to potential candidates.

Community engagement can help build organizations’ reputations. Several organizations described
the importance of supporting the communities in which they work to help develop local pipelines of talent. This includes sponsoring local events or organizations in the community and working to advertise its efforts around DEI. Several organizational representatives also described the importance of the organization taking a public stand on national issues of equity and inclusion to demonstrate their organizational values.

**Research supports targeted recruitment efforts to improve diversity.** Research on specialized recruitment programs that target women and minorities shows that there are overall positive effects in increasing historically disadvantaged groups in management jobs when targeted recruitment programs are used (Dobbin, Schrage, and Kalev, 2015). However, empirical studies on the effectiveness of specific outreach and recruiting practices designed to attract racial and ethnic minorities and women are limited. There is some empirical support to suggest that certain practices, including some of those discussed above, could hold promise. In a review of empirical research and theory on the effectiveness of targeted recruitment practices for improving diversity, Derek R. Avery and Patrick F. McKay (2006) suggest that the following tactics can help to increase perceptions that an organization values diversity and to make employment more attractive to women and minorities:

- placing recruitment ads in targeted media
- showing ads that convey that an organization values diversity
- including inclusiveness policy statements in ads
- recruiting at higher education institutions that are predominantly MSIs and predominately female
- employing female and racial and ethnic minority recruiters
- participating in diversity-focused job fairs
- sharing evidence of successful diversity management practices in the organization
- publicizing sponsorship of racial and ethnic minority and women’s causes

Other work has also found that visible representation of women and minorities in positions of authority might help improve recruiting of diverse talent. For example, one study of law enforcement found that representation of minorities in political office and in police leadership positions are among the most influential predictors of line office diversity (Gustafson, 2013). In another study, visibility of senior women and racial and ethnic minority faculty significantly influenced academic career interest among women and racial and ethnic minority trainees (Sánchez et al., 2018). However, more research is needed on the effectiveness of specific recruiting practices in increasing applicant pools.

**Interviewing Practices**

As part of the discussion on outreach and recruiting, a few interviewees described specific efforts that their organization has engaged in to improve interviewing practices that might affect the diversity of the incoming talent pool that is hired. Progressive described efforts to ensure that it has diverse interviewing and onboarding teams. It has also been reviewing its interview process to see whether there is anything that needs to be modified. This includes continually examining the qualifications required for various roles to ensure that they are broadly inclusive of different skills, experiences, and educational levels. Several organizations also described efforts to try to ensure that they have both a diverse candidate slate and diverse hiring teams as part of their process. For example, Boeing expects its talent acquisition team to source a diverse pool of candidates for job openings and has specific diverse slate requirements for executive-level positions.

In the empirical literature, there is some indication of the importance of having diverse hiring committees. One study found that participants assigned to a racially diverse committee “exhibited more positive beliefs toward diversity, were more likely to acknowledge subtle forms of bias, and were more likely to promote a minority candidate than
participants assigned to an all-white committee” (Williams, 2018). Other research done in an academic setting similarly found that having a woman or racial or ethnic minority faculty search chair and a greater percentage of women or racial or ethnic minorities on the search committee correlated with more women and racial and ethnic minority applicants (Kazmi et al., 2022). Although not included in this review, there is also a large body of literature on the potential adverse impact on women and racial and ethnic minorities when using different selection methods (e.g., standardized aptitude tests, personality tests, interviews, work samples) and how to try to mitigate these effects.

**Ongoing Training and Professional Development**

We were able to discuss the professional development of currently employed staff with six of the seven companies we spoke with. All spoke of formal mentorship or leadership development programs that had been set up in the past decade. These programs tended to be of limited duration (although informal relationships could endure), and we were told that these programs have produced positive results thus far.

