## Oregon State Government

2015 PAY EQUITY STUDY

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\text { of } \\
\text { EXECUTIVE BRANCH } \\
\text { EMPLOYEES }
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## Project Overview

The Center for Public Service (CPS) was engaged by the Oregon state government Chief Human Resource Office (CHRO) to examine and identify pay gaps that exist among employees within the executive branch. The Oregon State Government 2015 Pay Equity Study of Executive Branch Employees (2015 Pay Equity Study) was conducted to analyze comparative pay levels based on gender and minority status, and has done so controlling for known contributing factors through comprehensive regression analysis.

In addition, the 2015 Pay Equity Study also provides the median analysis, or mid-point calculation, of actual monthly base pay levels comparing female to male, as well as minority to non-minority employees. Although such median data does not control for any known contributing factors, it is often used in national and regional pay equity studies citing general dollar to dollar differences.

By including both regression and median analyses, this study provides a substantial examination of pay differences between males and females as well as minorities and non-minorities among the employees in the executive branch overall, and then provides analyses broken down into these key subgroups: agency type, service type, generation, EEO-4 code, part-time/job share employees, veterans, and employees with disabilities.

The analyses and findings from this study will provide the CHRO with information needed to understand and address pay equity issues in the executive branch.

## Methods

Pay equity was assessed by using monthly base pay data as compiled by the CHRO for all executive branch employees (34,020 employees) who were either permanent or limited duration employees as of February 12, 2015. Seasonal employees were not included in the data.

The study compared the monthly pay levels of male vs. female, and minorities (non-white) vs. non-minorities (white) using regression analysis in order to control for the following factors:

- Agency size (less than 100, 100-999, 1000+ employees)
- Agency type (distributive, financial administration \& general control, regulatory, redistributive)
- Service type (executive service, management service, union, and unrepresented)
- Age
- Length of employment in the executive branch
- Length of employment in current position
- EEO-4 employee categories (officials/ administrators, professionals, technicians, protective service workers, paraprofessionals, administrative support, skilled craft workers, service maintenance workers, other)

Additional variables such as education and experience prior to employment at the state, which may also have an impact on pay, were not available in the data set at the time of the study.

This report features regression analysis results which provide findings that are precise in predicting pay differences between males and females, as well as minorities and non-minorities after controlling for the known contributing factors noted above.

Additionally, median monthly base pay values are provided throughout the report in order to show the actual middle value of monthly base pay for males versus females and minorities versus non-minorities in the overall executive group and in the key sub-groups as well. By including the actual mid-point amount of monthly base pay, the median calculations provide a relative framework for the differences predicted through the regression analysis. Together, the regression and median analyses tell a more complete story about the size and proportion of pay gaps.

Throughout the report the regression results will be illustrated with a pale gold-tone background in order to differentiate the regression from the median analyses.

## Key Results

The results of the regression analysis consistently show a pattern of difference in pay levels showing:

- Males earning more than females, and
- Non-minorities earning more than minorities.

Additionally, when looking at the combination of these traits, the median results consistently show:

- Minority females experience the lowest median monthly base pay, while
- Non-minority (white) males receive the highest median monthly base pay.


## Executive Branch Overall

In reviewing the full executive branch workforce and controlling for the identified factors, the results show a prediction of the pay differentials by gender and minority status as follows:

- Females in the executive branch are predicted to earn $\$ 380.34$ a month less than males in their monthly base pay.
- Minorities (non-whites) are predicted to earn \$92.11 a month less than non-minorities in their monthly base pay.


## Comparison Across Agency Types

The 67 agencies in the executive branch are categorized into four groups based on their primary functions. They are: financial administration and general control, distributive, redistributive, regulatory.

In particular, it is noteworthy to point out the financial administration and general control group shows:

- Males are predicted to earn $\$ 844.08$ a month more than females. This gender difference represents the largest pay gap of all groups assessed in the study.
- Minorities are predicted to earn $\$ 222.42$ a month more than non-minorities. This is an exceptional finding that is contrary to the pattern found in the executive branch overall.


Figure 1: Regression Analysis-Predicted Pay Differences for

## Comparison Across Service Types

Monthly base pay in gender and minorities are compared across primary service types. They are: executive service (limited to officials/administrators as identified in the EEO-4 code), management service, union, and unrepresented.

- The difference between males and females is statistically significacnt with males predicted to earn more with the exception of executive serviceofficials/administrators.
- The union group showed a relatively small predicted difference among minorities and non-minorities of $\$ 89.27$. This result is statistically significant.
- This result in the unrepresented group is also exceptional. Here, minorities are predicted to earn more than non-minorities by $\$ 332.23$ per month.


Figure 2: Regression Analysis-Predicted Pay Difference

## Comparison Across Generations

The comparison across generations included millennial, generation X , baby boomer, and traditionalist groups.

Millennials: Employees born in or after 1981<br>Generation X: Employees born between 1965-1980<br>Baby Boomers: Employees born between 1947-1964<br>Traditionalists: Employees born in or before 1946

Each of the generations show a substantial predicted monthly base pay difference, with males making more in all generations. It is interesting to see that with age, the gender gap increases. The pay differential between males and females in the traditionalist generation nearly double the expanse of the gap compared with the gap among baby boomers.

- In the millennial generation, males are predicted to earn $\$ 111.89$ more than females.
- In generation X males are predicted to earn $\$ 364.03$ more than females.
- In the baby boomer generation, males are predicted to earn $\$ 441.67$ more than females.
- In the traditionalist generation, males are predicted to earn $\$ 872.79$ more than females, and minorities predicted to earn $\$ 9.88$ more than non-minorities.


Figure 3: Regression Analysis-Predicted Pay Difference for Gender and Minority Status by Generation

## Comparison Across EEO-4 Code Categories

Monthly base pay for females and minorities are compared across employee groupings based on nine EEO-4 codes. Remarkable findings were demonstrated in two of the EEO-4 groups where the predicted monthly base pay for females is higher than their male counterparts. These two EEO-4 groups are:

- Among Paraprofessionals (EEO-4 Code E), females are predicted to make $\mathbf{\$ 1 4 . 5 4}$ more than males.
- Among Administrative Support (EEO-4 Code F), females are predicted to make $\mathbf{\$ 5 1 . 8 8}$ more than males.


Figure 4: Regression Analysis-Predicted Pay Differences for Gender and Minority Status by EEO-4 Code (*indicates the result is statistically significant, $\mathrm{p}<.05$ )

## Comparison Across Unions

Employees represented by unions are grouped into ten union groups. Due to small populations in many union groups, a more in-depth analysis using tools such as regression analysis, is not possible. The median analysis presented in this section reveals important trends for monthly base pay by gender and minority status.

Each union group was analyzed using central tendencies including the comparisons of the mean (average), median (mid-point), and total numbers of employees.

## Comparison Between Full-time vs. Part-time \& Job Share Employees

Monthly base pay in gender and minorities for non-full-time employees are compared to that of full-time employees. There are 1,230 part-time and job share employees represented in the data. Because part-time employees often experience the workplace differently, looking specifically at this group of employees warrants attention.

- Among part time and job share employees, the general pattern of the males and non-minorities having a higher monthly base pay than females and minorities, respectively, holds true.


Figure 5: Regression Analysis-Predicted Pay Differences for Gender and Minority Status by Full-time Status

## Comparison Between Veterans vs. Non-Veterans

The gender and minority monthly base pay equity gaps are assessed for employees who reported veteran status at the time of hire.

- Male veteran employees are predicted to earn \$289.32 more than female veteran employees.
- Non-minority veteran employees are predicted to earn \$162.27 more than minority veteran employees, although this difference is not statistically significant.


Figure 6: Regression Analysis-Predicted Pay Differences for Gender and Minority Status by Veteran Status (*indicates the result is statistically significant, $\mathrm{p}<.05$ )

## Comparison Between Employees with Reported Disabilities vs. Employees Without Reported Disabilities

The gender and minority monthly base pay equity gaps are assessed for employees who reported disability status at the time of hire.

- Among employees with a reported disability, minorities are predicted to have a higher median monthly base pay by $\$ 35.80$ per month as compared to non-minorities with a disability.


Figure 7: Regression Analysis-Predicted Pay Differences for Gender and Minority Status by Disability Status

## Conclusion

The Oregon State Government 2015 Pay Equity Study found a consistent pattern of pay difference in the overall executive branch workforce and in the majority of executive branch sub-groups that were identified for analysis. The pattern repeated throughout the study, with few exceptions, demonstrated that non-minority (white) males are paid at the highest levels (median monthly base pay $=\$ 4,786$ ) with minority (non-white) males earning the next highest pay ( median $=\$ 4,176$ ). Non-minority females (median = \$4,111) and then minority females (median $=\$ 3,607$ ).

Overall, in reviewing the full executive branch workforce and controlling for the contributing factors identified (age, agency size, agency type, service type, length of employment at the state, length of employment in position, and EEO-4 employee category), females are predicted to earn $\$ 380.34$ less than males in their monthly base pay, and minorities are predicted to earn $\$ 92.11$ a month less than their non-minority counterparts.

The largest stastically significant gender pay gap in the study was found in the sub-group of agencies categorized as delivering financial administration and general control services. After controlling for contributing factors the regression results showed males are predicted to earn $\$ 844.08$ more in their monthly base pay than females.

When comparing minorities with non-minorities, the largest statistically significant monthly base pay differential was $\$ 332.23$ in the unrepresented service type, with minorities predicted to earn more than non-minorities. The largest statistically significant pay gap with non-minorities predicted to earn more than minorities, occurs in the EEO-4 job code C , technicians, with a difference of $\$ 216.76$ a month.

Also, it is interesting to highlight that a significant gender pay gap exists within the traditionalist generation with males earning $\$ 872.79$ more in monthly base pay than females. We see the gap narrow to a differential of $\$ 111.89$ among the millennial generation, the youngest generation. While this may indicate an improved trend for gender equity for the younger generation of employees, this trend is not seen among executive branch minorities.

It will also be important to observe how the pay gap among millennials changes over time as these employees move through their careers.

In summary, pay gaps for females and minorities compared to males and non-minorities differ across the many sub-groups within the Oregon state government executive branch. Workers performing jobs in the same salary range and at the same step earn similar pay due to the well-organized compensation systems for both represented and unrepresented workers. Such structured compensation programs support pay equality to a large degree. The gap or differential in pay primarily occurs where males and females, non-minorities and minorities differ in their positions, steps and occupations.

Public and private employers alike recognize the need to promote women and minorities into the higher levels of management and administration; to provide employment opportunities into positions that have traditionally been higher-paying and male-dominated; and to open access to the science, technology, engineering and mathematic (STEM) fields through academic support and practical work experience. Additionally, hiring managers involved in recruitment and selection processes should have heightened awareness and flexibility in considering a broad spectrum of skills, knowledge and abilities when establishing minimum qualifications and preferred position requirements, as well as when determining starting salaries and compensation steps at time of hire. These are critical considerations for giving minorities and women equitable alignment with their male and non-minority counterparts.

The U.S. Census Bureau in its Current Population Survey, 1961 to 2014, established the female to male earnings ratio of 78 percent. This statistic has been used by public and private leaders to highlight the work to be done in the area of gender pay equity. This calculation of median earnings for full-time, year-round male and female workers has also been widely criticized for being too general and not diving deeper into the context of occupation segregation, educational levels, environment comparisons, socialeconomic influences, and other impacting factors.

Statistics for racial pay equity vary greatly and are most often reported by racial group and compared to nonminority (white) males, which is not consistent with the 2015 Pay Equity Study.

Not withstanding these caveats, the Oregon state government executive branch median analysis shows that the female to male pay ratio is $83 \%$; in other words, females earn 83 cents for every dollar earned by a male co-worker, while minorities earn 91 cents compared to their non-minority colleagues. It should be noted, however, that the minority population included in the study is relatively small, totaling 5,080 employees who self-identified as minorities. While the median monthly base pay gap is narrower for minorities than for females, attention should be given to the level of representation of minorities in the executive branch.

As noted by Oregon state government leaders, as well as by many human resource and labor relations experts, intentional efforts are needed to achieve and maintain pay equity in the workplace. This study provides the foundational data analyses upon which to identify the key pay inequity areas to address with short and long term strategic actions, programs and policies. Oregon state government executive branch seeks to pursue and attain pay equity for their workers. The hope is for other employers to follow their lead in establishing pay equity for all Oregonians.

## A Closer Look:

Key Pattern Throughout the Study
A key pattern throughout the study demonstrated the following order of monthly base pay:


> The Oregon state government Chief Human Resource Office, (CHRO) was directed by the Governor's Office to conduct a pay equity study of employees within the executive branch.

> While there have been past efforts to address pay equity among Oregon state government employees, the Governor's Office and Oregon
state government administrative leadership recognize the need to further investigate and pursue strategies around this issue specifically for their executive branch employees. This study will also inform the current work to revise the management service classification and compensation system.

