



Addressing the Gender Pay Gap in County Government

Danni Melton, 2019 Summer Fellow

Email: dakmelton@gmail.com

LinkedIn: www.linkedin.com/in/danielle-melton

TABLE OF CONTENTS

| | |
|--|----|
| About the Fellow | 3 |
| Acknowledgments | 3 |
| Definitions | 4 |
| Disclaimer | 4 |
| Executive Summary | 5 |
| Introduction | 6 |
| Methodology | 6 |
| Statistical Analysis of the Pay Gap | 7 |
| Findings | 7 |
| Calculating the Gender Pay Gap | 8 |
| Gender Pay Equity Matters for the County and for Employees | 11 |
| Potential Sources of the Pay Gap | 12 |
| Women are Less Likely to Work in Highly Paid Positions | 12 |
| Women Make Less in Overtime and Variable Pay | 13 |
| Gendered Occupational Segregation by Department | 13 |
| Indications of Unequal Pay for Similar Work | 15 |
| The Gender Pay Gap is Wider for Senior Employees | 16 |
| Recommmendations for Further Study and Data Analysis | 18 |
| Potential Policies or Practices to Help Address the Gender Pay Gap | 19 |
| Policies and Practices That Work | 20 |
| Policies and Practices That Might Work | 22 |
| Policies and Practices That Probably Do Not Work | 22 |
| Appendix | 24 |
| References | 26 |

About the Fellow

Danni Melton is currently a Master of Public Policy student at the Harvard Kennedy School. She is a Poolesville, Maryland, native who is passionate about gender equality, the environment, and data-driven policymaking. She previously worked for the Association for Women in Science, founded the annual George Mason University Women's Leadership Conference and managed a winning campaign for City Council in Fairfax, Virginia. In her spare time, Danni can be found cooking or watching interior design shows.



Acknowledgments

Thank you to the Montgomery County Council and all of the wonderful staff for hosting the fellows program and supporting us throughout the summer. I want to give special thanks to Dr. Costis Torgas, Craig Howard, Tori Hall, and Aron Trombka for all their guidance over the summer and assistance with this report. I want to thank Pam Dunn and Marlene Michaelson for their support of all the fellows.

Definitions:

Gender pay gap – The difference between the amounts of money paid to men and women which includes the effect of part-time employment, type of jobs, and bonuses or overtime. This is not a comparison between men and women in the same job.

Equal pay – When men and women doing the same work with similar backgrounds and experience receive comparable pay for their work.

Gendered occupational segregation – The tendency for men and women to work in job occupations at different rates.

Gross pay – Gross pay includes both salary and overtime work. Gross pay can be either larger or smaller than one's salary based on the amount of time worked.

Disclaimer

Care was taken to protect all personally identifiable information. Specific position titles were chosen for detailed analysis solely based on statistical significance and large employee populations. The analysis below does not include data from other County agencies including MCPS as they are not available in DataMontgomery. Due to the unavailability of data, no analysis relating to race/ethnicity or any other personal characteristics (such as education) was undertaken. Thus, the following results may not reflect the totalities of issues regarding pay inequities in Montgomery County Government. All of the following results and recommendations reflect the opinions of the author alone.

EXECUTIVE SUMMARY

Key Findings:

- There is a **gender pay gap of \$14,219 a year** in gross pay for County employees, which equates to roughly 82.2 cents to a man's dollar.
- There is a **gender pay gap of \$9,265 a year** in gross pay for County employees, which equates to roughly 89 cents to a man's dollar. This figure includes controls for full-time status, years of employment, department, and interaction with department and gender.
- There is a **gender pay gap of \$5,304 a year** including controls for full-time, years of service, department, and overtime pay.
- The above findings are statistically significant to the .001 level.

Factors That May Contribute to the Gender Pay Gap:

- 1) Women make less in **overtime** and variable pay.
- 2) Men make up the majority of **full-time** and **highly paid positions**.
- 3) **Gendered occupational segregation** occurs by departments.
- 4) Some similar positions show indications of **unequal pay** by gender.
- 5) The **gender pay gap is larger for senior employees** – possible explanations include promotion inequity, historical pay gaps in entry salaries, or family responsibilities.

Summary of Recommendations

- Create a **Diversity Talent Manager position in OHR** with responsibilities to **analyze and establish a strategy** around workforce diversity and authority to reduce the gender pay gap.
- Establish **departmental diversity task forces** with voluntary participation.
- Mandate that all County supervisors/departments with more than 50 employees **report on the gender pay gap and workforce diversity**.

INTRODUCTION

Background

This memo presents an analysis of publicly reported 2018 employee pay data from DataMontgomery and explores the issue of gender pay equity among Montgomery County employees. Previous reports published by Montgomery County have used a basic comparison of averages between specific staff positions' pay by gender. This memo provides an in-depth and statistical analysis of the interaction between pay and gender in County employment by conducting a regression analysis. The conclusion offers recommendations for further study and suggests several policies and practices that could help reduce gender pay disparities in Montgomery County.

This study expands on previous assessments by answering the following research questions:

- What is the statistical pay gap?
- What does data suggest are the potential sources of the pay gap?
- What has been proven to work in reducing and addressing the pay gap and increasing workforce diversity?

Methodology

Data Analysis of publicly available employee pay data from DataMontgomery using the statistical program Stata to complete regression analysis as well as graphing tools to create visualizations of the data to illuminate key trends.

Literature Review of previous reports and research from the Council, academic papers, books, and case studies from the private sector.

