SEPTEMBER 2021

PUBLIC FINANCE WORKFORCE STUDY

© 2021 NATIONAL ASSOCIATION OF STATE TREASURERS FOUNDATION & BURNING GLASS TECHNOLOGIES
Welcome

September, 2021

Dear Public Finance Colleagues,

We are entering a potentially tumultuous era of employment and staffing in the public finance sector. With unpredicted rates of retirement coupled with fewer applicants, we asked our professional association to conduct a national study to challenge our assumptions about the workforce of the future.

Anecdotally, we have heard about pending retirements of senior staff, mid-level employees going to the private sector, and a lack of applications for job postings, especially for entry-level positions. As a result, we requested a national data-driven report to verify our assumptions; this study aligns with our concerns. Not only are state agencies experiencing these workforce issues, but so are our colleagues at the county and city levels.

In this groundbreaking report, we see firsthand the need for highly trained staff to fill these important roles. With this research we see where professional development must occur to recruit and retain staff, create a pipeline of new entrants, and undertake appropriate succession planning. While most State Treasurers are elected or appointed, the vast majority of our staff are not, and we must anticipate forthcoming challenges with decisive action in the public finance sector to advance the profession.

As we look toward NAST’s future, this report will help guide our planning to meet these workforce needs. For years, NAST has been a leader in advocacy and provider of networking opportunities, but now we want to go deeper and wider into Treasury and other related offices to provide better benefits, services, and training for the public finance workforce sector.

We look forward to working with all of you on this important and timely issue.

Treasurer Kelly Mitchell
Indiana
NAST President
Chair, NAST Foundation

Treasurer Shawn Wooden
Connecticut
NAST Senior Vice President
Vice-chair, NAST Foundation

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Recently, the NAST Foundation commissioned a national study of the public finance sector workforce specifically looking at the opportunities in this particular space. We wanted to “look closely and think broadly” about this important topic since it is affecting so many of our agencies -- from state to local offices, every citizen is interacting with a public finance official in some fashion. Therefore, it is critical that we take proactive measures to promote a solid pipeline of individuals entering the public finance workforce, as well as support our members in their efforts to retain and train their employees. This data-driven report will kick start that conversation.

I’d be remiss if I didn’t thank the NAST Foundation board for their leadership:

- Treasurer Kelly Mitchell (IN), Chair
- Treasurer Shawn Wooden (CT), Vice-chair
- Treasurer Randy McDaniel (OK), Secretary-treasurer
- Treasurer Manju Ganeriwala (VA), Member
- Treasurer Kimberly Yee, (AZ), Member

Along with the board, we had input and review from an ad hoc committee including:

- Treasurer Colleen Davis (DE)
- Karen Austin (IA)
- Amy Gannon (IN)
- James MacDonald (MA)
- Alex Marcellino (CT)
- Joann Povia (NJ)
- Nancy Spagnolo (CT)
- Daria Story (AL)
- Mark Swenson (AZ)
- David Swynford (VA)
- Grant Wallace (AR)
- Melissa Waller, National Institute of Public Finance Executive Program Director
- Treasurer Manju Ganeriwala (VA), Member
- Treasurer Kimberly Yee, (AZ), Member

I would also like to thank our consultants at Burning Glass Technologies for the work they did in compiling, analyzing, and reporting the data that you will see in this report. A special thanks goes to Kari Arfstrom, NAST’s Deputy Executive Director for Learning, for her leadership on this project.

Finally, I want to thank the Wells Fargo Foundation for their support and in particular Bonnie Wallace, Program Lead, Financial Health Philanthropy, for her leadership of this report.

A copy of this report, along with the numerous appendices, can be found at nast.org/workforce/.

Shaun Snyder
Executive Director
NAST & NAST Foundation
**Introduction**

The landscape of the finance industry is constantly evolving, with employers and employees reacting and adapting to everything from new technologies to fluctuations in the economy to the evolving role of government entities. The public finance sector is ubiquitous, employing individuals and serving communities at the national, state, county, and city levels and impacting every American in some form. Consequently, understanding public finance jobs, skills and demand is critical to ensuring that public finance systems are staffed with the most capable employees, and that those individuals have access to learning opportunities that will enable them to best serve the public.

Public sector financial agencies are facing pressure to deliver better and more efficient services in a time of need, change and scrutiny. There has never been a more important time to understand not only how public sector finance agencies staff their critical operations, but also how they ensure that those public servants have the skills they need to manage public resources responsibly. Such understanding will ensure that both typical operations and extraordinary recovery activities maintain the confidence of both the citizenry and the public officials who serve them.

As an advocate for and association of State Treasurers, the National Association of State Treasurers (NAST) Foundation recently undertook a study in collaboration with Burning Glass Technologies to review the public financial sector, to address skills needed within a range of public sector finance offices, and address short- and long-term staff and skills challenges facing them. Burning Glass delivers job market analytics that empower employers, workers, and educators to make data-driven decisions. The company’s artificial intelligence technology analyzes hundreds of millions of job postings and real-life career transitions to provide insight into labor market patterns. This real-time strategic intelligence offers crucial insights to this particular sector, such as which jobs are most in demand, the specific skills employers need, and the career directions that offer the highest potential for workers. It was because of those deep and content-rich databases that this study was conducted.

