

MUNICIPALITY OF ANCHORAGE
AFFIRMATIVE ACTION PROGRAM FOR WOMEN AND MINORITIES
EXECUTIVE SUMMARY REPORT
TO THE
ANCHORAGE ASSEMBLY
2023

Prepared by

Raylene Griffith
Chief Human Resources Officer (Acting)

Uluao "Junior" Aumavae
Chief Equity Officer

Erica Barry
Executive Director of Equal Opportunity

Ronald Kamahele
Director of Organizational Development
Principal Investigator

POLICY

Municipal Code 5.20.040.A.1 - Unlawful employment practices.

It is unlawful for an employer to refuse employment to a person, or to bar him or her from employment, or to discriminate against him or her in compensation, or in a term, condition or privilege of employment or to discharge, expel, reduce, suspend or demote him or her because of race, color, sex, sexual orientation, gender identity, religion, national origin, marital status, age, or physical or mental disability, unless the reason for the discrimination is a bona fide occupational qualification.

INTRODUCTION

An Affirmative Action Plan (AAP) for Women and Minorities was prepared by the Human Resources Department, in accordance with AMC 3.100 – AFFIRMATIVE ACTION PLAN and 41 CFR Section 60-2 AFFIRMATIVE ACTION PROGRAMS.

41 CFR Section 60-2.10(a)(1) General purpose and contents of affirmative action programs

An affirmative action program is a management tool designed to ensure equal employment opportunity. A central premise underlying affirmative action is that, absent discrimination, over time a contractor's workforce, generally, will reflect the gender, racial and ethnic profile of the labor pools from which the contractor recruits and selects.

Three prominent features of an AAP are establishing Placement Goals and conducting Disparity and Compensation Analyses. This report will summarize the Municipality of Anchorage's ("Municipality" or "MOA") Placement Goals and results of Disparity and Compensation Analyses.

Placement Goals are established for each Job Group in which females or minorities are under-utilized, meaning that the organization's utilization of a particular group is not equivalent to, or representative of, its proportional makeup in the labor pool (See *Appendix 2 – Methodology, p. 14*). The purpose of these goals is to highlight areas where the Municipality can focus its recruiting efforts, in order to better reflect the gender, racial and ethnic profiles of its various labor pools. It is important to note that Placement Goals are *not* quotas; it is illegal to hire, or fail to hire, a person solely based on his or her gender, race or ethnicity.

Areas of concern are ascertained by applying a Disparity Analysis to placement, promotion, and separation actions in each Job Group (See *Appendix 2 – Methodology, p.15*). The purpose of a Disparity Analysis is to identify potential barriers to equal employment opportunity. Where there is a preliminary showing of disparity for women or minorities, the MOA examines the disparity more closely and, if the disparity is found statistically significant, action steps are developed and implemented to address it (See *Action-Oriented Program*).

Compensation Analysis involves comparing the mean rate of pay of females to males and minorities to non-minorities in each Job Group when possible. Where initial analysis (See *Appendix 2 – Methodology p.17*) indicates a preliminary showing of a statistical significance difference in mean rate of pay of *any* subgroup, supplemental analyses will be conducted. Because compensation differences can arise from legitimate factors, such as, years of Municipal service and experience, supplemental analyses are needed to validate initial findings (See *Action-Oriented Program*).

MOA DEMOGRAPHIC OVERVIEW

Table 1 summarizes MOA-wide demographics, as of January 1, 2023. The MOA count includes regular Municipal employees but not temporary or seasonal ones. For year-over-year comparison, MOA-wide demographics for 2020, 2021, and 2022 are included. For context the Anchorage Working Age Population and Occupation-based Availability are also included.

Table 1 – Demographic Overview

	MOA 2020		MOA 2021		MOA 2022		MOA 2023		Anchorage Working Age Population % ¹	Occupation-based Availability % ²
	Total	Percent	Total	Percent	Total	Percent	Total	Percent		
Female	850	31.5%	823	32.5%	788	31.9%	745	31.0%	49.6%	25.0%
Male	1851	68.5%	1708	67.5%	1681	68.1%	1655	69.0%	50.4%	75.0%
AK Native/American Indian	95	3.5%	99	3.9%	99	4.0%	94	3.9%	9.0%	5.3%
Asian	156	5.8%	150	5.9%	154	6.2%	155	6.5%	10.0%	5.4%
Black/African American	100	3.7%	95	3.8%	90	3.6%	88	3.7%	6.0%	3.4%
Hawaiian/Pacific Islander	36	1.3%	34	1.3%	44	1.8%	46	1.9%	2.8%	2.6%
Hispanic/Latino	123	4.6%	110	4.3%	108	4.4%	105	4.4%	9.0%	5.8%
Two or More Races	72	2.7%	81	3.2%	86	3.5%	88	3.7%	6.6%	7.4%
White	2119	78.5%	1962	77.5%	1888	76.5%	1824	76.0%	65.7%	70.2%
Veteran	321	11.9%	301	11.9%	306	12.4%	302	12.6%		
Disability	10	0.4%	10	0.4%	22	0.9%	56	2.3%		
Total Employees	2701		2531		2469		2400			

Notes:

1. Working age population includes persons in Anchorage between the ages of 20 and 64. Source: Alaska Department of Labor and Workforce Development 2021 population estimate for Anchorage.
2. Composite availability in Anchorage census area within occupations employed by the MOA. Source: US Census Bureau.

In comparison to the Anchorage Working Age Population, the MOA workforce shows a number of disparities, some of them quite large. However, it is not uncommon for gender or racial representation within various occupations to vary (sometimes widely), in part because the MOA does not employ every kind of occupation in the Anchorage Census Area. Consequently, making a straight MOA workforce-to-MOA population comparison can be problematic. For that reason, the Occupation-based Availability is provided to assess whether the MOA *employs* people at or near a rate that is expected based on our population's availability by gender and race to fill MOA's existing and available occupations. When evaluated from this more appropriate, and technically precise perspective, the disparities narrow.

As Table 1 above shows, despite a marked decrease in the MOA's overall employee head count, the percentage representation of minorities increased in four of six categories between 2022 and 2023. In one minority category (Hispanic/Latino) there was no change in percentage representation. In another minority category (AK Native/American Indian), there was a slight decrease in percentage representation between 2021 and 2022 (4.0% to 3.9%), but this decrease is not statistically significant.

Gender and racial disparities exist within many occupations in the broader community and may be the result of any number of factors or variables entirely unrelated to discrimination. Nevertheless, such disparities sometimes are the result of intentional or unintentional barriers to equal opportunity. While disparities sometimes are the product of broader, long-standing, societal factors the MOA is powerless to address, the Municipality nonetheless remains resolute

in its commitment to overcome any barriers to equal employment opportunity with (or within) its workforce. Toward this end, we perform a detailed analysis to discover where Placement Goals are needed.

JOB GROUPS

In order to conduct an analysis compliant with 41 CFR 60-2, large employers with a wide variety of occupations must consolidate them into Job Groups. A Job Group is a grouping of jobs with similar duties, compensation, and opportunities for promotion. The MOA has nearly 400 distinct job classifications that have been placed into fifty-two (52) Job Groups. (See *Appendix 1, p. 10*).