## Why Does this Matter?

Addressing the issue of pay equity matters to Oregonians. According to the 2013 National Women's Law Center report, Wage Gap Rankings State by State, women in Oregon earned 80.5 cents on the male's dollar, slightly better than the national average of 78 cents. However, the gap is more pronounced when considering Oregon's African American women and Latinas who when compared with non-minority males respectively earn 68.8 cents and 50.7 cents on the dollar. Asian American women in Oregon fared better with a differential of 75.7 cents to their nonminority male counterparts. ${ }^{1}$

Oregon households depend on women's wages more than ever. Two thirds of working women are the primary or co-breadwinners in their families and an estimated 33 percent of single working mothers in Oregon live below the poverty line, according to the recent study, Pay Inequality in Oregon, produced for Oregon's Bureau of Labor and Industries by the Oregon Council on Civil Rights. ${ }^{2}$

Oregon's demographics are changing as the baby boomers age and immigrant and refugee groups enter the region. These women and minority wage earners will be a significant component of Oregon's economy. The case has been made that when diversity is embraced, when individuals are engaged and treated equitably, organizations and society thrive.

1 National Women's Law Center. (2015). Wage Gap Rankings State by State. Retrieved from http://www.nwlc.org/resource/wage-gap-state-women-overall-2013.

2 Oregon Council on Civil Rights. (2014) Pay Inequality in Oregon. Retrieved from http://www.oregon.gov/boli/docs/Pay\ Inequality\ 0regon\ 012314-Final.pdf.

Oregon state government's executive branch is in a position to set a model for the state in addressing pay equity for their workers. The hope is that other employers will follow the lead of Oregon state government. Accomplishing pay equity, with pay rates that are gender and minority neutral, and using fair hiring and promotion processes, will attract and retain employees to government jobs and perhaps attract desired talent to the state. This has been the experience in Minnesota, which is the first to claim statewide pay equity. ${ }^{3}$

With the goal of achieving pay equity in the executive branch, the Chief Human Resource Office launched a study to examine if there is any evidence that a pay differential exists based on gender or minority status among the employees who work in the executive branch.

[^0]
## Purpose and Project Overview

The Center for Public Service (CPS) was engaged by the Oregon state government CHRO to examine and identify pay gaps that may exist among employees within the executive branch.

The monthly base pay data compiled by CHRO for all executive branch employees ( 34,020 employees) who were either permanent or limited duration employees as of February 12, 2015 were analyzed. Seasonal employees were not included in the data.

Regression analysis was conducted to examine if there is a systematic difference in monthly base pay after controlling for factors such as age, length of service at the state and in the current position, EEO-4 employee category, size and type of agency as well as type of service. This study was unable to control for work experience prior to employment in the executive branch and employee educational level due to the lack of available data at the time of the study. It is important to emphasize that controlling for the factors noted above increases the statistical likelihood that the findings are based on other influencers.

To compliment the regression results, this study also calculated median monthly base pay values in order

## Project Approach

This project employed a co-production model where the CPS team from Portland State University worked collaboratively with the CHRO project managers and designated personnel representing executive branch agencies. The CPS and CHRO teams met throughout the duration of the project. The CHRO team compiled the employee data and the relevant personnel pay information, providing it to the CPS team after eliminating any personal identifiers. The CPS team performed the literature review, provided other relevant state and national background information and conducted the comprehensive data analysis.
to show the actual middle value of monthly base pay for males versus females and minorities versus nonminorities in the overall executive group and in the key sub-groups as well. By including the actual mid-point amount of monthly base pay, the median calculations provide a relative framework for the differences predicted through the regression analysis. Together, such comprehensive regression and median analysis of the complex nature of pay equity provides the executive branch with a clearer path from which to identify the root causes for existing pay gaps.

Throughout the report the regression results will be illustrated with a pale gold-tone background in order to differentiate the regression from the median analyses.

In addition to the data analysis, this study reviewed existing literature to identify the research and knowledge recently gained in the area of pay equity. The CPS team also included a brief historical look at the legislation guiding the legal pay equity environment, and included a chronology of the recent efforts to stem the recessionary impact to the state budget through measures restricting hiring and pay that affected workers in the executive branch.

The CHRO team provided necessary assistance and information relevant to the operations of the executive branch, enabling the CPS researchers to accurately comprehend the personnel data, develop appropriate analytic strategies, and provide interpretation of the results that are informative and relevant in understanding pay equity in the executive branch.

## LITERATURE REVIEW

In an effort to provide historical background and setting for this study, the CPS team reviewed research literature and existing studies involving gender and minority pay equity issues.

In addition, the CPS team compiled the major legislative and legal efforts enacted to support fair pay and prohibit pay-related discrimination on a national level and in Oregon.

## Past Research

While the gender pay gap narrowed substantially since the Federal Equal Pay Act was enacted in 1963, there have not been significant changes since 2000.
(See Figure 1)
During the same time period, minorities have faced persistent barriers to being paid fairly for their work.

-_ Women's/Men's Earnings Ratio
Figure 1: Ratio of Median Earnings by Gender, 1963 to 2011, Full-Time, Year-Round Workers ${ }^{4}$



Ratio of Women's Earnings to Men's
$78.0 \%$
$76.9 \%$
$84.4 \%$
$90.7 \%$
$83.8 \%$
$90.6 \%$

Ratio of Women's Earnings to White Men's Earnings

| $88.5 \%$ | $\square I$ |
| :--- | :--- |
| $76.9 \%$ | $\square \square$ |
| $73.1 \%$ | $\square \square$ |
| $65.4 \%$ | $\square \square$ |
| $59.6 \%$ | $\square I$ |
| $53.8 \%$ | $\square$ |

Figure 2: Ratio of Gender Earnings among Minority and Non-Minority Groups in $2013{ }^{6}$

As shown in Figure 2 above, minorities currently are generally paid less than non-minorities. In addition, within each minority group there are evident gender pay gaps.

Scholars of economics, sociology, social psychology, and public and business administration have researched pay differences by gender and minority, including their causes and implications.

An understanding of pay equity, comparable worth, and wage discrimination has been developed through examining labor markets and pay data at state and national levels from an economics perspective. This research has broken down the pay gap between men and women into an explained portion, attributable to differences in education, experience, and occupation, and an unexplained portion that is usually attributed to discrimination. Such research uses econometric techniques, such as decomposition analysis and multiple regression, to analyze the relative contribution of different factors to pay differences among groups. Francine Blau, among others, is acknowledged for her work to raise awareness of gender inequality in the labor market through developing a large body of empirical research. ${ }^{5}$

[^1]Research to understand how and why pay inequity exists from a sociological and legal perspective uses, among other sources, evidence from employment discrimination lawsuits on employee pay, job evaluation surveys, and sworn statements about discriminatory practices. ${ }^{7}$ There is both (a) wage discrimination, "inequality generated by male-female differences in the direct rates of return to productive resources," and (b) rank segregation, "inequality generated by denying women equal access to the higher-paying ranks to which a particular job ladder leads." ${ }^{8}$

Other research has established theories of "glass ceilings," defined as the unseen, yet unbreachable barrier that keeps minorities and women from rising to the upper rungs of the organizational ladder, regardless of their qualifications or achievements." ${ }^{\text {a }}$ Likewise, "sticky floors" refer to wage gaps that occur at the bottom of the wage distribution, in which women and minority groups are less likely to receive promotions from entry-level positions.

[^2]More recently, research from social psychological perspectives shows that differences in men's and women's attitudes and preferences help explain the gender pay gap. More specifically:

## "Women are more risk averse and prefer jobs with stable earnings."

Men have "different attitudes towards competition" and are more likely to compete for jobs with higher pay.

## Differences in social norms, "which dictate what men

 are expected to do and what is appropriate." 10Research also demonstrates that gender differences play out in the area of salary negotiations. Bowles and Babcock found that employers are often unwilling "to work with women who ask for higher salaries because they view them as less nice and too demanding." ${ }^{11}$ In addition, fear of backlash can prevent women from initiating effective negotiation during their jobs. ${ }^{12}$ Similar lines of research continue to unfold and expand the understanding of pay gaps by gender and minority status.

There have been some criticisms of research suggesting that gender pay gaps are due to discrimination, usually on the grounds that women are paid less overall because they are "more likely than men to take extended leaves, work part-time, and complete fewer years of post-college training in order to accommodate family responsibilities." ${ }^{13}$ Scholars generally agree that it is perhaps impossible to determine the precise percent of the pay gap that's due to discrimination. However, there is consensus that inequality and unfairness exist with respect to pay, rank, and other dimensions of the workplace.

Racial and ethnic differences in wages have also been studied in depth, although not to the extent that gender differences have been covered. From the 1960s through the 1980s, the wage gap between African-American and Non-Minority workers of both genders converged steadily; however, since the 1980s the African-American/NonMinority wage gap has stayed level. African-American women have made greater gains, earnings-wise, than African-American men.

[^3]In 2007, African-American male and female workers earned $71.7 \%$ and $84.6 \%$ of Non-Minority male and female workers, respectively. ${ }^{14}$ Racial segregation by occupation has declined, but is still evident, with resulting pay differentials. Occupational segregation between Hispanics and Non-Hispanics, notably in service, production and farming occupations, has increased in recent periods. ${ }^{15}$

There is strong evidence that minorities continue to be discriminated against in hiring practices. In a recent field experiment conducted in New York City, applicants with different racial backgrounds were given equivalent résumés and applied for hundreds of entry-level jobs. The study found that African-American applicants were "half as likely as equally qualified whites to receive a callback or job offer." ${ }^{16}$ The authors noted that "the magnitude of these racial disparities provides vivid evidence of the continuing significance of race in contemporary low-wage labor markets. There is a racial hierarchy among young men favoring whites" over minority groups beginning in the hiring process. ${ }^{17}$

The minority population in Oregon is projected to grow from its current level of 22 percent, as shown in Figure 3 . As the minority share of the population increases in Oregon, greater research is needed to examine pay differences among the state's racial groups. ${ }^{18}$


Figure 3: Ratio of Gender Earnings among Minority and Non-Minority Groups in $2013{ }^{19}$

[^4]In summary, contemporary research provides the following key points that emerge from academic literature on gender and minority pay equity issues.


The higher the percentage of females or minorities in a job, the lower the average wage.
Female-dominated occupations are undervalued. Within specific occupation categories, women are concentrated in firms that pay lower wages to both women and men. ${ }^{20}$

The gender pay gap has narrowed since the 1970s.
However, the portion of this gap that is "unexplained by differences in qualifications and skills is increasing." ${ }^{21}$ Differences in educational attainment and occupation by gender have also decreased since the 1970s, but "occupational segregation" exists to a large extent.


The wage gap between African-American and NonMinority workers of both genders converged steadily since the Equal Pay and Civil Rights Acts.

Since the 1980s, however, the African-American-White wage gap has stayed level.


Differences in attitudes by gender, along with social norms, help explain pay differences.

For example, men may be more likely than women to compete for positions with higher salaries.


Organizational dynamics influence pay equity.
Organizations with greater numbers of women at higher levels tend to have greater pay equity.

## Historical Review: <br> Key National Legislation

The right of employees to be free from discrimination in their compensation is protected under several major federal laws.

Enacted in 1963, the Equal Pay Act (EPA) was comprehensive and clear in requiring that men and women be given equal pay for equal work in the same establishment. The jobs need not be identical, but they must be substantially equal in skill, effort and responsibility as defined in the legislation, and performed under similar working conditions. The EPA permits pay differentials when they are based on seniority, merit, quantity or quality of production, or a factor other than sex. These are known as "affirmative defenses" and it is the employer's burden to prove that they apply. The law was clear that no employee's pay may be reduced in correcting a pay differential; instead, the pay of the lower paid employee(s) must be increased.

Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, and Title I of the Americans with Disabilities Act of 1990 prohibit compensation discrimination on the basis of race, color, religion, sex, national origin, age, or disability. These laws evaluate employees who are similarly situated, and unlike the EPA, there is no requirement for the claimant to work in the same establishment as a comparator. Pay gaps among employees in the protected classes need to be consistent with their nonminority male counterparts based on the employer's job evaluation programs and compensation plans. Importantly, these laws established protections from retaliation for opposing employment practices that discriminate based on compensation or for filing a discrimination charge.

The Lily Ledbetter Fair Pay Act, signed on January 29, 2009, amends the Civil Rights Act of 1964 by restoring protections that existed prior to the Supreme Court decision in Ledbetter v. Goodyear Tire and Rubber Co., allowing liability to accrue from the first discriminatory paycheck, and resetting the length of time permitted for filing a claim and the recovery period for back pay.

