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CITY COUNCIL TRANSMITTAL

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Lisa Shaffer, Chief Administrative Officer

Date Received: _____
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TO: Salt Lake City Council
Amy Fowler, Chair

DATE: March 3, 2021

FROM: Deb Alexander, Chief Human Resources Officer _____
Human Resources Department

SUBJECT: 2020 Salt Lake City Pay Equity Audit by Payfactors

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RECOMMENDATION: This report is for informational purposes. A formal presentation of this report and the audit findings may be scheduled upon request.

CITY COORDINATION: n/a

BUDGET IMPACT: n/a

BACKGROUND/DISCUSSION: In the fall of 2020, Salt Lake City partnered with Payfactors (a global compensation management technology and consulting firm) to complete a comprehensive and proactive review of non-represented employee salaries to ensure that pay practices are equitable and not adversely impacting incumbents based on gender, age, and/or ethnicity.

This review was completed in three stages. The first stage was a simple comparison of average pay for each employee demographic group. The second stage was a regression analysis of employee salaries, with the goal of identifying and measuring a predictive relationship existing between pay and individual employee characteristics such as gender, age, or ethnicity. Finally, Payfactors was tasked with conducting an Employee Cohort Analysis whereby salaries paid to employees in the same or comparable jobs were manually evaluated to identify any perceived

inequities requiring in-depth review, and individual pay actions meant to mitigate these inequities were recommended.

SUMMARY OF FINDINGS: While a statistically significant difference in pay was found between female employees and male employees across the City's general employee population, none of the other differences identified were deemed statistically significant. Further, an in-depth review of employees and their associated backgrounds ultimately demonstrated that all but three identified pay discrepancies were found to be justifiable.

Overall salary adjustments were recommended with the goal of adjusting those three unjustifiable pay gaps, and while the overall amounts recommended as a result of this audit were relatively small, it's often the case that organizations are unable to make all recommended adjustments in a single increase cycle. Our short- and long-term strategies for closing gaps are to initially focus on resolving on focusing largest discrepancies first, followed by adjustments to employees that happen to also be below their respective range minimum, or adjustments to employees that are top performers or long-tenured.

PUBLIC PROCESS: n/a

EXHIBITS: 2020 Salt Lake City Pay Equity Audit Report

payfactors

Pay Equity Audit Findings

Prepared for Salt Lake City Corporation

Contents

1. Project Overview

1.1. Project Background

Salt Lake City has approximately 1,000 non-union employees, spread across approximately 450 job titles and 26 pay grades. Salt Lake City has been careful to align pay to market, and has conducted an internal high-level review of employee pay, but is seeking an in-depth review of employee pay to ensure that pay practices are equitable and are not adversely impacting employees based on gender, age, or ethnicity.

In 2020 Salt Lake City partnered with Payfactors to complete a comprehensive and proactive review of current employee salaries, to ensure that pay practices are equitable and not adversely impacting incumbents based on gender, age, and/or ethnicity. This review was completed in three stages. The first stage was a simple comparison of average pay for each employee demographic group. The second stage was a regression analysis of employee salaries, with the goal of identifying and measuring a predictive relationship existing between pay and individual employee characteristics such as gender, age, or ethnicity. Finally, Payfactors was tasked with conducting an Employee Cohort Analysis whereby salaries paid to employees in the same or comparable jobs were manually evaluated to identify any perceived inequities requiring in-depth review, and individual pay actions meant to mitigate these inequities were recommended.

1.2. Pay Equity Overview

While Utah does not have standalone legislation governing pay equity, the Utah Antidiscrimination Act prohibits employers from wage discrimination based on gender, age, or ethnicity (among other individual employee characteristics). Under this Act, employers may not pay different salaries to employees having substantially equal experience, responsibilities, and skills for the particular job. Furthermore, the federal Equal Pay Act states that employers may not pay different salaries to men and women when those employees are performing substantially equal work.

The Utah Antidiscrimination Act specifically calls out organizational tenure as an affirmative defense for observed pay differences, provided that increases are uniformly applied across employees. The federal Equal Pay Act goes farther, and outlines four possible affirmative defenses for pay differences: seniority, merit, quantity or quality of work output, or any factor other than sex.

1.3. Defining Substantially Equal

As noted above, “substantially equal” is a key concept in most pay equity legislation. It’s not sufficient to simply compare salaries paid to employees in the same job title; instead, a proper pay equity audit will consider salaries paid to employees working jobs requiring similar skill, effort or responsibility. As a result, the first step in a pay equity audit is to determine which company jobs can be considered substantially equal.