Given that public sector finance includes, but is not limited to, State Treasurers’ offices, having a comprehensive view of the skills needed to fill critical roles across state, county and municipal public finance offices is essential. This report seeks to better understand the broader marketplace for people and skills beyond the public finance offices. The report also assessed the interrelatedness of employees in the private finance sector and sussed out the employment eco-systems between the two sectors.

The following analyses of public sector finance jobs, skills, and demand aim to provide this sector with a sound fact base from which to develop programs, policies, outreach strategies and professional development resources. This will ensure that current, potential and aspiring public finance offices can attract, retain, and develop the next generation of public finance professionals, and best serve the citizens of their cities, counties and states.

**DATA AND METHODOLOGY**

To provide the information contained in this report, Burning Glass utilized its comprehensive job posting and social profile databases, as well as publicly available data from the American Community Survey (ACS). The data analyzed for this report reflect the United States labor market. Demand numbers are reported as a snapshot between January 1, 2019 and December 31, 2020. A two-year window of time was used in order to smooth out some of the effects of the Covid-19 pandemic on the economy in 2020. Burning Glass also analyzed demand growth rates, evaluating longer-term trends between January 1, 2016 and December 31, 2020.

To define public finance roles, Burning Glass and the NAST Foundation jointly identified seven key public finance functions and 36 distinct roles within those functions. Members of the NAST Foundation and ad hoc committee acknowledge that State Treasurers’ and other public finance offices operate in unique fashion, with dissimilar uniformity of job titles, organizational structures, and job descriptions among them. Burning Glass’ proprietary occupational taxonomy is designed to normalize occupational titles and roles across such disparate and idiosyncratic data, basing its classification of roles around key job skills and requirements ingested by Burning Glass’ software. Using a proprietary machine learning model, followed by close qualitative review, Burning Glass researchers were able to map the job roles and titles to the most similar roles in the Burning Glass Occupational Taxonomy. Industry tagging in Burning Glass’ job posting database enabled identification of jobs (and in turn their associated skills, education requirements, anticipated salary) between those posted by public sector and private sector employers. See page 21 for more information on the methodology used in this report.
**Key Findings**

**Public finance workforce needs are growing**, with increased demand for all roles across all levels of the government sector between 2016 and 2020. The growth of individual roles analyzed for this report ranged from a 6% to a 31% increase in job postings between 2016 and 2020, while the public finance industry as a whole saw greater than 16% growth in job postings over that same period. This increase in demand has not been due to a concentration of jobs in one region of the country, but spans across all states.

**The public finance workforce is diverse**, with more women and African Americans employed by public finance entities across the country than the national average across all employed workers.

**The public finance workforce is aging**: over 50% of employed workers are over the age of 45. Impending retirements will outpace those in private sector finance roles and firms.

**The public sector offers fewer finance job opportunities than the private sector**, with total hiring demand representing less than one quarter of the total demand for all finance workers. Specific occupations whose demand in the public sector exceeds that of similar occupations in the private sector may be more attractive to those making the choice of embarking on a public or private finance pathway and highlighting those occupations can encourage finance workers to choose the public sector.

Similarly, **assumptions that private sector pathways are more lucrative are not universally true**. Professional associations can amplify the public sector career pathways that are more financially favorable to recent graduates and early-career finance professionals.

While the number of openings is smaller, the **public sector offers wider access to jobs for a wider range of employees**, with proportionately more postings open to those with less experience and lower levels of educational attainment.

Most transitions between the two finance sectors occur when **public sector workers move into private sector roles**, though only modestly so as just 1.11% of resumes studied indicate such a shift. Worker transitions from private sector finance to public sector finance are vanishingly rare at less than one quarter of one percent.
Public Finance Functions and Roles

This report calls for a shared understanding of what in fact constitutes the public finance workforce. All such offices are unique, and each uses its own organizational structure and terminology. Currently, the public finance workforce totals more than 850,000 people across the U.S., working in state, county and city government agencies. Demand for public finance employees as expressed by online job postings has increased by 84% between 2016 and 2020. As with much of our economy, so too have public sector hiring and postings been impacted by the Covid-19 crisis. 2020 saw a nearly 6% drop in job postings for public sector finance roles compared to the number of jobs posted in 2019.

With federal investments in economic recovery and infrastructure, public expenditures are expected to rise and the burden on public agencies to receive, manage and disburse funds may increase staffing in the near future. It is reasonable to anticipate public sector agencies needing to expand capacity, staffing, and hiring coupled with anticipated retirements of public sector workers may further exacerbate skills and worker shortages.

Rather than render a hybrid organizational and staffing structure, this analysis focuses on the core functions that define most public sector finance offices that (however they are organized) indicate the capabilities that those functions call for, and the roles (however they are titled) that fulfill those functions.