1963 Equal Pay Act (EPA)

1964

1967

1990

2009
Title VII of the Civil Rights Act

Lily Ledbetter Fair Pay Act

Age Discrimination in Employment Act

Title I of the Americans with Disabilities Act

Women working full time, year round are typically paid less than full-time, year-round male workers. In the 50 years since the passage of the national landmark legislation, the Equal Pay Act, women have made considerable progress in increasing their earnings. In 1963, a woman working full time, year round typically made just 59 cents for every dollar paid to her male counterpart; that represents a wage gap of 41 cents. In 2013, the most recent year for which data is available, a woman working full time, year round typically made just 78 cents for every dollar paid to her male counterpart. Indeed the gap has narrowed, but it still persists, and the size of the disparity varies by state. ${ }^{22}$

## Pay Equity Efforts in Oregon

Oregon's legislature has been a leader in addressing pay equity issues and enacted the state's Equal Pay Act in 1955, eight years before the federal law was passed. Oregon currently has two major and fundamental laws setting the groundwork for equal pay.

The Oregon Equal Pay Act provides important wage and hour protection prohibiting discrimination between male and female employees in the payment of wages for work of comparable character, where the performance of the work requires comparable skills. Exemptions are made where pay levels are established pursuant to a seniority or merit system that does not discriminate on the basis of gender.

The Fair Employment Practices Act of 1953 and amended by the Oregon Legislature in 2001 (now called the Unlawful Discrimination in Employment Act, Public Accommodations and Real Property Transactions Act) prohibits discrimination because of race, color, religion, sex, sexual orientation, national origin, marital status, or age in compensation or in terms, conditions, or privileges of employment.

The Oregon Commission for Women was established by Governor Mark O. Hatfield in 1964 to advise the governor's office in matters of equal rights for women. Specifically, the commission was charged "to work for the implementation and establishment of economic, social, legal, and political equality for women...maintain a continuing assessment of the issues and needs... with a primary goal to advocate for equal opportunity and treatment for women in employment." ${ }^{23}$

During the recent 2015 legislative session, the Oregon Senate continued to build on the state's legal framework supporting pay equity and passed Senate Bill 491 in June 2015. Specifically, this bill requires public contractors to comply with pay equity provisions of state law, and directs the Oregon Department of Administrative Services to establish a training program for contractors.


[^5]
## Historical Review: <br> Key Compensation Actions and Restrictions

June 2002-June 2012

During the recent recessionary period Oregon was among many states seeking to control the cost of government and demonstrate to their citizens a concerted and organized effort to spend responsibly on essential public services. Included in this effort and under the authority of the Office of the Governor, the Department of Administrative Services established restrictions on many aspects of hiring and compensation affecting executive branch employees.

Restrictions took the form of a mandated hiring freeze, step and merit pay limitations, unpaid furloughs, and other compensation controls that extended during the period from June 2002 through June 2012. These wage-constraining measures were implemented according to relevant policies and administrative guidelines for consistency across all employee groups. The following summarize the key compensation actions and restrictions impacting executive branch employees:

## Hiring Freeze

On June 10, 2002 Governor Kulongoski announced a hiring freeze applying to all vacancies in the executive branch. Guidelines were issued and only positions authorized as essential "to state government's business [that] affect the health, welfare, and safety of the public" were filled during the period of implementation from July 18, 2002 through July 1, 2005.

## Compensation Actions/Restrictions

From July 1, 2003 through July 1, 2005 step increases for represented classified employees were frozen and special merit increases for management service, unclassified and executive service employees were prohibited. Restrictions were also placed on step increases for promotions, lateral transfers and work out of class. New-hire salaries were limited to steps 1 and 2 , or up to step 4 with agency director approval. Starting salaries above step 4 were considered only in exceptional circumstances and pre-approval from DAS Human Resources Service Division (HRSD) was required.

During the 2005-2007 biennium and continuing through much of the 2007-2009 biennium many of the compensation restrictions were progressively lifted. Step increases on promotions resumed, a new top salary step was added, a bottom step removed with increases available to eligible employees, and special merit increases were allowed with agency director approval.

In a directive issued by DAS HRSD under the authority of Oregon state government, it was explained that "due to extraordinary budgetary shortfalls this biennium, [DAS] is implementing cost reduction measures for the fourth quarter of fiscal year 2008-2009..." that applied to management service, unclassified and executive service employees. Effective March 1, 2009 salaries were frozen, special merit increases were again prohibited and the new top step was rolled back returning employees at the new top step to the next lower step. These restrictions remained in place until lifted on July 1, 2012.

From September 1, 2009 through July 1, 2012 salaries were frozen for represented classified staff.

## Furloughs

Effective March 1, 2009 a tiered protocol of unpaid furloughs was instituted for management service, unclassified and executive service employees. This furlough requirement continued for 51 months until rescinded on July 1, 2013.

A program of unpaid furloughs was implemented for represented classified employees for the period beginning September 1, 2009 through July 1, 2013 for a total of 45 months.

## Cost of Living Adjustments (COLAs)

See figure 3 for a listing of the COLAs that occured during this period.

As stated earlier, these wage-constraining programs were implemented for consistency across all employee groups. What affect these cost-cutting measures had on gender and minority pay equity is not possible to discern through this study, but it is certainly worthy to point out that for the majority of workers starting salaries were held at the lowest steps, pay increases for promotional opportunities were capped, unpaid furlough days were required, and pay for lateral transfers and work out of class were restricted. Certainly, non-represented employees, including females and minorities, who were subject to unpaid furloughs of longer duration and those whose pay was restricted for longer periods of time will be affected differently than their represented co-workers.

```
Effective Represented Classified* Management Service, Unclassified, & Executive Service
Date
2-1-2003 3% COLA -
7-1-2005 2% COLA (or $50 minimum) 2% COLA
12-1-2006 2% COLA (or $50 minimum) -
7-1-2007 3% COLA (or $80 minimum) New salary plan for agency heads with 10% increase 3% COLA for range 24 and above 3.2% COLA
11-1-2008 3.2% COLA (or $85 minimum) 3.2% COLA
12-1-2013 1.5% COLA 1.5% COLA
12-1-2014 2% COLA 2% COLA
```

Figure 3: Cost of Living (COLAs) for Represented Classified and Management Services, Unclassified and Executive Services Employees from 2003 to 2014

[^6]Methods

The CHRO committee and CPS research team jointly determined:

1 The data used in the study

2 Indicator for equity

3 Main groups to be assessed

4 Employee categories for sub-analyses

5 Individual characteristics that need to be controlled for in the analyses

6 Data analysis approach

## Description of the Data

Number of employees in the data after removing outliers


## 1 The data used in the study

CHRO compiled monthly base pay and key attribute data for all executive branch employees ( 34,020 employees) who were either employees in permanent or limited duration positions as of February 12, 2015. Employees in seasonal positions were not included in the data.

An initial analysis examining for outliers in the data indicated there were four outliers: three employees earned $\$ 400$ per month (less than 20\% the rate of the next highest earner) and one employee earned $\$ 33,189$ per month (an increase from the next highest monthly pay of more than $62 \%$ ). These four outliers were excluded from all analyses. The data used for the regression analysis excluded those who did not identify as minority or non-minority (313 employees). Additionally, veterans, disabled, and jobshare/part-time employees were excluded from several of the analyses due to the small number of employees. However, to provide meaningful results for each of these groups, dedicated regression analysis was performed and provided in seperate sections of the study: veterans, disabled, and jobshare/part-time employees.

It should be noted that the employee attribute information relied on each employee's self-report. Not everybody in the executive branch provided all necessary attribute information.

Consequently, the total number of employees included in each individual analysis varied. In the case of veterans and those with disabilities, the data reflects those employees who formally declared status as a veteran or as disabled at the time of hire or requested their information be updated. In other words, the data does not reflect those who claim either status informally or who did not update their information after the date of hire.


Figure 4: Number of Employees by Gender with Minority Status Breakdown

## 2

## Indicator for equity

- Pay equity was assessed by using the monthly base pay.

3 Main groups to be assessed

- Gender (male/female)
- Minority status (minority/non-minority)

4 Employee categories for sub-analyses

- Analysis for the entire executive branch, as well as the following eight subgroups, was conducted:

Agency Type
Service Type
Generation
EEO-4 Employee Categories
Unions (Descriptive Analysis Only, Regression not Performed)
Part Time/Job Share Employees
Veterans
Employees who Reported a Disability

5 Individual characteristics controlled for in the analyses

- Group affiliation and other individual characteristics are factors controlled for in regression analysis:

Agency size
Agency type (Distributive, Financial Administration \& General Control, Regulatory, Redistributive)

Service type (Executive Service, Management Service, Union, and Unrepresented)

## Age

Length of employment in the executive branch
Length of employment in current position
EEO-4 employee categories

- The factors listed above were controlled for in order to identify the extent to which an individuals gender and minority status affect monthly base pay.
- It should be noted that the level of education and experience prior to employment with the executive branch, which are known as determinants of base pay, were not available in the data set compiled by CHRO.


## 6 Data analysis approach

- Regression analysis was conducted to assess the statistically significant difference in monthly base pay by gender and minority status after controlling for group affiliations and individual characteristics.

Regression analysis is a technique which "uses correlation as a basis to predict the value of one variable from the value of a second variable or the combination of several variables." ${ }^{24}$ In other words, the analysis allows for the control of group affiliations and individual characteristics in the prediction of monthly base pay based on individual gender and minority status in this study. Multiple linear regression was used to identify statistically significant differences between male vs. female and minorities vs. non-minorities in the mean monthly base-pay, after controlling for other grouping affiliations and the individual characteristics. The number of employees ( N ) shown in each of the subanalysis sections represent the employee cases used in regression analysis after deletion of incomplete cases and the exclusion of non-full time, veteran, and disabled employees (see specific sections on part time/job share, veteran, and disabled employees in this report for information on these groups).

Median is a measure of central tendency represented by the value found in the exact middle of a range of values, when the values are listed in numerical order. ${ }^{25}$ Other state government studies of pay equity have utilized the median pay to compare groups. Thus, if comparing to other studies, the median values described in the report may be the appropriate comparison. Median results, in addition to mean (average) and number of employees, are included in Appendix C.

Regression results are reported to the 100th decimal place (dollars and cents). The reported median results are rounded to the nearest dollar.

[^7]
## Analysis and Key Findings



## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

In order to explore the difference between males and females as well as minorities (non-whites) and nonminorities (whites) after controlling for group affiliations and other characteristics as detailed on pages 28-29, a regression analysis was performed.

The result of the regression analysis indicates that after controlling for factors that impact base pay beyond gender and minority status, the difference in monthly base pay between males and females persists. Among full-time, non-veteran, non-disabled employees, female pay is $\$ 380.34$ less per month than male pay. In other words, after controlling for the additional factors, we still see a pay discrepancy between the genders that is not due to age, length of employment in the executive branch or in appointment, the type or size of the agency, or the service type of the employee. For additional information on the regression results, see Appendix B.

Similarly, the results suggest that a difference among minorities and non-minorities exists in monthly base pay. Specifically, minorities make $\$ 92.11$ less per month than non-minorities after additional variables have been controlled for in the analysis. The analysis uses monthly base pay; therefore, when converted in to annual base pay, males make \$4,564.08 more than females, and nonminorities make $\mathbf{\$ 1 , 1 0 5 . 3 2}$ more than minorities over the course of a year.

The regression equation used in this analysis is as follows, where b represents a coefficient:

```
Base Pay
    =
constant
    +
b1(gender)
    +
b2(minority status)
    +
b3(age)
    +
b4(length of employment at the State)
    +
b5(length of employment in current position)
    +
b6(agency type)
        +
b7(service type)
        +
b8(size of agency)
    +
b9(EEO-4 Group)
```

Annual Base Pay


Males earn
\$ 4,564.08 yyear
more
than Females


Non-Minorities earn
\$ 1,105.32 yyear

than Minorities

## Comparisons of Medians:

## Not Controlling for Group Affiliations and Other Characteristics

Median is a measure of central tendency represented by the value found in the exact middle of a range of values, when the values are listed in numerical order. ${ }^{26}$ Unlike regression analysis, median does not control for additional factors that affect base pay; however, examining the median and distribution of the data complements the regression analysis result.

Providing median information here allows for the direct comparison between the executive branch results and other studies that use the median calculation to assess pay difference. The median monthly base pay of the executive branch is $\mathbf{\$ 4 , 3 4 9 . 0 0}$.

Figure 5, shows the distribution of employees' pay after excluding the four outliers described in the Methods section on page 26. It indicates that the bulk of employees fall on the lower end of the spectrum with a monthly base pay ranging from $\mathbf{\$ 2 , 0 0 0}$ to $\mathbf{\$ 6 , 0 0 0}$.


Figure 5: Distribution of Employee Base Pay After Outliers Were Removed

## Gender Comparison

The comparison of males and females in the executive branch as a whole indicates that males tend to be paid more than females. Figure 6 shows the distribution of monthly base pay for males and females. The median monthly base pay for males $(\$ 4,786.00$ ) is higher than the median monthly base pay for females $(\$ 3,974.00)$.


Figure 6: Distribution of Monthly Base Pay for Female and Male Employees, Showing a Higher Median Pay for Males.