For the purposes of the Employee Cohort Analysis, it was initially assumed that employees assigned to the same job title perform the same work and employees assigned to different jobs but the same company grade are likely performing substantially equal work. Employees performing the same or substantially equal work were further delineated based on the presence or absence of direct subordinate reports/people management responsibilities. These assumptions were validated and refined as needed during our review of individual employee pay.

2. Pay Equity Audit Methodology and Results

2.1. Employees Excluded from the Analysis

The following groups of employees were excluded from the analysis entirely:

Employees belonging to a collective bargaining unit
Temporary or seasonal workers
Political appointees
Employees assigned to jobs where there is no variability in pay (for example, Justice Court Judge, ranked Fire or Police jobs)

In addition, special consideration was given to employees assigned to two groups of jobs:

Employees assigned to company grades 039X and 041X: these grades are reserved for division and department heads, and while at the jobs assigned to these grades may be similar in organizational level it was determined that the jobs themselves are not comparable from a job content perspective. As a result, these employees were included in the regression analysis but were not included in the employee cohort analysis (although employees in grades 039X and 041X that are assigned to the same company job title were reviewed for equity).

Employees working in the Department of Airports, in Airport-specific jobs: the nature of this department means that these jobs are much more competitively compensated than comparable jobs working in other departments, particularly at the manager levels and higher. Additionally, as a revenue generating department, salary increases have historically (until 2017 or so) been performance driven rather than tenure based. As a result, Department of Airport employees working in Airport-specific jobs were treated as a distinct organization, with separate regression analyses and employee cohort analyses performed.

Employees working in the Department of Airports, in non-Airport specific jobs (for example, employees working in Network Support jobs with clear comparables in the larger Salt Lake City population) were included in the broader general employee population analysis.

2.2. Simple Pay Comparison

The easiest way to measure a pay gap is to simply average salaries paid to employees in any given group. When we average pay across Salt Lake City Corporation's general employee base we find the following:

Gender	
Group	Avg Rate
Female	$34.53
Male	$37.74

Age	
Group	Avg Rate
Over 40	$38.42
Under 40	$31.54

Ethnicity	
Group	Avg Rate
Caucasian	$37.12
Non-Caucasian	$32.86

Which would suggest that being male, being Caucasian, or being over the age of 40 are all associated with increased pay.

Variances are a bit more pronounced when we average pay across Salt Lake City Corporation's Department of Airports employee population:

Gender	
Group	Avg Rate
Female	$35.23
Male	$40.19

Age	
Group	Avg Rate
Over 40	$41.49
Under 40	$32.68

Ethnicity	
Group	Avg Rate
Caucasian	$39.65
Non-Caucasian	$36.09

The pay gaps that are identified through a simple average of employee pay are sometimes called to as "Headline" pay gaps, referring to the commonly shared statistic that women earn $0.79 for every dollar earned by men. These unadjusted figures can be misleading, as they offer no insight into why the pay gaps exist – are there differences in job responsibility, organizational tenure, or overall work experience that could be valid reasons for variances in pay?

2.3. Regression Analysis

In order to control for the above-mentioned variables, and assess the strength and significance of the relationships between gender, age, ethnicity and salary, a series of linear regressions were conducted. Linear regressions model the relationship between one or more predictor variables (such as gender or age) and a single outcome variable (in this case, salary).

Regressions provide three important metrics to consider: the regression coefficients, the R-Square, and the P-value. A regression coefficient describes the linear relationship between a given predictor variable and the outcome variable, holding all other predictors constant. That is, each coefficient represents the predicted increase (or decrease) in the outcome variable for each 1-unit increase in the given predictor variable, controlling for all other variables. In other words, the regression coefficient quantifies the relationship between a predictor variable and the outcome variable.

While the regression coefficient represents each variable's predicted "effect" on the outcome variable, the R-Square of a regression describes the accuracy of such predictions. Specifically, the R-Square value represents the correlation between the actual y-values and the predicted y-values, and for our purposes, the R-Square can be interpreted as the proportion of variance in the outcome variable accounted for by the predictor variables, collectively. An R-Square of 0.30, for example, would suggest that the linear model accounts for 30% of the variance in adjusted salary. Because the R-Square is measured as a proportion, its maximum value is 1 (or 100% of the variance in the outcome variable). It can also be useful to consider each predictor's individual R-Square, which indicates how much of the variance in the outcome variable is accounted for by that specific predictor, above and beyond all other predictors. A large individual R-Square thus indicates that a given predictor variable has a strong linear relationship with the outcome variable.

