

Pay Equity Analysis & Recommendations

RE: Resolution #20140320-053

March 15, 2017

The purpose of the memorandum is to provide the annual analysis of compensation practices in compliance with Resolution #20140320-053. The March 20, 2014 resolution directed the City Manager to provide an annual report to Council analyzing the City's compensation practices to ensure that City employees are paid, promoted, and given raises based on lawful criteria rather than on gender, race, ethnicity, or other protected class status. The resolution cites comparative data from various sources reporting a nationwide wage gap based upon gender, ethnicity, and age as compared to White males.

Study Background

The City of Austin (the City) has been collecting, comparing, and monitoring pay differences among different genders and races over the last two years in order to identify and correct any pay discrimination against protected employee groups (i.e. gender, race, age). We were provided and reviewed prior year reports:

- In these reports, median and average salaries were compared;
- We repeated the same analysis to provide a year-on-year reference;
- This level analysis provided a good general reference.

We then conducted more detailed statistical analysis. Therefore, we conducted two analyses in the course of our project. We repeated prior year studies of comparing average and median pay by job titles and gender/race differences. We then performed detailed statistical analysis.

Prior Study Comparison and Updates

- There are 438 non-sworn jobs identified in the initial pay equity study process;
- We compared the percentage of female salary to male salary by job, and used 2015 and 2016 pre-adjustment results as comparison;
- The percentage of jobs in which female employees are receiving lower salary than male employees in the City **remains the same as August 2015, at 50.2%**. (slightly higher than the percentage of 48.5% before the pay adjustments made in August of 2016.)

Jobs in Bands Comparing Female to Male Pay as a Percentage

Years	August, 2015		October, 2016	
Salary: Female/Male (by Title)	# of Jobs	% of Jobs	# of Jobs	% of Jobs
Over 120%	12	2.7%	6	1.4%
Over 110% to 120%	36	8.1%	27	6.2%
Over 100% to 110%	158	35.5%	165	37.7%
100%	16	3.6%	20	4.6%

90% to Less than 100%	<u>185</u>	<u>41.6%</u>	<u>180</u>	<u>41.1%</u>
82.5% to Less than 90%	<u>31</u>	<u>7.0%</u>	<u>32</u>	<u>7.3%</u>
Less than 82.5%	<u>7</u>	<u>1.6%</u>	<u>8</u>	<u>1.8%</u>

This is a general indication of improvement in pay equity within the City from 2015 and is significantly above the national trend of females paid at 79.6% of male pay*. Please note, this data does not account for differences in occupational category, education, length of time in the workforce, or other factors that would legitimately result in pay disparity among the groups compared.

General comparison by gender was also conducted to track the City's pay equity status and the City has maintained similar leading gender pay equity ratios across the functional areas.

Average Pay for Female City Employees Compared to Average Pay for Male City Employees as a Percentage

	Female Pay vs. Male Pay			
Year	Non-Sworn	Police	Fire	EMS
2015	96%	101%	91%	94%
2016 (Pre-Adjust)	95%	102%	94%	97%
2016	96%	102%	93%	96%

The gap between Male and Female in average pay is at the same level as 2015, with a narrower negative gap for Fire (Sworn) positions.

General comparisons by race was also conducted to track the City's pay equity status. The difference between White and other ethnicity group is generally at the same level as 2015.

Average Pay for City Employees of Various Ethnicities Compared to Average Pay for White City Employees as a Percentage

		Non-White Pay vs. White Pay			
Year	Ethnicity	Non-Sworn	Police	Fire	EMS
2015	American Indian/Aleutian	100%	<u>123%</u>	<u>99%</u>	108%
	Asian/Pacific Islander	113%	93%	78%	84%
	Black	82%	101%	94%	<u>94%</u>
	Hispanic	79%	96%	94%	92%
2016	American Indian/Aleutian	97%	<u>95%</u>	<u>93%</u>	107%
	Asian/Pacific Islander	113%	90%	81%	87%
	Black	81%	103%	92%	<u>86%</u>
	Hispanic	78%	97%	92%	96%

*Women's Policy Research 2016 Report



In some areas, due to low number of employees within certain specific ethnicity groups, the fluctuation of general race comparison results is more significant than gender comparison.