## Minority Status Comparison

Figure 7 shows the distribution of monthly base pay for minorities and non-minorities monthly base pay. The comparison between minority employees and nonminority employees indicates a higher median pay for non-minorities $(\$ 4,358)$ than for minorities $(\$ 3,946)$.


Figure 7: Distribution of Monthly Base Pay for Minority and Non-Minority Employees, Showing a Higher Median Pay for Non-Minorities.

## Combined Gender and Minority Status Comparison

An additional question about pay equity concerns the combined impact of gender and minority status. As we see from Figure 6 and 7, both females and minority employees have lower median monthly base pay as compared to males or non-minorities, respectively. The combined impact of gender and minority status was examined. The four groups are:

Figure 8, below, shows the comparison of median base pay for female/minority, female/non-minority, male/ minority, and male/non-minority. When looking at these characteristics together, female minorities receive lower pay than female non-minorities or male minorities. Male minorities tend to be paid more than either female minorities or female non-minorities. Finally, male nonminorities have the highest median base pay.

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority


Figure 8: Median Monthly Base Pay By Gender and Minority Status Indicating Male, Non-Minorities are Overall the Highest Paid Group and Female Minorities are Overall the Lowest Paid Group

## Agency Analysis

## Summary and Key Findings

Agencies were compared by categorizing into 4 groups:

Financial Administration and General Control
( $\mathrm{N}=1,290$ )
Distributive
( $\mathrm{N}=6,338$ )

## Redistributive

```
( N = 12,081)
```


## Regulatory

( $\mathrm{N}=9,882$ )

The financial administration and general control agency group has a wide gap between males and females.

Although the result is not statistically significant, it is noteworthy that minorities in the financial administration and general control agency group have a higher predicted monthly base pay than their non-minority counterparts.

## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

The internal pay structure and types of positions available in each agency may contribute in creating pay inequity. It is, therefore, important to examine if there is any variation in pay equity across agency types.

To allow for more meaningful comparative analysis, the agencies were grouped into four types by function using Alkadry and Tower's typology of state agencies. ${ }^{27}$ The four types are: Financial Administration and General Control, Distributive, Redistributive, and Regulatory ( $\mathrm{N}=29,591$ ).

Table 1 provides an explanation of each agency type and the executive branch agencies included in each type.

## Financial Admin \& General Control

These agencies include a mixture of policy missions ranging from tax assessment and collection, budgeting, maintaining the treasury, auditing and judicial responsibilities.

| Agencies | N |
| :--- | :--- |
| ADMINISTRATIVE SRVCS, DEPT OF | 747 |
| PUBLIC EMPS RETIREMENT SYSTEM | 347 |
| SECRETARY OF STATE | 189 |
| TREASURY, OREGON STATE | 92 |
| GOVERNOR, OFFICE OF THE | 53 |

Table 1: Agency Type Groupings

## Distributive Agencies

Agencies that typically have a large number of subject specialists operating in functional areas such as: construction, repair and administration of highways and bridges, administration and management of forests, state lands and water resources, provision and operation of parks/ recreational facilities, historic preservation, community development.

| Agencies | N |
| :--- | :--- |
| TRANSPORTATION, DEPT OF | 4260 |
| FISH \& WILDLIFE, DEPT OF | 932 |
| FORESTRY, DEPT OF | 589 |
| MILITARY, DEPT OF | 436 |
| PARKS \& RECREATION, DEPT OF | 401 |
| AGRICULTURE, DEPT OF | 339 |
| OR BUSINESS DEV DEPT | 123 |
| LANDS, DEPARTMENT OF STATE | 104 |
| ENERGY, DEPARTMENT OF | 93 |
| LAND CONSERV \& DEV, DEPT OF | 57 |
| GEOLOGY \& MINERAL IND, DEPT OF | 37 |

## Redistributive Agencies

Agencies that have a predominance of functionality in managing public welfare programs, employment security, mental health and disability, programs involving the aging, vocational rehabilitation, operation of homes and institutions for the disabled/needy and the provision of public health services.

| Agencies | N |
| :--- | :--- |
| HUMAN SERVICES, DEPARTMENT OF | 7469 |
| OREGON HEALTH AUTHORITY | 4283 |
| EMPLOYMENT DEPT | 1115 |
| EDUCATION, DEPT OF | 444 |
| HOUSING \& COMM SRVCS, DEPT OF | 124 |
| VETERANS AFFAIRS, DEPT OF | 78 |
| COMM COLL/WRKFRCE DEV, DEPT OF | 46 |
| LIBRARY, OREGON STATE | 35 |
| STUDENT ACCESS / COMPLETION | 24 |
| LONG TERM CARE OMBUDSMAN | 12 |

## Regulatory Agencies

The functions performed by regulatory government agencies include: police protection, operation of prisons, detention homes, activities related to parole and probation, fire protection, regulation of business practices such as labor relations, securities, environmental conditions, banking, insurance, utilities, energy/oil and gas, occupational licensing.

| Agencies | N | Agencies | N |
| :--- | :--- | :--- | :--- |
| CORRECTIONS, DEPT OF | 4356 | PAROLE/POST PRISON SUPV, BRD | 17 |
| JUSTICE, DEPARTMENT OF | 1230 | OR EDUCATION INVESTMENT BRD | 15 |
| POLICE, OREGON STATE | 1190 | EMPLOYMENT RELATIONS BOARD | 13 |
| REVENUE, DEPARTMENT OF | 969 | AVIATION, DEPARTMENT OF | 12 |
| YOUTH AUTHORITY, OREGON | 928 | RACING COMMISSION | 12 |
| CONSUMER AND BUS SRVCS, DEPT | 849 | PSYCHIATRIC SECURITY REV BRD | 10 |
| ENVIRONMENTAL QUALITY, DEPT | 647 | GOVERNMENT ETHICS COMMISSION | 7 |
| PUBLIC SAFETY STANDARDS \& TRNG | 325 | CRIMINAL JUSTICE COMMISSION | 6 |
| LIQUOR CONTROL COMMISSION | 220 | LAND USE BOARD OF APPEALS | 6 |
| WATER RESOURCES, DEPT OF | 144 | LICENSED SOCIAL WORKERS BOARD | 6 |
| PUBLIC UTILITY COMMISSION | 116 | MORTUARY AND CEMETERY BOARD | 6 |
| LABOR \& INDUSTRIES, BUREAU OF | 93 | CHIROPRACTIC EXAMINERS, BRD OF | 5 |
| CONSTRUCTION CONTRACTORS BOARD | 54 | COUNSELORS \& THERAPIST BRD | 5 |
| BLIND, COMMISSION FOR THE | 53 | MEDICAL IMAGING, BOARD | 3 |
| NURSING, BOARD OF | 46 | PSYCHOLOGISTS EXAMINERS BRD | 3 |
| DISTRICT ATTORNEYS/DEPUTIES | 35 | TAX PRACTITIONERS, ST BRD OF | 3 |
| MARINE BOARD | 35 | VETERINARY MED EXAMINING BRD | 3 |
| OREGON MEDICAL BOARD | ADVOCACY COMMISSIONS, OREGON | 3 |  |
| WATERSHED ENHANCEMENT BOARD | 31 | 29 | NATUROPATHIC MEDICINE, BOARD |
| REAL ESTATE AGENCY | OCCUPATIONAL THERAPY, BOARD | 2 |  |
| HI-ED COORDINATING COMM | 19 | SPEECH PATHOLOGY/AUDIOLOGY | 2 |
| PHARMACY, OREGON BOARD OF | 19 |  | 2 |

Regression analyses were conducted in order to explore the difference between males and females as well as minorities and non-minorities in each of the agency types.

Four separate regression analyses-one for each agency type-were conducted after controlling for group affilliations and other characteristics as detailed on pages 28-29. See Appendix B for more detailed regression results.

As shown in Figure 9, the regression analysis suggests:

- The financial administration and general control agency group has a wide gap among males and females (\$844.08 per month).*
- Though statistically non-significant, in the financial administration and general control agency group, minorities have higher monthly base pay than nonminorities (\$222.42). This stands out as different from other agency types in which minorities are predicted to make less.
- For a female employee in the redistributive group the predicted monthly base pay gap is the smallest; when compared to the other agency groups ( $\$ 246.95$ less than males).
- For minority status, only two agency groups (redistributive, regulatory) showed statistically significant results.


[^8]Figure 9: Regression Analysis-Predicted Pay Differences for Gender and Minority Status by Agency Type (*indicates the result is statistically significant, $\mathrm{p}<.05$ )

## A Closer Look:

## Financial Administration and

## General Control

Figure 10 illustrates the distribution of monthly base pay for males and females in the financial administration and general control agency group. The highest frequency of employees in a given base pay range occurs at the peak of the distribution.

Male monthly base pay peaks between $\$ 4,000$ and $\$ 6,000$, while female monthly base pay peaks between $\$ 3,000$ and $\$ 4,000$.

The observed difference between the male and female monthy base pay peaks in the below distribution provides a more comprehensive understanding about the gender pay gap in this particular agency type.

There are 3 males who make $\$ 15,000$ or more per month who have no female counterparts. This is contributing to the difference identified in the regression result that shows a predicted gender pay difference of $\$ 844.08$.


Figure 10: Distribution of Monthly Base Pay in Financial Administration and General Control Agency Group by Gender

Additionally, two of the agencies included in the financial administration and general control agency group do not follow the executive branch hiring policies. These two agencies are the Oregon State Treasury and Secretary of State.

Due to the impact that differing hiring policies can have on pay equity, a second regression analysis was performed for the financial administration and general control agency group which excluded the department of treasury and secretary of state agencies.

The agencies remaining in this secondary analysis are:

- Office of the Governor
( $\mathrm{N}=53$ )
- Department of Administrative Services
( $\mathrm{N}=747$ )
- Public Employees Retirement System
( $\mathrm{N}=347$ )

The result of this analysis suggests:

- Males are predicted to make $\mathbf{\$ 7 4 5 . 7 5}$ (statistically significant) more than females. While this lowers the predicted difference between males and females in the Financial Administration and General Control agency group, the difference remains the largest gap among all agency types.
- The predicted difference based on minority status is $\$ 96.19$ (not statistically significant), with minorities making more. Again, although the pay gap is lower without the Oregon State Treasury and Secretary of State agencies included in the analysis, the pattern of the result does not change. In both cases, minority employees are predicted to make more than non-minorities.


## Comparisons of Medians:

## Not Controlling for Group Affiliations and Other Characteristics

## Gender Comparison

Medians for each agency type are compared by gender. Figure 11 shows the median pay by gender for each agency type.

- Across the four agency types, males earn more than females in monthly base pay.
- Redistributive agencies have the smallest monthly pay difference between male and female employees (difference in median monthly base pay is $\$ 208$, with males making more than females).
- The male median pay is lowest for redistributive agencies (Median = \$4,161).
- Redistributive and distributive agencies have the lowest median pay for females (Median is \$3,953 and $\$ 3,974$, respectively).
- Financial administration and general control has the highest median monthly base pay for both males $(\$ 5,545)$ and females $(\$ 4,569)$, but also showed the greatest difference between the genders. The difference in median monthly base pay is $\$ 976$, with males making more than females.
- Gender difference in median monthly base pay for all categories of agencies were statistically significant, indicating that the males' higher pay is not due to chance alone.


Figure 11: Median Monthly Base Pay by Gender for each Agency Type

## Minority Status Comparison

Turning now to the examination of median monthly base pay comparison between minority and nonminority employees by agency groups, Figure 12 shows the median pay by minority status for each agency type.

- The smallest difference between minorities' and non-minorities median pay exists in the distributive agencies (median pay difference is $\mathbf{\$ 1 9 7}$, with nonminorities' making more).
- The greatest difference in median pay is in the financial administration and general control agencies (median pay difference is $\mathbf{\$ 6 2 0}$, with non-minorities making more).
- Similar to the pattern identified in the gender comparison, the financial administration and general control agencies have the highest median salaries for both minorities $(\$ 4,409)$ and non-minorities $(\$ 5,028)$.
- Redistributive agencies have the lowest median salaries for both minorities $(\$ 3,607)$ and nonminorities $(\$ 3,974)$.
- For all agency types, the non-minorities have a higher median monthly base pay.


Figure 12: Median Monthly Base Pay by Minority Status for each Agency Type

## Combined Gender and Minority Status Comparison

The combined impact of gender and minority status for each agency type was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Figure 13 combines gender and minority status to show the median monthly base pay for each agency type.

- Non-minority males have the highest median pay for all agency types.
- Minority females have the lowest median pay across all agency groups, with the exception of redistributive agency group, in which male and female minorities both have a median pay of $\$ 3,607$.
- The redistributive agency group is also the only agency group in which the minority male median ` non-minorities $(\$ 3,974)$.


Figure 13: Median Monthly Base Pay by Gender and Minority Status for each Agency Type

Information for Individual Agencies
For the purpose of the analysis, this report provided analysis of the four agency types. To review an individual agency, the following appendices are helpful.