Lastly, the P-value evaluates the statistical significance of the regression results by quantifying the likelihood that variance in the outcome variable would be observed if we knew that the null hypothesis were true (i.e. the likelihood that variability in hourly pay would still be observed even if we knew that there was no relationship between hourly pay and gender, age, or ethnicity). Ultimately, P-value can be interpreted as the likelihood that variability in the outcome variable is due to chance rather than due to a causative relationship, so a small P-value (ideally under 0.05) means that the observed coefficient is unlikely due to change, and is probably statistically significant.

When interpreting multiple regression specifically, individual predictor variables are deemed significant when P-value is under that 0.05 threshold AND equal to or less than the model's overall Significance F, which signifies that the variable is a meaningful addition to the model.

Individual statistics for each of the employee characteristics evaluated in Salt Lake City's study are as follows:

General Employee Population			
Variable	Coefficient	R Square	P-value
Gender	3.21	0.019	0.0001
Age	6.88	0.073	0
Ethnicity	4.26	0.019	0.0001

Department of Airports			
Variable	Coefficient	R Square	P-value
Gender	4.96	0.015	0.112
Age	8.81	0.062	0.001
Ethnicity	3.56	0.004	0.415

The coefficients can be interpreted as the increase in hourly pay rate associated with being male, being over the age of 40, or being Caucasian, respectively.

The R Square values are not particularly large, indicating that gender, age, and ethnicity each (individually) account for less than 10% of the overall variance in employee pay rates across the Salt Lake City Corporation. Further, while P-values indicate statistical significance for all variables across the general employee population, in the Department of Airports only the pay differential associated with Age is deemed to be statistically significant.

Individual regression analyses measure the relationship between the dependent variable (salary) and each separate independent variable (gender, age, ethnicity, tenure, grade) but multiple regression will allow us to evaluate the relationship between pay and all other employee characteristics combined. Specifically, what is the impact of gender, age, and ethnicity when we control for organizational tenure and grade?

Multiple regression of the overall organizational dataset provides us with the following:

General Employee Population		
Variable	Coefficient	P-value
Gender	-1.64	0
Age	1.31	0.0004
Ethnicity	0.09	0.82
Grade	2.02	0
Tenure	0.05	0.003
Adj R-Square: .873		
Significance F: 0		

Department of Airports		
Variable	Coefficient	P-value
Gender	-1.70	0.29
Age	2.45	0.11
Ethnicity	0.77	0.72
Grade	2.88	0
Tenure	-0.11	0.12
Adj R-Square: .754		
Significance F: 0		

Which can be interpreted as the increase in hourly pay rate associated with being male, being over the age of 40, being Caucasian, having one additional year of tenure with Salt Lake City, or moving up one grade in the organization respectively when all other variables are considered simultaneously.

As we can see from a comparison of the individual regression gender and ethnicity coefficients with the multiple regression gender and ethnicity coefficients, the impact of ethnicity on pay decreases substantially when all other employee characteristics (grade, tenure) are controlled for, while the impact of gender is reversed (i.e. individual regression finds that male employees earn $3.21/$4.96 more than female counterparts, while multiple regression finds that male employees earn $1.64/$1.70 less than female counterparts). These shifts would suggest that the increased pay rates associated with being male or being Caucasian, as seen in the individual regressions, are actually attributable to male or Caucasian employees being the predominate employee groups in the higher graded and more highly compensated organizational grades.

This is borne out by a review of employee distribution across the organization, in both the general employee population and the airports department specifically:

General Population (EE Count)				
Grade	Female	Male	Non-Caucasian	Caucasian
015X	0	0	0	0
016X	6	1	2	5
017X	4	0	1	3
018X	9	0	4	5
019X	31	4	12	23
020X	8	17	5	20
021X	18	3	3	18
022X	7	2	3	6
023X	17	13	7	23
024X	33	34	14	53
025X	22	60	12	70

Airports Department (EE Count)				
Grade	Female	Male	Non-Caucasian	Caucasian
015X	1	0	1	0
016X	0	0	0	0
017X	0	0	0	0
018X	0	0	0	0
019X	0	0	0	0
020X	0	0	0	0
021X	0	0	0	0
022X	0	0	0	0
023X	3	4	0	7
024X	6	17	3	20
025X	4	27	2	29

General Population (EE Count)				
Grade	Female	Male	Non-Caucasian	Caucasian
026X	23	23	15	31
027X	26	61	6	81
028X	12	23	5	30
029X	32	26	12	46
030X	8	21	5	24
031X	12	29	6	35
032X	9	24	6	27
033X	12	41	7	46
034X	5	17	2	20
035X	6	14	2	18
036X	4	18	2	20
037X	5	4	0	9
038X	1	4	1	4
039X	11	14	1	24
041X	8	1	1	8
TOTAL	**329**	**454**	**134**	**649**

