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**THE CONNECTICUT
STATE WORKFORCE:
AN ANALYSIS OF
REPRESENTATION AND
COMPENSATION EQUITY
ACROSS GENDER AND
RACE-ETHNICITY**

Tara Downes
Director of Communications
Connecticut Office of the
State Comptroller

Mohamad G. Alkadry
Professor & Department Head
Department of Public Policy
University of Connecticut

Michelle Gilman
Assistant State Comptroller
Connecticut Office of the
State Comptroller

Introduction

Pay equity across gender and racial-ethnic differences remains aspirational for workforces across the country. The depth, pace and shape of that change has varied across localities, workforces, industries, occupations and generations. This report reveals the results of an analysis of the Connecticut state workforce. The analysis involved a review of data on approximately 32,693 state employees working in the executive branch in order to identify any disparities in representation and compensation across gender and racial-ethnic identities.

The data reveals how Connecticut stands out when compared to other states, as well as the federal workforce, on gender representation and equity when the population is viewed as a whole and particularly within some of the state's highest ranking professional categories. In Connecticut, women represent 51.7% in the highest-level category of "officials and administrators" – whereas women only represent approximately 30% in the highest senior civil-service positions in the federal government (Alkadry and Tower, 2013). However, a closer view also reveals that Connecticut faces some of the same challenging trends found elsewhere across the country where women, particularly minority women, remain segregated in female-dominated occupations and agencies. Equity in the Connecticut state workforce fluctuates in sync with national and state trends when gender and racial-ethnic categories are compared by agency type, by union codes, and by equal employment opportunity categories.

The goal of this report is to provide the state and its component executive agencies with basic information about where each stands with regard to representation and compensation across gender and racial-ethnic categories. It is not intended to provide diagnostic or prescriptive guidance, but simply to deliver evidence that each agency can use to conduct its own thorough self-assessment. Such assessments should help inform individualized benchmarks and action plans to address any income or representation gaps. The hope is that this work will also serve as an example for the greater Connecticut workforce, including all public and private employers, to pursue similar self-assessments and responses.

Background and Literature

The State of Connecticut is consistently ranked as having one of the highest concentrations of wealth in the nation. With that concentration also comes one of the most [vast wealth gaps](#) in the country (in a country that faces a [wealth gap](#) greater than most developed countries in the world).

Income inequality has frequently been attributed over the years to factors outside of gender, including job longevity, educational attainment and experience. These factors do influence income, but are not the sole causes. Significant research on the role of gender in state workforces has isolated these "human capital" variables to confirm that all of these elements influence compensation, *including gender* (Alkadry and Tower, 2006). This research found that gender was as significant a determinant of income and, in some cases, was as important a determinant on income as human capital factors such as experience and job responsibilities.

Federal and state policies (adopted in Connecticut and other states) to address inequalities, as well as changing cultural norms, may have effectively narrowed gender-based income inequality gaps since 1980, but a [2018 study by PEW Research](#) found that this progress has plateaued in recent years. The PEW analysis found that in 2018 women continued to earn only 85 cents for every dollar that men earned, although the gap was smaller for younger adults where women ages 25 to 34 earned 89 cents for every dollar that men in the same age bracket earned. This compares to a 36-cents wage gap in 1980, according to PEW. In 2017, the [Census Bureau reported](#) a greater income divide in which women working full time earn only 80% of what their male counterparts earned.

Income inequality has seen a resurgence of interest in recent years by state legislatures, including in Connecticut, where some policymakers want to refocus policies on eliminating disparities in pay and representation in the workforce, particularly across gender and racial-ethnic divides that persist a half century after the federal government enacted laws such as the Equal Pay Act, the Civil Rights Act and Title IX of the Education Amendments (Alkadry and Tower, 2006).

The Connecticut state legislature has adopted new measures in recent years that attempt to eliminate persistent barriers to upward mobility and income growth for women and particularly minority women. Recent policies include adoption of a new minimum wage standard and the paid family medical leave program that will provide up to 12 weeks of replacement wages and employment protections for workers who must take time off for personal illness or to care for a child or other family members. Minimum wage policies are especially important to women's pay equity because the majority of minimum wage earners are women (about six in 10 minimum wage workers in Connecticut are women, [according to the National Women's Law Center](#)). The Connecticut state legislature has also in recent years enacted policies that attempt to prevent past disparities from repeating themselves in future employment opportunities – for example, [Public Act 18-8](#) would prohibit employers from basing a new employee's compensation on their prior salary history. The goal is to prevent past compensation inequity from continuing through future employment opportunities.

Connecticut Governor Ned Lamont this year established the Governor's Council on Women and Girls, "tasked with providing a coordinated state response to issues that impact the lives of women, girls, their families and the State of Connecticut." The Council, chaired by Lt. Gov. Susan Bysiewicz, has established at least four subcommittees to explore areas including women in leadership, health and safety, education (including STEAM) and economic opportunity and workforce equity. Executive agencies are engaged in these efforts with community and corporate stakeholders from throughout the state.

The formation of the Council was the impetus for this analysis. State Comptroller Kevin Lembo, as administrator of the state's payroll, pension and health care benefits systems and as a member of the Council, initiated this review, which was conducted in collaboration with the University of Connecticut's Department of Public Policy (DPP) and led by the DPP's department head, Dr. Mohamad Alkadry. Alkadry conducts extensive research on the role of gender and diversity in the workforce, particularly in the public sector, and has conducted similar analysis in the past.