Interviews and Meetings with staff from the County Council and the Office of Human Resources to gather relevant information about the intricacies of the hiring, overtime, and pay-setting process.

DataMontgomery

DataMontgomery is an open platform where millions of data points are published. This includes data from car crashes to polling places in Montgomery County. It is available to the public and is a key tool in transparent and open government.

STATISTICAL ANALYSIS OF THE PAY GAP

Findings

As of 2018, Montgomery County Government employs 10,071 people, 90.9 percent of whom are full-time employees. Women make up 37 percent of all full-time employees. In Montgomery County, a basic comparison of the difference in men and women's average gross pay finds that the average woman makes \$14,219 less annually. This means the average woman County employee earns roughly 82.2 cents to a man's dollar. The more complex regression analysis which controls for full-time status, years of County employment measured by years since their start date, departments and department-gender interaction shows that the average woman makes \$9,265 less a year in gross annual pay compared to her counterparts or 89 cents on the dollar.^{1,2} By comparison, the 2016 American Community Survey found that the average gender pay gap for all of Montgomery County is 82 cents on the dollar.³

Share of
Workforce
Full or Part-time



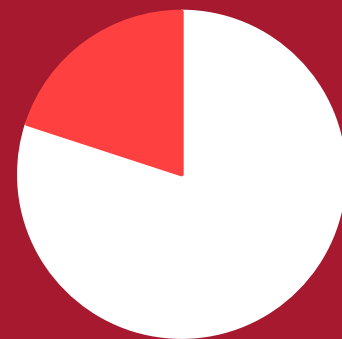
■ Full-time ■ Part-time

Share of Full-time
Workforce by
Gender



■ Women ■ Men

Share of Part-time
Workforce by
Gender



■ Women ■ Men

¹ Found using regression analysis, with an R squared of .4124

² Average pay for men employees: \$85,726, average pay for women employees: \$71,507, total average is 79,855.

³ Women and the Economy. (2016). Retrieved from <https://stat.montgomerycountymd.gov/stories/s/Women-and-the-Economy/wsit-u2rz/>

Calculating the Gender Pay Gap

All methods of calculating the pay gap are statistically significant to the .001 level which indicates the likelihood that the difference is due to random chance is less than .1 percent. Statistical significance is a mathematical term that requires a sufficient number of data points to assure that an observed pattern is unlikely to be a result of chance or random fluctuations. A summary of the regression formula used for this analysis is included in the appendix. Controlling for the department, full-time status and years of employment (years since hiring) ensures that the way those variables influence pay are not factored into the estimate of the gender pay gap. Controlling for the department can help to ensure comparison among similar job types and levels of job risk in a position. Needless to say, the types of positions available in the Fire and Rescue services are inherently different from those in the Department of Health and Human Services (HHS). Controlling for department prevents those differences from biasing the estimate of the pay gap.⁴

| Gender Pay Gap Analysis | | | | | | |
|--------------------------------------|--|------------|------------|------------|------------|------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| | gross pay | gross pay | gross pay | gross pay | gross pay | gross pay |
| Gender Pay Gap (\$) | 14,219*** | 7,267.5*** | 8,573.2*** | 8,361.3*** | 9,265.2*** | 5,307.2*** |
| Controls: | (19.05) | (10.6) | (13.4) | (11.52) | (4.37) | (7.63) |
| Full-time Employment | | Yes | Yes | Yes | Yes | Yes |
| Years of Service | | | Yes | Yes | Yes | Yes |
| Department | | | | Yes | Yes | Yes |
| Department-Gender Interaction | | | | | Yes | |
| Overtime | | | | | | Yes |
| Number of Observations | 10,071 | | 10,071 | 10,071 | 10,071 | 10,071 |
| | t statistics in parentheses, *** p<0.001 | | | | | |

⁴ Additionally, there are often job types that make up most of the positions in the department, for example police officers make up most of the police department and bus operators make up most employees for the Department of Transportation.

In 2018, the basic gender pay gap for average gross pay among all County employees was calculated to be \$14,219 a year. This represents a basic mathematical average difference between the gross pay of men and women employees.⁵ This is the most basic measure of the pay gap and accounts for the facts that women are more likely to be part-time and many women work in departments which are paid less.

After controlling for full-time employment, the pay gap narrows to \$7,267 a year on average. As being a woman is correlated with working part-time, this reduction in the pay gap is expected. This indicates that being a full-time female employee is associated with earning \$7,267 less a year in gross pay on average compared to the average man who is also working full-time.

After controlling for years of County employment in addition to full-time status, the pay gap increases to \$8,573 a year on average. Women have a longer average length of service in County government compared to men, so the increase in the pay gap was expected. Years of County employment was calculated from the number of years since the individuals date of hire.

After controlling for the department in addition to years of service and full-time status, the pay gap decreases to \$8,361 a year on average. This indicates that being a full-time woman is associated with earning \$8,361 a year less than a man who is also full-time with the same length of service and in the same department. Department was expected to have a greater impact on the pay gap as gendered occupational segregation, whereby one gender makes up a large majority of the department, occurs in Montgomery County and pay varies by department.

After performing a regression analysis that controls for the department, years of County employment, and full-time status, the average gender pay gap in 2018 decreases from \$14,219 to \$9,265 in gross annual pay. Different departments have different ways of assigning overtime pay based on seniority or intricacies related to temporary promotions, pay raises, and promotions that can interact with gender but vary within a department. For example, the Fire and Rescue Service offers overtime through a seniority system. As most

⁵ The median gender pay gap among all employees was \$12,245 and among all full-time employees was \$7,690.

firefighters 20 years ago were men, this would mean that women are likely given fewer opportunities to earn overtime pay. The \$9,265 pay gap is the aggregate pay gap within departments and actual pay gaps within departments vary.