Airports Department (EE Count)				
Grade	Female	Male	Non-Caucasian	Caucasian
026X	4	11	0	15
027X	2	20	1	21
028X	0	0	0	0
029X	1	3	0	4
030X	2	27	4	25
031X	2	7	0	9
032X	0	2	0	2
033X	2	1	1	2
034X	0	1	0	1
035X	0	3	0	3
036X	0	6	0	6
037X	0	2	0	2
038X	1	3	0	4
039X	0	8	1	7
041X	0	1	0	1
TOTAL	**28**	**143**	**13**	**158**

2.4. Employee Cohort Analysis

While regression analysis is useful in determining if systematic inequities exist across an organization's compensation data, the findings generally do not help resolve specific inequities at the employee level. We can't simply use the regression coefficients and adjust employees' pay to a level commensurate with their individual grade and tenure; some employees will undoubtedly be paid more than their grade and tenure would mathematically predict, and pay equity legislation states that employee salaries may not be reduced in an attempt to equalize pay. As a result, to comply with legislation stating that employers must pay equal pay for equal work, an employee cohort analysis was performed to identify potentially unexplained pay differences associated with employees performing the same or substantially equal work.

To perform this analysis, employees were first divided into cohorts based on 1) organizational grade and 2) presence of managerial duties. Within each cohort, individual employee rates of pay were scrutinized to identify pay differences that could not be explained by differences in organizational tenure and that could expose the organization to claims that pay differentials were a result of differences in employee gender, age, and/or ethnicity. Unexplained pay differences were flagged and presented to Salt Lake City Human Resources staff, to be reviewed for the presence of additional affirmative defenses not evident in the original dataset.

2.5. Employee Cohort Analysis--Example

After a review of salaries paid to non-managerial employees in grade 30, the below potential inequities were noted. Specifically, employees 186620 and 210586 (highlighted in pink) were identified as among the most highly compensated in the grade, despite relatively short organizational tenures. These two employees do happen to be among the oldest in the grade, however, suggesting that longer overall work experience could be a justification for the variances in pay.

Pay adjustments were recommended for the employees highlighted in green, with the goal of aligning their pay with their colleagues that are shorter tenured but more highly compensated.

These records and recommended adjustments were provided to Salt Lake City Human Resources staff for review.

EE ID	Job Code	Job Title	Hourly Pay Rate	Tenure	Age	Is Manager?	Age	Gender	Ethnicity	Recommended (Hourly) adjustment	Recommended (Hourly) New Rate
205580	002338	BUSINESS SYSTEMS ANALYST II	34.13	1.0	43.6	NO	Over 40	Female	Caucasian		
186620	001729	SOFTWARE SUPPORT ADMIN II	38.90	3.0	50.6	NO	Over 40	Male	Caucasian		
128052	000734	CITY SURVEYOR	36.54	5.2	34.6	NO	Under 40	Male	Caucasian	2.36	38.90
210586	000646	DEVELOPMENT REVIEW SUPERVISOR	40.56	5.2	51.7	NO	Over 40	Male	Caucasian		
932045	001264	GEO INFO SYSTEMS (GIS) COORD	36.14	6.1	45.3	NO	Over 40	Female	Non-caucasian	4.42	40.56
616530	001729	SOFTWARE SUPPORT ADMIN II	39.06	6.2	52.7	NO	Over 40	Male	Non-caucasian	1.50	40.56
334092	001729	SOFTWARE SUPPORT ADMIN II	38.53	6.9	45.7	NO	Over 40	Male	Caucasian	2.03	40.56
247668	002338	BUSINESS SYSTEMS ANALYST II	36.14	10.0	41.9	NO	Over 40	Male	Caucasian	4.42	40.56
684749	002222	PU SURVEYOR	38.14	13.0	47.0	NO	Over 40	Male	Caucasian	2.42	40.56
283566	002338	BUSINESS SYSTEMS ANALYST II	38.15	19.3	42.4	NO	Over 40	Male	Caucasian	2.41	40.56
647298	001264	GEO INFO SYSTEMS (GIS) COORD	38.64	19.5	48.6	NO	Over 40	Male	Caucasian	1.92	40.56
386199	000646	DEVELOPMENT REVIEW SUPERVISOR	38.15	20.3	43.3	NO	Over 40	Female	Caucasian	2.41	40.56

Upon discussion with HR staff, it was determined that while these jobs may all be assigned to the same organizational grade, there are a number of different skills required, meaning that these six jobs are not in fact substantially equal from a pay equity perspective. By refining our definition of substantially equal, we change the way we compare jobs to each other in our revie of pay equity. It would be more appropriate to compare the Business Systems Analyst and Software Support Admin roles together, to compare the two Surveyors together, to compare the GIS Coordinators together, and to compare the Development Review Supervisors together.