Research conducted on other states, and the federal workforce, indicate persistent areas of representation and compensation inequality based on gender. As Connecticut policymakers seek to eliminate inequities in this state, this analysis seeks to answer questions about how Connecticut's state workforce is performing as far as income and representation equality.

Data

There are unique challenges to analyzing the Connecticut state workforce. Most notably is that the State of Connecticut, unlike the federal government and many other public state workforces, does not have a statewide system equivalent to the federal General Schedule (GS). The federal GS system is the grading system for the majority of federal workers, used to categorize employees in professional, technical, administrative or clerical positions. The federal system, which serves as a model for many other states, allows for positions and pay scales to be classified comparably by experience, education and other factors that should more appropriately determine compensation – and to do so consistently across agencies.

In the absence of a statewide classification system that spans all executive agencies, this analysis relied on both equal employment opportunity categories (EEOC) and union codes. This approach allowed for some measure of comparability of positions across agencies.

The data used for this analysis was extracted in March 2019 from the Office of the State Comptroller's payroll system, which is maintained within the CORE-CT statewide accounting network. It should be noted that this analysis focuses strictly on payroll data for the Connecticut state executive branch workforce, encompassing approximately 32,693 full-time workers. It does not include part-time workers, nor does it include employees from the legislative and judicial branches or the state universities. There are several reasons for isolating the full-time executive branch employees from these other state workers, including:

- The Office of the State Comptroller has more complete, comprehensive and accurate payroll and employment data for executive branch employees in the CORE-CT system than it does for "limited scope" agencies such as legislative management and judicial. While the Office of the State Comptroller administers payroll for those limited scope agencies, those agencies maintain their own human resources data independently and what they enter into the comptroller's statewide system is not as complete, particularly for gender and racial-ethnic data.
- Employees of higher education units follow a pattern of work that is often distinct from employees in the executive branch, including how they are compensated and their schedule and nature of their work. Including this segment of the state workforce would undermine an attempt to achieve a more true comparison.
- Including part-time employees would similarly complicate attempts to make direct comparisons between employees.

While this analysis focuses strictly on full-time executive branch employees, separate analyses should be conducted on each of these excluded components, including the part-time workforce. Child care needs are

one of the [top reasons cited for relying on part-time work](#), a challenge that may disproportionately compromise women's upward mobility and earnings.

Findings

Connecticut Representation by Gender and Race-Ethnicity

Connecticut, by comparison to other states and the federal workforce, appears more equitable across gender and racial-ethnic categories from a broad view. That said, the state has more work to do in addressing some of the distressing representation problems that are consistent with problems that exist across the country.

Before considering state employees, it is helpful to view the state population as a whole. U.S. Census data from 2018 on Connecticut indicates that females make up approximately 51.2 percent of the state population (the total state population is 3.57 million) and the median household income (in 2017 dollars) was \$73,781. The racial-ethnic breakdown shows that approximately 66.5 percent of Connecticut residents identify as white only, 12 percent black or African American, 4.9 percent Asian and approximately 16.5 percent identify as Hispanic or Latino.

The state workforce as a whole, and each agency within, would ideally achieve female representation within the range of 45 - 55%. When female representation is below this range, then women are underrepresented. When the percentage of women exceeds 55%, indicating an overrepresentation of women, it then raises concerns about segregation of women in certain agencies, fields or occupations, and position levels.

The Connecticut state executive branch as a whole is within the range of gender parity, with 48.8% of the population identifying as female, 51.1% as male and .1% undisclosed. As a comparison, in the federal government workforce women represent about 44.2% (Alkadry and Tower, 2013). The Connecticut executive branch gender and minority break down as a whole indicates that 34.8% identify as white male, 30% as white female, 14.8% as minority male and 20.3% minority female.