A review of numerous State Treasurers’ offices reveals a general pattern of seven functions that are typical across states and frequently present in other public finance offices at the county and city level.
THE SEVEN FUNCTIONS INCLUDE:

Executive / Principal Management  This function leads the operations and personnel, coordinates with other fiscal agencies, approves reporting, performs administrative, audit and support functions, and serves as the public face of the agency.

Budget Management  This function is responsible for the organization’s budgeting and financial forecasting activities; leads the budgeting process for annual, quarterly, and monthly budget development; and develops budgetary policies, controls, and guidelines to meet short and long-term financial goals.

Banking / Cash Management  This function is responsible for managing the cash and electronic transactions, relationships with the banking sector, and short-term investments.

Debt Management  This function issues and manages bonds to enable the agency to finance schools, infrastructure, economic development, and other priorities. Debt Management personnel are also responsible for maintaining relationships with ratings agencies.

Investments / Pensions Management  This function manages public employee retirement funds and trust funds, invests assets, and maintains safety, liquidity and yield on behalf of residents and employees.

Legislative, Legal and Communications  This function of external relations management supports the efforts to ensure that activities are compliant with applicable local, state and federal laws; advances policy and legislative issues with elected officials and maintains contact with legislators and advocates as new policies are designed and implemented; and oversees that the offices’ activities are transparent for citizens, the press, advocacy organizations and others.

Consumer / External Programs  While each Treasurer’s office maintains a unique set of Consumer / External Programs, some common programs include:

- Unclaimed Property Divisions work to help citizens and companies gain access to property or assets that they have lost or that they have been unaware of after the business loses contact with the customer or rightful owner.
- 529 and ABLE savings programs assist individuals with savings for education and/or disability-related services.
- Financial Education programs provide information to the public about saving and investing and support educators and students implementing financial literacy curricula.
DEMAND OF PUBLIC FINANCE FUNCTIONS

Over the course of 2019 and 2020, public sector employers across all levels of government posted just over 112,000 jobs for roles across the functions described above, with Consumer / External Program functions posting the largest number of open positions (30,246) and Executive / Principal Management posting the fewest (4,260). This report acknowledges that some Executive Management positions at the state agency level include roles that may be elected or appointed and therefore would not appear in traditional online job postings, rendering this count likely marginally lower than the actual number of positions in those functions.

<table>
<thead>
<tr>
<th>Public Finance Functions at State, County and City Levels</th>
<th>2019 &amp; 2020 Demand (Largest to smallest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer / External Programs</td>
<td>30,246</td>
</tr>
<tr>
<td>Legislative, Legal, Communications</td>
<td>24,680</td>
</tr>
<tr>
<td>Banking / Cash Management</td>
<td>21,276</td>
</tr>
<tr>
<td>Debt Management</td>
<td>11,964</td>
</tr>
<tr>
<td>Budget Management</td>
<td>10,531</td>
</tr>
<tr>
<td>Investments / Pensions</td>
<td>9,801</td>
</tr>
<tr>
<td>Executive / Principal Management</td>
<td>4,260</td>
</tr>
</tbody>
</table>

52% OF ALL WORKERS ACROSS CITY, COUNTY AND STATE-LEVEL PUBLIC FINANCE OFFICES ARE FEMALE.

NEARLY ONE THIRD OF THE WORKFORCE IS OVER THE AGE OF 55.
While each public finance office arranges functions and their personnel in unique ways, the analysis utilized organizational charts to understand which types of roles appear within each of the seven functions.

Several roles/titles are unique to their respective functions, while some roles are present in multiple functions. Total 2019-2020 workforce demand among public sector entities for each role identified (irrespective of unique or multiple functions) is as follows:

<table>
<thead>
<tr>
<th>Seven Public Finance Functions</th>
<th>36 Public Finance Roles</th>
<th>2019 &amp; 2020 Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Executive / Principal Management</strong></td>
<td>Chief Financial Officer</td>
<td>623</td>
</tr>
<tr>
<td></td>
<td>Chief Information Officer</td>
<td>338</td>
</tr>
<tr>
<td></td>
<td>Chief Marketing Officer</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Chief of Operations</td>
<td>834</td>
</tr>
<tr>
<td></td>
<td>Chief of Staff</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td>Chief Technology Officer</td>
<td>136</td>
</tr>
<tr>
<td><strong>Budget Management</strong></td>
<td>Budget and Finance Director</td>
<td>4,457</td>
</tr>
<tr>
<td></td>
<td>State Budget Specialist</td>
<td>6,074</td>
</tr>
<tr>
<td><strong>Banking / Cash Management</strong></td>
<td>Accountant</td>
<td>5,608</td>
</tr>
<tr>
<td></td>
<td>Accounting Analyst</td>
<td>1,109</td>
</tr>
<tr>
<td></td>
<td>Accounting Manager</td>
<td>884</td>
</tr>
<tr>
<td></td>
<td>Auditor</td>
<td>2,336</td>
</tr>
<tr>
<td></td>
<td>Cash Management Director</td>
<td>4,457</td>
</tr>
<tr>
<td></td>
<td>Director of Audits</td>
<td>292</td>
</tr>
<tr>
<td></td>
<td>Senior Accountant</td>
<td>1,569</td>
</tr>
<tr>
<td></td>
<td>Senior Financial Analyst</td>
<td>191</td>
</tr>
<tr>
<td></td>
<td>State Cash Flow Analyst</td>
<td>2,566</td>
</tr>
<tr>
<td></td>
<td>Tax Accountant</td>
<td>1,112</td>
</tr>
<tr>
<td></td>
<td>Warrants Manager</td>
<td>1,152</td>
</tr>
<tr>
<td><strong>Debt Management</strong></td>
<td>Debt Compliance Officer</td>
<td>2,909</td>
</tr>
<tr>
<td></td>
<td>Debt Director</td>
<td>4,457</td>
</tr>
<tr>
<td></td>
<td>Debt Manager</td>
<td>4,457</td>
</tr>
<tr>
<td></td>
<td>Debt Program Analyst</td>
<td>141</td>
</tr>
<tr>
<td><strong>Investments / Pensions</strong></td>
<td>Credit Analyst</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>Director of Investments</td>
<td>4,457</td>
</tr>
<tr>
<td></td>
<td>Investment Accountant</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>Investment Analyst</td>
<td>584</td>
</tr>
<tr>
<td></td>
<td>Investment Officer</td>
<td>4,457</td>
</tr>
<tr>
<td><strong>Legislative, Legal, Communications</strong></td>
<td>Attorney</td>
<td>14,943</td>
</tr>
<tr>
<td></td>
<td>Communications Director</td>
<td>353</td>
</tr>
<tr>
<td></td>
<td>Director of External Affairs</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Government and Legislative Affairs Manager</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Paralegal</td>
<td>6,519</td>
</tr>
<tr>
<td></td>
<td>Policy Analyst</td>
<td>2,746</td>
</tr>
<tr>
<td><strong>Consumer / External Programs</strong></td>
<td>Program Analyst</td>
<td>17,202</td>
</tr>
<tr>
<td></td>
<td>Program Manager</td>
<td>13,044</td>
</tr>
</tbody>
</table>
Public Finance Sector Hiring and Demand

ROLES WITH THE GREATEST GROWTH

The public finance occupations showing the most growth in demand between 2016 and 2020 include Program Analysts, Budget Specialists and Program Managers, with Program Analysts topping the list with a 31.24% average annual growth rate between 2016 and 2020. While Consumer / External Programs are not a new concept within public sector offices, many positions have undergone enhancements in recent years, such as the 529 and ABLE savings program.

<table>
<thead>
<tr>
<th>Public Finance Function</th>
<th>Public Finance Role</th>
<th>Average Annual Growth Rate (2016 – 2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer / External Programs</td>
<td>Program Analyst</td>
<td>31.24%</td>
</tr>
<tr>
<td>Budget Management</td>
<td>State Budget Specialist</td>
<td>31.13%</td>
</tr>
<tr>
<td>Consumer / External Programs</td>
<td>Program Manager Including 529 and ABLE Savings Program Managers, Unclaimed Property Program Managers, etc.</td>
<td>24.71%</td>
</tr>
</tbody>
</table>

SLOWEST GROWING ROLES

Debt Directors, Accounting Managers and Tax Accountants show relatively lower average annual growth rates. While these rates are still positive, they may be partially stunted by skills required of workers in these roles which are typically hard to fill. Skills in Public Administration, Strategic Planning and Risk Management are frequently found in job postings for Debt Directors and Accounting Managers, yet these skills come with a time-to-fill premium of up to seven days. This premium implies that postings which require these skills, on average, can take up to a week longer to fill than the national average. Consequently, since employers often have a harder time finding candidates with these skill sets, job postings for these roles tend to appear less often.

<table>
<thead>
<tr>
<th>Public Finance Function</th>
<th>Public Finance Role</th>
<th>Average Annual Growth Rate (2016 – 2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Management</td>
<td>Debt Director</td>
<td>5.84%</td>
</tr>
<tr>
<td>Banking / Cash Management</td>
<td>Accounting Manager</td>
<td>7.85%</td>
</tr>
<tr>
<td>Banking / Cash Management</td>
<td>Tax Accountant</td>
<td>8.33%</td>
</tr>
</tbody>
</table>

In 2019 and 2020, public financial sector employers across all levels of government posted over 112,000 jobs.
PUBLIC SECTOR DEMOGRAPHICS

The public sector employs individuals across the United States at the state, county and city level. The ubiquitous nature of the public finance sector enables the hiring of a diverse workforce across a number of different metrics.

Gender. An analysis of workers across a gender spectrum reveals that the public sector is a majority-female industry. 52% of all workers across city, county and state-level public finance offices are female, whereas only 47% of all employed individuals in the United States are female.