After comparing within these four cohorts, instead of across the entire organizational grade, we reduce the number of potential inequities:

EE ID	Job Code	Job Title	Hourly Pay Rate	Tenure	Age	Is Manager?	Age	Gender	Ethnicity	Recommended (Hourly) adjustment	Recommended (Hourly) New Rate
205580	002338	BUSINESS SYSTEMS ANALYST II	34.13	1.0	43.6	NO	Over 40	Female	Caucasian		
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616530	001729	SOFTWARE SUPPORT ADMIN II	39.06	6.2	52.7	NO	Over 40	Male	Non-caucasian		
334092	001729	SOFTWARE SUPPORT ADMIN II	38.53	6.9	45.7	NO	Over 40	Male	Caucasian	0.37	38.90
247668	002338	BUSINESS SYSTEMS ANALYST II	36.14	10.0	41.9	NO	Over 40	Male	Caucasian	3.76	39.90
283566	002338	BUSINESS SYSTEMS ANALYST II	38.15	19.3	42.4	NO	Over 40	Male	Caucasian	2.75	40.90
128052	000734	CITY SURVEYOR	36.54	5.2	34.6	NO	Under 40	Male	Caucasian		
684749	002222	PU SURVEYOR	38.14	13.0	47.0	NO	Over 40	Male	Caucasian		
932045	001264	GEO INFO SYSTEMS (GIS) COORD	36.14	6.1	45.3	NO	Over 40	Female	Non-caucasian		
647298	001264	GEO INFO SYSTEMS (GIS) COORD	38.64	19.5	48.6	NO	Over 40	Male	Caucasian		
210586	000646	DEVELOPMENT REVIEW SUPERVISOR	40.56	5.2	51.7	NO	Over 40	Male	Caucasian		
386199	000646	DEVELOPMENT REVIEW SUPERVISOR	38.15	20.3	43.3	NO	Over 40	Female	Caucasian	2.41	40.56

While there is still a perceived pay inequity between employee 186620 and three colleagues, there is no demographic differences between the four (all are Caucasian males over the age of 40). Thus, while there may still be a pay difference, this pay difference must be due to something other than gender, age, or ethnicity.

There is also a remaining perceived inequity between employee 210586 and employee 386199. However, after a review of past work history, it was determined that employee 210586 had been employed by the City for many years, left for the private sector for many more years, and then returned to the City. As a result, the organizational tenure of employee 210586 is being underestimated, and this employee has more overall work experience as well.

As a result of these reviews, it was determined that all pay variances found in grade 30 were justified, and no pay adjustments were needed.

EE ID	Job Code	Job Title	Hourly Pay Rate	Tenure	Age	Is Manager?	Age	Gender	Ethnicity	Recommended (Hourly) adjustment	Recommended (Hourly) New Rate
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3. Findings

After several iterations of the Employee Cohort Analysis, all but 3 of the initial 522 employee pay discrepancies that were flagged for review were ultimately found to be justified. The primary justifications were considerable prior work experience, often in the private sector and occasionally at specific and relevant labor competitors; specialized technical skill or knowledge, or possession of a certification/license that impacts the value of the work; or the relative size of the department or team managed.

Overall, the total cost of the recommended pay increases meant to resolve these discrepancies is $4.46 per hour: $3.08 in the general employee population and $1.38 in the Department of Airports population. Four additional employees were flagged for future review and potential pay adjustment, simply because their pay rate was relatively low in their respective pay ranges, but not a result of a specific pay equity concern.

4. Recommendations & Recap

To summarize, while a statistically significant difference in pay was found between female employees and male employees across the City's general employee population, none of the other differences identified were deemed statistically significant. Further, an in-depth review of employees and their associated backgrounds ultimately demonstrated that all but three identified pay discrepancies were found to be justifiable.

Overall salary adjustments were recommended with the goal of adjusting those three unjustifiable pay gaps, and while the overall amounts recommended as a result of this audit were relatively small, it's often the case that organizations are unable to make all recommended adjustments in a single increase cycle. Our short- and long-term strategies for closing gaps are to initially focus on resolving on focusing largest discrepancies first, followed by adjustments to employees that happen to also be below their respective range minimum, or adjustments to employees that are top performers or long-tenured.