



# **The Revised EEO-1 Report: Seeing the Trees and the Forest**

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**August 2, 2017**

# Overview

- **Seeing the trees:**

- **Examine the details of compiling and integrating required data**
- **How challenging will the task be?**

- **Seeing the forest:**

- **What statistical picture of your organization's compensation practices does the revised EEO-1 report provide to the EEOC or OFCCP?**
- **What actions should you take to be well prepared for filing the revised report?**





# Let's Start with the Trees!



# Changes in EEO-1 Reporting



EEO-1 Reporting	Past	Future
Private employers (without federal contracts or subcontracts) with 100 or more employees	Sex and race/ethnicity data	Sex, race/ethnicity, W-2 earnings, and hours worked data
Federal contractors and subcontractors with 100 or more employees	Sex and race/ethnicity data	Sex, race/ethnicity, W-2 earnings, and hours worked data
Federal contractors and subcontractors with 50-99 employees	Sex and race/ethnicity data	Sex and race/ethnicity data
Federal contractors and subcontractors with 49 or fewer employees and private employers with 99 or fewer employees	No filing requirements	No filing requirements
Workforce snapshot (taken as of a payroll within the designated 3-month period)	July 1 - September 30	October 1 - December 31
Filing deadline	September 30 (ending in 2016)	March 31 (beginning with 2018)

# Revised EEO-1 Report: Data Elements



- **Need to know the following for each employee:**

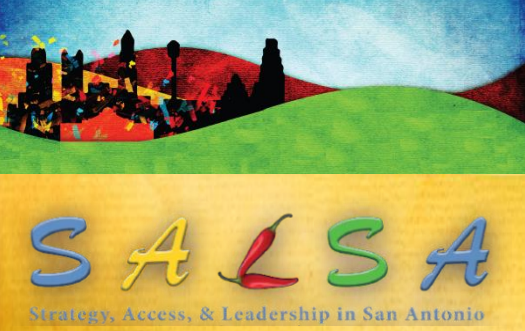
- **Employee date**
- **EEO-1 establishment (location)**
- **EEO-1 job category**
- **Sex**
- **Race or ethnicity**

Same as in the past

New

- **Earnings during the calendar year from Box 1 of W-2**
- **A measure of hours worked during the calendar year**
  - **Non-exempt: Hours worked (as defined by FLSA)**
  - **Exempt: (1) Actual hours worked or (2) 20 hours/week if PT, 40 hours/week if FT**





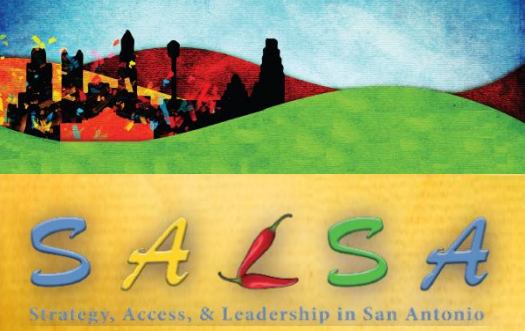
# First Reporting Matrix: Employee Counts by Pay Band & Race/Gender Combo

## SECTION D - EMPLOYMENT DATA

Employment at this establishment - Report all permanent full- and part-time employees including apprentices and on-the-job trainees unless specifically excluded as set forth in the instructions. Enter the appropriate figures on all lines and in all columns. Blank spaces will be considered as zeros.

Job Categories	Annual Salary in Thousands	Number of Employees (Report employees in only one category)														Total Col A-N
		Race/Ethnicity														
		Hispanic or Latino		Non-Hispanic or Latino												
				Male					Female							
Male	Female	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More races	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More races			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Executive/Senior Level Officials and Managers 1.1	1. \$19,239 and under															
	2. \$19,240 - \$24,439															
	3. \$24,440 - \$30,679															
	4. \$30,680 - \$38,999															
	5. \$39,000 - \$49,919															
	6. \$49,920 - \$62,919															
	7. \$62,920 - \$80,079															
	8. \$80,080 - \$101,919															
	9. \$101,920 - \$128,959															
	10. \$128,960 - \$163,799															
	11. \$163,800 - \$207,999															
	12. \$208,000 and over															
13. \$19,239 and under																
14. \$19,240 - \$24,439																
15. \$24,440 - \$30,679																

**SAMPLE**



# Second Reporting Matrix: Hours Worked by Pay Band & Race/Gender Combo

## SECTION D - EMPLOYMENT DATA

Employment at this establishment - Report all permanent full- and part-time employees including apprentices and on-the-job trainees unless specifically excluded as set forth in the instructions. Enter the appropriate figures on all lines and in all columns. Blank spaces will be considered as zeros.