- Appendix D: Median monthly base pay including number of employees, broken down by gender, minority status, and gender/minority combined.
- Appendix E: Information sheets for each agency (including the current governor's office as of April 22, 2015) which compare median base pay by gender and minority status across agency type, service type, EEO-4 Code, and agency size.


## Service Type Analysis

## Summary and Key Findings

Monthly base pay for employees in four service types are compared. Executive Service group is further broken down into three groups.

The groups are:

## Executive Service

( $\mathrm{N}=646$ )
Officials/Administrators (EEO-4 Code A) ( $\mathrm{N}=491$ )

Professionals (EEO-4 Code B)
( $\mathrm{N}=86$ )
Administrative Support (EEO-4 Code F)
( $\mathrm{N}=69$ )

## Management Service

( $\mathrm{N}=3,677$ )

## Union

( $\mathrm{N}=24,499$ )

## Unrepresented

( $\mathrm{N}=766$ )
Males are predicted to earn more in all service types. This is statistically significant for all groups with the exception of the following two subgroups: Official/Administrator (EEO-4 Code A) and Administrative Support (EEO-4 Code F).

Minority employees are predicted to have a higher monthly base pay in the unrepresented group. This is a statistically significant difference.

## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

The employee's service types may contribute in creating pay inequity. It is, therefore, important to examine if there is any variation in pay equity across different service types.

To allow for more meaningful comparative analysis, with the input from the CHRO committee, the data is grouped into four service type categories: executive service, management service, union, and unrepresented ( $\mathrm{N}=29,588$ ). Executive service type is further categorized into three different types of employees based on EEO-4 Code (Officials/Administrators, Professional, and Administrative Support). There was one employee in the executive service who fell into Technicians (EEO-4 Code C) and two employees in Protective Service Workers (EEO-4 Code D). Due to the small size of these groups, these three individuals were excluded from this analysis.

Regression analyses were conducted in order to explore the difference in monthly base pay between males and females as well as minorities and non-minorities in each of the service types.

Six separate regression analyses-one for each service type category - were conducted after controlling for group affilliations and other characteristics as detailed on pages 28-29 (see Appendix B for more detailed regression results).

As shown in Figure 14 the regression analyses suggest:

- The difference in monthly base pay for males and females persists in every service type, with males earning more than females.
- Minority employees are predicted to have a lower monthly base pay compared to non-minorities, with the exception of unrepresented and executive service-professionals (EEO-4 Code B).
- In the unrepresented group, minority pay is predicted to be $\$ 332.23$ more than what is predicted for nonminorities. This result is statistically significant.

For more in-depth information on the regression results, see Appendix B. The number of employees by gender and minority status for each service type is included in Appendix F.

## A Closer Look: <br> Executive Service - Professionals (EEO-4 Code B)

As shown in Figure 14, in the group Executive ServiceProfessionals (EEO-4 Code B), the monthly base pay difference between male and female is $\$ 2,479.62$, with males making more. In addition, it is noteworthy that although not statistically significant, the minorities are predicted to earn $\$ 809.36$ more than their nonminority counterparts.

Since the monthly pay gap by gender in Executive Service-Professionals (EEO-4 Code B) is fairly large in comparison to other service type groups, the data was examined in more detail. This group consists of a variety of classifications with a vast gap in base pay. For example, the bulk of the female employees in this group ( $45 \%$ ) are executive assistants, and the bulk of the males are physicians ( $63 \%$ ). Executive assistants typically earned a lower wage as compared
to physicians. This helps to understand why there is a large gap in gender base pay in this service type.

It should also be noted that the Executive ServiceProfessionals (EEO-4 Code B) group has a small sample size of 86 and the result of the regression analysis may be affected for this reason.

The monthly pay gap by minority status in the Executive Service-Professionals (EEO-4 Code B) is also fairly large in comparison to other service type groups. The data was again examined more in detail. Within this group, minorities are predicted to make more than non-minorities. Although the result is statistically significant, it should be noted that there is a big difference in the sample size between minorities ( $n=12$ ) and non-minorities ( $n=74$ ), and may have affected the regression result.


Figure 14: Regression Analysis-Predicted Pay Differences for Gender and Minority Status by Service Type

## Comparisons of Medians:

## Not Controlling for Group Affiliations and Other Characteristics

## Gender Comparison

Medians for each service type are compared by gender. Figure 15 shows the median monthly base pay by gender for each service type.

- In all service types, males have higher median base pay than females except Executive ServiceAdministrative Support (EEO-4 Code F).
- In the Executive Service-Administrative Support (EEO-4 Code F) group, female median monthly base pay is $\$ 170$ more than males, even though the regression analysis result suggests female pay is predicted to be $\mathbf{\$ 1 4 9 . 4 2}$ less than males (regression analysis result is not statistically significant). This difference in results may be due to the incorporation of control variables in the regression analysis.
- The difference in the median base pay between males and females in the Executive ServiceProfessionals (EEO-4 Code B) is large in comparison to other service type groups. As explained in the results of the regression analysis, this is a group that consists of a variety of classifications with a vast gap in median monthly base pay, which may explain the larger gap.


Figure 15: Comparison of Median Monthly Base Pay for Gender by Each Service Type.

## Minority Status Comparison

Turning now to the examination of median monthly base pay comparison between minority and non-minority employees by service types, Figure 16 shows the median monthly pay by minority status for each service type.

- In all service types, non-minorities have equal or higher median monthly base pay than minorities.
- The Executive Service-Officials/Administrators (EEO-4 Code A) group shows the smallest difference in monthly base pay, with minorities and nonminorities both having a median monthly base pay of $\mathbf{\$ 8 , 9 1 7}$, although in the regression analysis the results suggest non-minorities are predicted to make \$274.11 more than minorities. This difference in results may be due to the incorporation of control variables in the regression analysis.
- Non-minorities in the Executive ServiceProfessionals (EEO-4 Code B) have a median monthly base pay of $\$ 1,982$ more than minorities when medians are compared, even though in the regression analysis minority pay is predicted to be $\$ 809.36$ more than non-minorities. As explained in the result of the regression analysis, this is likely due to the small sample size of the minorities.


Figure 16: Median Monthly Base Pay for Minority Status by Each Service Type.

## Combined Gender and <br> Minority Status Comparison

The combined impact of gender and minority status for each service type was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Figure 17 combines gender and minority status to show the median monthly base pay for each service type.

- The Executive Service-Professionals (EEO-4 Code B), Management and Union service groups follow a trend similar to that observed elsewhere in this study where minority females earn a lower median base pay than non-minority females, who earn less than males.
- The management service group is the only group where minority males and non-minority males have the same median monthly base pay.
- In the Executive Service-Officials/Administrators (EEO-4 Code A) group, male minorities make $\$ 710$ more than male non-minorities, which is a different pattern than we see elsewhere.
- The unrepresented group is the only group in which minority females out-earn non-minority females based on median monthly base pay.


Figure 17: Comparison of Median Monthly Base Pay across all Service Types by Gender and Minority Status

## Generation Analysis

## Summary and Key Findings

Four common generations are used to group employees by date of birth:

## Millennial

Born in or after 1981

$$
(N=5,410)
$$

## Generation X

Born 1965-1980
( $\mathrm{N}=12,695$ )

## Baby Boomer

Born 1947-1964
( $\mathrm{N}=10,605$ )

## Traditionalist

Born in or before 1946
( $\mathrm{N}=881$ )

Gender and minority status showed statistically significant differences in all groups, with the exception of minority status among traditionalists.

The pay gap in the monthly base pay by gender narrows in each successive generation, with the largest predicted pay gap among the traditionalists and the smallest among the millennials.

## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

Regression analyses were conducted in order to explore pay equity between males and females as well as minorities and non-minorities in each of the generation groups. Age was available for 29,591 employees in the dataset compiled by CHRO, and it was used to identify the generation groupings:

Millennials: Employees born in or after 1981
Generation X: Employees born between 1965-1980
Baby Boomers: Employees born between 1947-1964
Traditionalists: Employees born in or before 1946
Four separate regression analyses-one for each generation group-were conducted after controlling for group affilliations and other characteristics as detailed on pages 28-29 (see Appendix B for more detailed regression results).

As shown in Figure 18, the result of the regression analyses by generation group suggest:

- There is a statistically significant difference between males and females in every generation.
- The pay gap in the monthly base pay by gender narrows in each successive generation, with the largest predicted pay gap among the traditionalists and the smallest among the millennials.
- There is a statistically significant difference between minorities and non-minorities in every generation except for traditionalist.
- Minorities in the traditionalist generation are predicted to make more than their non-minority counterparts by $\$ 9.88$ per month. Although the differnce is not statistically significant.


Figure 18: Regression Analysis-Predicted Pay Difference for Gender and Minority Status by Generation (*indicates the result is statistically significant, $\mathrm{p}<.05$ )

## A Closer Look at:

## Traditionalists

Since the monthly pay gap by gender in the traditionalist group is large in comparison to other generation groups, the data was examined more in detail. Figure 19 shows the distribution of monthly base pay for males and females in the traditionalists group.

Within the traditionalist group there are 543 females and 382 males. Fifty two percent of females have a monthly base pay under $\$ 4,000$. On the other hand, fifty three percent of males have a monthly base pay between $\$ 4,000$ and $\$ 6,999$. Additionally, among those who have a monthly base pay of $\$ 9,000$ or above, there are 39 males ( $10 \%$ ) and 5 females ( $1 \%$ ).


Figure 19: Distribution of monthly base rate of pay in traditionalist generation by gender

## Comparisons of Medians:

## Not Controlling for Group Affiliations and

 Other Characteristics
## Gender Comparison

Medians for each generation group are compared by gender. Figure 20 shows the median pay by gender for each generation.

- Males have a higher monthly base pay than their female counterparts in every generation.
- The median monthly base pay gap between genders narrows with each younger generation.
- Females of each older generation have a higher median base pay than the females in the preceding generation group, except for females in the traditionalist group, whose median monthly base pay exceeds only the millennial generation.


Figure 20: Median Base Pay for Males and Females by Generation

## Minority Status Comparison

Figure 21 shows the median monthly base pay by minority status for each generation group. The median analysis suggests the following:

- In each generation, a higher median base pay is observed for non-minorities than for minorities.
- Traditionalists have the greatest difference in median monthly base pay between minorities and non-minorities with a difference of $\$ 817$.
- Baby boomers have the smallest difference in median monthly base pay for minorities and nonminorities with a difference of $\$ 433$.
- Non-minority traditionalists and non-minority baby boomers have the same median monthly base pay of $\$ 4,791$.


Figure 21: Median Monthly Base Pay of Minorities and non-Minorities by Generation

## Combined Gender and <br> Minority Status Comparison

The combined impact of gender and minority status for each agency type was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Figure 22 presents the median monthly base pay for generation groups by gender and minority status.

- In every generation, non-minority males have the highest median monthly base pay and female minorities have the lowest median monthly base pay.
- The median monthly base pay of a given gender/ minority status group is higher in each successive generation, except in the traditionalist group. All females and minorities in the traditionalist generation have lower median monthly base pay than their baby boomer counterparts.
- The male non-minority group is the only group in which an increase in median monthly base pay is seen through all of the generations.
- Female non-minorities in the millennial generation have a higher median monthly base pay than male minorities in that generation. This pattern is not seen elsewhere in this study. Typically, male minorities have a higher median monthly base pay than female non-minorities.


Figure 22: Median monthly base pay by gender and

## EEO-4 Code Analysis

## Summary and Key Findings

The EEO-4 report, mandated by the federal Equal Employment Opportunity Commission since 1993, collects labor force data from state and local governments. Governments provide information on their employment totals, employees' job codes and salary by sex and race/ethnic groups. The job codes have become a standard way for governments across the nation to group work functionality.

Monthly base pay for employees in nine EEO-4 codes are compared.
A Officials/Administrators
( $\mathrm{N}=2,440$ )
B Professionals ( $\mathrm{N}=12,716$ )

C Technicians
( $\mathrm{N}=1,666$ )
D Protective Service Workers
E Paraprofessionals
( $\mathrm{N}=2,945$ )
F Administrative Support ( $\mathrm{N}=4,385$ )
G Skilled Craft Workers
( $\mathrm{N}=1,277$ )
H Service Maintenance Workers
( $\mathrm{N}=888$ )
O Other
( $\mathrm{N}=35$ )

Difference in the monthly base pay by gender for all EEO-4 code groups except for Paraprofessionals (EEO-4 Code E) and Administrative Support (EEO-4 Code F) shows males having higher predicted monthly base pay. The result of Paraprofessionals (EEO-4 Code E) is not statistically significant.

Difference in the monthly base pay by minority status shows non-minorities are predicted to have higher monthly base pay in all EEO-4 code groups.

## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

Regression analysis was conducted to examine if there is any variation in pay equity across employees with different EEO-4 Codes.