To understand the difference between pay gaps in salary rather than gross pay, the final regression controls for overtime pay. This decreases the gender pay gap to \$5,307 a year on average.⁶ As overtime appears to be correlated with gender and overtime is used most in departments which are heavily male, a reduction is expected. This indicates that being a full-time woman employee is associated with earning \$5,307 less a year on average in salary or non-variable pay compared to a full-time man, in the same department, with the same number of years of service.

This analysis shows that while other factors likely contribute to differences in pay (department, length of employment, etc.), the most significant measured factor explaining the difference in pay between men and women employees **is** gender. Controlling for these factors removes traditional arguments that try to explain away the observable gender pay gap. Overtime is a large factor in the gender pay gap as is full-time status. For policy purposes, the average difference in gross pay of \$9,265 a year between men and women employees is the pay gap that the County should try to address and reduce.

⁶ R squared of .52

Gender Pay Equity Matters for the County and for Employees

In addition to the moral imperative to pay men and women equally, discrimination by sex in pay is illegal under Maryland and Federal law. Many of the potential causes of the gender pay gap, such as the professions individuals pursue and how much they work overtime, are to some extent a result of the choices they make for themselves. Nevertheless, policies like offering paid family leave and reducing employers' reliance on overtime work, or ensuring equal access to overtime, can likely reduce the gender pay gap in government.

There is little research on what other counties have done to successfully reduce the gender pay gap among their employees. Thus, Montgomery County has an opportunity to address the gender pay gap and become a leader for other local governments to follow. The gender pay gap affects women across the County in both public and private sector employment. Addressing the County government pay gap can also create an example for private-sector firms to follow. In addition, policies and practices that aim to address the gender pay gap show a commitment to women employees and residents alike, which can incentivize more women to apply for County government positions.

Who is employed by the County and what they are paid is determined by many policies and choices. The type of job advertisements, the makeup of interview panels, job hours, number of employees, workplace culture, and many more policies can influence the gender balance and gender pay gap either intentionally or unintentionally. A critical look at existing policies and potential new policies can design a more equitable workplace and workforce.

POTENTIAL SOURCES OF THE PAY GAP

Women make up 51.7 percent of the County population, 41 percent of the total County Government workforce, and 37.2 percent of the full-time County Government workforce, according to 2018 employment data.

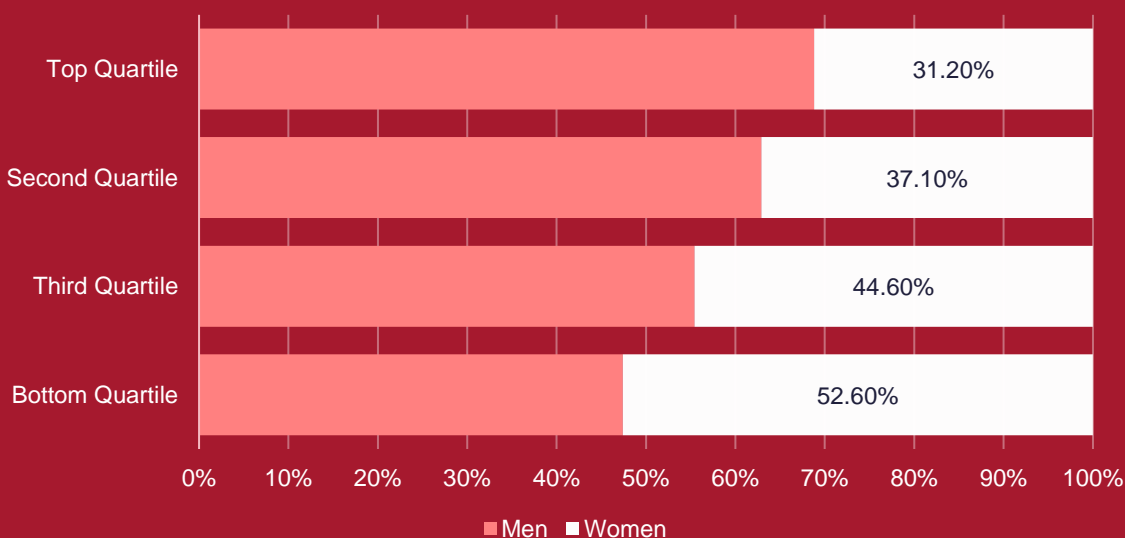
The fact that men outnumber women in County Government does not directly contribute to pay inequality on its own. However, gender balance should be considered in any future policies to address the gender pay gap in County Government because if women are over or underrepresented in a quartile of the pay scale, that can also contribute to the pay gap

Women are Less Likely to Work in Highly Paid Positions

Women employees in County Government are overrepresented in the lowest pay quartile and underrepresented in the highest pay quartile compared to their proportion in the workforce.

While women make up 41 percent of all positions, women make up 52 percent of the positions in the lowest quartile, including most part-time and entry-level positions. By contrast, women make up only 31.2 percent of the positions in the highest quartile, where most managerial and leadership positions, as well as many senior public safety positions, are found. This indicates that women are more likely to be in positions that fall into the bottom quartile and perhaps less likely to rise into the top quartile of positions. It is unclear whether this effect is due to lack of promotional opportunity, fewer women being hired into top quartile positions, women dropping out of the workforce, or an effect of historical bias against women.