PLACEMENT GOALS

In order to determine the need, if any, for a Placement Goal, the current utilization of women and minorities within each Job Group is compared to the composite availability of promotable women and minorities employed by the MOA and the availability of qualified women and minorities within the Anchorage Census Area. The US Census Bureau publishes the EEO Tabulation that is used to determine the availability of qualified women and minorities by occupation. The occupation codes from the EEO Tabulation are matched to the MOA’s Job Groups. Finally, a Two Standard Deviation test is used to perform the comparison analysis. (See *Appendix 2 – Methodology, p. 18*). Where the need for a Placement Goal is indicated, the composite availability rate of women or minorities in the Anchorage Census Area becomes the Placement Goal.

In 2022 demographic shifts in the Anchorage Census Area workforce produced twenty-six (26) Placement Goals in thirteen (13) Job Groups. There was good progress during plan year 2022 and for plan year 2023 there are eighteen (18) Placement Goals in eleven (11) Job Groups.

Analysis of the Job Groups, reflected in Tables 2 to 4 below, reveals areas of under-utilization for women, minorities as a whole and minorities by race. Appendix 3 (p. 18) provides a breakdown of female and minority utilization levels in the remaining forty-one (41) Job Groups where no under-utilization was noted.

Table 2 – Female Placement Goals

Job Group	Job Group Total	Total Female	Female Utilization	Current Placement Goal	Number of Placements needed to eliminate the Goal
BF1: Business and Finance 1	154	68	44.2%	55.0%	5
REC1: Parks & Recreation 1	18	5	27.8%	65.0%	2
TRNS1: Transportation 1	103	20	19.4%	30.0%	2

*Transportation 1 consists entirely of Bus Operator job classification.

The Placement Goal for Females in Transportation 1 has been persistent, and this Job Group was monitored during the 2022 plan year. Monitoring revealed progress toward the goal, with seven (7) female hires. However, there were also four (4) terminations of females from this Job Group, thus necessitating a goal again this year. All four female terminations were probationary separations. When looking at Transportation 1 as a whole, there is alarmingly high turnover. In 2022, there were 27 hires (females 7, males 20) and 26 terminations (females 4, males 23).

Table 3 – Minority Placement Goals

Job Group	Job Group Total	Total Minority	Minority Utilization	Current Placement Goal	Number of Placements needed to eliminate the Goal
AFD6: Fire 6	176	22	12.5%	28.0%	21
APD6: Law Enforcement 6	58	17	29.3%	47.0%	1
BF1: Business and Finance 1	154	32	20.8%	32.0%	17
EC2: Emergency Communications 2	49	11	22.4%	37.0%	2
LIB1: Library 1	29	4	13.8%	34.0%	1
LIB2: Library 2	42	8	19.0%	43.0%	1
SCI1: Science 1	22	2	9.1%	30.0%	1

Table 4 – Race Placement Goals

Job Group	Category	Job Group Total	Total Category	Category Utilization	Current Placement Goal	Number of Placements needed to eliminate the Goal
AFD6: Fire 6	Two or More Races	176	4	2.3%	9.0%	4
AFD6: Fire 6	Hispanic/Latino	176	6	3.4%	9.0%	6
APD3: Law Enforcement 3	Hawaiian/Pacific Islander	231	1	0.4%	4.0%	1
BF1: Business and Finance 1	AK Native/American Indian	154	4	2.6%	7.0%	4
BF1: Business and Finance 1	Two or More Races	154	5	3.2%	10.0%	5
BF3: Business and Finance 3	Two or More Races	77	3	3.2%	11.0%	3
LIB1: Library 1	Asian	29	1	3.4%	19.0%	1

ASSESSMENT OF PERSONNEL PROCESSES

The Municipality performed an analysis of its overall employment process, which included Placements, Promotions From, and Terminations, to determine whether impediments to equal employment opportunity exist. There is a change from previous years’ methodology. Placements replaces Hires and includes external applicant hires *and* internal applicant promotions. In previous years, Hires were measured by examining only external applicant selection (hire) rates base on the total number of applicants which often included internal applicants who promoted, but internal applicant promotions were not counted among the “hired”. By including and counting both external hires and internal promotions, Placements give a more accurate measure of selection rates. Hence, providing a better method for determining whether impediments to equal employment opportunity exist. The term “Promotions From” is a clarification. Promotions From – previously Promotions – measures promotions *out of* Job Groups with the selection rate based upon the number of employees in the Job Group. This measure at times is misleading because not all employees in a Job Group are qualified to stand for promotion nor wish to. Because actual promotions are counted in Placements, where a disparity is noted in Promotions From, we can examine Placements to determine whether there was disparity among those who applied to be promoted.

The analysis revealed ten (10) Areas of Concern listed below in Table 5. All areas identified below displayed a preliminary showing of statistical significance using the Two-Standard Deviation test and verified by the Fisher’s Exact test.

Table 5 – Areas of Concern

Job Group	Category	Personnel Process
EC2	Male	Placements
LEGAL2	Female	Placements
APD4	Hispanic/Latino	Placements
APD4	Black/African American	Placements
BF2	Two or More Races	Placements
BF3	AK Native/American Indian	Placements
ADMN2	Multiple Races	Promotion From
APD2	Multiple Races	Promotion From
APD6	Male	Terminations
BF3	Asian	Terminations

A discussion of these Areas of Concern follows:

EC2: Emergency Communications 2 – Disparity Placements

Analysis of EC2 revealed a statistically significant disparity in Placements for males. Within this Job Group there were six (6) external hires and five (5) internal promotions all females. Out of 191 total applicants there were fifty-seven (57) male applicants, and none were hired or promoted.

LEGAL2: Legal 2 – Disparity Placements

Analysis of LEGAL2 revealed a statistically significant disparity in Placements for females. Within this Job Group there were four (4) promotions, one (1) female and three (3) males. There were sixteen (16) female applicants and four (4) male applicants giving females a 6.25% selection rate and males a 75% selection rate. The observed difference in selection rate is statistically significant.

APD4: Law Enforcement 4 – Disparity Placements

Analysis of APD4 revealed a statistically significant disparity in Placements for Hispanic/Latinos and Black/African American. APD4 consists of Police Officers but this analysis specifically addresses Police Officer Recruits. In 2022 Human Resources and Anchorage Police Department collaborated to develop a method for tracking the progress of Police Officer Recruit applicants through the multi-stage screening process. This new method was implemented on two requisitions created in 2022, 2022-07197 and 2022-0718. When a disparity in hiring is noted, this method allows for detailed analysis of applicant progress and determine whether there is disparity in any particular stage of the screening process. Two requisitions from which hires were made in January 2022 included in the analysis for APD4, but two requisitions were initiated before the new screening track method was developed, consequently more in-depth analysis cannot be performed.

The table below shows the fail percentage at progressive stages of screening from requisitions 2022-07197 and 2022-07198.

Race	Total Applicants	1. Minimum Qualifications		2. Written Exam		3. Physical Ability Test		4. Background Investigation	
		# Failed	% Failed	# Failed	% Failed	# Failed	% Failed	# Failed	% Failed
Black/African American	21	3	14.3%	13	61.9%	4	19.0%	1	4.8%
Hispanic/Latino	27	3	11.1%	13	48.1%	4	14.8%	7	25.9%

Analysis was performed at each stage and no statistically significant disparities were noted.