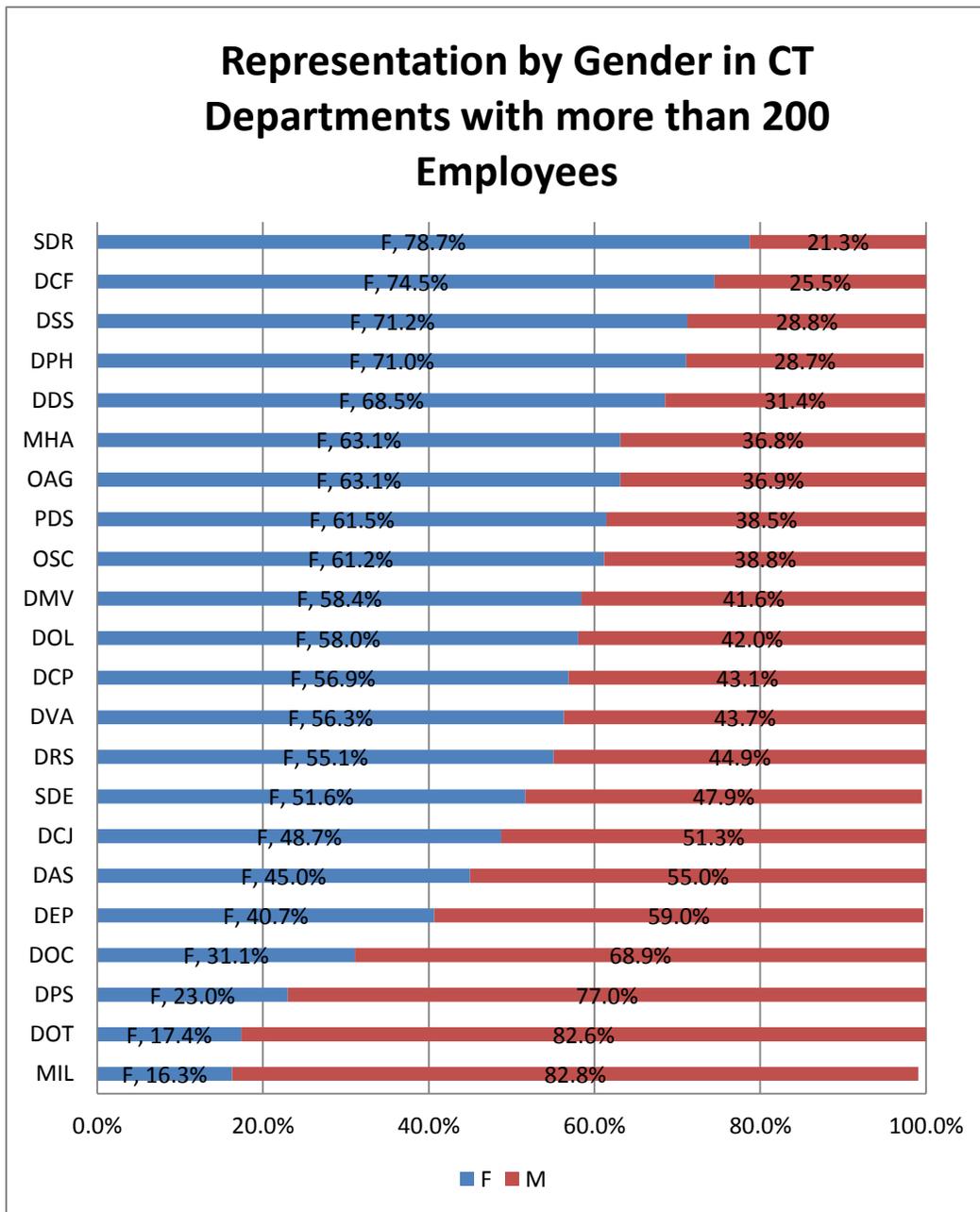
Previous research has shown that women and men are typically segregated in certain agencies (Alkadry and Tower, 2006; and Newman, 1994). These studies placed public agencies into one of three categories based on Lowi's (1985) framework: "regulatory," "redistributive" or "distributive." Under this framework, a regulatory agency could include law enforcement agencies, taxing authorities, environmental agencies or other agencies that might oversee control and regulatory policies. Agencies characterized as distributive typically involve general service agencies, including transportation and parks. And finally, redistributive agencies might include those that oversee the reallocation of services, such as health, welfare or education, to a state's most vulnerable populations.

This same research has found that women are often disproportionately segregated to "caring" occupations, particularly in redistributive agencies (Alkadry and Tower, 2006). And although these agencies and occupations may often require higher levels of education attainment and sometimes involve facing

emotional and physical hazards similar to law enforcement agencies, the compensation is often less. Men are often overrepresented in regulatory agencies, particularly those involving law enforcement, as well as distributive agencies that may focus on classic STEM (Science, Technology, Engineering and Math) occupations.

Figure 1 (Page 5) illustrates gender representation in Connecticut’s largest executive branch agencies (those with 200 employees or more). See Appendix A for a glossary of agency title abbreviations.

Figure 1: Representation by Gender in CT Departments with more than 200 Employees



As Figure 1 shows, gender representation fluctuates along the same trends found in other public workforces. Women in Connecticut have the most disproportionately high representation in state redistributive agencies, including the state Department of Rehabilitative Services (SDR) at 78.7%, the Department of Children and Families (DCF) at 74.5%, Department of Social Services (DSS) at 71.2%, Department of Public Health (DPH) at 71%, Department of Developmental Services (DDS) at 68.5 % and Department of Mental Health and Addiction Services (DMHAS) at 63.1%.

The executive agencies with the disproportionately lowest female representation can all be classified as regulatory or distributive agencies, including the state Military Department at 16.3% female representation, Department of Transportation (DOT) at 17.4%, Department of Emergency Services and Public Protection (DESPP – formerly DPS) at 23%, Department of Corrections (DOC) at 31.1% and Department of Energy and Environmental Protection (DEEP – formerly DEP) at 40.7%.

The illustration below in Figure 2 shows executive branch representation by Equal Employment Opportunity (EEO) category. This chart shows where Connecticut shines in the category of top “officials and administrators” where the state has reached precise parity in female representation at 51.7%. This compares to approximately 44% full-time female representation in this same category for state workforces across the country, and approximately 40% full-time female representation across all non-federal public sector workforces, including states, counties, cities, townships and special districts (Alkadry and Tower, 2013). However, the chart also indicates overrepresentation by females in the “administrative support” category, which typically includes lower-ranking positions, and underrepresentation in “protective services,” “skilled craft” and “service maintenance” categories.