Race and Ethnicity. Self-reported race and ethnicity data from ACS reveal that public finance sector offices mirror the race and ethnicity distribution of the total US workforce with a few exceptions. Public sector offices tend to employ more African American and White individuals than the national average. At the same time, they tend to under-employ Hispanic individuals relative to the national average.
**Age.** Analysis of the age distribution in the public finance sector reveals an aging workforce. Nearly one third of the workforce (31%) is over the age of 55, while over half of the workforce (60%) is over the age of 45. With such a mature workforce, the public sector is on the brink of a wave of retirements for which it needs to be prepared. Compare this to the private sector where the median age of their workforce is 44, according to the Bureau of Labor Statics (BLS).

**Geographies.** Opportunities to work in the public sector are not limited to one region of the country. Demand, as expressed by online job postings, reveals that the top five states hiring for public finance roles span both coasts. See Appendix B for a complete list of states’ demand.

The ubiquitous nature of public finance sector enables the hiring of a diverse workforce across a number of different metrics.
DEMAND: PUBLIC VS. PRIVATE

Public and private sector employers are seeking workers for many similar roles, but often express quite different levels of demand. The chart below shows the shared roles with greatest demand overall, and those with the greatest public sector demand and compares the differential between the public and private employers. While private sector demand is greater for Attorneys, Program Managers and Paralegals, public sector demand for those roles is still formidable especially when considering the far greater level of overall demand in the private sector. Public sector demand for Program Analysts, State Budget Specialists*, Policy Analysts and Warrants Managers* exceeds that of private sector firms.

EDUCATION AND EXPERIENCE

Public finance roles and functions require specialized expertise, public trust and responsibility, and often require significant education and experience, though public finance roles differ somewhat in requirements from finance roles generally. Public finance roles appear to be more welcoming of younger, less experienced workers with lower levels of educational attainment as a share of total demand. This places the public sector in a unique position to hire from a more diverse pool of applicants.

In recent job postings (2019-2020), the share of demand for applicants with less than a baccalaureate degree was more than double in public finance roles than in finance roles generally (13% vs 6%), and the share of demand for those baccalaureate degrees was far greater in finance generally (83% of postings) than in public sector finance (just 61% of postings). The share of those postings seeking Master’s and Doctoral degrees (including J.D.), however, was greater in the public sector with demand for advanced graduate degrees commanding nearly three-times the proportion of jobs than for finance jobs generally.
Public finance appears to offer a greater share of opportunities for those with less experience. Nearly a majority (48%) of postings for public finance roles require less than two years’ experience, while less than one-third (29%) of finance roles generally accommodate those at that early career stage. More experienced workers are in greater demand across finance roles in general with nearly a quarter of job postings (23%) requesting at least six years of experience, while postings in the public sector only request the same level of experience 16% of the time.

Accessing and engaging talent at this early career juncture works to the public sector’s advantage since transitions between the private and public sector are uncommon in the finance workforce. This is discussed in-depth later in the report.

Challenges Facing the Public Finance Sector

This landmark report is intended to support State Treasurers’ offices and other public finance agencies to build a framework to attract workers, plan to backfill positions from which current workers will soon retire, and build talent in and for the sector. These findings document there are a number of challenges facing the public finance sector and their workforce needs.

Smaller Set of Opportunities.
The public finance sector is far smaller than its private sector counterparts, and in the aggregate offers fewer opportunities for those choosing a finance path. The public finance sector represents only approximately 25% of the total finance workforce, and the demand for workers in the private sector in 2019 and 2020 was nearly five-times that of demand for public sector finance workers (508,725 posted private sector openings nationally versus only 112,758 in the public sector). Those embarking on a finance career or seeking advancement within finance will find a larger number of openings in the private sector.
Wage Gaps for Senior Professionals.
While the sheer number of openings favors the private sector for early career workers, so too do wage differentials at the higher levels. Managers and Executive Managers earn 6-10% more in the private sector.

Salaries for management and executive level positions are higher, on average, in the private sector than in the public sector, serving as a financial disincentive for finance professionals to move from the private to the public sector later in their careers. These same factors may also encourage public sector workers to pursue advancement in the private sector, where there are more and better-paying jobs. Salary advantages in early and mid-career roles in the public sector are positive, but not dramatically so.

Wage Gaps in Skill-Similar Roles.
There are many finance roles whose required skill sets are very similar across both the public and private sector. This enables workers with such skills to consider a wide range of employers spanning each sector. Nonetheless, in many instances, there are higher salaries in the private sector which attract employees with these skills away from the public and towards the private sector.

While Accounting Managers and Cash Management Directors tend to have similar functions regardless of industry, they tend to be paid at a higher rate in the private sector.
Talent Leakage / Talent Sourcing.
Since 2019, the public sector has only lost an average of 1.11% of its employees to the private sector. However, there are some specific roles in which employees are leaving at a quicker rate. Five percent of State Cash Flow Analysts have left the public sector since 2019 to work in the private sector in roles such as Financial Analysts (making the rate nearly five times greater than the average). Between 2019 and 2020, the public sector saw a 6.27% increase in demand for State Cash Flow Analysts while demand for all public sector finance roles shrank by 5.40% over that same period. This stark dichotomy signals the public sector’s need to attract and retain talented State Cash Flow Analysts.