These areas have been identified in bold in the chart. More investigation will be needed if this information is to be utilized to identify pay equity issues. Factors such as qualifications, job value, seniority, and prior experience were not included in these general comparisons. Thus, the information of general comparison shouldn't be used to determine whether the City is in compliance with federal and state equal pay laws.

Detailed Pay Equity Analysis - Study Objective

The City requested a more comprehensive evaluation tool to identify if there are any pay equity issues in the organization. Arthur J. Gallagher's Human Resources and Compensation Consulting group (AJG) was retained by the City to conduct detailed statistical analysis of the current pay levels and identify possible pay equity issues at both organizational and department levels.

The objective of this analysis is to determine if there are any indications of systematic pay disparities between employees of differing race or gender, isolate specific areas as possible, and identify key contributing factors. The analysis adheres to conditions defined in the Federal Equal Pay Act (EPA) of 1963, which forbids wage discrimination on the basis of gender. In addition, this study includes analysis of other protected classes, in accordance with the Title VII of the Civil Rights Act of 1964.

Specific objectives of the analyses are to review the effect of various elements on pay differentials, such as:

- Gender
- Age
- Years of Service
- Race
- Job Value

Statistical analyses were performed in accordance with standard, professionally accepted methods and those methods that are recognized by the Equal Employment Opportunity Commission (EEOC).

Statistical Methodology

The accepted methodology in the analysis of a pay system for Equal Pay issues is to conduct a series of statistical tests. The purpose of the tests is to discover whether there are any pay differences between protected groups and other employees that are statistically significant, and whether these differences can be explained by a factor other than gender, race, or age.

The statistical methods used are:

- Regression Analysis: This method is an effective technique to learn the effect of multiple variables on a given outcome. Multiple regression allows the researcher



to ask (and hopefully answer) the general question "what is the best predictor of pay".

- Statistical Significance Level (p-value): This is a judgment of the quality of the test data. The statistical significance of a result is the probability that the observed relationship or a difference occurred by pure chance, and that in the population from which the sample was drawn, no such relationship or differences exist. Results that are significant at the $p \leq .05$ level are commonly considered statistically significant, and $p \leq .005$ level are often called highly significant.
- Median Comparison: Median pay difference among different employee groups within the organization will be calculated and reviewed. Then the results will be compared with the national average differences for those groups to see if the City is implementing pay practices with narrower gaps among various employee groups (gender/race/age) than the market practice. This has been provided to the City to use for any additional analysis identified.

Regression analyses were run on all variables at once. This means that we regressed pay against the following variables:

- Gender
- Age
- Seniority (years since job begin day)
- Race
- Job Value (represented by pay grade mid-point)

Regressions were run by: the whole organization (sworn and non-sworn positions) and department as long as the department has 40 or more employees. Regressions used the hourly pay for comparison in order to account for different annual hours. Our analysis included all of the applicable variables to determine which have a significant impact on pay. Statistical significance for inclusion in the formula was defined as $p < .05$. This is the accepted level of statistical impact on the result.

Once we identified those that did not have a significant impact on pay, we removed them from the analysis and re-ran the analysis until we had the best set of variables that impacted pay. Therefore, this analysis requires multiple "runs" of data to obtain the best set of variables that impact pay.

Due to the data available, we needed to make some Exclusions:

- All Executive positions under current grade of E00 were excluded from the regression analysis because there is no grade range information.
- All Cadet (Sworn) positions were excluded as there's no grade range information.

After reviewing and 'cleaning' the data set, we conducted the regression analysis. After identifying the significant variables from the overall regression, we proceeded to the in-department regression to identify more specific areas that might have pay equity issue.