In addition to mentoring- and networking-focused development practices, which are discussed in more detail below, several organizations take additional steps to ensure DEI is incorporated into their professional development programs. For example, Marriott spoke about a program focusing on diversifying its middle management. This program focused on getting participants on track to be general managers by developing skill sets necessary for the role, such as financial acumen, customer engagement, and human resource management. Boeing described regularly assessing its leadership programs for inclusivity in an attempt to promote diversity and equity among participants. This company is examining promotion rates by demographic, particularly the time it takes certain demographics to promote to the next level, to see where the company can improve.

*Leadership development programs often focus on mentoring and networking.* Leadership development and mentoring programs were not always administered by chief diversity officers but did have DEI aspects. Interviewees from Marriott, Boeing, and Comcast noted that inclusivity meant that, although these programs could be designed to further promote diversity in leadership roles and correct for past inequities, they had to be open to all staff. Leadership development programs tended to last no longer than one year and involved networking sessions with C-suite-level executives, ongoing mentorship by an executive, and a capstone involving either a presentation or pitch for a new marketable business product that showed how valuable the experience was for the individual.

Two interviewees spoke about initiatives focused on developing a cadre of women leaders. One such initiative has been in place at Northrop Grumman since 2010. It came about as a result of planning for future growth and an awareness that retirements were increasing, that STEM diversity was lacking, and that the company needed to expand its leadership pipeline, particularly for women and people of color. The initiative required the company’s leadership to commit to modeling cultural change from the top and holding executives and managers accountable and required a talent acquisition strategy that included hiring more women.6

Comcast discussed how its leadership and mentoring programs were administered through its ERGs. One program paired employees at different levels and across business functions to give participants perspectives on the company from different views from someone who might better understand

**Visible representation of women and minorities in positions of authority might help improve recruiting of diverse talent.**
Members of underrepresented minority groups might become overburdened with work responsibilities as they are expected to balance their normal workload with such responsibilities as participating on diversity boards.

Cultural or other challenges to success. This program was formally capped at nine months with a capstone that allowed individuals to pitch business ideas that could be further developed into products or other marketable services.

Research supports the use of mentoring and networking to help improve diverse representation. According to the literature, increasing access to mentoring and networking led to the promotion of underrepresented individuals in the workforce. For example, Debbie Bazarsky and colleagues (2022) stated that early career mentoring helped lesbian, gay, bisexual, transgender, queer, and intersex individuals have a clearer understanding of their career path, which helped individuals to advance their career. Dobbin and Kalev (2016) also recorded a positive impact on management diversity from mentoring programs; these programs fostered connections between junior and more-senior staff. Both of these outcomes support the conclusion that increased access to mentoring and networking improves promotion outcomes for members of different underrepresented groups.

Organizations have begun to try to assess the effectiveness of their development programs. In terms of assessing the success of these types of programs, organizations described efforts to collect and analyze data. For example, Marriott mentioned that 100 percent of participants that had gone through their program had been promoted since the program’s inception about five years ago; Comcast and Progressive reported roughly two-thirds of their participants had been promoted to higher levels of responsibility.

Retention

Our conversations with private organizations did not yield much on practices to retain employees. One interviewee from Comcast said retention was understandably difficult in some of its lines of work, including call center staffing and frontline sales. There are long-term efforts to try to reduce attrition in some of its more traditionally higher-turnover jobs. The interviewee likened this retention difficulty to the DAF’s efforts to retain first-term enlisted personnel after their initial contracts. The same interviewee later noted that retention rates in other business functions speak to the culture of an organization: If employees feel supported and welcome in their workplace, they are more likely to stay.

Academic studies in various fields, including the public and private sectors, nursing (see Cary et al., 2020), higher education (see Jimenez et al., 2019), and STEM fields (see Annabi and Lebovitz, 2018), provide some promising practices on retention. The following seven items were found to aid retention of women and/or minorities:

- providing flexible work arrangements to account for differences in work-life balance needs
- preventing burnout for racial and ethnic minority members in the organization by ensuring that minorities are not overpromising their time to diversity boards or other organizational commitments related to diversity, which could lead to lower retention
• creating ERGs that provide women and racial and ethnic minority workers with a sense of community and access to professional development and other resources
• providing access to ongoing trainings in fast-changing fields, such as IT, so employees do not face knowledge gaps
• providing access to mentoring and networking opportunities to promote career development, including providing time off or compensation to participate in these opportunities
• creating diversity boards or officers
• shifting workforce culture toward embracing diversity.