The nine EEO-4 Code groups are:
A: Officials/Administrators
B: Professionals
C: Technicians
D: Protective Service Workers
E: Paraprofessionals
F: Administrative Support
G: Skilled Craft Workers
H: Service Maintenance Workers
O: Other

Nine separate regression analyses-one for each EEO-4 code-based classification type-were conducted after controlling for group affilliations and other characteristics as detailed on pages 28-29 (see Appendix B for more detailed regression results).

As shown in Figure 23, the results of the regression analyses by EEO-4 Code suggest:

- Males have a higher predicted monthly base pay for all EEO-4 employee categories, except for Paraprofessionals (EEO-4 Code E) and Administrative Support (EEO-4 Code F) where female pay is predicted to exceed that of their male counterparts. It is important to point out that the result of Paraprofessionals (EEO-4 Code E) is not statistically significant.
- The Administrative Support (EEO-4 Code F) was the only statistically significant group showing higher predicted monthly base pay ( $\$ 51.88$ ) for females.
- Differences in the monthly base pay by minority status show non-minorities are predicted to have higher monthly base pay in all EEO-4 Code groups.
- While the Other (EEO-4 Code O) group has relatively large monthly base pay difference by both gender and minority status, it should be noted that the number of employees in this group is only 35 . Thus, the regression analysis is less reliable as a predictor of outcomes in this group.
- Officials/Administrators (EEO-4 Code A), Professionals (EEO-4 Code B) and Technicians (EEO-4 Code C) all show a predicted monthly base pay difference in gender (with males making more) of over $\$ 450$.
- Minority status is not a statistically significant predictor of monthly base pay for the following five EEO-4 groups:
-Officials/Administrators
-Protective Service Workers
-Paraprofessionals
-Skilled Craft Workers
-Other


Figure 23: Regression Analysis - Predicted Pay Difference for Gender and Minority Status by EEO-4 Code

## Comparisons of Medians:

## Not Controlling for Group Affiliations and

 Other Characteristics
## Gender Comparison

The median monthly base pay for each of the nine EEO-4 codes by gender is shown in Figure 24.

- Skilled Craft Workers (EEO-4 Code G) and Other (EEO-4 Code O) have the same median base pay for males and females at \$3,974 and $\$ 8,274$, respectively.
- Protective Service Workers (EEO-4 Code D) have a small difference in median monthly base pay (\$49) between males and females. Similarly, Service Maintenance Workers (EEO-4 Code H) also have a relatively small difference of \$25 (females have a higher median monthly base pay).
- Officials/Administrators (EEO-4 Code A), Professionals (EEO-4 Code B), and Technicians (EEO-4 Code C) have a large difference in median monthly base pay between males and females, with males having higher median salaries for all of these groups.
- Paraprofessional (EEO-4 Code E), Administrative Support Staff (EEO-4 Code F), and Service Maintenance Workers (EEO-4 Code H) females have higher median monthly base pay. For a list of which classes fall into which EEO-4 Code, see Appendix G. ${ }^{28}$


Figure 24: Median monthly base salary by gender for each EEO-4 code

## Minority Status Comparison

Turning now to the examination of monthly base pay comparison between minority and non-minority employees by EEO-4 Code groups, Figure 25 shows the median pay for each of the nine EEO-4 codes by minority status.

- In all EEO-4 groups, with the exception of skilled craft workers (EEO-4 code G) and (EEO-4 code O) non-minorities have a higher median monthly base pay than minorities.

A: Officials/Administrators have a difference in minority and non-minority monthly base pay of \$345.

B: Professionals have the largest difference in the monthly base pay between minority and non-minority, with non-minorities making a higher median monthly base pay by $\$ 440$.

C: Technicians have a difference in minority and non-minority monthly base pay of $\$ 186$.

D: Protective Service Workers have a difference in minority and non-minority monthly base pay of \$28.

E: Paraprofessionals have a difference in minority and non-minority monthly base pay of $\$ 133$.

F: Administrative Support have a difference in minority and non-minority monthly base pay of \$266.

G: Skilled Craft Workers have the same median monthly base pay for minorities and nonminorities, \$8,274.

H: Service Maintenance Workers have a difference in minority and non-minority monthly base pay of \$312.

O: Other Employees have the same median monthly base pay for minorities and non-minorities, \$266.


Figure 25: Median monthly base salary by minority status for each EEO-4 code

## Combined Gender and Minority Status Comparison

The combined impact of gender and minority status for each EEO-4 code was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Figure 26 presents the median monthly base pay for EEO-4 groups by gender and minority status.

- Other (EEO-4 Code O) is relatively small ( $n=35$ ), but the median monthly base pay is the same for employees regardless of gender or minority status.
- In the Technician group (EEO-4 Code C) female non-minorities have a lower median monthly base pay than female minorities.
- In the Paraprofessional (EEO-4 Code E), Administrative Support (EEO-4 Code F), and Service Maintenance Worker (EEO-4 Code H) groups it should be noted that the non-minority groups of both males and females are making, respectively, more than the minority groups of males and females.
- Female minority Skilled Craft Workers (EEO-4 Code G) have the highest median monthy base pay in that EEO-4 Code.


Figure 26: Median monthly base salary by gender and

## Union Analysis

## Summary and Key Findings

The union employees were categorized according to their major union affiliation (total of 10 groups) as follows:
AEE Association of Engineering Employees( $\mathrm{N}=1,083$ )
AFSCME American Federation of State, County, andMunicipal Employees ( $N=6,025$ )
AOCE Association of Oregon Corrections Employees
( $\mathrm{N}=713$ )
CIA Criminal Investigators Association( $\mathrm{N}=15$ )
IAFF/ International Association of Firefighters
PANG ..... ( $\mathrm{N}=14$ )
KAFFA Klamath Falls Airport Fire Fighters Association( $\mathrm{N}=27$ )
ONA Oregon Nurses Association
( $\mathrm{N}=24$ )
OSPOA Oregon State Police Officers Association ( $\mathrm{N}=736$ )
SEIU Service Employees International Union
( $\mathrm{N}=19,212$ )
STEA State Teachers Education Association

Due to the small number of employees in some of the unions, regression analysis was not performed. Only descriptive statistics are provided in this section of the report.

## Comparisons of Medians:

## Not Controlling for Group Affiliations and Other Characteristics

The original data coded 65 different types of employee representation at the state. Some of these groups are very small, and analyzing this number of groups individually would yield less generalizable results, CHRO provided ten union groups into which all represented employees fit. This section of the report discusses the union groups through descriptive analysis, specifically the mean (average) and median (middle value) are presented. Regression analysis on individual union groups was not possible due to limited group sizes in many cases.

The ten union groups are:

AEE: Association of Engineering Employees<br>AFSCME: American Federation of State, County, and Municipal Employees<br>AOCE: Association of Oregon Corrections Employees<br>CIA: Criminal Investigators Association<br>IAFF/PANG: International Association of Firefighters<br>KAFFA: Klamath Falls Airport Fire Fighters Association<br>ONA: Oregon Nurses Association<br>OSPOA: Oregon State Police Officers Association<br>SEIU: Service Employees International Union<br>STEA: State Teachers Education Association

Due to small populations, a more in-depth analysis of union groups using tools to compare means was not possible. The descriptive analysis presented in the union groups section reveals important trends based on central tendencies, but it should be considered that in cases with small population sizes the central tendencies are representing a much smaller volume of data than in cases with larger populations.

Table 2 illustrates the mean and median base rates of pay for each union group as well as the number of members in respective unions.

- SEIU is the largest union group with 19,212 members; AFSCME follows with 6,025 members.
- CIA and ONA union groups have the highest and second highest median monthly base pay.
- SEIU, the largest union, has the lowest median base pay.

| Union <br> Group | Mean <br> Base Pay | Median <br> Base Pay | Number of <br> Records |
| :--- | :---: | :---: | :---: |
| AEE | $\$ 5,805.50$ | $\$ 5,615.00$ | 1,083 |
| AFSCME | $\$ 4,780.10$ | $\$ 4,377.00$ | 6,025 |
| AOCE | $\$ 4,466.16$ | $\$ 4,377.00$ | 713 |
| CIA | $\$ 7,644.40$ | $\$ 7,818.00$ | 15 |
| IAFF/PANG | $\$ 6,295.64$ | $\$ 6,159.00$ | 14 |
| KAFFA | $\$ 6,165.00$ | $\$ 6,159.00$ | 27 |
| ONA | $\$ 6,596.63$ | $\$ 7,072.00$ | 24 |
| OSPOA | $\$ 5,413.11$ | $\$ 5,480.00$ | 736 |
| SEIU | $\$ 4,031.16$ | $\$ 3,781.00$ | 19,212 |
| STEA | $\$ 4,561.63$ | $\$ 4,746.00$ | 25 |
| Grand Total | $\$ 4,682.44$ | $\$ 4,349.00$ | 34,016 |

Table 2: Mean and Median Monthly Base Pay by Union

## Gender Comparison

Table 3 shows the central tendencies of monthly base pay by gender for each union group. The "Number of Employees" column on the right side of the table shows the number of males and females in each union group, illustrating the gender variation among union groups.

- IAFF/PANG and KAFFA groups represent no females.
- Males and females in the AOCE group earn identical median monthly base pay.
- OSPEA males' median monthly base pay is $\$ 675$ more than females' and ONA females' median monthly base pay is $\$ 919$ more than males' pay. These are the unions with the greatest difference in median monthly base pay by gender.
- Unions represent employees in particular occupations (e.g., firefighters (IAFF/PANG) or nurses (ONA)) and certain occupations continue to be dominated by one gender or the other.
- Of the three union groups that are femaledominant by population, two of those groups, ONA and STEA, show females earning higher median monthly base pay than males at a difference of $\$ 919$ and $\$ 336$, respectively.
- SEIU, the largest union group, represents 12,029 females and 7,183 males; median monthly base pay for females in SEIU is $\$ 367$ lower than that of males.

| Union Group | Gender | Mean Monthly Base Pay | Difference in Mean (Male-Female) | Median <br> Monthly Base Pay | Difference in Median (Male-Female) | Number of Employees |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AEE | Male Female | $\begin{aligned} & \$ 5,871.18 \\ & \$ 5,624.18 \end{aligned}$ | $\begin{aligned} & \$ 622.09 \\ & (14.14 \%) \end{aligned}$ | $\begin{aligned} & \$ 5,895 \\ & \$ 5,615 \end{aligned}$ | $\begin{aligned} & \$ 409.50 \\ & (9.8 \%) \end{aligned}$ | $\begin{aligned} & 795 \\ & 288 \end{aligned}$ |
| AFSCME | Male <br> Female | $\begin{aligned} & \$ 4,826.97 \\ & \$ 4,717.26 \end{aligned}$ | $\begin{aligned} & \$ 653.43 \\ & (14.65 \%) \end{aligned}$ | $\begin{aligned} & \$ 4,586 \\ & \$ 4,176.50 \end{aligned}$ | $\begin{aligned} & \$ 280.00 \\ & (4.99 \%) \end{aligned}$ | $\begin{aligned} & 3,451 \\ & 2,574 \end{aligned}$ |
| AOCE | Male <br> Female | $\begin{aligned} & \$ 4,436.30 \\ & \$ 4,576.34 \end{aligned}$ | $\begin{aligned} & -\$ 140.03 \\ & (-3.06 \%) \end{aligned}$ | $\begin{aligned} & \$ 4,377 \\ & \$ 4,377 \end{aligned}$ | $\begin{aligned} & \$ 0.00 \\ & (0.00 \%) \end{aligned}$ | $\begin{aligned} & 561 \\ & 152 \end{aligned}$ |
| CIA | Male Female | $\begin{aligned} & \$ 7,674.92 \\ & \$ 7,446.00 \end{aligned}$ | $\begin{aligned} & \$ 228.92 \\ & (3.07 \%) \end{aligned}$ | $\begin{aligned} & \$ 7,818 \\ & \$ 7,446 \end{aligned}$ | $\begin{aligned} & \$ 371.00 \\ & (5 \%) \end{aligned}$ | $13$ |
| IAFF/PANG | Male <br> Female | $\$ 6,295.64$ | - | $\$ 6,159$ | - | $\begin{aligned} & 14 \\ & 0 \end{aligned}$ |
| KAFFA | Male Female | $\$ 6,165.00$ | - | $\$ 6,159$ | - | $\begin{aligned} & 27 \\ & 0 \end{aligned}$ |
| ONA | Male Female | $\begin{aligned} & \$ 6,193.00 \\ & \$ 6,654.29 \end{aligned}$ | $\begin{aligned} & -\$ 461.29 \\ & (-6.93 \%) \end{aligned}$ | $\begin{aligned} & \$ 6,153 \\ & \$ 7,072 \end{aligned}$ | $\begin{aligned} & -\$ 919.00 \\ & (-12.99 \%) \end{aligned}$ | $\begin{aligned} & 3 \\ & 21 \end{aligned}$ |
| OSPOA | Male Female | $\begin{aligned} & \$ 5,513.64 \\ & \$ 5,030.07 \end{aligned}$ | $\begin{aligned} & \$ 483.57 \\ & (9.61 \%) \end{aligned}$ | $\begin{aligned} & \$ 5,659 \\ & \$ 4,984 \end{aligned}$ | $\begin{aligned} & \$ 675.00 \\ & (13.54 \%) \end{aligned}$ | $\begin{aligned} & 583 \\ & 153 \end{aligned}$ |
| SEIU | Male Female | $\begin{aligned} & \$ 4,295.40 \\ & \$ 3,873.37 \end{aligned}$ | $\begin{aligned} & \$ 422.03 \\ & (10.90 \%) \end{aligned}$ | $\begin{aligned} & \$ 3,974 \\ & \$ 3,607 \end{aligned}$ | $\begin{aligned} & \$ 367.00 \\ & (10.17 \%) \end{aligned}$ | $\begin{aligned} & 7,183 \\ & 12,029 \end{aligned}$ |
| STEA | Male Female | $\begin{aligned} & \$ 4,421.63 \\ & \$ 4,640.38 \end{aligned}$ | $\begin{aligned} & -\$ 218.74 \\ & (-4.71 \%) \end{aligned}$ | $\begin{aligned} & \$ 4,477 \\ & \$ 4,813 \end{aligned}$ | $\begin{aligned} & -\$ 336.00 \\ & (-6.98 \%) \end{aligned}$ | $\begin{aligned} & 9 \\ & 16 \end{aligned}$ |
| Grand Total |  | \$4,682.44 |  | \$4,349.00 |  | 34,016 |

