



Activating Talent in the Public Sector

The STAR Mobility Compass



Opportunity
@Work.

Introduction

Putting skills to work for the public good.

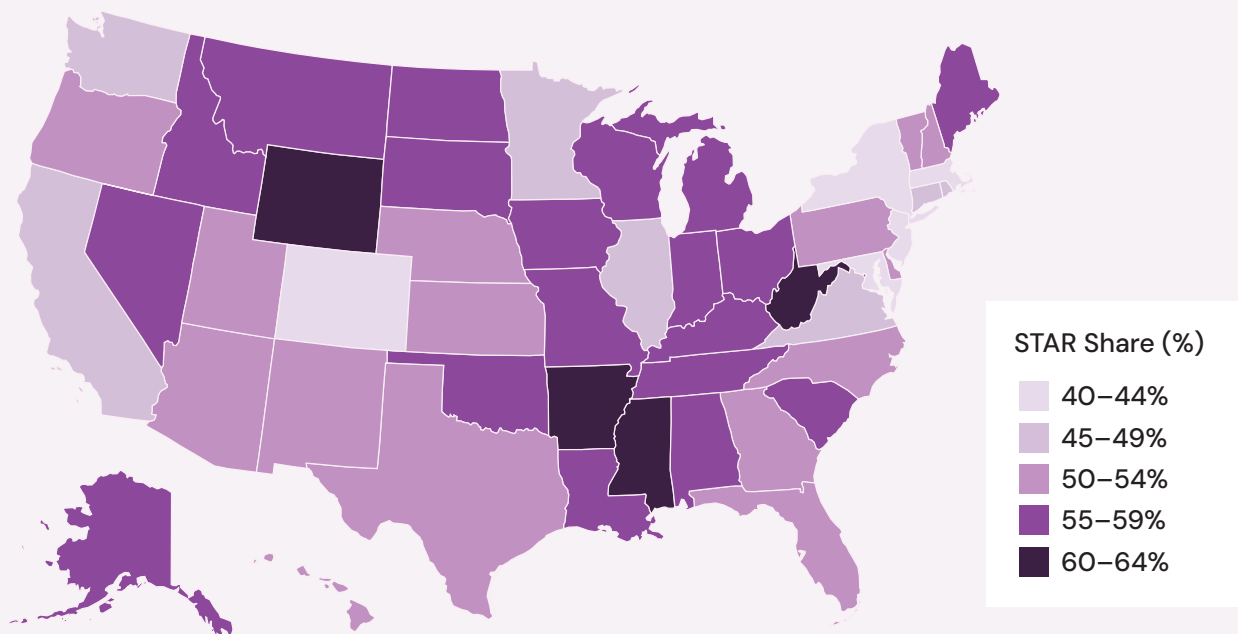
A government's ability to deliver essential services depends directly on the strength of its workforce. The public sector is one of the nation's largest employers, employing more than 15% of workers in diverse roles ranging from child care workers to software developers. In the aftermath of the 2020 pandemic, state and local governments struggled to fill critical positions and lagged behind the private sector in returning to pre-pandemic hiring levels.¹ This slow recovery strained service delivery and operations, with negative impacts for constituents.

The persistent vacancies began with the Great Recession and were intensified by the pandemic. These challenges are compounded by the public sector's perceived reliance on college degrees as a

means to screen qualified job candidates. Research revealed that public sector roles are more likely to require a degree than private sector roles.² Currently, 59.2% of state and local employees and 51.1% of federal workers hold bachelor's degrees, compared to 39.4% in the private sector. Degree requirements limit public sector access to over 70 million STARs — workers who are Skilled Through Alternative Routes. STARs have gained valuable skills through community college, certifications, military service, apprenticeships, or on-the-job training, rather than a bachelor's degree. At over half the workforce, STARs represent the full diversity of the U.S. workforce across gender, race, ethnicity, and geography, forming the backbone of our economy (Figure 1).

FIGURE 1. STARS ARE THE MAJORITY OF THE WORKFORCE ACROSS THE U.S.

Over 50% of workers in most states are STARs.



Source: Opportunity@Work analysis of the 2023 1-year American Community Survey (ACS), IPUMS.
Note: This map does not include the District of Columbia, where the share of STARs is 20%.

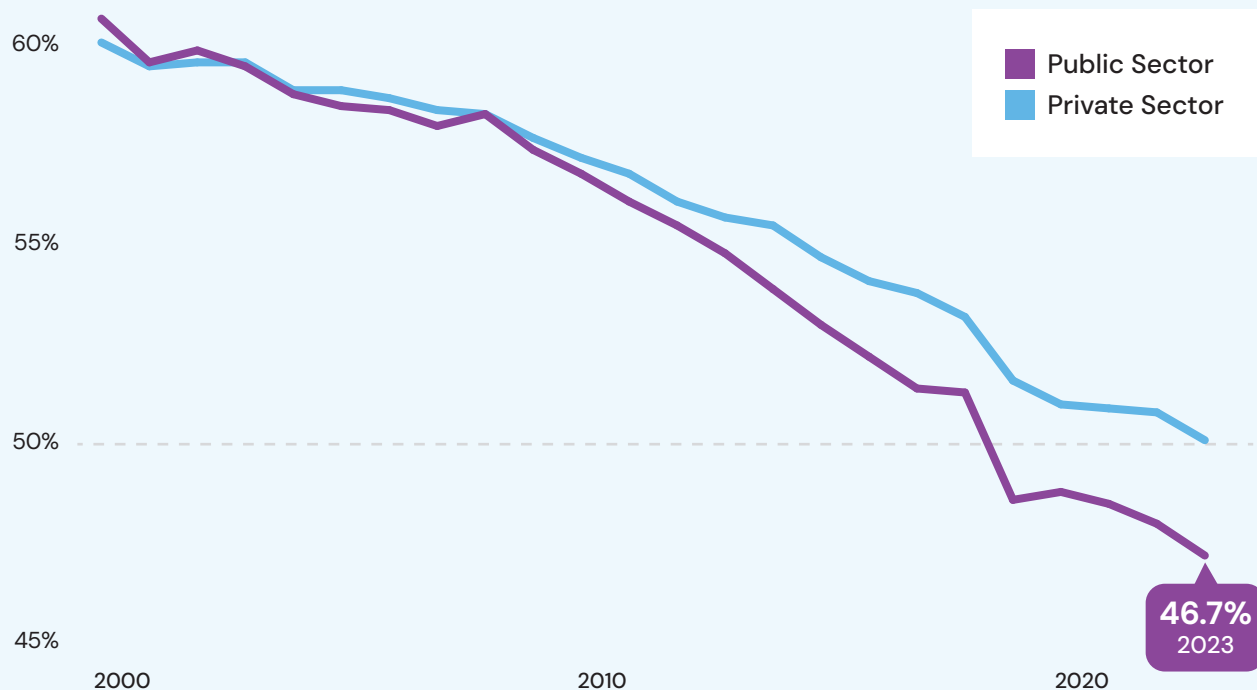
Over the past 20 years, STARs have seen their access to good-paying public sector jobs, like managers and compliance officers, diminish. While the public sector added more than 2.5 million good-paying jobs during this time, the share of STARs in these roles has declined even though STARs have historically held these jobs. This decline occurred in both the public and the private sector, but the decline was sharper in the public sector (Figure 2). STARs are now underrepresented in the public sector jobs that offer the most opportunity.³ This trend has contributed to declining economic mobility among STARs while state and local governments experience increased hiring challenges. This disconnect has negative consequences for the health of public services and the vitality of the U.S. labor market.

The public sector is taking action to prioritize skills.

In 2022, recognizing the vast, overlooked potential of the STARs in their state, the [State of Maryland](#) issued an administrative order to remove four-year degree requirements from thousands of state jobs. The [State of Tennessee](#) quickly followed suit, passing a law that prohibits state agencies from requiring a bachelor's degree for employment unless strictly necessary. The movement gained momentum with Utah, Pennsylvania, and others examining their hiring practices. The [State of Colorado](#) issued several executive orders to transition towards skills-based hiring, including the reduction of degree requirements and increased work-based

FIGURE 2. STARS HAVE BEEN LOSING ACCESS TO GOOD-PAYING JOBS.