Employee groups (department/job class/job category) with less than 40 employees were not examined with department level regression analysis given the limited size of the population.

Summary of General Findings (Overall)

In our overall review of “gender” salary comparison, in preparation for the regression analysis we noticed that a higher percentage of female employees are at lower grade jobs with grade midpoints ranging from \$15 to \$30 than male, while the percentage of male employees at jobs with grade midpoints from \$30 to \$60 is higher than females.

	2016			
Grade-Mid Hourly Rate	Female	Female	Male	Male
less than \$15	0	0.00%	0	0.00%
\$15 to \$20	614	18.20%	962	18.00%
\$20 to \$30	1548	45.89%	2238	41.87%
\$30 to \$40	717	21.26%	1172	21.93%
\$40 to \$50	348	10.32%	686	12.83%
\$50 to \$60	123	3.65%	262	4.90%
\$60 to \$70	16	0.47%	9	0.17%
\$70 or above	7	0.21%	16	0.30%
Total	3373	100.00%	5345	100.00%

Due to the distribution of employees shown in the chart, the impact of “gender” on salary maybe less significant than assumed through the average salary comparisons of prior years. The overall distribution shows that female employees are not proportionally represented across the pay rates as male employees (identified in the highlighted cells). This information should be taken into consideration when the City reviews the job placement and grade allocation.

In a similar overall review of “race” salary comparison, in preparation for the regression analysis we noticed that a higher percentage of non-white employees are at lower grade jobs with grade midpoints ranging from \$15 to \$30 than white, while the percentage of white employees at jobs with grade midpoints from \$30 to \$60 is higher than non-white.

	2016			
Grade-Mid Hourly Rate	Non-White	Non-White	White	White
less than \$15	0	0.00%	0	0.00%
\$15 to \$20	1167	25.32%	409	9.95%
\$20 to \$30	2181	47.32%	1605	39.06%
\$30 to \$40	747	16.21%	1142	27.79%
\$40 to \$50	374	8.11%	660	16.06%
\$50 to \$60	126	2.73%	259	6.30%



\$60 to \$70	5	0.11%	20	0.49%
\$70 or above	9	0.20%	14	0.34%
Total	4609	100.00%	4109	100.00%

Due to this distribution of employees, the impact of “race” on salary maybe less significant than assumed through the average salary comparisons. This information should be taken into consideration when the City reviews the job placement and grade allocation.

In the regression analysis, we used the following as independent variables:

Variables	Status
Seniority	Job Start Year to 2016
Job FTE	Full Time Employee
	Part Time Employee
Gender	Male
	Female
Age	40 or Above
	Below 40
Race	American Indian/Aleutian
	Asian/Pacific Islander
	Black
	Hispanic
	Other
	White
Job Value	Mid-point of Current Grade

Background of Statistical Findings

It should be noted that all statistical conclusions are limited to the data available and do not include other possible explanations for any pay differences that may exist. The rate of pay negotiated at the time of hire, including the financial capability and the relative level of City need for the potential employee at the time of hire could have an impact on any pay differences. The City policies for employees moving through salary range could impact the identified pay differences. These factors, and others that are either difficult or unable to be quantified, may have had an impact on hire pay rate and pay movement over time.

In addition, P-value generated by the regression thus should be used as an indicator for possible issues, rather than determination of pay equity problems – more detailed investigations would be necessary to explore the situation.



Overall Statistical Findings:

The Job Value (Grade Mid) variable has the biggest impact on the pay, followed by Seniority (years since job begin), Age (being 40 or above) and Gender. The impact of being 40 or older on salary is positive, which means the City is NOT paying lower salaries to employees who are 40 or older. No race/age related discrimination was observed by the statistical model at the organizational level.

Male employees, given all other factors being the same, tend to make \$0.12 or 0.4% more than Female employees per hour (based on the overall average hourly rate of \$29.20). The difference is minor and within the reasonable range for flaws in raw data (especially in Seniority) and not including factors such as performance in the analysis.