BF2: Business and Finance 2 – Disparity Placements

Analysis of BF2 revealed a statistically significant disparity in Placements for the category Two or More Races. Within this Job Group there were nine (9) external hires and twelve (12) internal promotions. Out of 199 total applicants there were thirty-four (34) Two or More Race applicants, and none were hired or promoted.

BF3: Business and Finance 3 – Disparity Placements

Analysis of BF3 revealed a statistically significant disparity in Placements for AK Native/American Indians. Within this Job Group there were twelve (12) external hires and eleven (11) internal promotions all females. Out of 248 total applicants there were twenty-three (23) AK Native/American Indian applicants, and none were hired or promoted.

ADMN2: Administrative 2 – Disparity Promotion From

Analysis of ADMN2 revealed statistically significant disparities in Promotion From for Asians, Black/African Americans, and Hawaiian/Pacific Islanders. Out of forty-one (41) total employees in ADMN2 there were thirteen (13) promotions, and none were Asians, Black/African Americans, and Hawaiian/Pacific Islanders. Because these promotions occurred across fourteen (14) departments and fifteen (15) different job classifications it is difficult to discern any mitigating factors.

APD2: Law Enforcement 2 – Disparity Promotion From

Analysis of APD2 revealed statistically significant disparities in Promotion From for Whites, Hawaiian/Pacific Islanders, and Two or More Races. APD2 consists of Sergeants in Anchorage Police Department. Out of 43 Sergeants, three (3) were promoted to Lieutenant, one (1) White and two (2) Black/African American. However, there were only six (6) Sergeants who applied for promotion to Lieutenant, six (6) White, and two (2) Black/African American. The observed difference in selection rate among those who actually applied for promotion to Lieutenant is not statistically significant.

APD6: Law Enforcement 6 – Disparity Terminations

Analysis of APD6 revealed a statistically significant disparity in Terminations for Males. In 2022 APD6 had sixty-three (63) employees, fifty-four (54) females and nine (9) males. There were eleven (11) terminations in 2022, six (6) females and five (5) males. The five (5) male terminations were voluntary separations.

BF3: Business and Finance 3 – Disparity Terminations

Analysis of BF3 revealed a statistically significant disparity in Terminations for Asians. In 2022 BF3 had seventy-nine (79) employees, two (2) were Asian, seventy-seven (77) were other races. There were sixteen (16) terminations, two (2) Asian and fourteen (14) other races. The two (2) Asian terminations were voluntary separations.

COMPENSATION ANALYSIS

Comparative analyses of mean Rate of Pay for Gender and Minority were performed in Job Groups where possible. For an analysis to be performed, the Job Group must have thirty (30) or more subjects and the subgroups (Female-Male, Minority-Non-minority) must have five (5) or more subjects. Where these conditions were met, a two-tailed, two-sample t-Test assuming unequal variance method was used to perform the analyses. Each employee's Hourly Factored Rate of pay was used in the analyses. Elected officials were not included in the analyses because their pay rates are established by the Commission on Salaries and Emoluments and therefore are not subject to managerial discretion.

Gender

Analysis was not possible for thirty-three (33) Job Groups due to either the Job Group size being less than thirty (30) or subgroup size being less than five (5). See Appendix 4.

There were fourteen (14) Job Groups where analysis revealed no disparity in compensation. See Appendix 5.

There were four (4) Job Groups, listed below, where there was a *preliminary* showing of statistically significant difference in observed mean rate of pay. Because compensation differences can arise from legitimate factors, such as, years of municipal service and experience, supplemental analyses are needed to find whether there are legitimate factors which account for the observed differences.

ADMN1: Administrative 1

EC2: Emergency Communication 2

M1: Management 1

M2: Management 2

Minority

Analysis was not possible for twenty-four (24) Job Groups due to either the Job Group size being less than thirty (30) or subgroup size being less than five (5). See Appendix 6.

There were twenty-two (22) Job Groups where analysis revealed no disparity in compensation. See Appendix 7

There were five (5) Job Groups, listed below, where there was a *preliminary* showing of statistically significant difference in observed mean rate of pay based either minority or non-minority status. Because compensation differences can arise from legitimate factors, such as, years of municipal service and experience, supplemental analyses are needed to find whether there are legitimate factors which account for the observed differences.

AFD5: Fire 5

BF1: Business and Finance 1

CONS3: Construction 3

LIB2: Library 2

TRNS1: Transportation 1

ACTION-ORIENTED PROGRAM

Human Resources Process Monitoring. For postings of job classifications in Job Groups where there is a Placement Goal for women or minorities, HR's Employment Division will monitor the diversity of the applicant pool and will require that job postings remain open for no less than fourteen (14) days, instead of the 7-day period departments typically use, unless there is a compelling and legitimate business need for a shorter timeframe.

Human Resources Process Monitoring. For postings of job classifications in Job Groups where there is a Placement Goal for women or minorities, HR's Employment Division will not authorize an internal posting *unless* there is a reasonably diverse internal pool of promotable employees, *or* a collective bargaining agreement requires an internal posting or posting with the union.

Human Resources Process Monitoring. For postings of job classifications in Job Groups where there is a Placement Goal for women or minorities, HR will collaborate with the Office of Equal Opportunity, the Chief Equity Officer, and the relevant hiring departments to improve the diversity of the applicant pools for those postings. These efforts will include notifying organizations and leaders who serve Anchorage's BIPOC communities about job openings with the Municipality.

Human Resources Process Monitoring. In Job Groups where a Placement Goal is indicated, HR will perform a quarterly assessment to determine whether the disparities are narrowing or whether further intervention is necessary.

Human Resources Process Monitoring. Departments that have a *statistically significant* showing of disparity in Placements (See *Table 5*) will be required to adopt a more detailed and robust screening process that will include providing a clearly documented, business-related reason for placement or screening out each applicant. The MOA's NEOGOV applicant tracking platform has a built-in functionality that will facilitate this initiative.

Supervisor training. HR has been conducting, and will continue to conduct, its training entitled "Effective Interviewing Skills for Supervisors." This training emphasizes the importance of well-structured interviews that focus on assessing an applicant's valid, job-related qualifications. Supervisors also are trained in unconscious bias and in methods for dampening its impact on the selection process.

Non-represented Position Recruiting. In an effort to enhance diversity in hiring from external sources, vacancy announcements for non-represented positions will have a supplemental question asking applicants to detail any "volunteer" work experience which they believe is relevant to the job.

Progress Briefing. The Chief Equity Officer, the Director of the Office of Equal Opportunity, and HR will brief the Mayor and the Assembly semi-annually on the progress made in implementing the AAP's action items.

Potential Compensation Disparity. Supplemental analyses will be performed on Job Groups where there is a preliminary showing of statistically significant difference in rate of pay. This analysis will involve determining whether or not there are legitimate factors which account for the observed disparity. The results of these analyses will be reported to the Chief Equity Officer, Chief Human Resources Officer, and Executive Director of Equal Opportunity in the 1st quarter Affirmative Action Program report.