STAR share of good-paying jobs in the public sector has declined from over 60% in 2000 to only 46.7% in 2023.



Source: Opportunity@Work analysis of the 2000 Decennial Census Survey and the 2001 to 2023 1-Year ACS, IPUMS.

learning programs. In total, [more than 30 states issued executive or legislative actions](#) that laid the groundwork for a skills-based approach to hiring and advancement.⁴

These actions had an impact. Our analysis of the first 18 states to take executive or legislative action showed that they opened more good-paying jobs to STARs than they had in the year prior to their commitment. In doing so, they moved closer to a public workforce that reflects the communities it serves and has the skills it needs to deliver quality services to constituents (For more on the impact of state actions, see the [Public Sector Impact Report](#)).

Skills form the foundation of a resilient and future-ready public sector workforce.

In an era of tightening budgets, advancing artificial intelligence, and rising demands, skills-based talent strategies remain critical for governments to effectively identify, enhance, and deploy the skills necessary to deliver quality public services. During lean fiscal times, focusing on skills becomes

even more crucial, allowing governments to be efficient and strategic with their resources. As technologies like AI rapidly transform the nature of work and create new-to-world jobs, skills-based talent management allows for quicker adaptation and reskilling. Putting skills first opens the public sector talent pool to STARs and also creates diverse opportunities for all workers to demonstrate their skills.

A focus on skills ensures that the public sector workforce remains the government's greatest resource. Continued advancement of skills-based talent practices can help state and local governments fill urgent staffing gaps and improve service delivery. It can also open pathways to economic mobility for millions of STARs, allowing them to compete for jobs for which they qualify based on skills. Our [STAR Mobility Compass](#) points to strategies that the public sector can leverage to create broader, more sustainable talent pipelines, retain skilled workers, and connect STARs to in-demand roles that match their skills.



**Unlock talent.
Strengthen government.
[Join the STARs Hub.](#)**

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The STAR Mobility Compass

The STAR Mobility Compass provides a realistic approach to boosting STAR mobility in the public sector.

The STAR Mobility Compass shows that it is possible to make significant improvements to STAR mobility through small shifts in hiring, compensation, and job design that prioritize skills. It identifies three ways to leverage skills in the U.S. labor market to propel an additional 10 million STARs into higher-paying jobs with greater mobility potential in the next five years. The public sector has a key role to play in advancing this vision. Across state and local governments, small but meaningful changes in hiring, advancement, and retention practices can contribute to this national trend.

1. Increase STARs' share of key public sector jobs:

Opportunity@Work has identified hundreds of occupations that unlock economic mobility for STARs by offering access to skills-based pathways and higher wages. Of these occupations, 30 target jobs have the greatest potential to impact STAR mobility within the public sector. If state and local government employers steadily increase access and employment to STARs in these roles, they could fill 431,000 more good-paying public sector jobs with STAR talent by 2030, compared to current trends.

2. Compensate STARs for valuable skills in common low-wage public sector jobs:

Skills required in common low-wage roles are similar to those found in higher-wage public sector roles. Barriers in the labor market inhibit mobility and fail to reward skilled workers in these essential roles. We identify five low-wage, highly-skilled, and essential roles where raising wages in the public sector can increase retention and improve the economic standing of over 1 million STARs.

3. Ensure STAR access to higher-wage, new-to-world public sector jobs:

Technological advancements such as AI bring about innovation, sparking the creation of new-to-world jobs. By 2030, nearly 800,000 new-to-world public sector jobs⁵ are predicted to pay at least middle wages. With intentional talent management strategies, at least 200,000 of these roles can be filled by STARs in state and local employment alone.

Skills-based talent strategies allow all workers to demonstrate their abilities by highlighting the skills they bring to a role. Using these three levers can further embed skills-based practices, strengthening the public sector workforce while creating mobility opportunities for more than 1.5 million STARs nationwide.

Increase STARs' share of key public sector jobs.

30 public sector jobs provide opportunities for over 400,000 STARs.

Public sector employers can generate meaningful economic mobility for their communities with strategic talent management in just 30 roles.

Opportunity@Work analyzed over 300 jobs to which STARs have some amount of access and are meaningfully connected to skills-based mobility pathways. Among those, we identified 30 jobs in the public sector that hold significant potential for STARs due to their current representation of STARs and links to other higher-paying jobs.⁶ A gradual increase in STAR placements in these roles by state and local governments over the next five years could yield 431,000 more STARs employed in good-paying public sector jobs by 2030 compared to current trends (Figure 3, Appendix Table 1). And this is just a baseline. As public sector employers seek to fill roles and retain talent, they should consider STARs in these 30 occupations and beyond.

How can public sector employers shift their talent management practices?

STARs both inside and outside the public sector are working in roles that position them for the 30 target jobs.

State and local governments have an opportunity to harness STAR talent to meet their staffing needs. STARs are demonstrating the skills needed for in-demand roles, but are often excluded from them by unnecessary degree requirements. Public sector employers can remedy this issue with a stronger focus on skills.

While STARs represent more than 50% of the workforce, they comprise only 40% of public sector workers in the 30 target occupations. This gap is related to an overreliance on degree requirements, illustrated by the public sector's approach to managerial and accounting roles. Since 2021, the public sector has posted over 150,000 jobs for positions like program coordinators and project managers. Most of these listings included a degree requirement, limiting STAR access. Similarly, almost 60% of public sector job postings for accountants and auditors, in the past four years, required a bachelor's degree or more (Appendix Table 2).

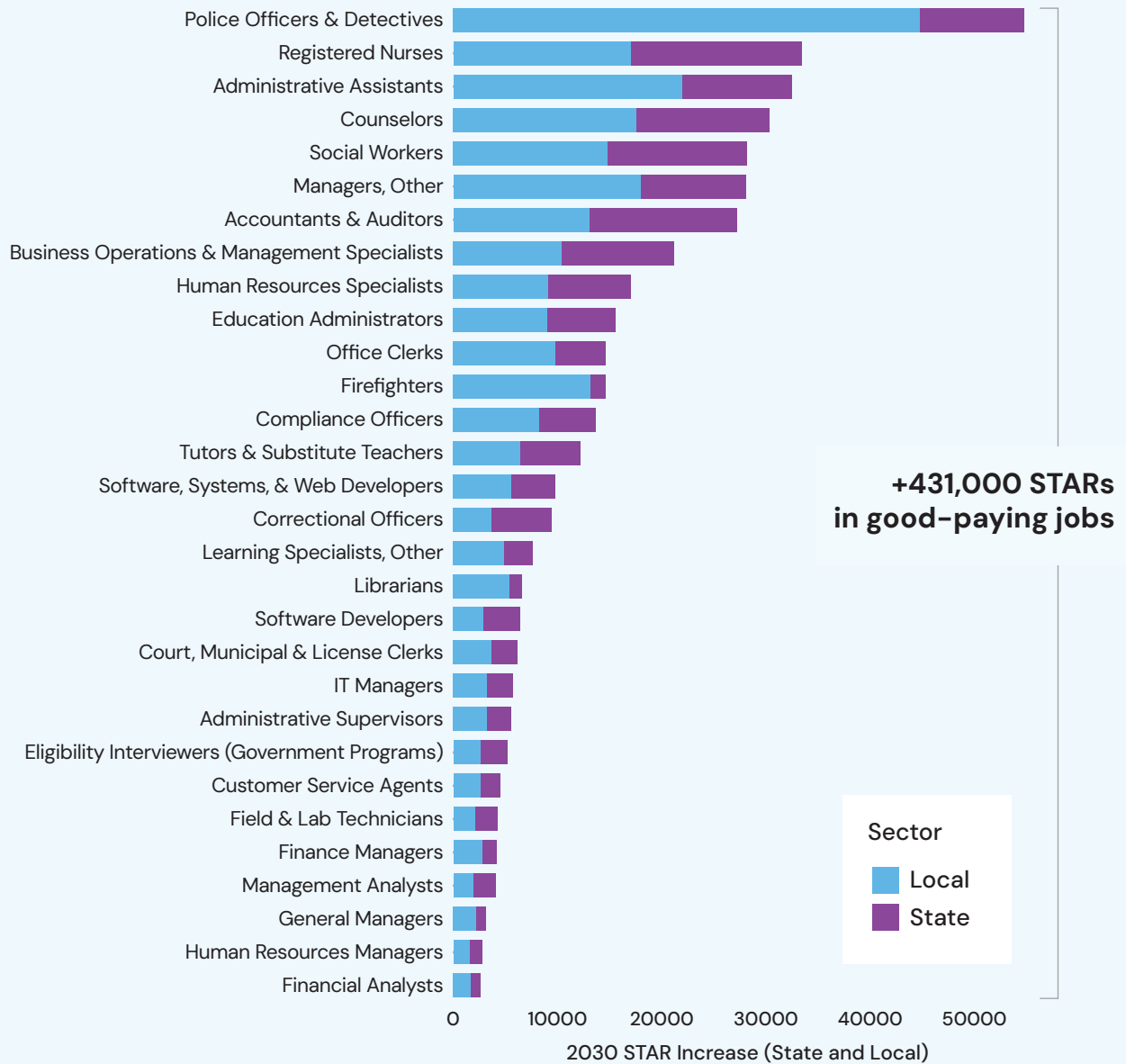
These degree requirements screen out STARs who demonstrate the skills needed for these roles through experience in skill-similar positions. Consider the role of Food Service Supervisor, a job that requires skills such as communication, leadership, management, and coordination.