Work-life balance is specifically addressed as a major issue for the retention of women, as women often have to balance family obligations with duties at work. For example, one article on the retention of women in the IT workforce found that issues with work-life balance were cited by 60 percent of respondents as a barrier for success in the workforce. In particular, women noted that the responsibilities they faced at work often conflicted with personal responsibilities, leading them to have to prioritize one set of responsibilities over the other. Five of the 23 women interviewed for that study said that increased flexibility in work arrangements, including the ability to work from home or work part-time, would improve their work-life balance (Annabi and Lebovitz, 2018). However, scholars note that there is difficulty in creating programs that adequately address women’s need for better work-life balance because different women might have vastly different responsibilities that require access to different resources (Trauth, Quesenberry, and Huang, 2009).

Organizations must be careful to not overburden members of underrepresented minority groups with DEI efforts. Several articles noted that members of underrepresented minority groups might become overburdened with work responsibilities as they are often expected to balance their normal workload with such responsibilities as participating on diversity boards (see Cary et al., 2020; Jimenez et al., 2019; Lin et al., 2004). This can result in underrepresented minorities missing out on other developmental opportunities and can lead to burnout and lower retention of minority members. A 2017 study also discussed how underrepresented minority faculty members faced pressure to take on additional duties, such as mentoring or participating on diversity committees. As these commitments were not job requirements, faculty members either became overburdened with responsibilities if they maintained these commitments or were viewed as failing to perform up to standards if they prioritized these commitments over other work (Zambrana et al., 2017). These articles highlight the need for increased flexibility for staff members balancing workplace DEI commitments with their explicit job duties. Ruth Enid Zambrana and colleagues (2017) recommend that institutions recognize diversity commitments as essential functions of faculty members’ jobs to decrease workload burden on these staff members.

Offering access to ongoing job skills trainings can help increase retention of diverse employees. Increasing access to job skills trainings was highlighted in several articles as important for the retention of women and minorities (Gilliss, Powell, and Carter, 2010; Annabi and Lebovitz, 2018; Trauth, Quesenberry, and Huang, 2009). Training was also highlighted as important for women in fast-changing fields, such as IT, as they might feel that they have fallen behind on current practices after taking time off to start families or raise children (Annabi and Lebovitz, 2018; Trauth, Quesenberry, and Huang, 2009).

Mentoring and support networks can help improve retention. Another promising practice for increasing retention of women and minorities highlighted in the literature is increasing access to mentoring and networking opportunities to promote career development. This is discussed above but is included here to highlight benefits for retaining talent. Although access to career development opportunities, including mentoring, is helpful, several articles noted the importance of women and minorities having access to mentors with similar backgrounds while also noting that this might be difficult because of a lack of senior members with similar credentials in the field of work (see Trauth, Quesenberry, and Huang, 2009, and Salvucci and Lawless, 2016).

ERGs’ importance in fostering inclusive organizational cultures is discussed above, but they can
also aid retention. For example, one article pointed out that ERGs allow employees to engage with others with similar backgrounds, which allows members to share experience and increases retention (Welbourne, Rolf, and Schlachter, 2017).

All the articles reviewed for this section emphasized the need for shifting institutional culture for diversity to increase retention. How this should be achieved is not specifically articulated in these articles. However, all the recommendations discussed in this section, such as creating ERGs or promoting mentoring, can be viewed as methods to shift institutional culture toward embracing diversity.

**Conclusions and Implications for the Department of the Air Force**

This research was conducted to aid DAF’s strategic focus to build a more diverse, equitable, and inclusive workforce. We found several promising practices employed by private organizations and bolstered by academic literature that could assist that effort.