Transitions from private to public sector roles are far less frequent. Since 2019, only 0.24% of private finance employees have left the private sector to work in the public sector. Such a small number of transitions from private to public sector may be a function of the relatively smaller number of jobs to which private sector workers can transition, as well as likely negative impact on earnings that would result.

Retirements. Currently, 60% of the workers in public sector finance offices across the country are over the age of 45, with over half of those individuals (31%) being over the age of 55. This heavily skewed age distribution signals that public sector entities will need to be ready and equipped to fill these impending vacancies. Also, public sector employees may be eligible to retire earlier than expected once they reach their maximum retirement benefit unlike their private sector colleagues. While early-career professionals will not yet have the skills or experience to fill all these roles that open due to retirements, those in the mid-to-late stages of their career should be primed to take their place.

These upward transitions also imply that there will be vacancies in lower-to-mid level roles. While this domino effect of retirements, upward transitions and job vacancies can provide a number of new opportunities for public sector employees, it also means that public sector employers need to be equipped to properly train and mentor their talent.

Recruitment and retention have never been more critical in the public finance sector. Attracting new talent, providing professional development opportunities, mentoring and coaching for knowledge transfer, and encouraging upward mobility will be crucial for public sector entities to be able to withstand the large number of impending retirements. NAST and its Foundation will further explore the role of providing these programs and services.
CAREER PATHWAYS

For associations supporting the public finance workforce, this report will be helpful to provide details not only on particular jobs and roles, but also the sequence of jobs that can comprise careers with progressing responsibilities and increasing financial rewards. Such information can in and of itself encourage students, career changers, and current finance workers to consider the benefits of public sector employment, and to view a structured set of opportunities and advancement pathways for a career in public finance.

Career pathways can focus on various value propositions for different worker profiles. For example:

- Individuals with lower levels of educational attainment may be attracted to roles that have a lower barrier to entry relative to private sector counterparts. Positions that commonly request less than a baccalaureate degree can serve as an appealing starting point more widely available in the public sector than in the private sector. Pathway visualizations can in turn show that from those more accessible starting points, individuals can advance further, though postsecondary education or other training/certification programs may be required for continued progression.

- Another approach to rendering pathways is to start not from the entry level, but from the destination. Higher-paid roles tend to require more experience and education but can serve as a guiding start to which careers can be oriented. Likewise, individuals aspiring to hold a higher-paid higher-skilled role in the future could map backwards and plan their work and education/training accordingly.

- Career mobility is another value around which pathways can be oriented. Mapping both upward trajectory and backward from those high-volume, high-demand roles will demonstrate to potential public finance workers not only where the greatest number of opportunities are, what training may be needed, but also how one can move into them and where one can advance to from them.

See the charts in Appendix A below for visualizations of sample pathways for each of the seven public finance functions.

Attracting new talent, providing professional development opportunities, mentoring and coaching for knowledge transfer, and encouraging upward mobility will be crucial for public sector entities to be able to withstand the large number of impending retirements.
Public Sector Advantages and Opportunities

While the public sector may have some obstacles to overcome in attracting and retaining workers when compared to the number and remuneration of private sector jobs, this report highlights the following factors as advantages to choosing to pursue a finance career in the public sector:

**Growth.** In an increasingly uncertain economic environment, the prospect of continued and long-term employment opportunities is powerful. Finance roles in the public sector have shown striking resilience and indeed growth beyond that of the private sector. Between 2016 and 2020, public sector roles showed a 16.71% average annual growth rate, compared to only 6.71% in the general labor market. During that time period, public sector finance opportunities expanded at nearly 2 ½ times than of other jobs. Conversely, private sector finance roles showed a slight net decline in demand over that time period (-.78%). Those choosing public over private finance roles find a more stable sector and an expanding set of job and career opportunities.

**Opportunity.** Even without the net expansion of jobs available in public sector finance, a large number of opportunities are likely to become available due to attrition or retirement. The public sector’s older workforce and their departure from the workforce due to retirements will create openings on top of the anticipated growth. While new entrants will not be qualified to fill the roles vacated by the retiring workers, those vacancies will draw mid- and later-career professionals into those roles, creating new vacancies to be filled by those in lower and lower-mid level roles. This upward pull will create vacancies that can be filled by new entrants. The Career Pathways section of this report can guide public sector finance offices in who can be developed within the sector based on the skills that they already have in their current roles.

**Stability.** As the labor market experiences volatility and private finance firms are impacted by market fluctuations and mergers and acquisitions, public sector entities can be more predictable environments where workers experience greater stability. Résumé and social profile data indicate that – on average – fewer employees working in the finance roles analyzed in this report leave the public sector than leave the private sector. Of all workers who were employed in a public finance job at the start of 2019, nearly 85% of them stayed in the sector, while only approximately 15% chose to leave the sector in that same year. On the other hand, of all workers who were employed within the private finance sector at the start of 2019, approximately 80% of them were still in the sector at the end of the year, while 20% left the sector entirely over the course of the year.