"The paper ceiling stops a lot of really well-qualified people from applying for those jobs or getting those jobs."

—Rob Sand, Auditor of the State, Iowa⁷

FIGURE 3. 30 TARGET JOBS CAN BOOST STAR MOBILITY IN THE PUBLIC SECTOR.

State and local agencies can gradually increase STAR advancement in these roles over the next five years, placing 431,000 more STARs in good-paying jobs compared to current trends.



Source: Opportunity@Work analysis of the 2000 Decennial Census Survey and the 2001 to 2023 1-Year ACS, IPUMS, with current trends and hire rate increases projected into 2030, see methodology.

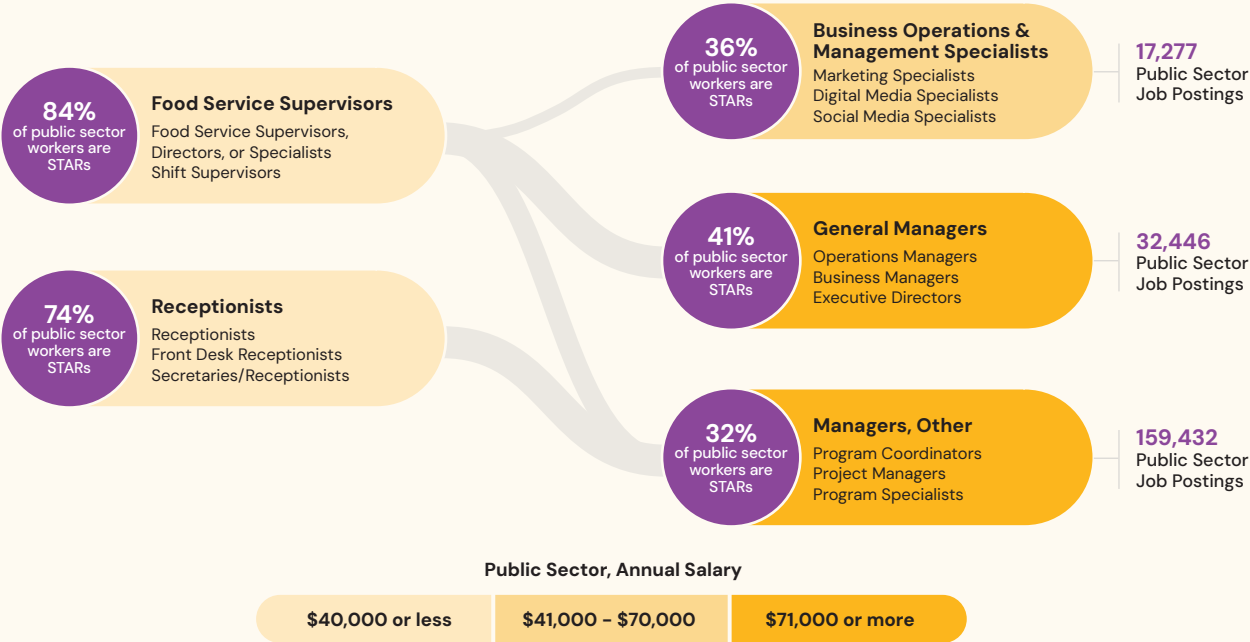
These are the same skills needed in office-based management positions, and over the past 10 years, more than 25,000 STARs in the U.S. have made such transitions into three common managerial roles (Figure 4). This skill-based pathway, and others like it, represent sources of STAR talent in both the public and private sectors that could fill important public sector roles.

Unnecessary bachelor's degree requirements also screen out STARs who can demonstrate their readiness with other credentials, such as an

associate's degree. When the [Office of the State Auditor in Iowa](#) recognized a shortage of trained auditors in the state, they began to source hires from local community colleges. The State Auditor recognized that the two-year accounting credential, with the requisite coursework in public sector accounting, equipped workers with the skills needed for the position. Having now made several hires from community colleges, he observes that there has been no negative impact on the quality of work performed.

FIGURE 4. THE PUBLIC SECTOR CAN SOURCE STARs ALONG PROVEN CAREER PATHWAYS.

STARs are overrepresented in public sector low-wage roles but have the skills to perform in higher-wage roles that the public sector is seeking to fill.



Source: Opportunity@Work analysis of skills and national occupational transitions using the Occupational Information Network (O*NET) 29.1 and the 2015 – 2024 Current Population Survey, Annual Social and Economic Supplement (CPS ASEC). Wage groups and STAR share of public sector occupations were determined using the 2023 1-year ACS and top titles and counts from the 2021-2024 Lightcast job postings data from the public sector.

[Join the STARs Public Sector Hub](#) to get early access to resources like, the Government as Employer Playbook, to understand how to access job requirements and build skills-based pathways for advancement.

SIGN-UP

Compensate STARs for valuable skills in common low-wage public sector jobs.

Over 1 million STARs work in essential public sector jobs that pay low wages.

Low wage does not equal low skill.

In 2023, there were over 2.4 million workers in public sector, low-wage occupations.⁸ These roles are essential to the delivery of quality services, and while low-wage, they are not low-skill. STARs in these roles deploy skills that are highly similar to higher-wage roles in the public sector.

Teaching assistants, for example, manage classrooms and provide one-on-one support to students under the guidance of a licensed educator. This requires specialized skills in lesson planning, child development, and classroom management, much like Early Childhood Teachers who earn nearly \$19,000 more per year in the public sector.⁹ Teaching assistant roles experience high turnover¹⁰ in the public sector, with over 61,000 job postings in 2024 alone.¹¹

We identify four other common low-wage roles in the public sector that are similar to higher-wage roles and employ significant numbers of STARs. They include, in addition to the Teaching Assistants, Janitors &

Custodians, Chefs & Cooks, Childcare Workers, and Food Service Workers (Figure 5). Together, these five jobs employ approximately 1 million STARs across state and local agencies. An effort to compensate them for the true value of their skills by raising wages would likely reduce turnover and represent a crucial step towards ensuring that the public sector pays its employees a living wage.

States and localities have tools to raise wages and boost the economic mobility of their constituents.

In times of tight budgets, raising wages is challenging, but cities and states are finding ways to increase wages for low-wage but essential roles.

In North Carolina, Governor Cooper and the NC Department of Health and Human Services (NCDHHS) are combating the loss of child care centers with \$67.5 million in funding for Child Care Stabilization Grants. This latest round of funding continues efforts

“North Carolina relies on high-quality early childhood education and child care to support children’s healthy development and learning, allow parents to work and keep businesses running.”