Appendix 1 – Job Group Table

Job Group	Job Classification Title	
ADMN1: Administrative 1	Account Representative III	
	SWS Account Representative III	
	Accounting Clerk IV	
	Permit Clerk III	
	Payroll Specialty Clerk	
	Administrative Assistant	
	Secretary To The Mayor	
	Fire Administrative Services Associate	
	Fire Payroll Specialist	
	Principal Office Associate	
	Audit Technician	
	Collector - NON REP	
	ADMN2: Administrative 2	Senior Office Assistant - AMEA
		Senior Courier
SWS Account Representative II		
Accounting Clerk III - AMEA		
Senior Office Associate - AMEA		
Technical Assistant		
Special Assistant		
Accounting Clerk II - NON REP		
Accounting Clerk III - NON REP		
Executive Assistant I		
Personnel Technician III		
AE1: Architecture and Engineering 1		Engineering Technician IV - AMEA
		GIS Technician III - AMEA
		Civil Engineer I - AMEA
	Civil Engineer II - AMEA	
	Civil Engineer III - AMEA	
	Landscape Architect II	
	Assistant Traffic Engineer II	
	Plan Review Engineer	
	Associate Traffic Engineer	
	Civil Engineer III - NON REP	
	Civil Engineer IV	
	AE2: Architecture and Engineering 2	Engineering Technician I
		Engineering Technician II
		Plan Reviewer I
Engineering Technician III		
GIS Technician II - AMEA		
Plan Reviewer II		
Plan Reviewer III		
Engineering Technician IV - Non Rep		
AFD1: Fire 1	Assistant Chief	
AFD2: Fire 2	Fire Battalion Chief	
	Battalion Chief	
AFD3: Fire 3	Fire Train M/M Video Producer	
	Fire Training Specialist	
	Fire Inspector	
	Fire Investigator	

Job Group	Job Classification Title
AFD4: Fire 4	Fire Captain
	Safety Officer
AFD5: Fire 5	Senior Fire Captain
	Fire Apparatus Engineer
AFD6: Fire 6	Firefighter
APD1: Law Enforcement 1	Police Lieutenant
	Police Captain
APD2: Law Enforcement 2	Sergeant
APD3: Law Enforcement 3	Senior Police Officer
APD4: Law Enforcement 4	Police Officer
APD5: Law Enforcement 5	Crime Prevention Specialist
	Community Service Officer
	Police Messenger
APD6: Law Enforcement 6	Police Clerk
	Senior Police Clerk
	Specialty Clerk
	Impound Technician
	Police Clerk III
	Senior Staff Accountant - AMEA
BF1: Business and Finance 1	Senior Administrative Officer - AMEA
	Appraisal Analyst
	Realty Officer III
	Tax Enforcement Officer II
	Street Maintenance Supervisor
	Transit Shift Supervisor
	Principal Accountant
	Principal Administrative Officer
	Appraisal Supervisor
	Principal Auditor
	Budget Analyst II
	Horticulturist
	Human Resources Professional IV
	Operations Supervisor
	Professional Investigator IV
	Retirement Specialist IV
	Safety Coordinator
	Deputy Officer
	Finance Supervisor
	Utility Management Assistant
	Superintendent
	Network Analyst
	Property Appraisal Administrator
Treatment Super (Water/Wastewater) Manager	
Public Finance Manager	

Appendix 1 – Job Group Table (cont'd)

Job Group	Job Classification Title	
BF2: Business and Finance 2	Senior Accountant - AMEA	
	Administrative Officer - AMEA	
	Senior Appraiser	
	Business Property Assessment Examiner	
	Special Administrative Assistant I	
	Professional Investigator I	
	Senior Accountant - Non Rep	
	Administrative Officer - NON REP	
	Personnel Analyst II	
	Professional Investigator II	
	Senior Staff Accountant - NON REP	
	Senior Admin Officer - Non Rep	
	Staff Auditor	
	Human Resources Professional III	
	Reprographics Supervisor	
	Business Analyst	
	Professional Investigator III	
	Retirement Specialist III	
	Utility Tariff Analyst	
	BF3: Business and Finance 3	Office Associate - AMEA
		Senior Code Enforcement Officer
Reprographics Technician III		
Junior Accountant - AMEA		
Junior Administrative Officer - AMEA		
Appraiser		
Collector - AMEA		
Community Work Service Specialist		
Accountant - AMEA		
Administrative Coordinator - AMEA		
Tax Enforcement Officer I		
CONS1: Construction 1	Junior Admin Officer - Non Rep	
	Personnel Analyst I	
	Administrative Coordinator - NON REP	
	Elevator Inspector	
	Journeyman Carpenter	
	Electrical Inspector	
	Structure Inspector	
	Electrical Inspector Foreman	
	Structure Inspector Foreman	
	Collection & Distribution IV-Lvl 5 of 5	
Maintenance Foreman - Level 2 of 2		
Journeyman Cert Plumber Fore		
Mechanical Inspector Foreman		
Collection & Distribution Foreman-L1 of 1		

Job Group	Job Classification Title	
CONS2: Construction 2	Collection & Distribution-OIT-Lvl 1 of 5	
	Collection & Distribution I-Lvl 2 of 5	
	Field Service Inspector I-Lvl 1 of 2	
	Journeyman Craftsman-OT-Lvl 1	
	Collection & Distribution III-Lvl 4 of 5	
	Collection & Distribution II - Lv 3 of 5	
	Field Service Inspector II-Lvl 2 of 2	
	Journeyman Craftsman - Lvl 2	
	Journeyman Certified Plumber	
	Maintenance Foreman-In Trn- Lvl 1 of 2	
	Mechanical Inspector - Level 1	
	CONS3: Construction 3	General Laborer
		Light Equipment Operator
		Medium Equipment Operator
Airport Maintenance Technician II		
Heavy Equipment Operator - ENG		
Airport Maintenance Technician III		
Heavy Equipment Operator Leadman		
Maintenance Worker I		
Maintenance Worker II		
Parks Foreman (Wrk) - Regular		
Swamper		
EC1: Emergency Communication 1	Communications Clerk III	
	Fire Dispatcher	
	Fire Lead Dispatcher	
EC2: Emergency Communication 2	Communications Clerk I	
	Communications Clerk II	
HEALTH1: Health 1	Senior Public Health Nurse	
	Community Health Supervisor	
	Nurse Supervisor I	
	Nurse Supervisor II	
	Child/Adult Care Specialist II	
HEALTH2: Health 2	Child/Adult Care Specialist III	
	Public Health Dietitian	
	Public Health Nurse	
HEALTH3: Health 3	Senior Family Service Aide	
	Family Service Counselor	
	Family Service Specialist	
	Senior Systems Analyst	
ITS1: Information Technology 1	Data Base Administrator I	
	Data Base Administrator II	
	Senior Systems Analyst	
	Systems Analyst Supervisor	
	Application Services Supervisor	
	Technical Support Manager	
	Computer Operations Officer	

Appendix 1 – Job Group Table (cont'd)