First, organizations begin by defining relevant concepts to provide a common foundation to build on to create a more-inclusive culture and improve their DEI talent practices. The organizations we interviewed also embraced certain practices, such as having a clear, public organizational strategy and oversight structures to ensure effective administration of policies. Organizations have taken a broad approach to outreach and recruiting, often partnering with nonprofits to support education from the elementary school level and provide internships and fellowships. They have also settled on such common practices as sponsoring ERGs and creating inclusive mentoring and professional development programs that have helped women and minorities be promoted to the next level. There also seems to be a trend toward including more voluntary DEI training, which might be more effective than mandatory trainings in certain circumstances. These practices have some support in the literature for their effectiveness; however, more research is needed.

Some of the practices identified might already be in place in the DAF, whereas others might be difficult to implement in a military setting or require statutory changes. However, there could still be opportunities to learn from private-sector DEI practices. For example, although the DAF does have internal councils meant to drive policy implementation, the DAF could take the additional step of ensuring that these councils include human capital management experts. There might be an opportunity for DAF DEI and force management offices to institute an external advisory board of DEI and civil rights experts who could provide ongoing expert advice on practices to recruit and retain diverse talent. It would still be the responsibility of DAF leadership, and Congress, to best tailor promising practices for a military environment.

Private-sector companies are constantly assessing how to better measure progress and the effectiveness of their DEI practices. Current measures tend to focus on assessing demographic changes and participation in certain events and using surveys to evaluate employee perceptions of an organization’s culture. Prior research suggests that diversity initiatives fail because they often lack evidence for their effectiveness. The DAF has an opportunity to develop relationships with private-sector partners across sectors to better understand what measures of effectiveness are used now and how to increase the sophistication of future metrics.

It is worth noting that none of the practices discussed, nor those that DAF is already carrying out, are a panacea. They might also have unintended consequences. In a review of common diversity initiatives, Leslie (2019) summarizes these potential unintended consequences, including when a DEI initiative backfires, shows false progress, negatively affects non-DEI initiatives, or even has positive effects for non-DEI initiatives without affecting the DEI goals. Leslie’s research went further to note that the most-commonly used measure to gauge DEI initiative success—increased representation—is insufficient; she suggests measuring engagement, extrinsic diversity motivation, climate perceptions, and other outcomes. That is, DEI program effectiveness should be considered holistically from inception through administration.
Appendix A

In this short appendix, we provide additional details on our methods for selecting organizations to interview and conducting the literature review.

Interviewee Selection

We identified four well-known organizations that annually list their selections for top companies for DEI, all of which use slightly different methods: Forbes’ America’s Best Employers for Diversity, DiversityInc’s Top Companies for Diversity List, Fortune’s Best Workplaces for Diversity, and Refinitiv’s Diversity and Inclusion Index.\(^8\) Forbes partners with a survey company to ask 50,000 Americans to recommend companies with at least 1,000 employees that they believe are most dedicated to DEI and examines board and executive diversity as well as diversity and inclusion initiatives. DiversityInc evaluates companies based on diversity metrics, talent programs, workplace practices, supplier diversity, philanthropy, and leadership accountability measures gathered from companies that request to participate in its annual assessment. Fortune analyzes feedback from a 60-question trust index survey of employees at companies with more than 1,000 people about their experiences in workplaces as well as demographic diversity of organizations' overall workforce, senior leadership, and boards, taking into account industry trends. To develop its ranking, Refinitiv collects information on 24 separate metrics, including demographic diversity, flexible working hours, access to day care services, and internal promotion measures and career development processes.

At this stage, we also selected several defense or aerospace organizations, some of which did not appear on the lists discussed above, but which might have been more comparable to the DAF because they draw from similar talent pools. One such organization, Boeing, was included in our original contact list, although others were included later as outreach to companies recognized as being top organizations for diversity proved difficult. Boeing appears on two of the lists but fell outside the top 50 in one list. The aerospace organizations we reached out to were recognized for their DEI practices in the fuller Forbes ranking but did not meet our initial criteria of appearing on at least two lists.