—Governor Roy Cooper, North Carolina

originally initiated in 2021. The support from these grants is two-fold: (1) support for childcare workers by providing better wages and benefits, and (2) support for community families by reducing the cost burden of child care.¹²

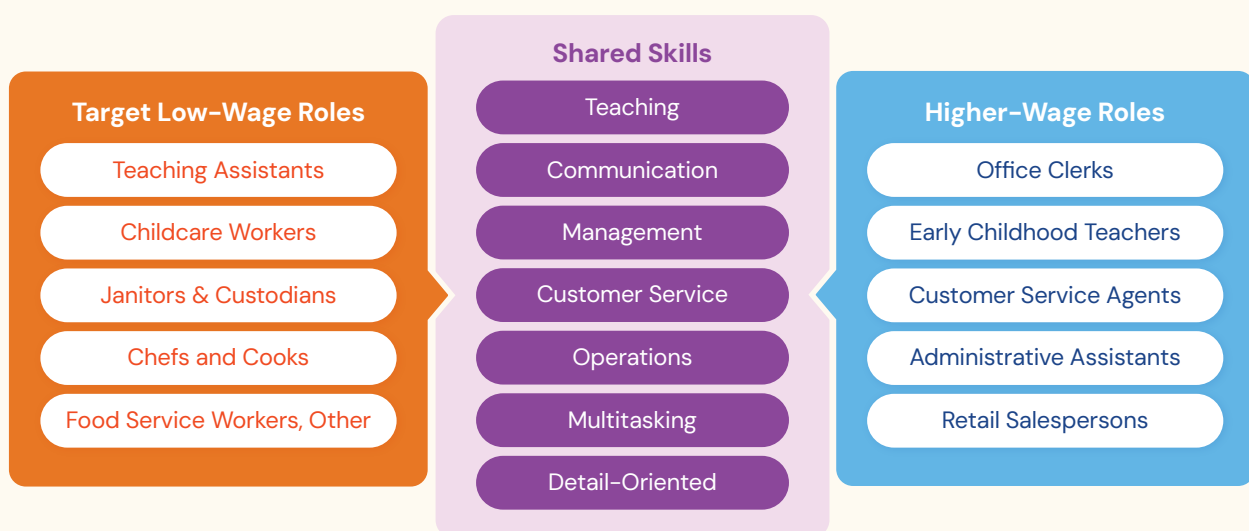
Post-pandemic, other states have also taken action to raise wages to combat retention and recruitment

difficulties. For example, New Mexico and Virginia increased wages by 8 and 10%, respectively, for the fiscal year 2023.¹³

The STAR Mobility Compass demonstrates that such efforts, targeted specifically at critical low-wage jobs, could impact millions of STARs.

FIGURE 5. OVER 1 MILLION STARS IN FIVE LOW-WAGE ROLES DEMONSTRATE SKILLS IMPORTANT IN HIGHER WAGE POSITIONS.

Workers in skill-similar roles earn over \$10,000 more per year when compared to workers utilizing the very same skills in five low-wage public sector occupations.



Source: Opportunity@Work analysis of skills and national occupational transitions using the O*NET 29.1 and the 2015 - 2024 CPS ASEC. Common skills were gathered from 2024 national Lightcast job postings data.

[Sign up for the STARs Public Sector Hub](#) to join communities of practice and peer cohorts that provide real-time problem solving with like-minded government leaders on topics of high importance.

SIGN-UP

Ensure STAR access to higher-wage new-to-world public sector jobs.

STARs are well-positioned to fill good-paying, new-to-world jobs in the public sector.

Technological advancements lead to job transformations and innovation.

As AI and other emerging technologies change the way we work, some jobs will disappear and other, new-to-world jobs will emerge, just as jobs like AI Operations Manager and Remote Experience Designer have emerged in the past five years.¹⁵ Skills-based pathways are likely to change as AI is used to replace some skills and augment others. Experts disagree on the impacts, but early research on AI shows that core skills are likely to be analytical thinking and leadership, as well as technological literacy and a learning mindset¹⁶ — skills demonstrated by millions of STARs today across occupations and industries. As the public and private sector fills these new roles, employers simply cannot afford to overlook half the workforce. Thinking critically about the minimum qualifications for these new roles will be integral to ensuring that STARs have equal access to them.

The public sector can meet the demands of a changing labor market with STARs.

Over the next five years, nearly 800,000 new-to-world, good-paying jobs are projected to emerge

in the public sector. If STARs fill just 35% of these new-to-world roles in state and local employment, we could see an increase of nearly 200,000 STARs in good-paying jobs. If STARs fill 50% of them, proportionate to their numbers in the workforce, this number rises to nearly 400,000. In short, if the public sector approaches this changing labor market with an eye towards STAR-inclusion, STARs will see at least 200,000, if not more, good-paying opportunities.

“By expanding AI education, investing in workforce development and encouraging innovation, we [...] are creating a pathway to dynamic careers in AI and cybersecurity for Mississippians. These are the in-demand jobs of the future — jobs that will change the landscape of our economy for generations to come.”

—Governor Tate Reeves, Mississippi¹⁴

[Become an institutional member of the STARs Public Sector Hub](#) for your state or local government to receive access to technical assistance and implementation support to become more efficient and responsive to changing talent needs through skills.

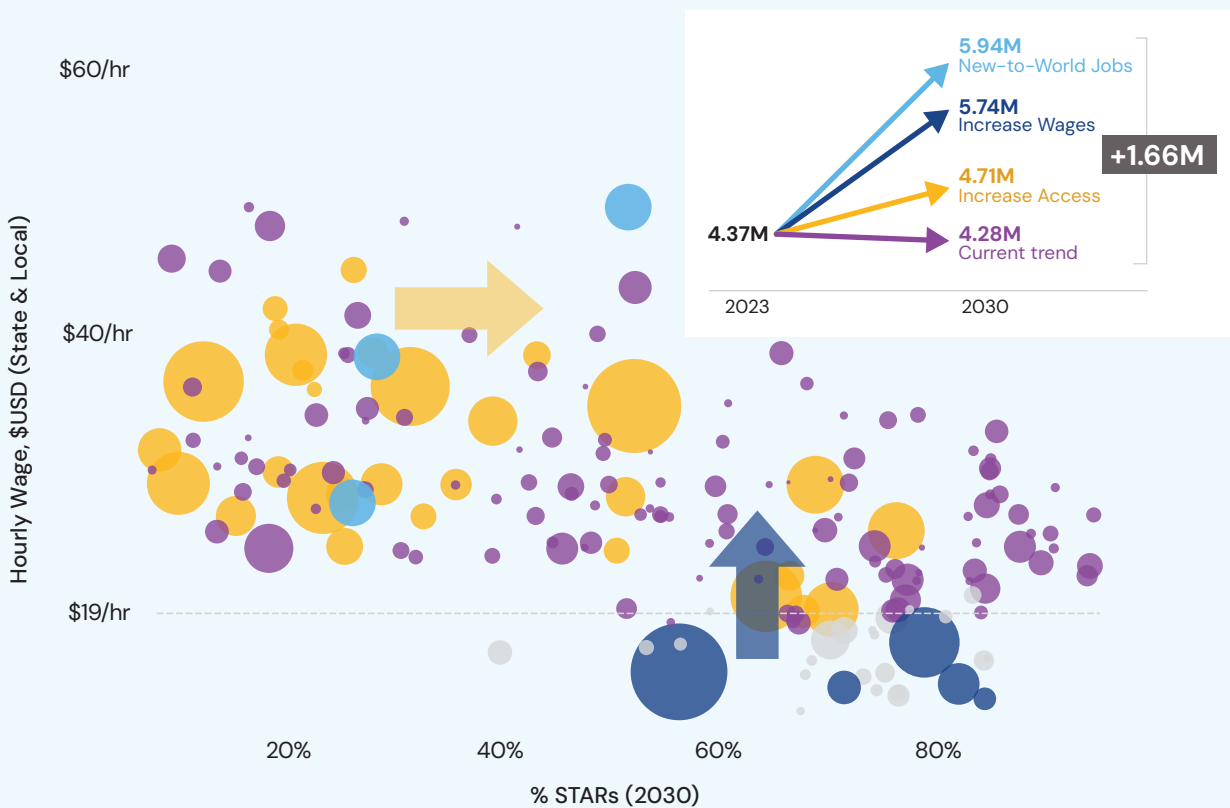
SIGN-UP

State and local governments can support the mobility of over 1.5M STARs in the next 5 years.