Job Group	Job Classification Title
ITS2: Information Technology 2	Data Systems Technician I
	Data Systems Technician II
	Information Center Consultant I
	Information Center Consultant II
	Network Technician III
	Systems Analyst
LEGAL1: Legal 1	Municipal Attorney I
	Deputy Municipal Attorney
	Municipal Attorney II
LEGAL2: Legal 2	Legal Secretary I
	Legal Secretary II
	Legal Secretary III
LEGAL3: Legal 3	Legal Clerk II
LIB1: Library 1	Associate Librarian - AMEA
	Associate Librarian - NON REP
	Professional Librarian I
	Professional Librarian II
	Professional Librarian III
	Professional Librarian IV
LIB2: Library 2	Library Clerk
	Library Assistant I
	Library Assistant II
	Library Assistant III
M1: Management 1	Assembly Chair
	Deputy Ombudsman
	Deputy Municipal Clerk
	Municipal Clerk
	Ombudsman
	Director Parks & Rec. Services
	Librarian
	Municipal Assessor
	Municipal Treasurer
	Senior Finance Officer
	Application Services Manager
	Controller
	Public Safety Deputy Chief
	Internal Auditor
	Director, Maintenance & Ops
	Merrill Field Manager
	Municipal Engineer
	Personnel Director
	Program & Policy Director
	Public Transportation Director
	Purchasing Director
	Municipal Traffic Engineer
Utility Division Manager II	

Job Group	Job Classification Title
M1: Management 1 (cont'd)	Labor Relations Manager
	Director, Real Estate
	Director, Development Services
	Chief Fiscal Officer
	Director, Office of ECD
	Director Police & Fire Retire
	Director Health & Human Services
	Human Resources Director
	Public Safety Chief
	General Manager AWWU
	Information Technology Director
	Medical Officer
	Management & Budget Director
	Municipal Attorney
	Port Director
	Solid Waste Services Director
	Chief of Staff
	Director, Planning
	Municipal Operations Manager
	Medical Officer
	Municipal Manager
	Mayor
Chief Equity Officer	
M2: Management 2	Assembly Counsel
	Associate Ombudsman
	Deputy Director I
	Executive Director Anch Equal Rights
	General Services Manager
	Executive Director OEO
	Public Information Officer
	Risk Manager
	Special Administrative Assistant II
	Transportation Inspection Manager
	Human Resources Professional V
MAT1: Materials Handling 1	Fire Logistics Technician
	Parts Warehouse
	Expediter
MAT2: Materials Handling 2	Warehouse Journeyman - PLU
	Expediter - Level 1 of 1
	Warehouseman Journeyman - ENG
	Hostler
	Assistant Parts Warehouseman
Residential Refuse Equipment Operator	
Commercial Refuse Equipment Operator	

Appendix 1 – Job Group Table (cont'd)

Job Group	Job Classification Title	
MECH1: Mechanical 1	Fire Mechanic	
	Fire Lead Mechanic	
	Journeyman Wireman	
	Senior Electronic Technician	
	Electronic Technician Leadman	
	Electronic Foreman	
	Radio Installer III	
	Journeyman Wireman Foreman	
	Chief Steward	
	Fleet Foreman-Level 1 of 1	
	MECH2: Mechanical 2	Radio Installer II
		Lead Equipment Technician
		Equipment Technician/Welder
		Equipment Tech Foreman (Working)
General Foreman		
Meter Install/Repair Journeyman-Lvl1 of 1		
Journeyman Mechanic - Lvl 2 of 2		
Fleet Journeyman Technician-Lvl 1 of 1		
Fleet Technician Lead-Lvl 1 of 1		
MECH3: Mechanical 3		Equipment Operations Technician II
	Refuse Disposal Foreman (Working)	
	Refuse Collection Foreman (Working) TMS	
	Body Repair Technician	
	Equipment Technician	
	Maintenance Supervisor	
	Meter Reader PLU	
	Fleet Service Technician - Level 1 of 1	
	Meter Reader Lead-Level 1 of 1	
	Journeyman Mechanic-OT-Lvl 1 of 2	
	MECH4: Mechanical 4	Refuse Disposal Utilityman
		Equipment Operations Technician I
		Port Maintenance Journeyman
Refuse Disp Journeyman		
Refuse Disp Technician I		
Port Maintenance Leadman		
Equipment Service Technician I		
Equipment Service Technician II		
Refuse Repair Technician		
MxG1: Maintenance and Grounds 1	Gardener I - Regular	
	Gardener II - Regular	
	Gardener III - Regular	
	Parks Superintendent	
MxG2: Maintenance and Grounds 2	Parks Caretaker I - Regular	
	Parks Caretaker II - Regular	

Job Group	Job Classification Title
PROD1: Production 1	Paint & Sign Foreman
	ICS Electrician/Instrument Tech -L1 of 1
	ICS Foreman - Level 1 of 1
	Treatment Plant Operator IV-L4
	Treatment Plant Operator Foreman
	ICS SCADA Programmer-Lvl 1 of 1
	PROD2: Production 2
Paint & Sign Technician III	
Paint & Sign Leadman	
Treatment Plant Operator I-L1	
Treatment Plant Operator II-L2	
Treatment Plant Operator III-3	
REC1: Parks and Recreation 1	Assistant Recreation Center Manager
	Recreation Program Specialist III
	Recreation Supervisor
	Aquatics Superintendent
REC2: Parks and Recreation 2	Recreation Superintendent
	Lifeguard I
	Lifeguard II
SCI1: Science 1	Recreation Program Specialist II
	Senior Planner - AMEA
	Identification Technician
	Environmental Sanitarian IV
	Forensic Supervisor
	Planning Supervisor
	SCI2: Science 2
Environmental Sanitarian I	
Senior Planning Technician	
Environmental Sanitarian II	
Air Quality Specialist II	
Associate Planner	
Environmental Sanitarian III	
Environmental Specialist	
Laboratory Analyst II	
Evidence Technician I	
Crime Lab Technician	
Evidence Technician II	
TRNS1: Transportation 1	Bus Operator

Appendix 2 – Methodology

Placement Goals

In order to establish a Placement Goal, we compare the Municipality's Utilization of women and minorities with the Availability of women and minorities. Utilization is a specific term in Affirmative Action Plans (AAP); it refers to the percentage of women and minorities in an organization's workforce. To determine these percentages, we evaluate the Utilization of women and minorities in each of the Job Groups.

Availability is another term of art used in AAPs. It refers to the percentage representation of women and minorities in the Municipality's recruiting area and is broken down by Job Group. Availability analyses are performed using the EEO Tabulation of the Anchorage Census Area provided by the US Census Bureau.

In order to establish Availability, we begin by determining the percentage representation of women and minorities employed in occupations that match the Job Groups for which the MOA hires. However, because employees internal to the organization are considered available for promotion, we also combine the census data with our internal Utilization to arrive at a composite Availability percentage for a Job Group.

When the Utilization of women or minorities employed in a particular Job Group is less than what would *reasonably be expected* given the Availability percentage for that Job Group, an annual Placement Goal is set at the Availability percentage. However, if the percentage of women or minorities employed in a particular Job Group is what reasonably would be expected given their Availability percentage, then an annual Placement Goal is not required.