**Lower barrier to entry.** The public sector breaks down many barriers that can traditionally prevent workers from entering. For those who have additional commitments outside of the office (family obligations, college/graduate school), the public sector can provide, on average, more predictable work hours and a stronger work-life balance than the private sector. For those with limited work experience or who do not have a baccalaureate degree, the public sector offers a greater share of opportunities relative to the private sector. The relative ease of access to these early-career roles, coupled with an enticing working environment, enables public entities to engage a broader and more diverse set of workers who may be inclined to remain on a public finance pathway. Continued professional development and training, recognition of non-academic learning, progressive wages and comparable benefits can be used to maintain engagement longer term. Public agencies may wish to more forcefully promote the accessibility of the entry level roles to ensure a steady pipeline of employees. A predictable schedule makes further education/training possible and assists with upward mobility, which will benefit the public sector overall.
**Wage advantage for entry and mid-level talent.** The public sector offers higher wages, on average, for entry and mid-career level positions. Positioning these public sector roles as more financially favorable than their private sector counterparts can help attract talent in the public sector, while mentoring and subsequent development and advancement can help retain them as salary differentials diminish.

**Salary differentials.** Some of these entry and mid-level roles require similar skill sets regardless of the industry in which one works. For example, both Senior Accountants and Tax Accountants require approximately 70% of the same skills in the public and private sectors but can earn higher average salaries in the public sector. This gives the public sector a leg up in recruiting individuals with such skill sets.

**2019 & 2020 AVERAGE SALARIES**

<table>
<thead>
<tr>
<th>Career-Level</th>
<th>Average Public Sector Market Salary</th>
<th>Average Private Sector Market Salary</th>
<th>Raw Difference (Public – Private)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry-Level Positions</td>
<td>$67,952</td>
<td>$65,282</td>
<td>$2,670</td>
</tr>
<tr>
<td>Mid-Career Positions</td>
<td>$89,524</td>
<td>$86,361</td>
<td>$3,163</td>
</tr>
<tr>
<td>Management Positions</td>
<td>$86,471</td>
<td>$95,010</td>
<td>-$8,539</td>
</tr>
<tr>
<td>Executive Management Positions</td>
<td>$97,640</td>
<td>$104,127</td>
<td>-$6,487</td>
</tr>
</tbody>
</table>

**Continued professional development and training, recognition of non-academic learning, progressive wages and comparable benefits can be used to maintain engagement longer term.**
**Inclusivity.** The public sector employs a larger portion of women than the national average and is in fact a majority-female sector. Additionally, the non-degreed population may represent a more diverse set of potential workers. As a companion to promoting the lower barrier to entry described above, promoting this message among underrepresented groups can position the public finance sector as an employer of choice for an increasingly diverse workforce.

**Employee Benefits.** While the scope of this report is confined to job postings, salaries, career pathways and skills, public sector employment often comes with generous benefits including health insurance, retirement, and leave accrual.

**Commitment to public service.** Workers at all stages of their careers seek not only renumeration and day-to-day satisfaction, but also a deeper sense of meaning and impact. Especially during these times of economic recovery and reimagining of the public sector’s role in the economy, new entrants into the workforce, as well as those more seasoned professionals, may place greater value on their potential positive social impact on the community and gain deeper respect for the public sector’s unique position in affecting societal change.

**Presence across geographies.** Every American lives in multiple public sector jurisdictions. Whether at city, county, or state level or other governmental jurisdictions there is a need to manage public assets and support resident and business communities. For those who may be reluctant to relocate to a finance center or urban area where there are greater number of private sector jobs, the presence of public sector entities in every corner of the country offers workers the ability to work close to home and impact their local communities.

Unlike the presence of public sector jobs that can be found throughout the entire country, private sector jobs tend to cluster around major metropolitan cities, where housing, transportation, and cost of living can be substantially higher. The public sector can promote this value proposition in their recruitment and retention efforts.

See Appendix B for a state-by-state chart of public finance job postings in 2019 and 2020.

According to the most recent BLS National Compensation Survey (2020), across the entire public administration sector, 91% of employees had access to retirement benefits and 85% of employees utilized them. Within the private finance sector, 84% of employees had access to retirement benefits and 75% of employees utilized them. Note this is the entire public administration sector and not just public finance.
Conclusion

The public sector finance workforce is diverse and growing, providing opportunities for individuals from all types of backgrounds and all locations across the nation. While the private sector offers more financial job opportunities in aggregate than the public sector, public sector agencies can look to leverage a few advantages in attracting and retaining talent.

Stability of the sector, lower volatility among the workforce, wage advantages in some key early-career occupations, lower barrier to access, and accessibility to the increasingly diverse workforce – especially those without four-year degrees – can be promoted as advantages of public sector versus private sector finance employment and careers. The evidence for these advantages as presented in this report can be combined with advantages related to more predictable schedules, more generous benefits, and favorable work/life balance to showcase the appeal of the public sector to aspiring finance professionals.