If current trends continue, STARs will lose access to good-paying public sector jobs. Through skills-based talent management, the public sector can increase access for all workers while also improving

the economic standing of STARs by (1) increasing access to good-paying roles, (2) increasing wages of essential positions, and (3) ensuring STAR placement in new-to-world positions.

FIGURE 6. PUBLIC SECTOR MOBILITY COMPASS OPENS OPPORTUNITIES FOR STARs.



Source: Opportunity@Work analysis of the 2000 Decennial Census Survey and the 2001 to 2023 1-Year ACS, IPUMS, with current trends and hire rate increases projected into 2030 for the public sector, see methodology. The bubble plot shows 185 occupations represented by state and local STAR shares (x-axis), wages (y-axis), and total workers (bubble size). Occupations were limited to those with at least 10% STARs nationally and 7,000 workers in the public sector.

Skills move the public sector *forward*.

Taking the next steps

Reworking long-held talent management practices is hard work, but it can be done. Numerous states have already been showing the way.

Consider these key steps:

- **Assess job requirements and update minimum qualifications:** Reevaluate degree and licensure requirements that may be getting in the way. Through the leadership of the [Louisiana State Civil Service \(SCS\)](#), the state removed barriers like outdated pre-employment exams and degree requirements—replacing the old requirements with a framework grounded in the competencies needed to succeed in state government. In January 2025, SCS updated the minimum qualifications (education and experience) for all job specifications to remove degree requirements where possible.
- **Review requirements of more senior roles in a job series:** Public sector positions are often classified within a job series to determine salary and advancement. Classifications are based on levels of responsibility, experience, and often degree requirements. It is common for senior-level roles to require degrees even when the more junior level roles in the same series do not. Opportunity@Work’s previous research in [Iowa with the State Office of the Auditor](#) found that the more senior the role, the less relevant the degree. While this may seem counterintuitive, most senior-level roles require on-the-job experience and training; and often, a college degree is not an adequate substitute for the skills acquired through numerous years spent in the workforce.
- **Expand internal pathways:** Apprenticeships, service year programs, and other work-based learning programs can serve to expand access to jobs and promote internal mobility as well. [The State of Colorado](#) is transforming its workforce by shifting to skills-based hiring and promoting work-based learning and apprenticeship programs. Colorado has dedicated resources to designating [Qualified Apprenticeship Intermediaries \(QAI\)](#), which are organizations operating in Colorado that play a crucial role in expanding or enhancing the state’s Registered Apprenticeship System through their support of career seekers, apprentices, employers, and Sponsors. The Qualified Apprenticeship Intermediaries initiative started with 35 designated organizations and have since added [an additional 12](#). Many of these QAIs serve public sector agencies in the state by helping them meet its goal of increasing the number of registered [apprenticeship](#) programs in state agencies by 50% by June 2024.



- **Broaden recruitment efforts:** Your existing outreach programs may not be meeting the need. Consider new targets for outreach like local community colleges and training programs. [The State of Arizona](#) has implemented no-degree job fairs with a renewed focus on opportunities for those who have gained skills through military service, community college, training programs, partial college completion, or on-the-job experience.



- **Reexamine your application review and assessment processes:** Your application and assessment processes may be inadvertently screening skilled candidates out. [The State of Maryland](#) launched a statewide initiative with BCR Cyber and the state's 16 community colleges to use hands-on training to strengthen cyber talent pipelines. Students complete a 40-hour asynchronous course, an eight-hour experiential capstone project, and a rigorous certification exam, which is intended to prepare them for immediate employment. The curriculum is co-developed with employers like Booz Allen Hamilton, Northrop Grumman, and the State of Maryland to reflect evolving skill needs. In addition, the utilization of a cyber range not only provides experiential learning opportunities for students, but it also provides a simulation experience for potential employers to assess the skills of the students in similar types of situations as they would face on the job.
- **Address systemic barriers:** Hiring practices are just one of the barriers STARs face in the workforce. As illustrated in Opportunity@Work's STAR [Barriers and Breakthroughs](#) framework, public sector employers can support mobility through programs, policies, and practices that support family and financial stability, community networks, job quality, inclusive workplaces, as well as transportation and job access. [The City of Philadelphia](#) launched the City College of Municipal Employment (CCME) to create new, skills-based career pathways into municipal service. The CCME includes professional development courses, technical training, and work-based learning experiences, with access to wrap-around supports like — paid job experiences, achievement stipends, navigator & success coaching, computers on loan, and coverage of certification fees — to increase successful completion.

How to get involved

Sign up and Apply

- **Sign-up** for the [STARs Public Sector Hub](#) to access insights to turn workforce data into action, draw from ready-to-use resources, playbooks and case studies, and join a community of government leaders implementing cutting edge practices.
- **Reach out to** Opportunity@Work's Public Sector team at publicsector@opportunityatwork.org to learn how you can get additional support with implementing skills-based practices.
- **Participate in or view** the Public Sector STAR Mobility Compass webinar to learn more about the Compass and other public sector employers who are implementing similar skills-based talent practices.
- **Advocate within your agency to participate** in an upcoming cohort with other leading government institutions who are working to transform their talent management practices.

Spark Conversation

- **Host a lunch-and-learn** or coffee chat to discuss this report with your team.
- **Invite a STAR to share their story** at a staff meeting or in a newsletter.
- **Ask your HR team** how STARs hiring shows up in your current practices.

Share and Spread Awareness

- **Share this report** with colleagues, human resources (HR) teams, or leadership via email or internal channels.
- **Post a key insight** or favorite data point from this report on social media like LinkedIn or via your intranet with a link to the report.
- **Bring it up** at your next team or staff meeting and discuss what this report means for your agency.

Take Personal Action

- **Review a current or upcoming job posting** and identify ways to make it more skills-focused, rather than degree- or credentials-focused.
- **Offer to pilot a skills-based hiring process** for your next hire.
- **Commit to mentoring** or sponsoring a STAR in your workplace.

Appendix

APPENDIX TABLE 1. 30 TARGET OCCUPATIONS FOR INCREASED STAR ACCESS AND PROPOSED SHIFTS IN STATE AND LOCAL PUBLIC SECTOR AGENCIES.¹