Gross Pay Quartiles by Gender



10,071

total Montgomery County employees

41%

of employees are women

31.2%

of positions in the top quartile of gross pay are women

Women Make Less in Overtime and Variable Pay

In calendar year 2018, Montgomery County paid over \$61 million in overtime and variable pay. Women earned just 14.95 percent of total overtime paid to all employees. The Department of Transportation, Fire and Rescue Service, and Police Departments all paid over 10 million in overtime pay. As these departments are majority male, this could influence the proportion of overtime that is available to women. The Fire and Rescue Service, in particular, offers overtime to staff based on seniority according to their labor agreement. This could disadvantage women as fire fighting is a profession historically dominated by men. In addition, it is possible that women are less able to work overtime shifts because of greater family or other responsibilities compared to men. Further study within the departments with a majority of overtime pay should be conducted to better understand the disparity in overtime pay by gender.

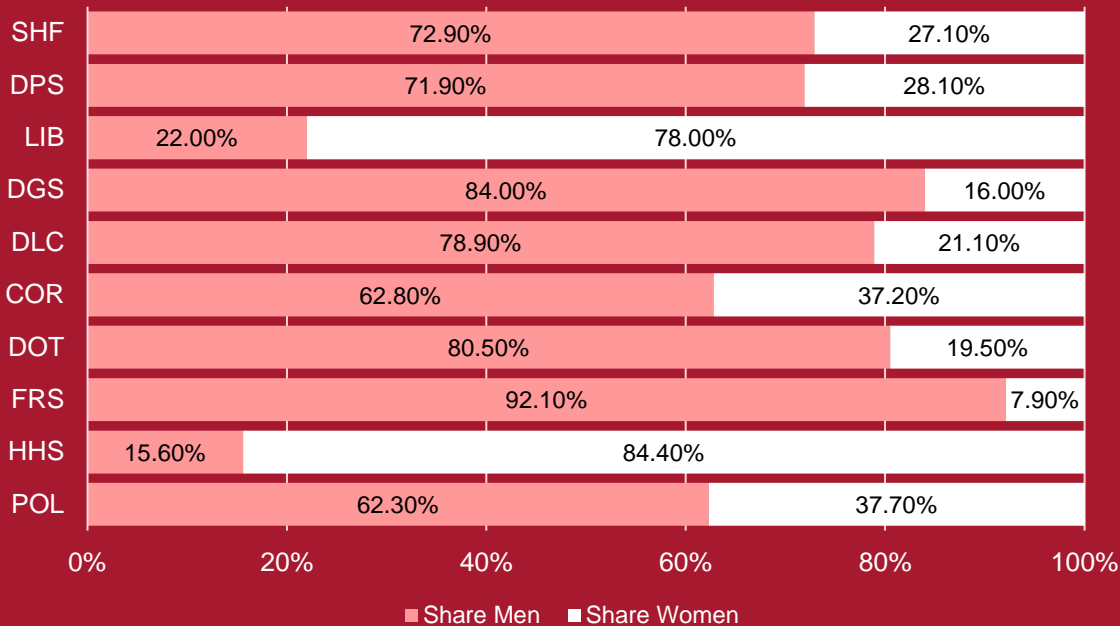
Gendered Occupational Segregation by Department

In addition to the underrepresentation of women in the whole of the County Government workforce, there are many departments that have a large majority of employees of one gender, also called gendered occupational segregation. Large departments with a significant majority of men include fire, transportation, and corrections. For example, women comprised only 7.8 percent of the Fire and Rescue Service in 2018. However, women significantly outnumbered men in Montgomery County Public Libraries which was 78 percent women, and the Department of Health and Human Services, which was over 84 percent women.

Gendered occupational segregation can be a result of individuals' choices to work in a certain profession. However, implicit biases in advertising, hiring, and workforce culture can influence an individual's decision to apply, join, and stay within a specific department. Gender opportunities in education and societal influence towards or away from some professions can also shape who applies to County positions and departments. However, Montgomery County government also has a unique ability to create pathways through education, outreach, and mentoring targeted to bring more diverse candidates into departments and fields which currently lack them.

⁷ Snyder, R. (2017, February 17). Female firefighters making strides in Baltimore County. *WBALTV11*. Retrieved from <https://www.wbalte.com/article/female-firefighters-making-strides-in-baltimore-county/8495297>

Share of 10 Largest Department by Gender



7.9%
of Montgomery County
Fire and Rescue
Service staff are
women.

20%
of the Baltimore County
Fire Department staff
are women.⁷

A significant majority of one gender in a department with high or low average wages can contribute to the gender pay gap. For example, if women only make up a small fraction of a department that tends to have well-paid positions, this can contribute to a pay gap. It also suggests that intervention into the gender balance and gender pay gap can be targeted at both the departmental and the whole workforce level. Targeting interventions at departments with the largest gender imbalances and gender pay gaps will likely have the largest marginal returns. This could be done through department-level voluntary diversity task forces which are further discussed in the recommendations section.

While not within the scope of this report, gender and other forms of diversity can assist departments in fulfilling their duties to the public. Aside from the implications of gender balance on the gender pay gap, diversity within departments can support their role in serving the community. For example, more male nurses participating in community outreach within HHS and more women police officers can help to build a stronger relationship with the communities they serve. Desired gender balance within a department is a public policy issue facing the County in itself. While a 50/50 gender balance or even a balance proportional to the County workforce's overall gender balance may be neither an attainable nor a desirable goal, setting a vision and a strategy for workforce diversity is important.