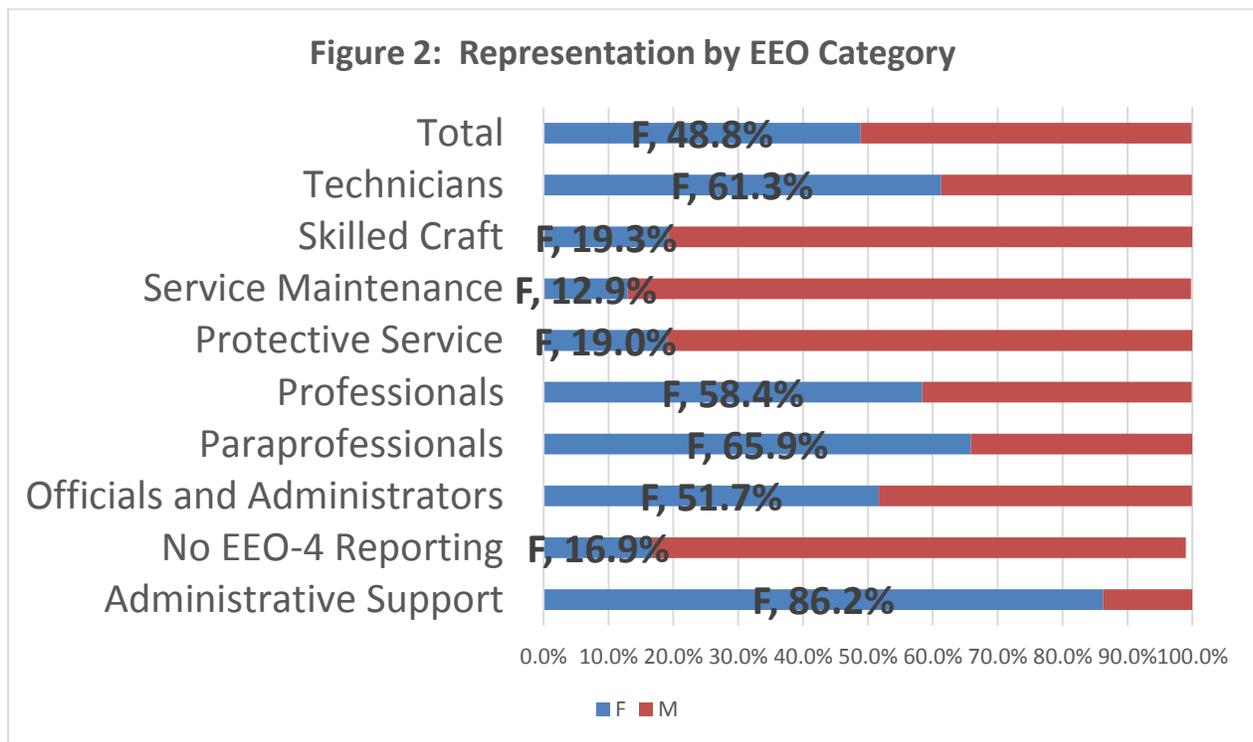
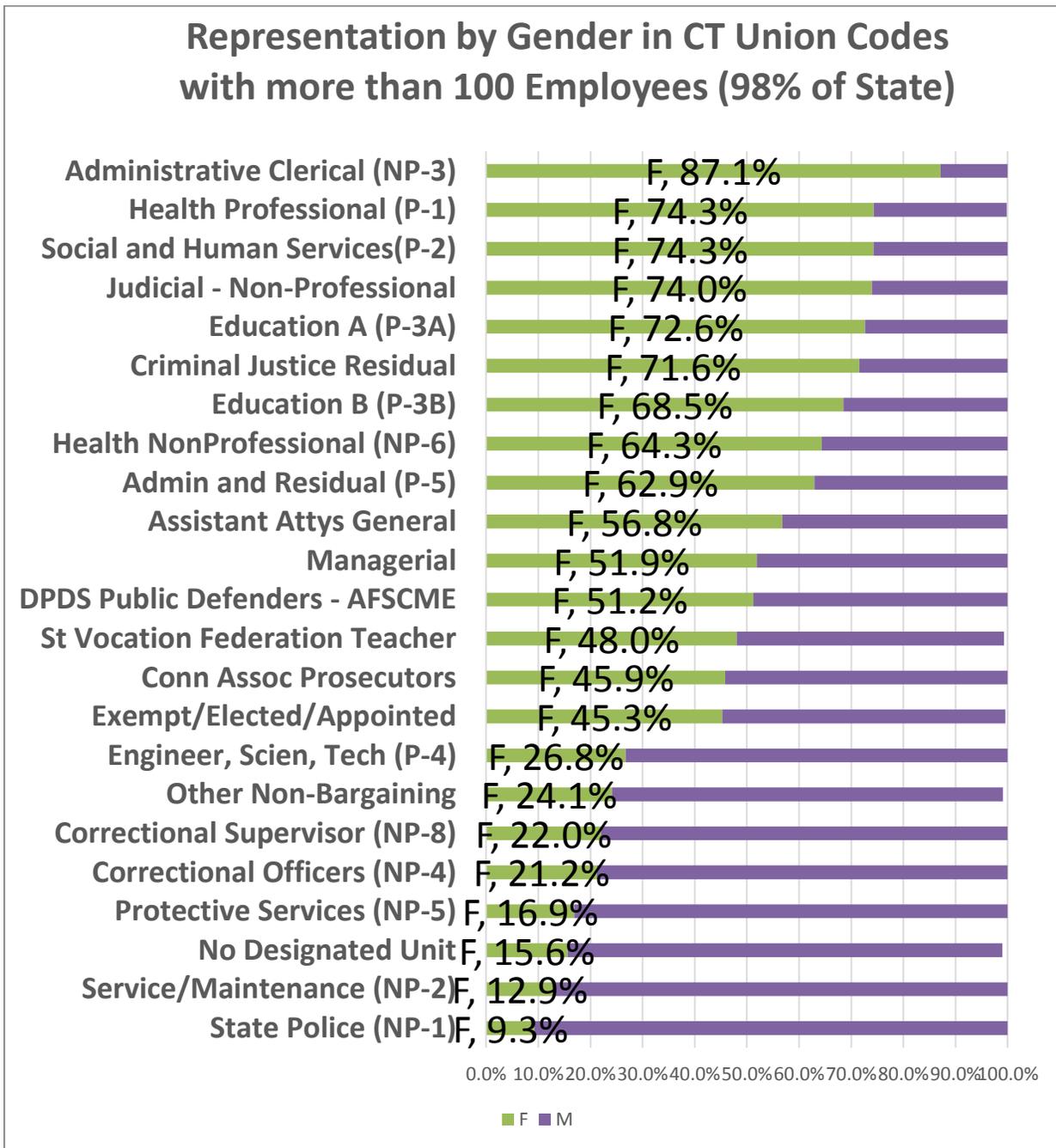