As these advantages are presented to engage new entrants, subsequent investment in public finance job pathways, career awareness, mentoring, and professional learning and development can help to recruit and retain employees. As this sector faces increasing retirements and competition from private sector counterparts, there has never been a better time to affirm and promote the advantages of public sector finance employment and invest in the finance workers who will serve the public going forward.

METHODOLOGY

To provide the information contained in this report, Burning Glass utilized its comprehensive job posting and social profile databases, as well as publicly available data from the American Community Survey (ACS). Descriptions of three main data sources that feed into the analyses are as follows:

- Burning Glass’ propriety job posting database contains millions of online job postings extracted daily from more than 40,000 online job boards, newspapers, and employer sites. Their software distills information about each job such as title, employer, and industry, and then “reads” each job description to identify specific job titles, skills, and qualifications that employers are seeking. Additionally, their software de-duplicates postings for the same job, whether it is posted multiple times on the same site or across multiple sites.

- Burning Glass’ social profile database has over 70 million social profiles from U.S. jobseekers from LinkedIn and other online social media platforms. This unique resource allows Burning Glass to track and measure realized job transitions and career pathways of large segments of the workforce. For each social profile, they have information on their detailed work history, educational attainment, and advertised skills and credentials.

- ACS is a survey program conducted yearly by the U.S. Census Bureau that collects and reports key information about the American population and housing characteristics. It regularly gathers key labor market information such as an individual’s demographic information, employment status, occupation, industry, and location. In this report, they used the 2019 five-year sample of ACS data, to estimate the employment size of NAST public finance roles at the national and state level.
Appendices

APPENDIX A: CAREER PATHWAYS

The following seven charts contain career pathways focused not only on the specific set of public finance roles analyzed in this report (denoted with a red star), but also other, related finance roles found across the public sector. Additionally, while these pathways are broken down by public finance function, each includes roles from other functions in which an individual would have the adequate skills to make a cross-functional transition.

Executive / Principal Management This function leads the operations and personnel, coordinates with other fiscal agencies, approves reporting, performs administrative, audit and support functions, and serves as the public face of the agency.
**Budget Management** This function is responsible for the organization’s budgeting and financial forecasting activities; leads the budgeting process for annual, quarterly, and monthly budget development; and develops budgetary policies, controls, and guidelines to meet short and long-term financial goals.
Banking / Cash Management: This function is responsible for managing the cash and electronic transactions, relationships with the banking sector, and short-term investments.
Debt Management. This function issues and manages bonds to enable the agency to finance schools, infrastructure, economic development, and other priorities. Debt Management personnel are also responsible for maintaining relationships with ratings agencies.
**Investments / Pensions Management** This function manages public employee retirement funds and trust funds, invests assets, and maintains safety, liquidity and yield on behalf of residents and employees.
Legislative, Legal and Communications  This function of external relations management supports the efforts to ensure that activities are compliant with applicable local, state and federal laws; advances policy and legislative issues with elected officials and maintains contact with legislators and advocates as new policies are designed and implemented; and oversees that the offices' activities are transparent for citizens, the press, advocacy organizations and others.
Consumer / External Programs While each Treasurer’s office maintains a unique set of Consumer / External Programs, some common programs include:

- Unclaimed Property Divisions work to help citizens and companies gain access to property or assets that they have lost or that they have been unaware of after the business loses contact with the customer or rightful owner.
- 529 and ABLE savings programs assist individuals with savings for education and/or disability-related services.
- Financial Education programs provide information to the public about saving and investing and support educators and students implementing financial literacy curricula.
The following supplemental information can be found online at nast.org/workforce/ or by clicking on the title of the Appendix.

**Appendix B: Public Finance Demand by Geography (State)**
Demand for public finance roles within all levels of government is distributed across the fifty states and DC.

**Appendix C: Mapping of Public Finance Roles to BGT Taxonomy**
Burning Glass mapped the public finance roles analyzed in this report to specialized occupations within their taxonomy. In addition to the following mappings, Burning Glass also used additional constraints, such as specific industry requirements, to ensure that all postings analyzed reflected public sector finance functions and roles.

**Appendix D: Top Certifications for Public Finance Roles**
Across all public finance roles analyzed within this report, employers are most frequently requesting that their employees be Certified Public Accountants (CPA). The next most frequent certification is the Certified Government Financial Manager (CGFM), followed closely by Project Management Certification, and Certified Internal Auditor (CIA). A comprehensive list of the top certifications requested in job postings for each public finance role can be found here.

**Appendix E: Skill Similarities Across Sectors**
Skills that are frequently requested by employers in both the public and private finance sectors for each of the roles analyzed can be found here.

**Appendix F: Certifications Similarities Across Sectors**
Certifications that are frequently requested by employers in both the public and private finance sectors for each of the roles analyzed are seen here.

**Appendix G: Feeder Roles for Public Finance Roles**
This table highlights a sample of roles that prepare workers to transition into one of the public finance roles analyzed in this report.

**Appendix H: Next Steps for Public Finance Roles**
This table highlights a sample of roles into which public finance workers could transition as a next step in their career.