Indications of Unequal Pay for Similar Work

In Montgomery County Government, women appear to be paid less than men for doing similar work in some cases. Among bus operators, there is a \$5,177 average annual pay gap between men and women for a position with the same job description controlling for full-time status and years of employment.⁸ For police officers with the title Police Officer III, there is an average gender pay gap of \$4,129 a year. All of the instances of unequal pay in the table below are statistically significant to the .01 level, meaning there is a less than 1 percent probability that the observation of unequal pay is due to chance or sampling error.

Notably, data is not available relative to education experience or other non-gender factors that might justify pay differentials between the positions. Information about experience prior to Montgomery County, education, or other skills could potentially explain the observed instances of unequal pay

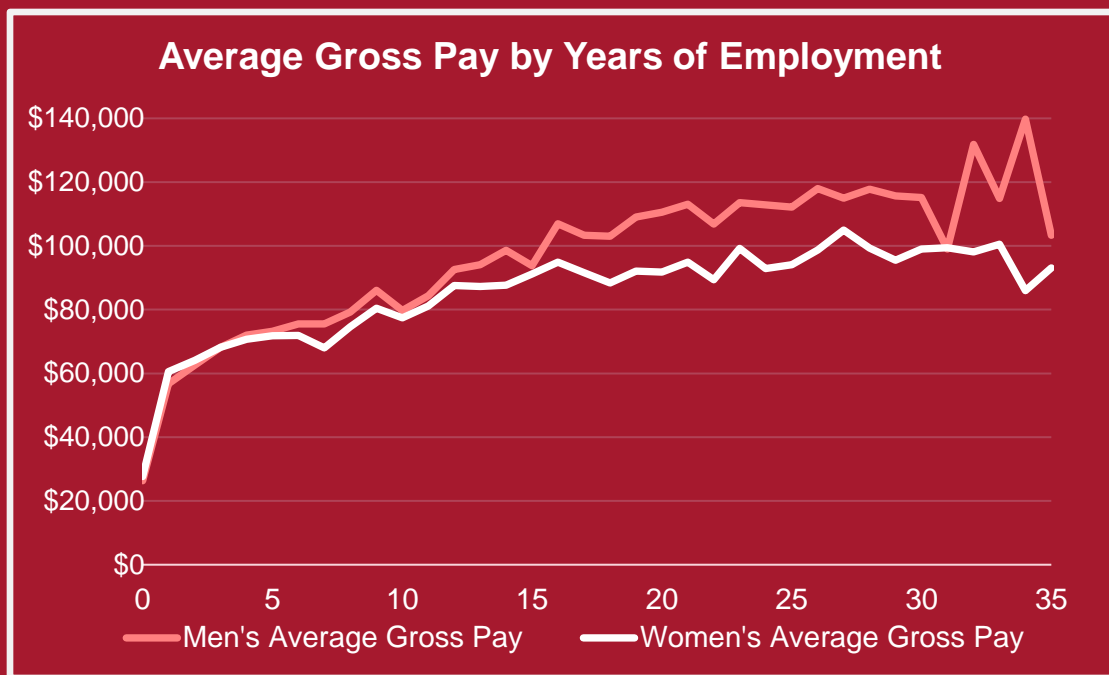
| Position Title | Average Difference in Pay | Count |
|---------------------------------|----------------------------------|--------------|
| Bus Operator | \$5,177 | 677 |
| Crossing Guard | \$6,849 | 178 |
| Office Services Coordinator | \$8,752 | 228 |
| Police Officer III | \$4,129 | 915 |
| School Health Room Technician I | \$8,457 | 223 |
| All Other Positions | \$9,759 | 5,801 |

if these other factors are correlated with gender. Should the Council wish to more fully understand the pay gap that exists within specific positions, an analysis must be conducted on more detailed personnel data that are not currently available to the public. It should be noted that Labor and Employment Article Title 3, Subtitle 3 already prohibits unequal pay by gender for equal work.

⁸ All calculated using gross pay from 2018 except where otherwise noted

The Gender Pay Gap is Wider for Senior Employees

The pay gap among County employees who have worked for the County longer appears to be larger compared to the gap for recent hires. The pay gap among recent hires is small or even negative. **In fact, women hired for full-time positions in 2018 make as much or more on average than men.**⁹ However, the pay gap becomes wider for those with more years of service in County government. The data below does not control for the department and thus could indicate that the pay gap is caused by any or all of the following: historical gender occupational segregation into positions that pay less, historical difference in starting salaries, fewer opportunities for promotion, and unequal use of family leave between men and women. It could also reflect that previously there was a difference in starting salaries for men and women.



If women are less likely to be promoted, apply for a promotion, ask for a pay raise, or receive a pay raise, it could potentially create a gender pay gap over time, even if there was not a pay gap for those hired in the last three years. However, it is also possible that in the past, women in County government did receive lower starting salaries and thus even with the same level of promotion and overtime they would make less than men as they remain in County government. It could also suggest that as women have kids, they are likely to earn less compared to men despite presumably equal rates of having children between the genders.

⁹ Around \$1,000 more on average but statistically insignificant, not controlling for position.

Further data analysis needs to be conducted to determine if these factors (lower historical starting salaries, rates of promotion, and family obligations) contribute to the growth of the pay gap over time and cause the observed wider gap for those with more years of service in County government.

Notably, broader studies have found there is a motherhood penalty while there is not a comparable fatherhood penalty. Women without children are eight times more likely to be recommended for promotion compared to a mother with children.¹⁰ Further data analysis needs to be conducted to determine if this contributes to the gender pay gap by years of service in Montgomery County.