Figure 3: Representation by Gender in CT Union Codes with more than 100 Employees



Illustrated in Figure 3 (above) is the gender representation by union codes with 100 employees or more (constituting 98% of the state workforce included in this analysis). This further demonstrates significant overrepresentation by females in occupations associated with administrative and clerical duties, as well as redistributive agencies, including health professionals and social and human services. Among the categories

with underrepresentation are state police, protective services, service/maintenance, and engineering, science and technology.

This analysis seeks to assess representation not just by gender, but where it intersects with race-ethnicity. Illustrated below in Figure 4 is the gender and minority breakdown by EEO categories, followed by Figure 5, which shows representation by gender and race-ethnicity for each of the largest agencies (those agencies with 200 employees or more).

Key takeaways from these illustrations show the following:

- Connecticut achieves its most parity in the EEO category of officials and administrators.
- The highest concentration of minority females is in female-dominated redistributive agencies, including Department of Children and Families and Department of Social Services. When looking at the EEO categories, the highest concentration of minority females is in administrative support and paraprofessionals.
- The highest concentration of minority men is within the skilled craft, service maintenance and protective services EEO categories.
- While both white and minority men have high concentrations (among top three) in Department of Transportation and Military, where they diverge is in the type of protective services. White men are most concentrated in Department of Emergency Services and Public Protection (DESPP), whereas minority men are most concentrated in Department of Correction.

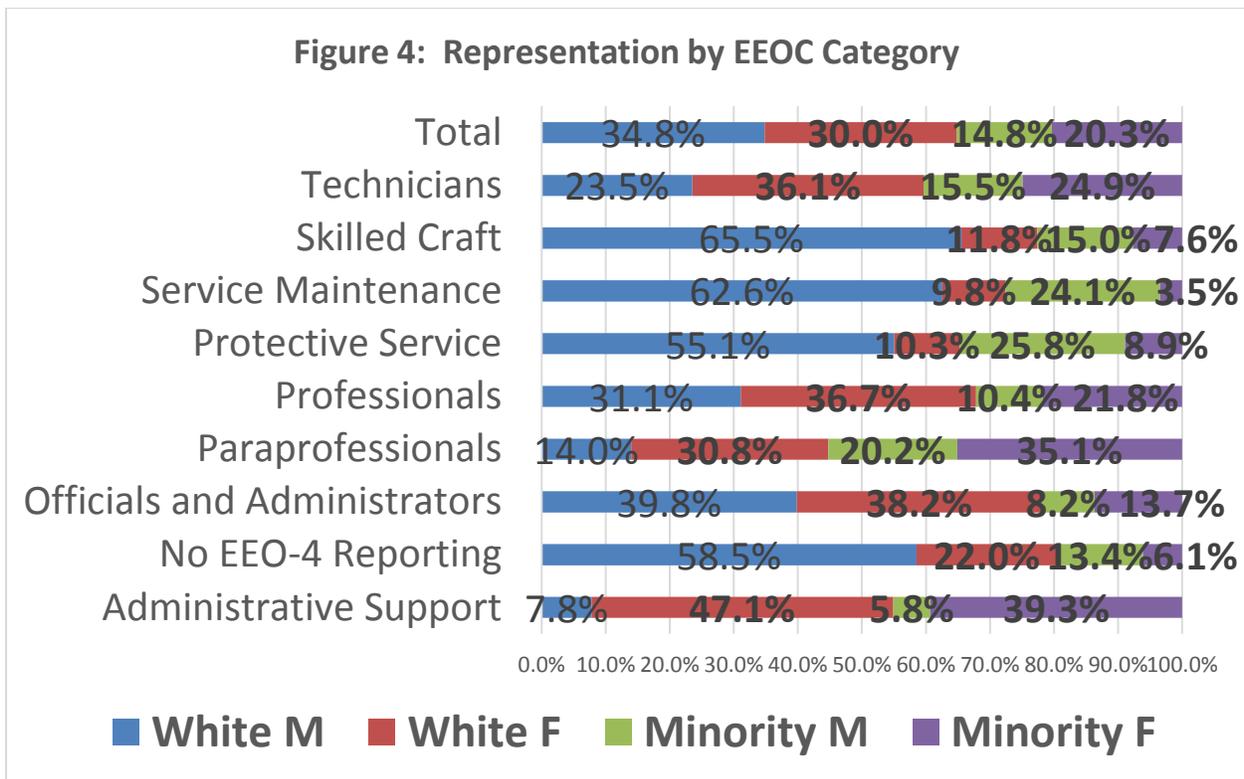
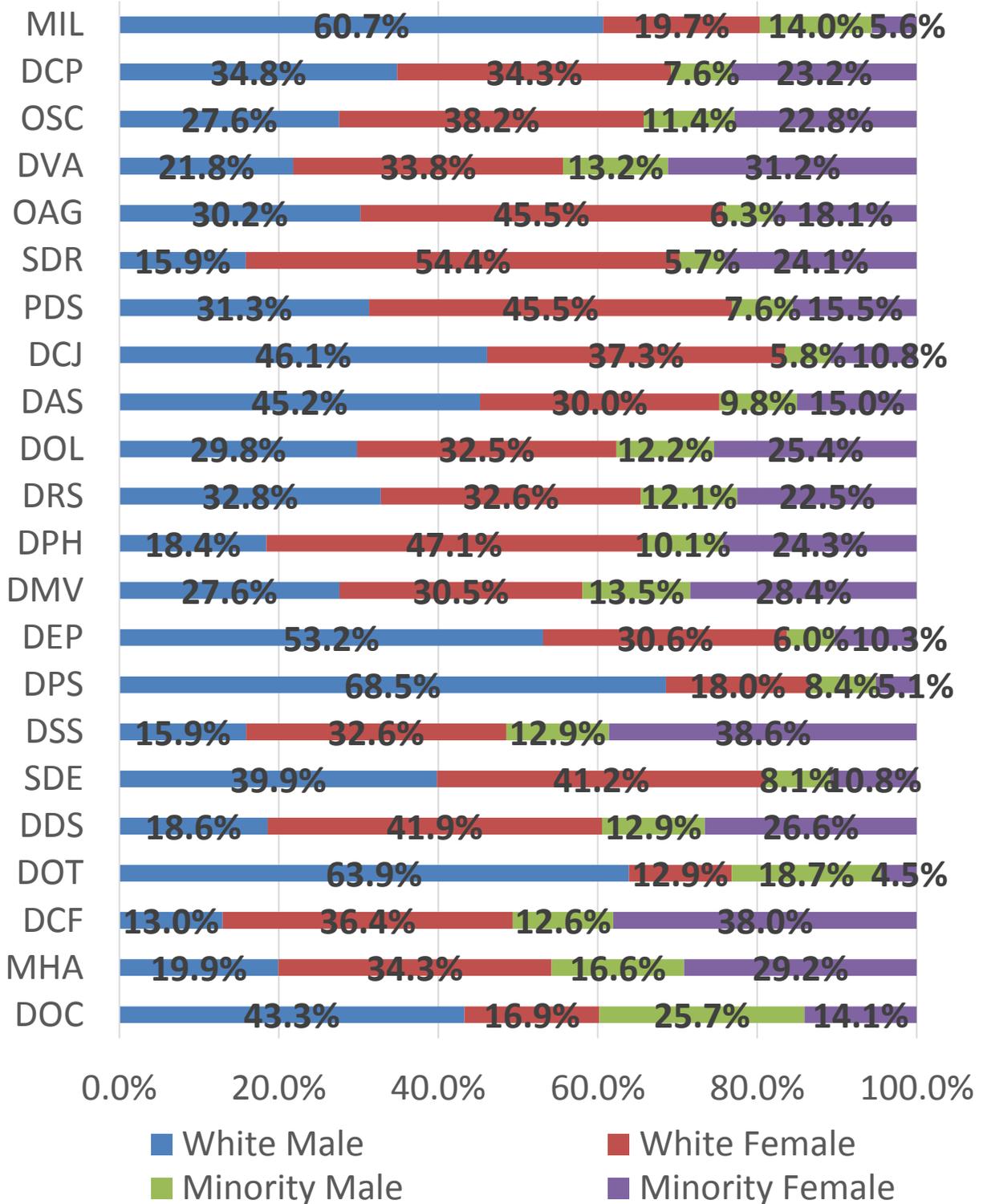