We then ran regressions with the same process by department to identify possible pay equity issues at department level. Below are Departments with possible pay equity issues:

- Austin Water Utility
- Aviation
- Building Services
- Convention Center
- Emergency Medical Services, Non-Sworn
- Fleet Services
- Health & Human Services
- Municipal Court
- Public Works
- Watershed Protection
- Fire, Sworn

We ran additional analyses in each of these areas to examine pay issues by checking the coefficient of those significant variables to determine the 'adjusted' pay difference. From this analysis, the City can examine the pay difference by job titles, within each of these departments to identify any issues.

In the regression for the sworn functions, Fire was identified as a potential pay equity area. However, based on our experience, this is an area of pay equity concern across the country, and the City currently is more equitable than the average comparison, as shown below in a detailed analysis.

The regression model indicates that pay for Female employees might be statistically lower than that for Male employees'. The average job value of Female employees in this department is lower than Male employees by \$0.52, while the current pay gap between these two groups is slightly wider (\$1.80). The adjusted difference is minor (\$0.43 or 1.3%) and within the reasonable range for flaws in raw data (especially in Seniority) and not including factors such as performance. This pay gap could be caused by difference between these two groups in seniority and age. Because the adjusted pay difference is minor, there is no statistical basis for



further investigation into this area. However, we recommend the City continue to examine pay equity issues in this area and continue initiatives related to recruitment and training.

Summary of Overall Findings:

Overall, the City is doing a good job managing ideal pay equity status and there's no significant systemic pay equity issues identified in this study. Certain departments may have issue in a few areas and the pay differences need more detailed investigation. (Aviation, EMS-Non-Sworn, Fire-Non-Sworn)

It should be noted that these statistical conclusions are limited to the data available and do not include other possible explanations for any pay differences that may exist;

- The rate of pay negotiated at the time of hire, including the financial capability and the relative level of City need for the potential employee at the time of hire could have an impact on any pay differences;
- The City policies for employees moving through salary range could impact the identified pay differences;
- These factors, and others that are either difficult or unable to be quantified, may have had an impact on hire pay rate and pay movement over time.

Recommendations (non-sworn):

- Examine policies and guidelines related to promotional opportunities and movement through the salary ranges to ensure equitable movement regardless of gender or race.
 - Based on the distribution of employees to the salary ranges shown on pages 5-6.
 - Impact areas: promotional
- Enhance the integrity of data related to employment history with the City.
 - Discrepancies identified related to job start dates and salary grade changes may have an impact on the pay equity analysis results.
- Evaluate the application process and promotional opportunities through data collection which enables further analysis into potential adverse impact. Potential inclusion in future pay equity analyses.
- Continue to evaluate pay practices through a pay equity analysis on an annual basis.
- Utilize a formal job evaluation methodology to determine internal equity. This would be used in place of the pay grade midpoint for the job value. This would provide a more consistent and equitable internal value for the job titles.
 - Federal equal pay regulations state: Market value qualifies as a defense **only if** the employer can demonstrate that it assessed the marketplace value of the particular individual's job-related qualifications, and that the compensation disparity is not based on gender, which means consistent requirement for market pricing.
 - The implementation of formal job evaluation methodology will provide job value information that waives the needs of market value as defense of pay equity issue.



- If the City decides that a job evaluation method is not to be utilized soon, we recommend consistent market pay research in order to meet federal equal pay regulations. (Market pricing research for all (or as many as possible) executive positions is recommended to confirm that the current pay is reflective of market rates since there is no established salary range for executive positions to reflect internal value.)

Recommendations (sworn):

- Examine policies and guidelines related to promotional opportunities and movement through the salary ranges to ensure equitable movement regardless of gender or race.
- Evaluate the application process and promotional opportunities through data collection which enables further analysis into potential adverse impact. Potential inclusion in future pay equity analyses.
- Continue to evaluate pay practices through a pay equity analysis on an annual basis.