Table 3: Mean and Median for Union Groups by Gender; Female-Dominant (50\% or more female employees) Groups are Shaded

## Minority Status Comparison

The central tendencies for union groups by minority status are illustrated in Table 4. The "Number of Employees" column on the right side of the table shows the number of minorities and non-minorities in each union group. In each union group, there are substantially more non-minority employees than minority employees, which is in line with the overall state employee population.

- Within the union ONA, there are no minority employees. Thus, no comparison can be made based on minority status.
- In five of the ten union groups (AEE, AOCE, KAFFA, OSPEA, and STEA), the median monthly base pay for minorities exceeds that for non-minorities.
- IAFF/PAFF shows minorities and non-minorities earning identical median monthly base pay, while non-minorities earn $\$ 417.40$ more than minorities when comparing mean base rates of pay.

| Union <br> Group | Minority <br> Status | Mean <br> Monthly <br> Base Pay | Difference <br> in Mean <br> (Male-Female) | Median <br> Monthly <br> Base Pay | Difference <br> in Median <br> (Male-Female) | Number of <br> Employees |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AEE | Non-Minority | $\$ 5,801.92$ | $-\$ 34.61$ | $\$ 5,615$ | $-\$ 280.00$ | 971 |
|  | Minority |  |  |  |  |  |

Table 4: Mean and Median for Union Groups by Minority Status

## Combined Gender and Minority Status Comparison

The combined impact of gender and minority status for each union was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Table 5 presents the central tendencies of monthly base pay for union groups by gender and minority status.

- CIA represents no minority females.
- In AEE, the median monthly base pay for nonminority males is the same to that for minority females $(\$ 5,895)$. Likewise, the median base rate of pay for non-minority females and minority males in this group is the same $(\$ 5,615)$.
- In AOCE and STEA, minority females earn higher median monthly base pay than other employee groups in these unions.
- Non-minority and minority males in OSPOA have the same median monthly base pay $(\$ 5,701)$, while non-minority females and minority females have lower median monthly base pay (\$4,984 and \$4,892.50, respectively).
- Non-minority and minority males in IAFF/PANG have the same median monthly base pay; there are no females in this union group.
- Minority males earn the highest median monthly base pay in the KAFFA union group. There are no females in this group.
- Non-minority males earn the highest median monthly base pay in AFSME, CIA, and SEIU.

| Union | Minority Status | Mean Monthly Base Pay |  | Median Monthly Base Pay |  | Number of Employees |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Male | Female | Male | Female |
| AEE | Non-Minority Minority | $\begin{aligned} & \$ 5,873.27 \\ & \$ 5,852.55 \end{aligned}$ | $\begin{aligned} & \$ 5,602.64 \\ & \$ 5,796.47 \end{aligned}$ | $\begin{aligned} & \$ 5,895.00 \\ & \$ 5,615.00 \end{aligned}$ | $\begin{aligned} & \$ 5,615.00 \\ & \$ 5,895.00 \\ & \hline \end{aligned}$ | $\begin{aligned} & 715 \\ & 80 \end{aligned}$ | $\begin{aligned} & 256 \\ & 32 \end{aligned}$ |
| AFSCME | Non-Minority Minority | $\begin{aligned} & \$ 4,857.82 \\ & \$ 4,652.21 \end{aligned}$ | $\begin{aligned} & \$ 4,735.13 \\ & \$ 4,646.55 \end{aligned}$ | $\begin{aligned} & \$ 4,622.00 \\ & \$ 4,180.00 \end{aligned}$ | $\begin{aligned} & \$ 4,180.00 \\ & \$ 3,994.00 \end{aligned}$ | $\begin{aligned} & 2,985 \\ & 450 \end{aligned}$ | $\begin{aligned} & 2,230 \\ & 328 \end{aligned}$ |
| AOCE | Non-Minority Minority | $\begin{aligned} & \$ 4,438.44 \\ & \$ 4,434.80 \end{aligned}$ | $\begin{aligned} & \$ 4,593.06 \\ & \$ 4,482.52 \end{aligned}$ | $\begin{aligned} & \$ 4,377.00 \\ & \$ 4,566.00 \end{aligned}$ | $\begin{aligned} & \$ 4,377.00 \\ & \$ 4,586.00 \end{aligned}$ | $\begin{aligned} & 493 \\ & 66 \end{aligned}$ | $\begin{aligned} & 129 \\ & 23 \end{aligned}$ |
| CIA | Non-Minority Minority | $\begin{aligned} & \$ 7,716.55 \\ & \$ 7,446.00 \end{aligned}$ | $\$ 7,446.00$ | $\begin{aligned} & \$ 7,818.00 \\ & \$ 7,446.00 \end{aligned}$ | $\$ 7,446.00$ | $\begin{aligned} & 11 \\ & 2 \end{aligned}$ | $\begin{aligned} & 2 \\ & 0 \end{aligned}$ |
| IAFF/PANG | Non-Minority Minority | $\begin{aligned} & \$ 6,414.90 \\ & \$ 5,997.50 \end{aligned}$ | $\begin{aligned} & - \\ & - \end{aligned}$ | $\begin{aligned} & \$ 6,159.00 \\ & \$ 6,159.00 \end{aligned}$ | $\begin{aligned} & - \\ & - \end{aligned}$ | $\begin{aligned} & 10 \\ & 4 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ |
| KAFFA | Non-Minority Minority | $\begin{aligned} & \$ 6,107.00 \\ & \$ 6,498.50 \\ & \hline \end{aligned}$ | $\begin{aligned} & - \\ & - \end{aligned}$ | $\begin{aligned} & \$ 6,159.00 \\ & \hline \$ 6,985.00 \\ & \hline \end{aligned}$ | - | $\begin{aligned} & 23 \\ & 4 \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ |
| ONA | Non-Minority Minority | \$6,193.00 | $\$ 6,654.29$ | $\$ 6,153.00$ | $\$ 7,072.00$ | $\begin{aligned} & 3 \\ & 0 \end{aligned}$ | $\begin{aligned} & 21 \\ & 0 \end{aligned}$ |
| OSPOA | Non-Minority Minority | $\begin{aligned} & \$ 5,553.97 \\ & \$ 6,001.93 \end{aligned}$ | $\begin{aligned} & \$ 5,045.30 \\ & \$ 5,226.33 \end{aligned}$ | $\begin{aligned} & \$ 5,701.00 \\ & \$ 5,701.00 \end{aligned}$ | $\begin{aligned} & \$ 4,984.00 \\ & \$ 4,892.50 \end{aligned}$ | $\begin{aligned} & 509 \\ & 40 \end{aligned}$ | $\begin{aligned} & 143 \\ & 6 \end{aligned}$ |
| SEIU | Non-Minority Minority | $\begin{aligned} & \$ 4,366.04 \\ & \$ 3,955.42 \end{aligned}$ | $\begin{aligned} & \$ 3,923.91 \\ & \$ 3,688.57 \end{aligned}$ | $\begin{aligned} & \$ 3,974.00 \\ & \$ 3,607.00 \end{aligned}$ | $\begin{aligned} & \$ 3,607.00 \\ & \$ 3,450.00 \end{aligned}$ | $\begin{aligned} & 5,978 \\ & 1,149 \end{aligned}$ | $\begin{aligned} & 9,694 \\ & 2,196 \end{aligned}$ |
| STEA | Non-Minority Minority | $\begin{aligned} & \$ 4,381.00 \\ & \$ 4,746.00 \end{aligned}$ | $\begin{aligned} & \$ 4,548.50 \\ & \$ 5,283.50 \end{aligned}$ | $\begin{aligned} & \$ 4,342.50 \\ & \$ 4,746.00 \end{aligned}$ | $\begin{aligned} & \$ 4,813.00 \\ & \$ 5,283.50 \end{aligned}$ | $\begin{aligned} & 8 \\ & 1 \end{aligned}$ | $\begin{aligned} & 14 \\ & 2 \end{aligned}$ |
| Grand Total |  |  |  |  |  | 15,553 | 18,150 |

Table 5: Mean and Median for Union Groups by Gender and Minority Status; the largest earner by mean and by median in each union group is shaded

## Part Time and Job Share Employees Analysis

## Summary and Key Findings

## 1,230

Part-time and Job Share employees are present in the data.

## \$206.26

Part-time and Job Share male employees are predicted to earn \$206.26 more than Part-time and Job Share female employees.

## \$241.23

Part-time and Job Share non-minority employees are predicted to earn \$241.23 more than Part-time and Job Share minority employees, although this difference is not statistically significant.

## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

Part time and job share employees were excluded from the preceding analyses because of the small sample size of non-full-time employees ( $\mathrm{N}=1,230$ ) and because non-full-time employees often experience the workplace differently. However, looking specifically at this group of employees warrants attention.

Regression analysis was conducted in order to explore the difference between males and females as well as minorities and non-minorities for part-time and job share employees (see Appendix B for more detailed regression results). The dataset used for the regression analysis by not full-time status included only the parttime and job share employees who were non-veteran, and non-disabled ( $\mathrm{N}=1,230$ ). The result for the overall executive branch, which used full-time employees only, is provided in this section for comparison. The regression was conducted after controlling for group affilliations and other characteristics as detailed on pages 28-29.

As shown in Figure 27, the result of the regression analyses by part-time and job share employees suggests:

- The predicted monthly base pay for female parttime and job share employees is $\mathbf{\$ 2 0 6 . 2 6}$ less than that of male non-full-time employees. So, even though the median base pay is the same between males and females, once the additional variables are factored in, the male employees are predicted to have higher monthly base pay compared to female employees when they are part-time and job share employees.
- The minority part-time and job share employees are predicted to make $\mathbf{\$ 2 4 1 . 2 3}$ less than the nonminority part-time and job share employees.


Figure 27: Regression Analysis—Predicted Pay Difference for Gender and Minority Status by Full-Time Status (*indicates the result is statistically significant, $\mathrm{p}<.05$ )

## Comparisons of Medians:

## Not Controlling for Group Affiliations and

 Other Characteristics
## Gender Comparison

The median monthly base pay for part-time and job share employees by gender is shown in Figure 28.

- The median monthly base pay for part-time and job share employees is the same for males and females at \$3,973.
- For full-time employees, the difference between male and female median monthly base pay is \$812.00 ( $16.9 \%$ difference), with males making more than females.


Figure 28: Median Monthly Base Pay by Gender for Full-

## Minority Status Comparison

Turning now to the examination of monthly base pay comparison between minority and non-minority employees for part-time and job share employees, Figure 29 shows the median pay for this group by minority status.

- For part-time and job share employees, the median monthly base pay for non-minorities is the same as the median monthly base pay for minority employees ( $\$ 3,973$ ). This median monthly base pay is exactly the same for both males and females who are also part-time and job share employees.
- For full-time employees, there is a difference of $\$ 412$, with non-minorities making more than minorities.


Figure 29: Median Monthly Base Pay for Minority and Non-Minority Employees by Full-Time Status

## Combined Gender and

Minority Status Comparison
The combined impact of gender and minority status for part-time and job share employees was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Figure 30 presents the median monthly base pay for part-time and job share employees by gender and minority status.

- The median monthly base pay for all four gender and minority status groups is approximately the same for part-time and job share employees.
- The median monthly base pay for each gender and minority status group is different for full-time employees, with minority females having the lowest and non-minority males having the highest median monthly base pay.