¹⁰ Correll, S. J., Benard, S., & Paik, I. (2007). Getting a Job: Is There a Motherhood Penalty? 1. *American journal of sociology*, 112(5), 1297-1339.

Recommendations for Further Study and Data Analysis

This analysis is a first attempt to understand and consider policies to address the gender pay gap among County employees through statistical analysis. Additional study is needed to verify key findings and ensure that the policies proposed would have the intended effect of reducing the pay gap. Data that includes gender, gross pay, employment, history of promotion, position by pay scale, race, level of education, and parenthood status could be used to create a more dynamic regression that can control for many other factors that could influence estimates of the gender pay gap. With this data, a more detailed statistical analysis could be conducted with a Blinder-Oaxaca decomposition which would help improve accuracy in the proportion of the pay that is attributable to gender and discrimination.

Future studies should focus on:

- Representation of gender at each stage in the hiring and promotion processes
- Effect of family responsibilities and parenthood by gender on pay and promotion
- Analysis of pay gaps by gender, race/ethnicity, and other intersectional factors

In addition, the County Council could use qualitative survey or interview methods to determine factors that contribute to gender pay inequities in the County. This would be especially helpful with factors that are hard to quantify, such as a willingness to apply for a promotion or ask for a pay raise, bias in the workplace, or family responsibilities that could influence pay through gender.

To better understand the role promotions play in the gender pay gap, a study could be undertaken to determine if the number of people selected for a promotion is proportional to the number of people who applied for the position when disaggregated by gender and other demographic characteristics. If there is a stage in the application/promotion process where proportions by gender begin to differentiate, that stage is worthy of further study and correction. If women are not applying for the positions, that is also worthy of study.

While there is currently no data to distinguish the pay gap in County employment by race/ethnicity or any other status, national data suggest that the pay gap is larger for women of color. Data is missing or publicly unavailable for a variety of characteristics including ability,

race/ethnicity, age, gender identity, sexuality, education, previous criminal history, and parenthood status. Anonymous and aggregated data would be helpful in further study in pay gaps based on characteristics and identities other than gender.

Potential Policies or Practices to Help Address the Gender Pay Gap^{11,12}

The County Council took a significant step in addressing the gender pay gap through enacting the Montgomery County Pay Equity Act, which requires that the County government begin reporting on the pay gap in 2022.¹³ Findings from the statistical analysis of 2018 employee gross pay by gender suggest that future solutions or policies to address the gender pay gap should focus on:

- 1) Promotions**
- 2) Overtime and variable pay**
- 3) Establishing staff responsible for diversity and pay equity metrics within OHR**
- 4) Accommodating parental responsibilities**
- 5) Redressing historical pay differentials and unequal pay**
- 6) Promoting gender balance within departments**

This section summarizes policies and practices intended to address gender pay disparities sorted by those that have shown positive impacts on the gender pay gap, those that could have a positive impact, and those that have not worked well. The Council should ask the Office of Human Resources (OHR) to evaluate the impact of these (or similar) practices as part of its ongoing work on gender pay disparities.

¹¹ The Montgomery County Commission for Women. (n.d.). A Tale of Two Counties: The Status of Women in Montgomery County Report. Retrieved from <https://stat.montgomerycountymd.gov/stories/s/Report-Overview/t56p-br7a>

¹² Great resource: Behavioral Insights Team, & U.K. Government Equalities office. (2016). Retrieved July 1, 2019, from https://gender-pay-gap.service.gov.uk/public/assets/pdf/Evidence-based_actions_for_employers.pdf

¹³ Montgomery County Pay Equity Act, 33 Montgomery County Code § 33-25 (2019)

Policies and Practices That Work:

Detailed publication of data on pay by race and gender have been found to increase pay equality through social accountability.¹¹ Actions to increase transparency and social accountability of managers tend to decrease the gender pay gap.¹⁴ In addition, establishing a chain of command and direct responsibility for diversity within organizations has been shown to increase diversity within companies.¹⁵ Corporate diversity task forces that include CEOs, department managers, and members of minority groups on a voluntary basis which review diversity numbers and policies have been found to positively impact equity and increase social accountability in corporations and could have a similar impact within County departments.

Recommendations:

- Creation of Diversity Talent Manager position in OHR with a responsibility and authorities to reduce the gender pay gap and increase the gender balance across departments as well as other diversity metrics.
- Annual public reporting from the County Executive on workforce diversity and pay equity with a plan for addressing any pay gaps that emerge.
- Mandatory reporting on gender and pay by position for all County supervisors/departments with more than 50 employees.
- Establish departmental voluntary participation diversity task forces.

While the specific goals and responsibilities of a Diversity Talent Manager or a similar position should be determined with employee input, in King County, Washington, several positions currently exist with similar job responsibilities. The most similar is the Workforce Equity Manager which reports to the Human Resources department head and is responsible for executing the Workforce Equity Strategy and providing oversight across departments for issues related to diversity, equity, and inclusion.¹⁶

The County Executive should report on diversity and pay equity regularly and will do so starting in 2022. More importantly, the Executive branch should also report to the public or

¹⁴ Castilla, E. J. (2015). Accounting for the gap: A firm study manipulating organizational accountability and transparency in pay decisions. *Organization Science*, 26(2), 311-333.