Example:

Job Group: Architecture and Engineering 1	Class: Minorities
Availability: 19.4%	Utilization: 14.3%
Total number of employees: 77	Total number of minorities: 11

In this example, the Utilization of minorities is *less* than Availability. The question is whether the 14.3% Utilization is what *reasonably* would be expected as within the bounds of normal variation. To answer this question, we apply a statistical test called the Two-Standard Deviation Test. If the Utilization is *within* two standard deviations of Availability, then the Utilization rate is deemed reasonable, and a Placement Goal is not necessary. If, however, there is *more than* a two standard deviation difference between Utilization and Availability, then a Performance Goal is required and is set at the Availability rate (in this case, 19.4%).

Two-Standard Deviation Test

Formula:

$$T = \frac{(E - O)}{\sqrt{A * (N * (1 - A))}}$$

Where:

T = Test statistic

E = expected number of minorities employed (Availability (.194) x Total number of employees (77)=14.938)

O = observed number of minorities employed (11)

A = Availability (.194)

N = Total number of employees (77)

$$T = \frac{(14.938 - 11)}{\sqrt{.194 * (77 * (1 - .194))}}$$

$$T = 1.134$$

In this example, there are *less than* two standard deviations between Utilization and Availability. Consequently, the Utilization of minorities (14.3%) is within the bounds of expected variation from their Availability (19.4%). Accordingly, a Placement Goal is not necessary.

Disparity Analysis

When performing a disparity analysis of a personnel process, we compare the outcomes of that process by gender and race in a particular Job Group to what would *reasonably be expected* given certain parameters. We first use the Two Standard Deviation test to find whether there is a preliminary showing of statistical significance to the differential outcomes for gender or race in that Job Group. Where there is a preliminary showing of statistical significance, we then apply the Fisher's Exact test. The Fisher's Exact test is a statistical method that produces the *exact* probability of a set of observed outcomes occurring. A personnel process that passes the Two Standard Deviation test will always pass the Fisher's Exact test. However, a personnel process that fails the Two Standard Deviation test may still pass the Fisher's Exact test, in which case we can conclude there is no statistically significant disparity. Should a personnel process fail both the Two Standard Deviation test and the Fisher's Exact test, however, we can be confident that the observed differences in outcomes are statistically significant and that it is unlikely those outcomes resulted by chance or from normal variation. Personnel processes that result in statistically significant disparities must be examined to ensure decisions are being made based on legitimate business-related needs and not on gender or race.

Hiring Disparity Analysis: Gender

Example:

Job Group: Administrative 2	Personnel Process: Placements
Number of Female Applicants: 345	Number of Male Applicants: 123
Number of Female Hires: 16	Number of Male Hires: 10
Female Hires Percent: 4.64%	Male Hires Percent: 8.13%
Less Favored Group (LFG)	Most Favored Group (MFG)

In performing a Disparity Analysis, we first must determine the Most Favored Group by comparing the selection rates. The group with the highest selection rate is the Most Favored Group (MFG). Other groups in the analysis are Less Favored Groups (LFG). This particular example compares hiring selection rates. (Note that when performing this analysis on terminations, however, the *lowest* selection rate is the MFG.)

Two-Standard Deviation Test

Formula:

$$T = \frac{(A - B)}{\sqrt{C * D * \left(\frac{1}{E} + \frac{1}{F}\right)}}$$

Where:

- T = Test Statistic
- A = Percent of MFG Hired (0.0813)
- B = Percent of LFG Hired (0.0463)
- C = Percent of all Hires (0.0556)

D = Percent of all Not hired (0.944)
 E = Number of LFG applied (345)
 F = Number of MFG applied (123)

$$T = \frac{(0.0813 - 0.0463)}{\sqrt{0.0556 * 0.9444 * (\frac{1}{345} + \frac{1}{123})}}$$

$$T = 1.44$$

In this version of the Two Standard Deviation Test, the Test Statistic is examined to determine whether it is equal to or greater than -1.96 *and* less than or equal to 1.96. If so, the Test Statistic is deemed within the normal variation one would expect and the difference is not statistically significant. However, a Test Statistic that falls outside the bounds of normal variation (greater than -1.96 *and* less than 1.96) is a preliminary showing of statistical significance and requires application of the Fisher's Exact test.

In this example, the Test Statistic (1.44) is between -1.96 and 1.96. Therefore, the difference between the percentage of Male Hires and the percentage of Female Hires is not statistically significant. In other words, from this datum, we reasonably can conclude that the observed hiring difference, although facially large, is within the expected range of variation.

Fisher's Exact Test

In the example below, the hiring differential fails the Two Standard Deviation test because it results in a Test Statistic of 2.201. Thus, there is a preliminary showing of statistical significance that requires application of the Fisher's Exact test. The Fisher's Exact test uses a confidence interval of 5%, meaning that if the Test Statistic is less than 0.05 (5%), then the disparity in observed outcomes *is statistically significant*.

Example:

Gender	Applicants	Selected	Not selected	Hires %	T-Stat	Fisher's
Male	15	5	10	33% - MFG		
Female	20	1	19	5%	2.201	0.037

Formula:

$$p = \frac{(a + b)!(c + d)!(a + c)!(b + d)!}{a!b!c!d!n!}$$

(The "!" indicates the factorial function)

Where:

- p = probability
- a = number of MFG selected (5)
- b = number of LFG selected (1)
- c = number of MFG not selected (10)
- d = number of LFG not selected (19)
- n = sum of a, b, c, and d (36)

$$p = \frac{(6)! (29)! (15)! (20)!}{(5)! (1)! (10)! (19)! (36)!}$$

p = 0.037

In this case, the Test Statistic is less than 0.05. The observed hiring disparity therefore is statistically significant.

Compensation Analysis

Initial compensation analysis is performed using MS Excel Analysis ToolPak, t-Test: Two-Sample Assuming Unequal Variances. This analytical function uses Welch's t-Test and the Welch-Satterthwaite equation to produce the analysis results.

Example of analysis results and interpretation:

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Female</i>	<i>Male</i>
Mean	29.59286	25.391
Variance	23.16573	14.45052
Observations	35	10
Hypothesized Mean Difference	0	
df (Degrees of freedom)	18	
<i>t</i> (Test statistic)	2.894784	
p-value	0.009654	
α (Significance level)	0.05	
Critical Value	± 2.100922	

In this example the mean rate of pay for females is greater than the mean rate of pay for males. Where *t* is outside the range indicated by the Critical Value, the difference in mean rates of pay is statistically significant. In this example *t* is 2.89 and is outside the Critical Value range of ± 2.10 , therefore we conclude the observed difference in mean rates of pay is statistically significant. In addition, as confirmation, we observe the p-value (0.0096) is less than α (0.05), which indicates that the observed difference is highly unlikely to have occurred by chance.

Differences in compensation can arise from legitimate factors, such as, years of service and experience. Supplemental analysis is performed to taking these factors into account. The example below displays the results of a regression analysis using years of municipal service (YOS) as an explanatory variable.

<i>Regression Statistics</i>		
	<i>t Stat</i>	<i>P-value</i>
Gender	-1.196471658	0.238386
YOS	5.059864176	9.25E-06

Having taken YOS into account, we see that *t* (*t Stat*) for Gender is -1.19 . While we do not have a Critical Value to compare it to, the associated P-value of 0.238 is much greater than our significance level of 0.05 therefore we conclude that Gender is no longer a statistically significant influence on rate of pay when the influence of YOS is also accounted for. Further, we see that the YOS *t* (*t Stat*) is 5.06 which indicates a very strong influence on rate of pay and the P-value for YOS is 0.000009 which indicates this influence is highly statistically significant. In this example, there is strong evidence that the higher mean rate of pay for Females is due to the female employees have more years of service than the males.