Figure 5: Representation by Gender and Race/Ethnicity in CT Departments with more than 200 Employees

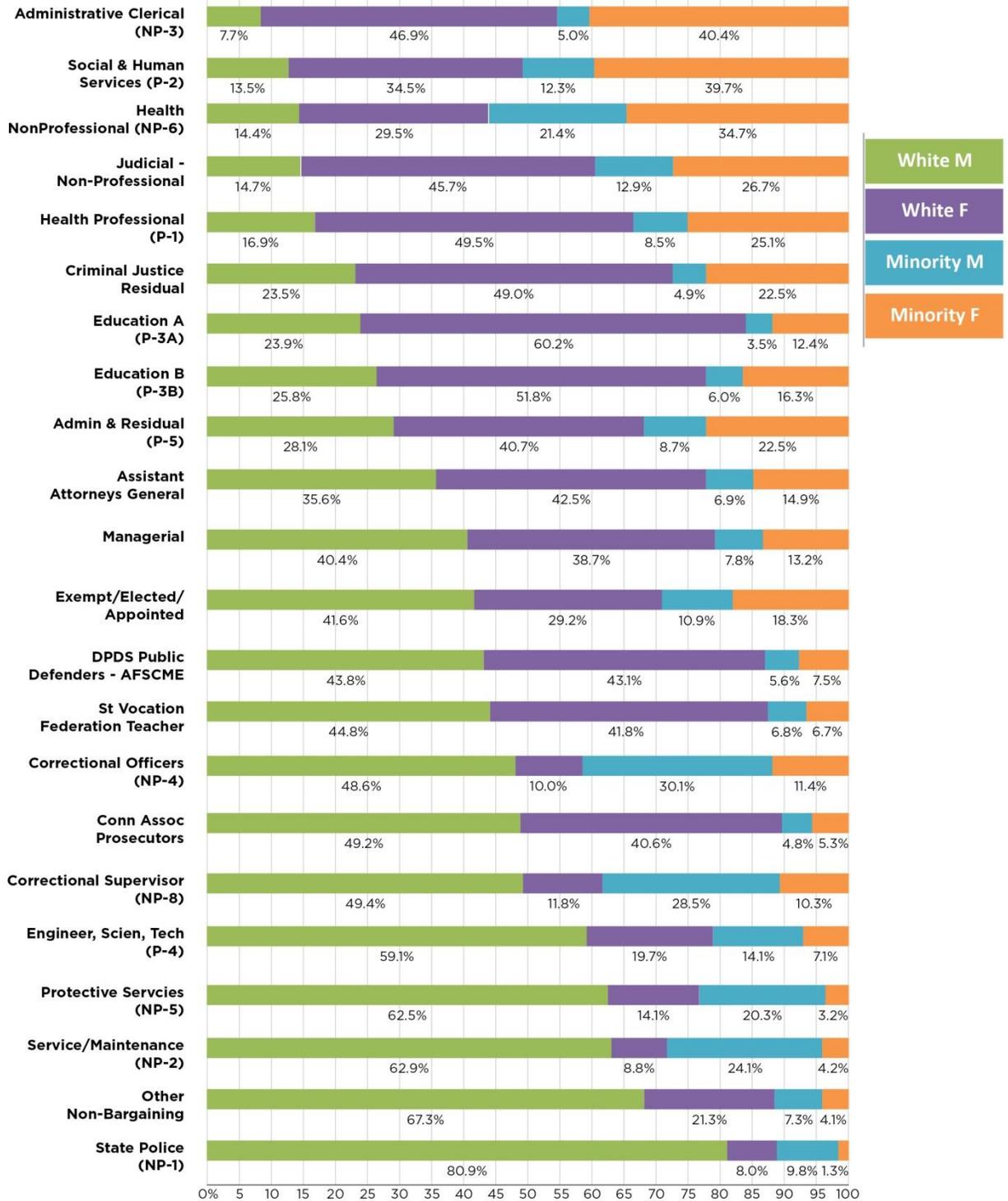


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The illustration in Figure 6 further demonstrates the higher concentration of minority females in redistributive agencies and occupations that are typically lower-ranking positions.

Representation by Gender/Race/Ethnicity in Union Codes with more than 100 Employees (98% of State Workforce)



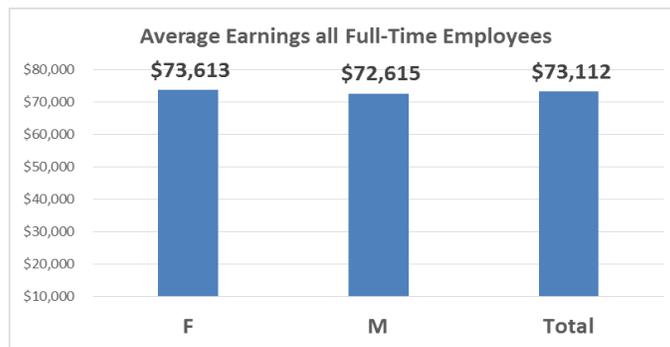
Connecticut Compensation by Gender and Race-Ethnicity

Representation across agencies and occupations is an essential starting point, because where workers are located and what positions they can access will determine what compensation and upward career mobility they may access.

A broad view of Connecticut’s full-time executive branch workforce again suggests that Connecticut outperforms many other public-sector workforces as far as gender parity, with the average salary for women above men by approximately \$1,000. However, a deeper look will show disparities as high as \$10,000 in annual compensation when gender and race-ethnicity are factored.

To look closer, the data shows that approximately two-thirds of women in the Connecticut executive branch earn within 95-100% of what the average white male earns.

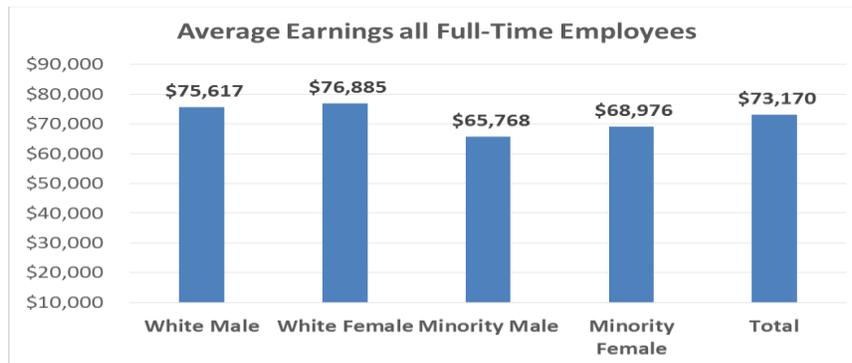
Figure 7: Average Earnings by Gender Across All Full-Time Executive Branch Employees



While Connecticut achieves parity from a broad view of gender alone, upon comparison, the data shows that both minority men and women earn less than white men and white women, but that white women slightly out-earn white men and minority women slightly out-earn minority men. The average minority male earns approximately \$10,000 less than the average white male and female. The average minority female earns almost \$8,000 less than the average white female (see Figure 8 on the following page).

Also, as prior research has found in other public workforces (Alkadry and Tower, 2013), disparities can be detected in Connecticut’s workforce when comparing certain EEO categories. In the “professionals” category, for example, there is a gap of more than \$9,000 when you compare the compensation means of the top five female-dominated agencies (SDR, DCF, DSS, DPH and DSS) to the compensation means of the top five male-dominated agencies (MIL, DOT, DPS, DOC and DEEP).