¹⁵ Athey, S., Avery, C., & Zemsky, P. (2000). Mentoring and Diversity. *The American Economic Review*, 90(4). Retrieved July 6, 2019, from <http://www.jstor.org/stable/117307>

¹⁶ Featured Job: Workforce Equity Manager. (2018, October 11). Retrieved from <https://kcemployees.com/2018/07/28/featured-job-workforce-equity-manager/>

the Council, a strategy for how the Executive Branch is addressing issues of unequal pay, pay inequity, and a workforce that is unrepresentative of the County. This reporting requirement can ensure that a strategy is developed from the top with the staff and resources necessary to increase both equity and diversity.

Department heads should report on pay equity and diversity, which is more than just gender, regularly to support the Executive Branch and the Council in their oversight role. In addition, data suggests that when managers feel someone is holding them accountable, diversity increases. Reports should include metrics about overtime and the rate of promotion and raises for women and minorities.

Voluntary diversity task forces have been proven to be successful in the private sector and can improve social accountability. Diversity task forces also allow for many of the policies that have a bias in them to be reevaluated at the departmental level, which can be more efficient and in-depth. It is also a vital way to engage the workforce in fighting bias and to give employees an opportunity to air concerns in a way that is productive and is unlikely to result in backlash. These meetings should include a scribe and mediator. Department heads and management involvement are crucial if these task forces are to have an impact.

In addition to policies addressing the pay gap, specific recruitment and hiring tools for all genders should be considered to reach a more balanced gender ratio among County departments and the whole County workforce.

Policies and Practices That Might Work:

Recommendations:

- Require hiring managers to consider multiple resumes from candidates of each gender, especially for high paying positions and internal hires.¹⁷
- Diversity hiring initiatives with outreach to local minority serving institutions and Montgomery College.¹⁸
- Minority and women focused mentorship programs for employees.
- Consider specific internal department targets for equal pay and occupational gender be included in a department director's annual performance evaluations by the Chief Administrative Officer.¹⁹

One study found that the 6-week paid family leave policy in New Jersey decreased the gender pay gap and increased women's attachment to the labor force.²⁰ The study did not conclude what portion of the effect was due to women returning to the labor market earlier or whether it was a result of more men also taking leave and thus sharing the impacts and responsibilities.

Recommendations:

- Flexible schedules with work from home opportunities to accommodate family obligations where possible.
- Encouraging equal use of family leave among all departments between men and women.

Policies and Practices That Probably Do Not Work:

While County employees are already required to take diversity training, there is no requirement for diversity training or implicit bias training for managers related to equity in promotions or pay. The best forms of diversity and anti-bias trainings focus on “perspective

¹⁷ Johnson, S. K., Hekman, D. R., & Chan, E. T. (2016). If there's only one woman in your candidate pool, there's statistically no chance she'll be hired. *Harvard Business Review*, 26(04).

¹⁸ Includes increasing the proportion of men in the HHS and Libraries workforce

¹⁹ Mento, A.J., Steel, R.P. & Karren, R.J. (1987). A meta-analytic study of the effects of goal setting on task performance: 1966–1984. *Organizational Behaviour and Human Decision Processes*, 39(1), 52-83.

²⁰ Tito, M. (2016). Maternity Leave and the Gender Wage Gap: An Analysis of New Jersey Family Leave Insurance. *FEDS Notes*, 2016(1817), *FEDS Notes*, 08/2016, Vol.2016(1817).

taking” which use role playing to create empathy or playing devils advocate against ones own biased beliefs as well as exposure to counter-stereotypical images.²¹ However, mandatory diversity training has been found to have either mixed or negative results as they can increase bias and discrimination in backlash.²² Voluntary trainings tend to have better results but only when carefully designed.²⁰

Recommendations to avoid:

- Mandatory diversity training
- Grievance systems

²¹ Bohnet, I. (2016). *What Works - Gender Equity by Design*. Cambridge, MA: The Belknap Press of Harvard.

²² Dobbin, F., & Kalev, A. (2016). *Why Diversity Programs Fail*. Harvard Business Review, 1.

Appendix

Supporting Data for Graph on Pay Quartile by Gender:

| Quartile | Pay Range | Total Number of Employees | Count Women | Proportion Women |
|----------|--------------------|---------------------------|-------------|------------------|
| 1 | \$0-\$55,700 | 2517 | 1324 | 52.6% |
| 2 | \$55,701-\$77,600 | 2514 | 1121 | 44.6% |
| 3 | \$77,601-\$101,000 | 2534 | 939 | 37.1% |
| 4 | \$102,001+ | 2506 | 781 | 31.2% |

Supporting Data for Graph on Department Staff by Gender

| Department Name | Share Women | Share Men | Count All |
|-----------------|-------------|-----------|-----------|
| POL | 37.7% | 62.3% | 2044 |
| HHS | 84.4% | 15.6% | 1729 |
| FRS | 7.9% | 92.1% | 1371 |
| DOT | 19.5% | 80.5% | 1332 |
| COR | 37.2% | 62.8% | 540 |
| DLC | 21.1% | 78.9% | 445 |
| DGS | 16.0% | 84.0% | 426 |
| LIB | 78.0% | 22.0% | 386 |
| DPS | 28.1% | 71.9% | 231 |
| SHF | 27.1% | 72.9% | 210 |
| DEP | 43.6% | 56.4% | 165 |
| REC | 62.3% | 37.7% | 154 |
| DTS | 36.8% | 63.2% | 152 |
| FIN | 67.8% | 32.2% | 121 |
| CCL | 56.1% | 43.9% | 107 |

Summary of Regression used to determine gender pay gap:

Simplified Regression formula:

$$\text{Reg (Gross Pay)} = \beta_0 + \beta_1(\text{Gender}) + \beta_2(\text{Full-time}) + \beta_3(\text{Years since Hired}) + \beta_4(\text{Department})\dots + \beta_5(\text{Department*gender}) \dots + \varepsilon$$

Using Stata, a commercially available statistical program, this regression can be used to calculate the association between any of the variables above and gross pay among every County employee. This tool calculates an estimate coefficient (β) which would represent the association between the variable and the amount of gross pay if that variable = 1. For example, $B_1 = 9,265$ which indicates that being a man (Gender=1) is associated with earning an additional \$9,265 which could then be interpreted as the gender pay gap.