Appendix 3 – No Under-utilization

Female: Job Groups with no Under-Utilization

Job Group	Job Group Total	Total Female	Female Utilization
ADMN1	45	35	77.8%
ADMN2	37	33	89.2%
AE1	78	23	29.5%
AE2	46	12	26.1%
AFD1	5		0.0%
AFD2	11		0.0%
AFD3	12	2	16.7%
AFD4	68		0.0%
AFD5	78	2	2.6%
APD1	15	4	26.7%
APD2	46	2	4.3%
APD4	122	18	14.8%
APD5	5	5	100.0%
BF2	112	80	71.4%
CONS1	40	1	2.5%
CONS2	53	2	3.8%
CONS3	84	7	8.3%
EC1	28	22	78.6%
HEALTH1	2	1	50.0%
HEALTH2	18	16	88.9%
HEALTH3	20	19	95.0%

Job Group	Job Group Total	Total Female	Female Utilization
ITS1	26	7	26.9%
ITS2	40	8	20.0%
LEGAL1	20	12	60.0%
LEGAL2	13	9	69.2%
LEGAL3	1	1	100.0%
M1	64	23	35.9%
M2	42	23	54.8%
M3	0	0	0.0%
MAT1	11	5	45.5%
MAT2	21	1	4.8%
MECH1	32	1	3.1%
MECH2	26		0.0%
MECH3	37	1	2.7%
MECH4	64	1	1.6%
MxG1	5	1	20.0%
MxG2	25	7	28.0%
PROD1	41	5	12.2%
PROD2	21	2	9.5%
REC2	4	1	25.0%
SCI2	23	12	52.2%

Minorities: Job Groups with no Under-Utilization

Job Group	Job Group Total	Total Minority	Minority Utilization
ADMN1	45	15	33.3%
ADMN2	37	13	35.1%
AE1	78	11	14.1%
AE2	46	7	15.2%
AFD1	5		0.0%
AFD2	11	2	18.2%
AFD3	12	4	33.3%
AFD4	68	6	8.8%
AFD5	78	10	12.8%
APD1	15	3	20.0%
APD2	46	8	17.4%
APD4	122	28	23.0%
APD5	5		0.0%
BF2	112	35	31.3%
CONS1	40	5	12.5%
CONS2	53	12	22.6%
CONS3	84	29	34.5%
EC1	28	4	14.3%
HEALTH1	2		0.0%
HEALTH2	18	5	27.8%
HEALTH3	20	14	70.0%

Job Group	Job Group Total	Total Minority	Minority Utilization
ITS1	26	3	11.5%
ITS2	40	15	37.5%
LEGAL1	20	4	20.0%
LEGAL2	13	1	7.7%
LEGAL3	1		0.0%
M1	64	8	12.5%
M2	42	10	23.8%
M3	0	0	0.0%
MAT1	11	2	18.2%
MAT2	21	14	66.7%
MECH1	32	6	18.8%
MECH2	26	4	15.4%
MECH3	37	8	21.6%
MECH4	64	16	25.0%
MxG1	5	1	20.0%
MxG2	25	6	24.0%
PROD1	41	10	24.4%
PROD2	21	5	23.8%
REC2	4	1	25.0%
SCI2	23	5	21.7%

APPENDIX 4

Job Groups where no compensation analysis was performed due to small size of Job Group or small size of gender subgroups sample.

		Female		Male		Reason excluded from analysis
		Mean Rate of Pay	Subjects	Mean Rate of Pay	Subjects	
ADMN2	Administrative 2	\$ 25.68	33	\$ 24.29	4	Subgroup too small
AFD1	Fire 1	\$ -	0	\$ 80.92	5	Subgroup too small
AFD2	Fire 2	\$ -	0	\$ 57.71	11	Subgroup too small
AFD3	Fire 3	\$ 55.02	2	\$ 50.92	10	Job Group too small
AFD4	Fire 4	\$ -	0	\$ 44.83	68	Subgroup too small
AFD5	Fire 5	\$ 39.07	2	\$ 39.25	76	Subgroup too small
APD1	Law Enforcement 1	\$ 76.37	4	\$ 77.48	11	Job Group too small
APD2	Law Enforcement 2	\$ 67.85	2	\$ 67.20	44	Subgroup too small
APD5	Law Enforcement 5	\$ 37.69	5	\$ -	0	Job Group too small
CONS1	Construction 1	\$ 53.22	1	\$ 47.75	39	Subgroup too small
CONS2	Construction 2	\$ 39.66	2	\$ 38.33	51	Subgroup too small
EC1	Emergency Communication 1	\$ 45.27	22	\$ 44.52	6	Job Group too small
HEALTH1	Health 1	\$ 39.39	1	\$ 45.53	1	Job Group too small
HEALTH2	Health 2	\$ 36.56	16	\$ 36.08	2	Job Group too small
HEALTH3	Health 3	\$ 25.65	19	\$ 21.98	1	Job Group too small
ITS1	Information Technology 1	\$ 58.51	7	\$ 53.96	19	Job Group too small
LEGAL1	Legal 1	\$ 47.55	12	\$ 47.13	8	Job Group too small
LEGAL2	Legal 2	\$ 34.72	9	\$ 26.37	4	Job Group too small
LEGAL3	Legal 3	\$ 19.93	1	\$ -	0	Job Group too small
LIB1	Library 1	\$ 34.08	21	\$ 33.74	8	Job Group too small
MAT1	Materials Handling 1	\$ 39.44	5	\$ 39.92	6	Job Group too small
MAT2	Materials Handling 2	\$ 32.94	1	\$ 35.03	20	Job Group too small
MECH1	Mechanical 1	\$ 46.28	1	\$ 50.26	31	Subgroup too small
MECH2	Mechanical 2	\$ -	0	\$ 41.55	26	Job Group too small
MECH3	Mechanical 3	\$ 37.47	1	\$ 38.86	36	Subgroup too small
MECH4	Mechanical 4	\$ 22.25	1	\$ 35.19	63	Subgroup too small
MxG1	Maintenance and Grounds 1	\$ 24.25	1	\$ 29.74	4	Job Group too small
MxG2	Maintenance and Grounds 2	\$ 24.46	7	\$ 22.19	18	Job Group too small
PROD2	Production 2	\$ 39.37	2	\$ 38.67	19	Job Group too small
REC1	Parks and Recreation 1	\$ 29.30	5	\$ 26.76	13	Job Group too small
REC2	Parks and Recreation 2	\$ 29.30	5	\$ 26.76	13	Job Group too small
SCI1	Science 1	\$ 43.69	12	\$ 47.01	10	Job Group too small
SCI2	Science 2	\$ 34.98	12	\$ 35.34	11	Job Group too small

APPENDIX 5

Job Groups where no gender disparity in compensation was noted. The Critical Value provides a range within which normal variation is expected. Where the t Stat value is within this range the observed difference in mean rate of pay is not statistically significant. The Job Groups below meet this criterion.