Figure 30: Median Monthly Base Pay for Minority and

## Veteran Status Analysis

1,473
Veteran employees are present in the data.

## \$289.32

Male veteran employees are predicted to earn
\$289.32 more than female veteran employees.

## \$162.27

Non-minority veteran employees are predicted to earn $\$ 162.27$ more than minority veteran employees, although this difference is not statistically significant.

## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

The current dataset for this study provided by CHRO includes employees who identified themselves as veterans at the time of hire ( $\mathrm{N}=1,473$ ). This section looks specifically at veteran employees for which information was provided on February 12, 2015. Those employees who may in fact be veterans, but who did not notify the employing agency of their veteran status at the time of hire or update their information after time of hire and before February 12, 2015, are not included in the current analysis.

A regression analysis was conducted in order to explore the difference between males and females as well as minorities and non-minorities for veterans and non-veterans (see Appendix B for more detailed regression results). The dataset used for the regression analysis by veteran status included only full-time employees without disabilities ( $N=1,473$ ).

The regression was conducted after controlling for group affilliations and other characteristics as detailed on pages 28-29.

As shown in Figure 31 the result of the regression analyses for veteran status indicates that, after controlling for the additional variables, there is a significant difference in the monthly base pay of males and females in both veteran and non-veteran groups. The difference between minorities and non-minorities is only statistically significant in the non-veteran group.

# A Closer Look at: 

## Veteran Data

The state is confident the veteran's status data for employees is currently incomplete. For a number of years it was not captured in the electronic employee records. Before being added to the personnel system, employees provided their veteran's status when they were newly hired or if they requested it to be updated.

- Among full-time, non-disabled, female veteran employees, the predicted monthly base pay is \$289.32 less than the predicted monthly base pay of their male counterpart. This difference is statistically significant.
- The difference in monthly base pay between veteran minorities and non-minorities is $\mathbf{\$ 1 6 2 . 2 7}$, while the difference among non-veterans is \$92.11. In both cases, non-minorities are predicted to make more than minorities. The difference in monthly base pay of veterans by minority status is not statistically significant.


Figure 31: Regression Analysis-Predicted Pay Difference for Gender and Minority Status by Veteran Status

## Comparisons of Medians:

## Not Controlling for Group Affiliations and

 Other Characteristics
## Gender Comparison

Figure 32 shows the median monthly base pay by gender for veterans and non-veterans.

- The median monthly base pay for female veterans is $\$ 4,349$ compared to $\$ 4,851$ for male veterans.
- By comparison, the median pay for non-veteran females is $\$ 3,974$ compared to $\mathbf{\$ 4 , 7 8 6}$ for nonveteran males.
- There is less than a $\mathbf{\$ 1 0 0}$ difference in median monthly base pay for veteran and non-veteran males.


Figure 32 Median Monthly Base Pay by Gender for Veterans and Non-Veterns

## Minority Status Comparison

Figure 33 shows the median base pay for veterans and non-veterans by minority status.

- Veteran minorities and non-minorities have higher monthly base pay than non-veterans.
- In each group (veteran and non-veteran), nonminorities have a higher median base pay than the minorities in that group, \$412 for non-veterans and $\$ 238.50$ for veterans.


Figure 33 Median Monthly Base Pay by Minority Status for Veterans and Non-Veterns

## Combined Gender and Minority Status Comparison

The combined impact of gender and minority status for veterans and non-veterans was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Figure 34 presents the median monthly base pay for veterans and non-veterans by gender and minority status.

- In both veteran and non-veteran groups, female minorities have the lowest median monthly base pay and male non-minorities have the highest median monthly base pay.
- When compared across veteran status (i.e. when comparing female minority veterans to female minority non-veterans), veterans have a higher median monthly base pay than their nonveteran counterparts.



## Disability Status Analysis

671 employees with a reported disability are present in the data.

## \$467.80

Male employees with a reported disability are predicted to earn $\$ 467.80$ more than female employees with a reported disability.

## $\$ 35.80$

Minority employees with a reported disability are predicted to earn $\$ 35.80$ more than non-minority employees with a reported disability. Although this difference is not statistically significant, it does not follow the trend observed in other regressions, where non-minorities are predicted to have higher monthly base pay.

## Regression Analysis:

## Controlling for Group Affiliations and Other Characteristics

The current dataset for this study provided by CHRO includes employees who reported having a disability at the time of hire $(\mathrm{N}=671)$. A separate analysis is conducted for those with and without disability in order to examine for pay equity by gender and minority status among them. Those employees who may presently identify as having a disability or who receive accommodation for a disability in the workplace but did not notify the employing agency of their disability status at the time of hire or update their personnel information after the date of hire and before February 2015, are not reflected in the current analysis.

A regression analysis was conducted in order to explore the monthly base pay difference between males and females as well as minorities and non-minorities when considering thier disability status (see Appendix B for more detailed regression results). The dataset used for the regression analysis by disability status included only full-time, non-veteran employees ( $\mathrm{N}=671$ ).

The regression was conducted after controlling for group affilliations and other characteristics as detailed on pages 28-29.

The result of the regression analysis for disability status is shown in Figure 35.

# A Closer Look at: 

## Disability Data

The state is confident the disability status data for employees is currently incomplete. Employees often only provide their disability status when they are newly hired. Employees may also be uncomfortable self-reporting this status to their employer.

- There is a statistically significant difference in the monthly base pay of males and females for both the disabled and non-disabled groups. The difference between minorities and non-minorities is only statistically significant in the group that did not report a disability.
- Among female employees who reported a disability, the predicted monthly base pay is $\$ 467.80$ less than their male counterpart.
- Females without a reported disability are predicted to have a monthly base pay $\$ 380.34$ less than a male without a reported disability.
- The difference in the predicted monthly base pay between minorities and non-minorities with reported disabilities is $\$ 35.80$, with minorities making more than non-minorities. This is not statistically significant.

Female Employees
Predicted to Earn More than Male Employees

Male Employees
Predicted to Earn More than Female Employees


Employees with Reported Disability


Minority Employees Predicted to Earn More than Non-Minority Employees

Non-Minority Employees
Predicted to Earn More than Minority Employees

Figure 35 Predicted Pay Difference for Gender and Minority Status by Disability Status

## Comparisons of Medians:

## Not Controlling for Group Affiliations and

## Other Characteristics

## Gender Comparison

Figure 36 shows the median monthly base pay by gender for employees with and without a reported disability.

- Males not reporting a disability appear to have a slightly higher median monthly base pay than males reporting a disability when median salaries are compared.
- Median salaries for females, regardless of disability status, are almost identical.
- The median monthly base pay for male employees reporting a disability is higher at \$4,766 compared to their female counterparts at \$3,973.


Figure 36 Median Monthly Base Pay by Gender for Employees with and without a Reported Disability

## Minority Status Comparison

Figure 37 shows the median base pay for non-minorities and minorities by disability status.

- The median monthly base pay is very similar for minority and non-minority employees who reported a disability: \$4,170.50 and \$4,161.00, respectively.
- Minorities have a higher median monthly base pay than non-minorities in the group reporting a disability. This difference is $\mathbf{\$ 9 . 5 0}$ and it is not statistically significant.


Figure 37 Median Monthly Base Pay by Minority Status for Employees with and without a

## Combined Gender and Minority Status Comparison

The combined impact of gender and minority status for disabled and non-disabled employees was examined after combining gender and minority status using the following four groups:

1. female minority,
2. female non-minority,
3. male minority, and
4. male non-minority

Figure 38 presents the median monthly base pay for disabled and non-disabled employees by gender and minority status.

- Male minorities with a reported disability have the highest median monthly base pay; their median monthly base pay ( $\mathbf{\$ 4 7 8 8 . 5 0 \text { ) is higher than that }}$ of male minorities and non-minorities without a reported disability (\$4,176 and \$4,786, respectively).
- Female minorities with a reported disability experience a slightly higher median base pay $(\$ 3,974)$ than female non-minorities with a reported disability $(\$ 3,849)$ and female minorities without a reported disability $(\$ 3,607)$.
- The median base salaries of employees without disabilities follow the same trend seen in other groups in this study. That is, female minorities have the lowest median monthly base pay, followed by female non-minorities, male minorities, and male non-minorities, in that order.


Figure 38 Median Monthly Base Pay by Gender and Minority Status for Employees with and without a Reported Disability

The Oregon State Government 2015 Pay Equity Study found a consistent pattern of pay difference in the overall executive branch workforce and in the majority of executive branch sub-groups that were identified for analysis. The pattern repeated throughout the study, with few exceptions, demonstrated that non-minority (white) males are paid at the highest levels (median monthly base pay $=\$ 4,786$ ) with minority (non-white) males earning the next highest pay ( median $=\$ 4,176$ ). Non-minority females (median = \$4,111) and then minority females (median $=\$ 3,607$ ).

Overall, in reviewing the full executive branch workforce and controlling for the contributing factors identified (age, agency size, agency type, service type, length of employment at the state, length of employment in position, and EEO-4 employee category), females are predicted to earn \$380.34 less than males in their monthly base pay, and minorities are predicted to earn $\$ 92.11$ a month less than their non-minority counterparts.

The largest stastically significant gender pay gap in the study was found in the sub-group of agencies categorized as delivering financial administration and general control services. After controlling for contributing factors the regression results showed males are predicted to earn $\$ 844.08$ more in their monthly base pay than females.

When comparing minorities with non-minorities, the largest statistically significant monthly base pay differential was $\$ 332.23$ in the unrepresented service type, with minorities predicted to earn more than non-minorities. The largest statistically significant pay gap with non-minorities predicted to earn more than minorities, occurs in the EEO-4 job code C, technicians, with a difference of $\$ 216.76$ a month.

Also, it is interesting to highlight that a significant gender pay gap exists within the traditionalist generation with males earning $\$ 872.79$ more in monthly base pay than females. We see the gap narrow to a differential of $\$ 111.89$ among the millennial generation, the youngest generation. While this may indicate an improved trend for gender equity for the younger generation of employees, this trend is not seen among executive branch minorities.

It will also be important to observe how the pay gap among millennials changes over time as these employees move through their careers.

In summary, pay gaps for females and minorities compared to males and non-minorities differ across the many sub-groups within the Oregon state government executive branch. Workers performing jobs in the same salary range and at the same step earn similar pay due to the well-organized compensation systems for both represented and unrepresented workers. Such structured compensation programs support pay equality to a large degree. The gap or differential in pay primarily occurs where males and females, non-minorities and minorities differ in their positions, steps and occupations.

Public and private employers alike recognize the need to promote women and minorities into the higher levels of management and administration; to provide employment opportunities into positions that have traditionally been higher-paying and male-dominated; and to open access to the science, technology, engineering and mathematic (STEM) fields through academic support and practical work experience. Additionally, hiring managers involved in recruitment and selection processes should have heightened awareness and flexibility in considering a broad spectrum of skills, knowledge and abilities when establishing minimum qualifications and preferred position requirements, as well as when determining starting salaries and compensation steps at time of hire. These are critical considerations for giving minorities and women equitable alignment with their male and non-minority counterparts.

The U.S. Census Bureau in its Current Population Survey, 1961 to 2014, established the female to male earnings ratio of 78 percent. This statistic has been used by public and private leaders to highlight the work to be done in the area of gender pay equity. This calculation of median earnings for full-time, year-round male and female workers has also been widely criticized for being too general and not diving deeper into the context of occupation segregation, educational levels, environment comparisons, socialeconomic influences, and other impacting factors.

Statistics for racial pay equity vary greatly and are most often reported by racial group and compared to nonminority (white) males, which is not consistent with the 2015 Pay Equity Study.

Not withstanding these caveats, the Oregon state government executive branch median analysis shows that the female to male pay ratio is $83 \%$; in other words, females earn 83 cents for every dollar earned by a male co-worker, while minorities earn 91 cents compared to their non-minority colleagues. It should be noted, however, that the minority population included in the study is relatively small, totaling 5,080 employees who self-identified as minorities. While the median monthly base pay gap is narrower for minorities than for females, attention should be given to the level of representation of minorities in the executive branch.

As noted by Oregon state government leaders, as well as by many human resource and labor relations experts, intentional efforts are needed to achieve and maintain pay equity in the workplace. This study provides the foundational data analyses upon which to identify the key pay inequity areas to address with short and long term strategic actions, programs and policies. Oregon state government executive branch seeks to pursue and attain pay equity for their workers. The hope is for other employers to follow their lead in establishing pay equity for all Oregonians.

## A Closer Look:

Key Pattern Throughout the Study
A key pattern throughout the study demonstrated the following order of monthly base pay:

Highest Non-minority (white) males


Next
Highest Minority (non-white) males


## Next

Lowest

Lowest Non-minority (white) females


Minority (non-white) females

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[^8]:    * It is important to note that the Oregon State Treasury and Secretary of State do not follow the hiring practices of the Executive Branch.