State and Local		2023			2030 ²					
Occupation	Category	Total Workers	STARs	% STARs	Predicted STARs	Predicted % STARs	Boost STARs	Boost % STARs	Increased Access in STAR count	% Increase in STAR share
IT Managers	Destination	53.579	15.562	29.04%	15.531	25.84%	21.2478	35.35%	5.71677	9.51%
Finance Managers	Destination	73.04	21.628	29.61%	22.515	27.63%	26.6636	32.72%	4.14912	5.09%
Human Resources Managers	Destination	33.289	7.844	23.56%	6.572	18.90%	9.34	26.86%	2.7675	7.96%
Education Administrators	Destination	563.352	67.085	11.91%	67.393	11.91%	82.9243	14.65%	15.53167	2.74%
Managers, Other	Gateway	523.383	177.788	33.97%	169.864	31.07%	197.9713	36.22%	28.10775	5.14%
Compliance Officers	Destination	83.309	36.021	43.24%	30.548	35.33%	44.1877	51.10%	13.63938	15.77%
Human Resources Specialists	Gateway	146.118	47.989	32.84%	43.983	28.41%	61.0404	39.42%	17.05747	11.02%
Management Analysts	Destination	35.828	8.308	23.19%	8.126	21.12%	12.1524	31.58%	4.02612	10.46%
Business Operations & Management Specialists	Destination	87.93	31.225	35.51%	22.782	24.76%	43.9551	47.76%	21.17278	23.01%
Accountants & Auditors	Destination	158.55	24.248	15.29%	12.924	7.83%	40.1629	24.33%	27.23888	16.50%
Financial Analysts	Destination	18.909	4.196	22.19%	4.476	22.19%	7.0725	35.06%	2.59664	12.87%
Software, Systems, & Web Developers	Gateway	193.658	75.019	38.74%	82.123	38.74%	91.8652	43.33%	9.74218	4.60%
Software Developers	Destination	48.788	10.739	22.01%	10.142	18.55%	16.5063	30.18%	6.36416	11.64%
Field & Lab Technicians	Destination	56.675	20.601	36.35%	19.045	32.30%	23.2722	39.47%	4.22726	7.17%
Counselors	Destination	320.244	37.96	11.85%	33.21	9.57%	63.531	18.31%	30.32057	8.74%
Social Workers	Gateway	433.437	97.096	22.40%	104.688	22.99%	132.8423	29.17%	28.15446	6.18%
Tutors & Substitute Teachers	Gateway	117.345	31.607	26.94%	29.773	24.99%	41.8942	35.17%	12.12084	10.17%
Librarians	Destination	137.554	18.931	13.76%	20.933	14.91%	27.5214	19.60%	6.58845	4.69%
Learning Specialists, Other	Destination	85.914	12.018	13.99%	16.396	18.85%	23.9963	27.58%	7.60032	8.74%
Registered Nurses	Destination	318.433	84.226	26.45%	69.424	20.47%	102.8932	30.34%	33.46927	9.87%
Firefighters	Destination	283.696	205.111	72.30%	200.516	68.66%	215.0572	73.64%	14.54157	4.98%
Correctional Officers	Gateway	295.901	230.404	77.87%	215.149	76.16%	224.5251	79.48%	9.37569	3.32%
Police Officers & Detectives	Destination	751.851	425.345	56.57%	399.937	51.86%	454.7141	58.96%	54.77695	7.10%
Administrative Supervisors	Gateway	140.089	74.935	53.49%	69.313	51.05%	74.8638	55.14%	5.55092	4.09%
Court, Municipal & License Clerks	Destination	74.477	53.343	71.62%	50.672	66.27%	56.7972	74.28%	6.12502	8.01%
Customer Service Agents	Gateway	101.046	70.549	69.82%	65.821	67.52%	70.3709	72.19%	4.55036	4.67%
Eligibility Interviewers (Government Programs)	Destination	57.947	31.316	54.04%	29.732	50.23%	34.945	59.04%	5.21264	8.81%
Administrative Assistants	Gateway	444.026	306.48	69.02%	286.243	64.09%	318.7851	71.38%	32.54245	7.29%
Office Clerks	Gateway	270.402	195.916	72.45%	182.263	70.14%	196.896	75.78%	14.63327	5.63%
General Managers	Destination	63.86	26.994	42.27%	28.46	42.83%	31.5846	47.53%	3.12454	4.70%

¹ Occupational categories are based on the 2010 IPUMS harmonized occupation coding scheme and a simplified title has been applied to each occupation. Worker counts, including STARs, are provided in 1000s.

² Predicted STARs and % STARs are calculated using the ARIMA model while Boost STARs and % STARs are calculated using the proposed hiring rate increase (see Methodology).

**APPENDIX TABLE 2. PUBLIC SECTOR (STATE, FEDERAL, AND LOCAL)
JOB POSTINGS IN THE 30 TARGET OCCUPATIONS FOR INCREASED STAR ACCESS.**

Occupation Title ¹	2021–2024 Postings ²	% Open to STARS ³	Top Titles ⁴
General Managers	32446	48.0%	Operations Managers Business Managers Executive Directors
IT Managers	6422	41.0%	Directors of Information Technology Chief Information Officers Chief Information Security Officers
Finance Managers	30021	40.4%	Chief Financial Officers Controllers Finance Directors
Human Resources Managers	32012	37.8%	Directors of Human Resources Human Resources Managers Directors of Diversity and Inclusion
Education Administrators	168630	50.6%	Assistant Principals High School Assistant Principals Principals
Managers, Other	159423	47.8%	Program Coordinators Program Specialists Project Managers
Compliance Officers	37904	55.2%	Customs and Border Patrol Agents Transfer Station Operators Compliance Officers
Human Resources Specialists	91194	55.8%	Human Resources Specialists Human Resources Generalists Human Resources Analysts
Management Analysts	29383	52.5%	Management and Program Analysts Program Analysts Management Analysts
Business Operations & Management Specialists	17277	50.9%	Marketing Specialists Social Media Specialists Digital Media Specialists
Accountants & Auditors	59056	41.1%	Accountants Auditors Internal Auditors
Financial Analysts	22078	40.9%	Financial Analysts Financial Management Analysts Fiscal Analysts
Software, Systems, & Web Developers	98208	53.9%	IT Project Managers IT Managers Systems Analysts
Software Developers	24671	51.4%	Software Engineers Application Developers Software Developers
Field & Lab Technicians	26150	70.5%	Forestry Technicians Crime Analysts Evidence Technicians

Occupation Title ¹	2021–2024 Postings ²	% Open to STARS ³	Top Titles ⁴
Counselors	137440	45.4%	School Counselors Counselors Vocational Rehabilitation Counselors
Social Workers	160266	46.7%	Social Workers Case Managers Probation Officers
Tutors & Substitute Teachers	121746	68.2%	Substitute Teachers Tutors Long Term Substitute Teachers
Librarians	20133	31.1%	Librarians Youth Services Librarians Reference Librarians
Learning Specialists, Other	75989	50.4%	Instructional Coaches Instructional Designers Education Specialists
Registered Nurses	171930	75.1%	Registered Nurses School Nurses Public Health Nurses
Firefighters	10827	98.6%	Firefighters Firefighters/Paramedics Lead Firefighters
Correctional Officers	45258	95.7%	Correctional Officers Corrections Officers Detention Officers
Police Officers & Detectives	129171	53.2%	Border Patrol Agents Police Officers Marine Interdiction Agents
Administrative Supervisors	39050	70.4%	Administrative Coordinators Office Managers Administrative Support Coordinators
Court, Municipal & License Clerks	27390	92.1%	Deputy Clerks Court Clerks Driver's License Examiners
Customer Service Agents	40831	88.8%	Customer Service Representatives Customer Service Specialists Contact Representatives/Customer Service Representatives
Eligibility Interviewers (Government Programs)	20609	77.2%	Eligibility Specialists Enrollment Specialists Eligibility Workers
Administrative Assistants	235714	88.7%	Administrative Assistants Secretaries Executive Assistants
Office Clerks	7495	95.1%	Office Assistants Office Administrative Assistants Medical Office Administrative Assistants

¹ Occupational categories are based on the 2010 IPUMS harmonized occupation coding scheme and a simplified title has been applied to each occupation.

² Number of job postings in the public sector in years 2021, 2022, 2023, and 2024. Data from Lightcast job postings.

³ Calculated as the proportion of the 2021 – 2024 postings where the minimum educational requirements did not include a bachelor's degree or higher.

⁴ Titles were ranked based on total posting count from 2021 to 2024 within the public sector for each occupation code.

Methodology

This report adapts methodologies and data used in the national [State of the Paper Ceiling \(SOPC\) report](#). The levers identified in the [STAR Mobility Compass](#) were analyzed through the lens of the public sector. For a more detailed explanation of the methodology, please refer to the section “Methodology Guide” in the appendix of the national [SOPC](#) report.

1. Estimating STARs employed in the public sector:

- a. **Historical trend:** We used the U.S. Census Bureau 2000 Decennial Census and the 1-year American Community Survey (ACS) for years 2001 to 2023 to construct a longitudinal dataset encompassing public sector workers from 2000 to 2023.
- b. **Study population:** The study population was limited to adults aged 25 and older who are in the civilian, non-institutionalized labor force. These criteria exclude active-duty military, residents of nursing homes or correctional facilities, and individuals who are unemployed. This population was further limited to workers currently employed in the public sector in federal, state, or local government. As of 2023, this population includes 22.3 million public sector workers, of which 8.9 million are workers Skilled Through Alternative Routes (STARs). STARs are workers who have at least a high school diploma, or GED, but not a four-year degree.