		Female		Male		t Stat	Critical Value	p-value
		Mean Rate of Pay	Subjects	Mean Rate of Pay	Subjects			
AE1	Architecture and Engineering 1	\$ 54.07	23	\$ 53.73	55	0.21	±2.02	0.838
AE2	Architecture and Engineering 2	\$ 39.39	12	\$ 37.16	34	1.01	±2.10	0.325
AFD6	Fire 6	\$ 35.25	10	\$ 35.10	166	0.11	±2.23	0.918
APD3	Law Enforcement 3	\$ 56.22	27	\$ 54.43	204	1.63	±2.04	0.114
APD4	Law Enforcement 4	\$ 38.34	18	\$ 39.60	104	-1.36	±2.05	0.185
APD6	Law Enforcement 6	\$ 30.10	51	\$ 29.06	7	0.48	±2.36	0.645
BF1	Business and Finance 1	\$ 45.63	68	\$ 47.78	86	-1.96	±1.98	0.052
BF2	Business and Finance 2	\$ 37.08	80	\$ 38.76	32	-1.88	±2.00	0.064
BF3	Business and Finance 3	\$ 29.08	54	\$ 28.78	23	0.27	±2.02	0.789
CONS3	Construction 3	\$ 28.67	7	\$ 33.25	77	-1.36	±2.36	0.215
ITS2	Information Technology 2	\$ 44.77	8	\$ 45.58	32	-0.60	±2.13	0.557
LIB2	Library 2	\$ 19.30	33	\$ 21.78	9	-1.75	±2.18	0.105
PROD1	Production 1	\$ 47.06	5	\$ 44.76	36	1.42	±2.57	0.214
TRNS1	Transportation 1	\$ 29.18	20	\$ 29.78	83	-0.97	±2.04	0.339

APPENDIX 6

Job Groups where no compensation analysis was performed due to size of Job Group or size of minority subgroup sample.

		Minority		Non-minority		Reason excluded from analysis
		Mean Rate of Pay	Subjects	Mean Rate of Pay	Subjects	
AFD1	Fire 1	\$ -	0	\$ 80.92	5	Job Group too small
AFD2	Fire 2	\$ 53.14	2	\$ 58.72	9	Job Group too small
AFD3	Fire 3	\$ 50.63	4	\$ 52.09	8	Job Group too small
APD1	Law Enforcement 1	\$ 76.23	3	\$ 77.43	12	Job Group too small
APD5	Law Enforcement 5	\$ -	0	\$ 37.69	5	Job Group too small
EC1	Emergency Communication 1	\$ 44.69	4	\$ 45.18	24	Job Group too small
HEALTH1	Health 1	\$ -	0	\$ 42.46	2	Job Group too small
HEALTH2	Health 2	\$ 35.52	5	\$ 36.89	13	Job Group too small
HEALTH3	Health 3	\$ 25.07	14	\$ 26.42	6	Job Group too small
ITS1	Information Technology 1	\$ 62.95	3	\$ 54.17	23	Job Group too small
LEGAL1	Legal 1	\$ 45.78	4	\$ 47.78	16	Job Group too small
LEGAL2	Legal 2	\$ 24.11	1	\$ 32.82	12	Job Group too small
LEGAL3	Legal 3	\$ -	0	\$ 19.93	1	Job Group too small
LIB1	Library 1	\$ 33.70	4	\$ 34.03	25	Job Group too small
MAT1	Materials Handling 1	\$ 39.75	2	\$ 39.69	9	Job Group too small
MAT2	Materials Handling 2	\$ 33.26	14	\$ 38.26	7	Job Group too small
MECH2	Mechanical 2	\$ 42.91	4	\$ 41.31	22	Job Group too small
MxG1	Maintenance and Grounds 1	\$ 29.32	1	\$ 28.48	4	Job Group too small
MxG2	Maintenance and Grounds 2	\$ 23.43	6	\$ 22.64	19	Job Group too small
PROD2	Production 2	\$ 40.64	5	\$ 38.14	16	Job Group too small
REC1	Parks and Recreation 1	\$ 28.51	4	\$ 27.16	14	Job Group too small
REC2	Parks and Recreation 2	\$ 18.95	1	\$ 20.26	3	Job Group too small
SCI1	Science 1	\$ 39.64	2	\$ 45.76	20	Job Group too small
SCI2	Science 2	\$ 34.57	5	\$ 35.32	18	Job Group too small

APPENDIX 7

Job Groups where analysis based on minority status revealed no disparity in compensation. The Critical Value provides a range within which normal variation is expected. Where the t Stat value is within this range the observed difference in mean rate of pay is not statistically significant. The Job Groups below meet this criterion.

		Minority		Non-minority		t Stat	Critical Value	p-value
		Mean Rate of Pay	Subjects	Mean Rate of Pay	Subjects			
ADMN1	Administrative 1	\$ 29.55	15	\$ 28.21	30	0.84	±2.06	0.411
ADMN2	Administrative 2	\$ 24.89	13	\$ 24.99	23	-0.06	±2.09	0.950
AE1	Architecture and Engineering 1	\$ 52.09	11	\$ 54.12	67	-0.77	±2.18	0.456
AE2	Architecture and Engineering 2	\$ 35.02	7	\$ 38.23	39	-1.32	±2.26	0.219
AFD4	Fire 4	\$ 43.73	6	\$ 44.93	62	-1.25	±2.36	0.250
AFD6	Fire 6	\$ 33.95	22	\$ 35.28	154	-1.47	±2.05	0.154
APD2	Law Enforcement 2	\$ 68.60	8	\$ 66.94	38	0.86	±2.26	0.413
APD3	Law Enforcement 3	\$ 54.52	57	\$ 54.68	174	-0.20	±1.99	0.841
APD4	Law Enforcement 4	\$ 39.46	28	\$ 39.40	94	0.05	±2.03	0.959
APD6	Law Enforcement 6	\$ 29.36	17	\$ 30.23	41	-0.63	±2.06	0.537
BF2	Business and Finance 2	\$ 37.58	35	\$ 37.55	77	0.04	±1.99	0.968
BF3	Business and Finance 3	\$ 28.52	31	\$ 29.31	46	-0.73	±2.00	0.467
CONS1	Construction 1	\$ 48.40	5	\$ 47.82	35	0.28	±2.36	0.788
CONS2	Construction 2	\$ 39.84	12	\$ 37.95	41	1.49	±2.08	0.150
EC2	Emergency Communication 2	\$ 39.12	11	\$ 41.10	38	-0.99	±2.11	0.335
ITS2	Information Technology 2	\$ 44.77	15	\$ 45.80	25	-0.73	±2.06	0.471
M1	Management 1	\$ 54.50	8	\$ 59.70	54	-1.44	±2.26	0.184
M2	Management 2	\$ 42.94	10	\$ 43.32	32	-0.13	±2.16	0.898
MECH1	Mechanical 1	\$ 48.72	6	\$ 50.46	26	-1.01	±2.16	0.329
MECH3	Mechanical 3	\$ 37.41	8	\$ 39.22	29	-1.11	±2.31	0.301
MECH4	Mechanical 4	\$ 33.29	16	\$ 35.55	48	-1.96	±2.06	0.061
PROD1	Production 1	\$ 44.49	10	\$ 45.22	31	-0.89	±2.08	0.382