Several organizations we identified either declined to be interviewed for this project or were nonresponsive after multiple attempts at contact. In total, we contacted 22 companies and were able to interview seven.

Literature Review


Our initial search yielded 1,093 articles. We reviewed titles and abstracts to screen for relevance and ensure studies addressed proper populations (adults in the workforce). Additional exclusion criteria included, but were not limited to, articles on noncareer-specific diversity (e.g., students, residen-
cies, and internships), articles on disparities and equity in healthcare, non-English literature, behaviors of diverse populations outside workplace settings, guides for underrepresented racial and ethnic minority groups in specialized areas, population performance, and qualitative studies on niche fields with small samples of interviewees. The exclusion check left the team with 193 articles to review. We then further reviewed each piece of literature for identified practices that effectively promote DEI practices in the workplace, whether that was in an organization or across an occupational career field. We identified 51 articles that met the aforementioned criteria and addressed promising practices. These were typically lessons learned after a policy change, organizational change, or program implementation. It is important to note that most articles were industry specific (e.g., nursing, biomedical sciences, law enforcement, and university faculty), but we identified several reviews of best practices as well. To the extent possible, we then categorized the articles by their place in the talent management life cycle (e.g., recruiting and hiring, professional development, and retention).

Notes
1 ERGs might also be referred to as business resources groups, affinity groups, team member networks, diversity networks, or team member networks.

2 Prior RAND research (see Marquis et al., 2008) in this space collected best DEI practices based on a review of academic literature and comparing them to practices adopted by private organizations identified as having the best human resources or best diversity practices. Jefferson P. Marquis and colleagues (2008) noted at the time that the organizations they interviewed conducted a variety of “best” diversity-related initiatives but found the evaluation picture “murkier.” The authors said that a more-scientific approach to diversity management would require more-detailed analysis. The authors also noted that although “best practices may contribute significantly to achieving diversity, they are not a magic bullet” (Marquis et al., 2008). This effort seeks to document not only diversity practices but also equity and inclusion practices currently in place in private-sector organizations and identify which had empirical support in academic literature.

3 We asked representatives whether their organization has a governance board or other organizational body that focuses on issues of DEI. Because of time constraints, we were not able to ask this of one organization, so this section reflects findings from the other six organizations included in the study.

4 The question about training was asked in the context of talent management processes (i.e., training and development of employees on the job), but the nature of the conversations meant that it was universally interpreted as DEI-specific training.

5 See CyberPatriot, 2013, for more detail.

6 See Catalyst, 2018, for more detail.

7 The DAF internal councils are the Air Force Executive Diversity & Inclusion Council and Air Force Diversity & Inclusion Action Group established in Air Force Instruction 36-7001, 2019.

8 Refinitiv’s list included companies from 24 countries. We limited our selection to companies based in the United States.

9 Not all these characteristics applied to all identified organizations. They were instead used as a point of comparison to guide outreach priorities.
References


About This Report

The research reported here was commissioned by DAF-A1 and conducted within the Workforce, Development, and Health Program of RAND Project AIR FORCE as part of a fiscal year 2021 project, titled “Data-Enabled Talent Management Through Targeted Benchmarks, Best Practices, and Partnerships.”

RAND Project AIR FORCE

RAND Project AIR FORCE (PAF), a division of the RAND Corporation, is the Department of the Air Force’s (DAF’s) federally funded research and development center for studies and analyses, supporting both the United States Air Force and the United States Space Force. PAF provides the DAF with independent analyses of policy alternatives affecting the development, employment, combat readiness, and support of current and future air, space, and cyber forces. Research is conducted in four programs: Strategy and Doctrine; Force Modernization and Employment; Resource Management; and Workforce, Development, and Health. The research reported here was prepared under contract FA7014-16-D-1000.

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