2. Calculating public sector employment projections, 2030:

- a. **Occupational Projections:** In the STAR Mobility Compass, we used the Bureau of Labor Statistics (BLS) Occupational Employment Projections to estimate annual churn and growth per occupation at the national level and linearly interpolated these projections to the year 2030. For each occupation, the 2030 national occupational counts were scaled to the public sector by using the share of workers per occupation employed in the sector in 2023.
- b. **2030 public sector predictions:**
 - i. To predict the number and share of STARs in each occupation, if current trends continue, an Autoregressive Integrated Moving Average (ARIMA) model was applied to the national 2000–2023 longitudinal dataset as described in the [SOPC](#) report.
 - ii. To apply these predictions to the public sector, the percent difference between the 2023 STAR share and the 2030 STAR share predicted by the ARIMA model was calculated for each occupation. This percent difference was applied to the 2023 public sector STAR share per occupation to estimate the predicted public sector share and count of STARs for each occupation in 2030.

3. Wages:

- a. Median hourly wages were calculated per year for each occupation in the longitudinal public sector dataset using the U.S. Census Bureau 2000 Decennial Census and the 2001–2023 1-year ACS. For each occupation, wages were calculated for state, local, federal, the combination of state and local, and the entire public sector. This gives a detailed understanding of how wages vary within public sector employment.
- b. For each sector (state, local, federal, and all public sector employment), wage groups per occupation were assigned based on comparison to the 2023 national median wage of \$25.62 per hour. Wage groups were assigned as follows:

- i. **Low wage:** Wages less than two-thirds (67%) of the national median.
- ii. **Middle wage:** Wages equal or greater than two-thirds (67%) of the national median but less than four-thirds (133%) of the national median.
- iii. **Upper wage:** Wages between greater than or equal to four-thirds (133%) of the national median but less than two times (200%) the national median.
- iv. **High wage:** Wages greater than or equal to two times (200%) the national median.

4. Defining occupations of interest:

- a. We focused our study on occupations to which (1) STARs have some degree of access; (2) there are meaningful connections to skills-based mobility pathways; and (3) the occupation is well-represented in the public sector workforce. We started with the 322 occupations identified as “good-paying jobs” in the [SOPC](#) report, and further narrowed this population to those with a minimum of 7,000 workers in the public sector. After applying these filters, the universe of occupations for this report includes 185 occupations, which represent 76% of all workers and 69.4% of public sector workers. The filters exclude:
 - i. Occupations exclusive to workers with degrees (e.g. surgeons, elementary school teachers)
 - ii. Lower-wage occupations with limited mobility into higher-wage work (e.g. carpenters, couriers and messengers)
 - iii. Occupations that are not well-represented in the public sector (e. g. tire builders, tool and die makers).
- b. Good-paying jobs are those that meet the following criteria nationally:
 - i. 10% or more of workers are STARs as of 2023; **AND**
 - 1. The occupations are classified as a Gateway or Destination¹⁷ where the 2023 national median wage is at least \$19 per hour; **OR**
 - 2. The occupations are classified as Origin¹⁷, where the national median wage is at least \$19 per hour, and for which there are observed transitions into higher wages – i.e. observed transitions into a minimum of three different occupations paying at least 10 percent higher wages, to which at least 10,000 STARs have made each transition over the past 10 years.
 - ii. To identify good-paying jobs in the public sector, the occupations of interest were filtered to those considered good-paying jobs nationally and further filtered to those with a public sector median wage greater than or equal to \$19 per hour.
 - 1. Some occupations were not considered good-paying nationally because the national median hourly wage was below \$19, but their public sector median wage was greater than or equal to \$19 per hour. Of these occupations, seven were labeled as good-paying jobs in the public sector because there were at least three similarly-skilled occupations paying at least 10 percent higher wages to which at least 10,000 STARs have made a transition over the past 10 years. These jobs are: nonfarm animal caretakers; shipping, receiving, and traffic clerks; stock clerks and order fillers; data entry keyers; laborers and freight, stock, and material movers, hand; security guards and gaming surveillance officers; preschool and kindergarten teachers.
 - 2. In contrast, two Origin occupations earn more than \$19 per hour but do not meet the transition volume threshold to be considered a good-paying job. These occupations were refuse and recyclable material collectors; and motor vehicle operators, all other.

5. Projecting the impact of the STAR Mobility Compass in the public sector:

The [STAR Mobility Compass](#) identifies three levers by which the public sector can increase its access to talent and by which STARs' economic mobility can be improved by 2030. These three levers are applied follows:

a. Increase STARs' share of key public sector jobs:

In this lever, hiring rates for STARs are increased across 30 target occupations.

- i. As described in the [SOPC](#) report, hiring rate increases were applied to each occupation linearly, year-over-year, from the current share of STARs nationally to the proposed increase as follows:
 1. Occupations with 10–20% STARs see an increase in the hiring rate of 25 percentage points by 2030.
 2. Occupations with 20–40% STARs see an increase in the hiring rate of 20 percentage points by 2030.
 3. Occupations with 40–60% STARs see an increase in the hiring rate of 10 percentage points by 2030.
 4. Occupations with 60–80% STARs see an increase in the hiring rate of 5 percentage points by 2030.
- ii. To determine the STAR hiring increase for each occupation in the public sector, the percent difference between the 2023 STAR share and the 2030 STAR share under the national hiring increase scenario was calculated. This percent difference was applied to the 2023 public sector STAR share for each occupation, resulting in the 2030 STAR share predicted by a hiring increase in public sector employment (federal, state, and local government).
- iii. To identify 30 target occupations in the public sector for hiring rate increases, we limit the occupations of interest to the 146 remaining Gateway and Destination jobs (see [Navigating with the STARs](#)) with median wages greater than or equal to \$19 per hour in the public sector.
 1. The occupation "Information and Record Clerks, Other" was excluded from consideration because zero job postings were returned for it when querying national counts of job postings per occupation from 2021 to 2024.
 2. For each occupation, we then took the difference between the number of public sector STARs estimated by the 2030 proposed hiring increase projection and the 2030 ARIMA prediction in each occupation. The occupations were then sorted in descending order by this difference.
 3. The 30 occupations with the largest difference between the ARIMA model and the hire rate increase were selected as the target 30 occupations. These occupations follow the hiring rate increase, while the remaining occupations of interest follow the predicted trend from the ARIMA model.

b. Compensate STARs for valuable skills in common low-wage public sector jobs: In this lever, five low-wage but highly-skilled occupations where STARs are overrepresented are proposed to receive higher wages in the public sector.

- i. The occupations considered for wage increases meet the following criteria:
 1. Are classified as Origin occupations, **AND**
 2. Have a median wage in the public sector that is less than \$19 per hour, **AND**
 3. There are at least five similarly skilled occupations paying at least 10 percent higher in median hourly wages, to which at least 5,000 STARs have made a transition over the past 10 years (hereafter referred to as "upwardly mobile pathways").

- ii. The total number of STARs estimated to benefit from wage increases in these occupations was calculated by summing the ARIMA model's prediction of the number of STARs estimated to be employed in each occupation in the public sector by 2030.
- c. **Ensure STAR access to higher-wage, new-to-world public sector jobs:** In this lever, STARs fill shares of good-paying jobs predicted to emerge in the public sector in the next five years.
 - i. In the STAR Mobility Compass, we estimate that 6.4 million new-to-world jobs are expected to emerge by 2030.¹⁸ Of these, the public sector is expected to have a representative share of approximately 15.5% of these jobs, translating to about 992,000 new-to-world public sector jobs.
 - ii. If 80% of these new-to-world jobs pay middle and high wages, that results in 793,600 new-to-world, good-paying jobs added to the public sector.
 - iii. If STARs receive at least 35% of these new-to-world, public sector jobs, this would open more than 270,000 opportunities for STARs in the public sector by 2030. These new-to-world jobs were divided among federal, state and local government employment based on each entity's representative share of the public sector. With this, nearly 200,000 new-to-world jobs are estimated in state and local public sector employment by 2030.