Figure 8: Average Earnings by Gender and Minorities for All Full-Time Executive Branch Employees



The illustration in Figure 9 further isolates full-time executive branch employees by gender and race-ethnicity. Here are some key findings from this figure:

- The highest earning, from top to bottom, are Asian males, Asian females, white females, white males, black females, Hispanic females, black males and Hispanic males.
- When viewed by racial-ethnic breakdown, women slightly outperform males within their racial-ethnic categories, except for Asian females. While Asian females outperform most other categories, they are the only racial-ethnic category where females earn less than males within their racial-ethnic identity.
- Black and Hispanic men earn the least on average with a disparity of more than \$10,000 annually.

Figure 9: Average Earnings by Gender and Racial-Ethnic Categories

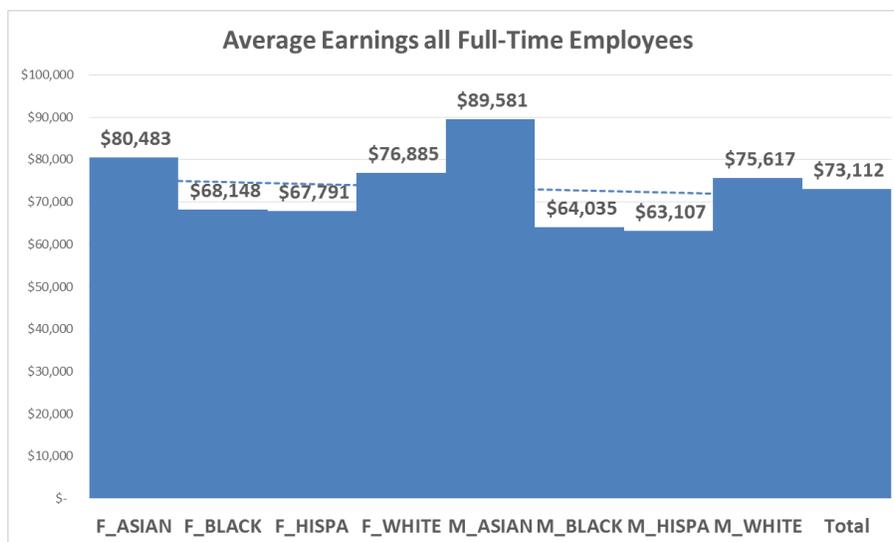


Figure 10 further illustrates the average salary of each gender and racial-ethnic category of employee as a percentage of white male salary in the Connecticut state executive branch.

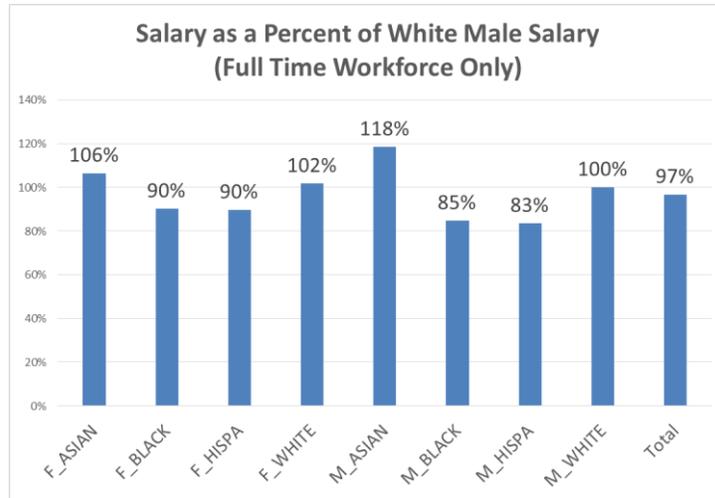


Figure 10: Salary as a Percent of White Male Salary.

Gender and racial-ethnic disparities vary widely across the boundaries of each agency, union code and EEO category. The data reports attached to this analysis offer the opportunity for each individual agency to view their information in a number of ways, including how female salary compares as a percentage of male salary by each union code and EEO category within their agency, and how their agency compares to others.

Female salary as a percentage of male salary within any given union code fluctuates significantly from agency to agency. For example, when reviewing the Administrative and Residual union code across agencies, female salary as a percentage of male salary varies from 61 – 142%. For Administrative Clerical it varies from 41 – 148%, and for Engineering, Science & Technical P-4 it varies from 45 – 129 %.

Conclusion and Recommendations

Even as the national economy experiences growth and households across the spectrum are reportedly growing, economic disparities by race, education and geography remains unchanged, according to the latest annual [Board of Governors of the Federal Reserve System report](#) issued in May.

This analysis indicates that Connecticut stands out when compared to other public-sector workforces as a whole component, particularly in some of its highest-ranking professional categories. However, Connecticut also faces some of the same disparities and trends found elsewhere when gender and ethnic-racial categories are viewed across agencies and occupations.

These disparities reflect challenges that the State of Connecticut faces as a whole as it seeks economic growth, but also fairness and equality across all populations. This analysis suggests the need for policy actions and/or exploration of the following issues:



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- The state should evaluate its employee classification policy. As mentioned earlier in this report, the federal government and many other states follow a position grading system that allows for positions to be classified in a more uniform way (across bargaining units) across all agencies. This allows for state positions to be classified and compensated more appropriately according to educational attainment, experience and other human capital factors that should determine compensation.
- Each executive agency should review this analysis and attachments to conduct their own self-assessments. Such assessments should be used to determine where action plans may be necessary to address any disparities, including a review of recruitment or organizational strategies.
- The Council should consider establishing a systematic schedule and procedure for agencies to report on the status of their self-assessments and action plans.

Again, this analysis does not provide a diagnosis of the reasons behind any disparities. This analysis is strictly intended to provide observations to agencies so that those individual agencies can use the data to conduct their own self-assessment, identify potential causes on their own, and develop their own plans to address any disparities where they may exist.

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