Supporting Data for Table on Pay Gap by Position:²³

| Position Title | Average Pay Gap | t-value | P>t | [95% Conf. Interval] | | Count |
|--|-----------------|---------|--------|----------------------|----------|-------|
| Bus Operator | \$5,177 | 3.39 | 0.001 | \$2,188 | \$8,165 | 677 |
| Community Health Nurse II | -\$3,614 | -0.54 | 0.588 | -\$16,691 | \$9,464 | 187 |
| Correctional Officer III (Corporal) | -\$4,318 | -1.11 | 0.266 | -\$11,928 | \$3,293 | 271 |
| Crossing Guard | \$6,849 | 3.02 | 0.003 | \$2,398 | \$11,300 | 178 |
| Firefighter/Rescuer III | \$6,272 | 1.7 | 0.089 | -\$949 | \$13,493 | 766 |
| Income Assistance Program Specialist II | \$755 | 0.31 | 0.757 | -\$4,027 | \$5,536 | 170 |
| Manager III | \$3,749 | 1.12 | 0.262 | -\$2,804 | \$10,301 | 270 |
| Master Firefighter/Rescuer | -\$15,978 | -0.86 | 0.392 | -\$52,567 | \$20,611 | 215 |
| Office Services Coordinator | \$8,752 | 3.74 | 0.0001 | \$4,169 | \$13,335 | 228 |
| Police Officer III | \$4,129 | 3.53 | 0.0001 | \$1,837 | \$6,422 | 915 |
| Program Manager II | \$3,884 | 1.12 | 0.264 | -\$2,938 | \$10,706 | 170 |
| School Health Room Technician I | \$8,457 | 2.94 | 0.003 | \$2,825 | \$14,090 | 223 |
| All Other Positions | \$9,759 | 10.92 | 0.0001 | \$8,008 | \$11,511 | 5,801 |

²³ Red color indicates statistically insignificant pay gap.

References

- Athey, S., Avery, C., & Zemsky, P. (2000). Mentoring and Diversity. *The American Economic Review*, 90(4). Retrieved July 6, 2019, from <http://www.jstor.org/stable/117307>
- Behavioral Insights Team, & U.K. Government Equalities office. (2016). Retrieved July 1, 2019, from https://gender-pay-gap.service.gov.uk/public/assets/pdf/Evidence-based_actions_for_employers.pdf
- Bohnet, I. (2016). *What Works - Gender Equity by Design*. Cambridge, MA: The Belknap Press of Harvard.
- Castilla, E. J. (2015). Accounting for the gap: A firm study manipulating organizational accountability and transparency in pay decisions. *Organization Science*, 26(2), 311-333.
- Correll, S. J., Benard, S., & Paik, I. (2007). Getting a Job: Is There a Motherhood Penalty? 1. *American journal of sociology*, 112(5), 1297-1339.
- Dobbin, F., & Kalev, A. (2016). Why Diversity Programs Fail. *Harvard Business Review*, 1.
- Employee Salaries - 2018: Open Data Portal. (n.d.). Retrieved from <https://data.montgomerycountymd.gov/Human-Resources/Employee-Salaries-2018/kdqy-4wzv/data>
- Featured Job: Workforce Equity Manager. (2018, October 11). Retrieved from <https://kcemployees.com/2018/07/28/featured-job-workforce-equity-manager/>
- Johnson, S. K., Hekman, D. R., & Chan, E. T. (2016). If there's only one woman in your candidate pool, there's statistically no chance she'll be hired. *Harvard Business Review*, 26(04).
- Mento, A.J., Steel, R.P. & Karren, R.J. (1987). A meta-analytic study of the effects of goal setting on task performance: 1966–1984. *Organizational Behaviour and Human Decision Processes*, 39(1), 52-83.
- Montgomery County Pay Equity Act, 33 Montgomery County Code § 33-25 (2019)
- Snyder, R. (2017, February 17). Female firefighters making strides in Baltimore County. *WBAL TV11*. Retrieved from <https://www.wbalv.com/article/female-firefighters-making-strides-in-baltimore-county/8495297>
- Tito, M. (2016). Maternity Leave and the Gender Wage Gap: An Analysis of New Jersey Family Leave Insurance. *FEDS Notes*, 2016(1817), *FEDS Notes*, 08/2016, Vol.2016(1817).

The Montgomery County Commission for Women. (n.d.). A Tale of Two Counties: The Status of Women in Montgomery County Report. Retrieved from <https://stat.montgomerycountymd.gov/stories/s/Report-Overview/t56p-br7a>

Two Women Sitting on Chair While Typing and Writing Near Man Standing Behind. (2018, April 08). Retrieved from <https://www.pexels.com/photo/two-women-sitting-on-chair-while-typing-and-writing-near-man-standing-behind-1234099/>

Women and the Economy. (2016). Retrieved from <https://stat.montgomerycountymd.gov/stories/s/Women-and-the-Economy/wsit-u2rz/>