6. Skill-similar pathways:

- a. To identify skill-similar pathways, we combine data about (1) the skill similarity between roles and (2) the number of STARs making transitions between those roles in the last 10 years.
 - i. To determine skill similarities between occupations, we first use the Occupational Information Network (O*NET) 29.1 Database to generate a 35-dimension vector on the importance of job-related skills for each occupation. We calculate the Euclidean "skill distance" between a pair of occupations' skill vectors. Occupations with "closer" skill distances share a more similar set of skill requirements; the opposite is true for occupations with "farther" skill distances.
 - ii. To estimate the number of STAR transitions between roles in the last 10 years, we pooled data from the 2015 to 2024 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) and used that to estimate the annual average number of cross-occupational transitions.
 - iii. To qualify as a skill-similar pathway, a pair of occupations must meet the following skill-distance and transition requirements:
 - 1. They have a skill distance less than or equal to 2.25, and we have observed at least 1,000 STARs making the transition over the past 10 years; **OR**
 - 2. They have a skill distance less than or equal to 3, and we have observed at least 5,000 STARs making the transition over the past 10 years; **OR**
 - 3. We have observed at least 10,000 STARs making the transition over the past 10 years.
- b. Example skill-similar pathways are shown in Figure 4.

7. Job postings and common titles:

- a. To identify the most frequent job titles and measure STAR access to occupations in the public sector, we used Lightcast job postings data to query the number of postings per OCC2010 code from 2021 to 2024. For each OCC2010-level code, we first crosswalked to its associated Standard Occupational Classification (SOC-5) code(s). Our queries were limited to the following filters:
 - i. (1) Excluded private-sector employers based on North American Industry Classification System (NAICS) codes (e.g., Retail Trade (44–45), Professional, Scientific, and Technical Services (54), and Accommodation and Food Services (72))) or prominent employer names (e.g. Dropbox, Lumen); **AND**
 - ii. (2) Included postings where employer names matched public sector indicator words and phrases such as “State of”, “School District”, or “Transit Authority”; **AND**
 - iii. (3) Excluded job postings with unclassified job titles.
- b. Job postings were defined as being open to STARs if the minimum education requirement listed was high school/GED or an associate’s degree, or if no minimum education requirement was listed. For each occupation, the share of postings open to STARs was calculated by dividing the number of job postings open to STARs by the total number of postings.
- c. Separately, we extracted the top three most frequently used job titles per occupation based on distinct posting counts, excluding titles labeled “Unclassified”.

Endnotes

1. In the 2022 Center for American Progress report, [Investments in the State and Local Government Workforce Will Deliver Crucial Services and Create Economic Security](#), employment levels across state and local governments before and after the 2020 pandemic are compared. Through this work, the authors highlight the need for state and local investment in recruitment, hiring, training, and wage increases for its employees.
2. In [The Benefits of Skills-Based Hiring for the State and Local Government Workforce \(2022\)](#) the Center for American Progress (CAP) and Opportunity@Work recommend a skills-based approach to meet the skill needs of the public sector.
3. We calculate this figure by considering occupations that were good-paying jobs in 2023 and comparing the number of workers in these roles from 2000 to 2023.
4. In 2024, Opportunity@Work published the [Tearing the Paper Ceiling: The Impact of State Commitments to Remove Degree Requirements on Public Awareness and Job Opportunities for STARS](#). Since its release, five more states (30 total as of August 20, 2025) have taken action to remove unnecessary degree requirements and shift to skills-based talent management.
5. This figure is based on emerging new-to-world jobs in the U.S. and the public sector's representative share of these jobs at 15.5% (see methodology and the [State of the Paper Ceiling report](#) for more details).
6. After qualitative review of occupations, we maintained roles that may have licensure and other professional requirements that can restrict entry for workers. These occupations include social workers, counselors, police officers, and registered nurses (RN). The public sector has significant power to analyze these restrictions and open alternative pathways for STAR entry into these good-paying roles. For example, California provides a 30-unit option for licensed vocational nurses (LVNs) to qualify for the RN licensure exam (NCLEX-RN) without a four-year degree ([California Board of Nursing](#)).
7. Rob Sand, the Iowa Auditor of State, advocates for lower degree requirements for more than 24 positions in the public sector. Retrieved from [CBS-2 Iowa](#).
8. For each public sector grouping, federal, state, and local, median hourly wages and wage groups were assigned individually. This figure represents the number of workers in occupations that are low-wage, where wages are less than two-thirds the national median hourly wage in their respective public sector groups.
9. Median hourly wages for public sector employees were converted to annual salaries based on full-time employment.
10. Teaching assistants, also known as paraeducators, have been historically understudied. Recent research into the staffing challenges among school districts in Washington state reveals that paraeducator turnover has increased over time, with job postings for these roles often remaining open longer than those for teachers ([Goldhaber et al. 2025](#)). These empty positions impact student learning but also teacher workload. When these positions remain unfilled, teachers, particularly special education teachers, must take on additional responsibilities to ensure student needs are met. Other research has shown that paraeducators have few opportunities for professional growth ([Bisht et al. 2021](#)) and experience low wages without compensation for additional responsibilities ([Tillery et al. 2003](#)) — all factors that could contribute to increasing turnover.
11. Opportunity@Work analysis of 2024 Lightcast job postings in the public sector.
12. North Carolina Office of the Governor. (2024, September 18). *Gov. Cooper warns of impending early childhood education and child care crisis as stop-gap funding falls short: Urges legislators to make meaningful investments to avoid a crisis for children, families, and employers* [[Press release](#)]. Raleigh, NC.

13. In [The Benefits of Skills-Based Hiring for the State and Local Government Workforce \(2022\)](#), the pre-and post-pandemic hiring levels for state and local governments are reviewed, highlighting strategies to address the decline in government employment.
14. The state of Mississippi signed a [memorandum of understanding \(MOU\)](#) with NVIDIA to foster collaboration in AI research and the development of AI education programs, along with economic development initiatives (2025).
15. [Feigenbaum, J., & Gross, D. P. \(2024\)](#) provides a historical context on the impact that technological advancements have had on jobs. The researchers show that when the job of telephone operator was automated, incoming cohorts of women workers shifted into skill-similar roles and into new jobs appearing across industries. More recently (2025), The New York Times article, [A.I. Might Take Your Job. Here Are 22 New Ones It Could Give You](#), gives examples of new-to-world jobs that may emerge with the rise of AI and demonstrates that humans will be needed for trust, integration, and taste.
16. The World Economic Forum's [Future of Jobs Report \(2025\)](#) provides a summary of current trends, including in-demand skills, reported through over 1,000 global employer perspectives.
17. In [Navigating with the STARs](#), Opportunity@Work studied the 79.5 million year-to-year cross-occupational transitions that STARs made from 2010 to 2019. Nearly 300 Gateway and Destination occupations were identified, offering STARs meaningful wage gains. Among these occupations, 51 jobs were considered Gateway occupations because they are accessible to STARs from multiple Origin occupations (occupations with low barriers to entry) and opened pathways to multiple higher-wage Destination occupations. To learn more about Origin, Gateway, and Destination occupations, see the full report.
18. To estimate national job creation in emerging roles through 2030, we assume a starting labor force of 161 million in 2023, with 0.4% annual organic growth (compounded, based on labor force projections from 2023 to 2033 from the U.S. Bureau of Labor Statistics) and an additional 0.56% of that year's labor force added annually in new occupations (noncompounded, based on [Lin \(2009\)](#)). See the [SOPC report](#) for a more detailed methodology.

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About Opportunity@Work

Opportunity@Work is a nonprofit social enterprise dedicated to advancing economic opportunities for the more than 70 million U.S. workers who are Skilled Through Alternative Routes (STARs) instead of through a bachelor's degree. Opportunity@Work's research capabilities inform the nation's understanding of STARs and uncover insights that show how to make positive change within regions and industries. The organization engages with corporate, public sector, and philanthropic partners to directly address the barriers that STARs face and equip organizations to make hiring STARs for higher-wage roles the norm. Learn more at www.opportunityatwork.org.