Job Categories	Annual Salary in Thousands	For each cell provide the <b>TOTAL</b> Number of Hours worked in last year														Total Col A-N
		Race/Ethnicity														
		Hispanic or Latino		Non-Hispanic or Latino												
				Male						Female						
Male	Female	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More races	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More races			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Executive/Senior Level Officials and Managers 1.1	1. \$19,239 and under															
	2. \$19,240 - \$24,439															
	3. \$24,440 - \$30,679															
	4. \$30,680 - \$38,999															
	5. \$39,000 - \$49,919															
	6. \$49,920 - \$62,919															
	7. \$62,920 - \$80,079															
	8. \$80,080 - \$101,919															
	9. \$101,920 - \$128,959															
	10. \$128,960 - \$163,799															
	11. \$163,800 - \$207,999															
	12. \$208,000 and over															
13. \$19,239 and under																
14. \$19,240 - \$24,439																

**SAMPLE**



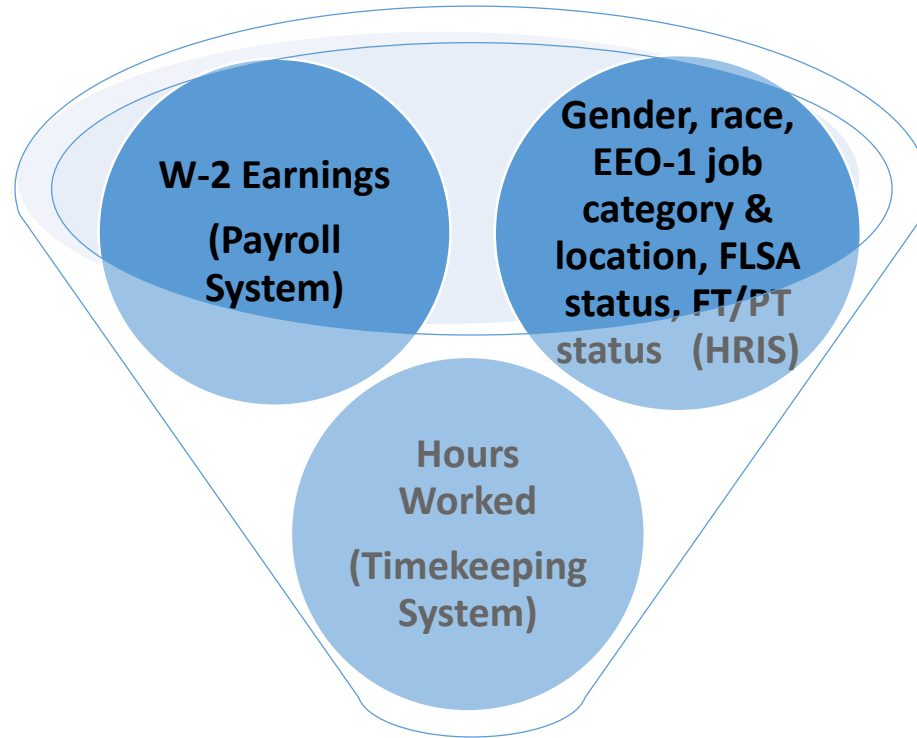




# Data Challenges



# Big Challenge: Integrating Data From Different Sources



Revised EEO-1 Report

- 1 • Are data extracts easy to obtain?
- 2 • How much data cleansing is needed?
- 3 • Merge data by Name (may be difficult) or unique Emp ID (easier)?





# Data Challenges – Common Key

Best Practice: Use a common identifier between systems



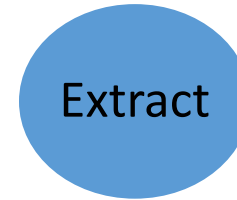
HRIS ● ● ● ● ●



Payroll ● ● ● ● ●



Timekeeping ● ● ●

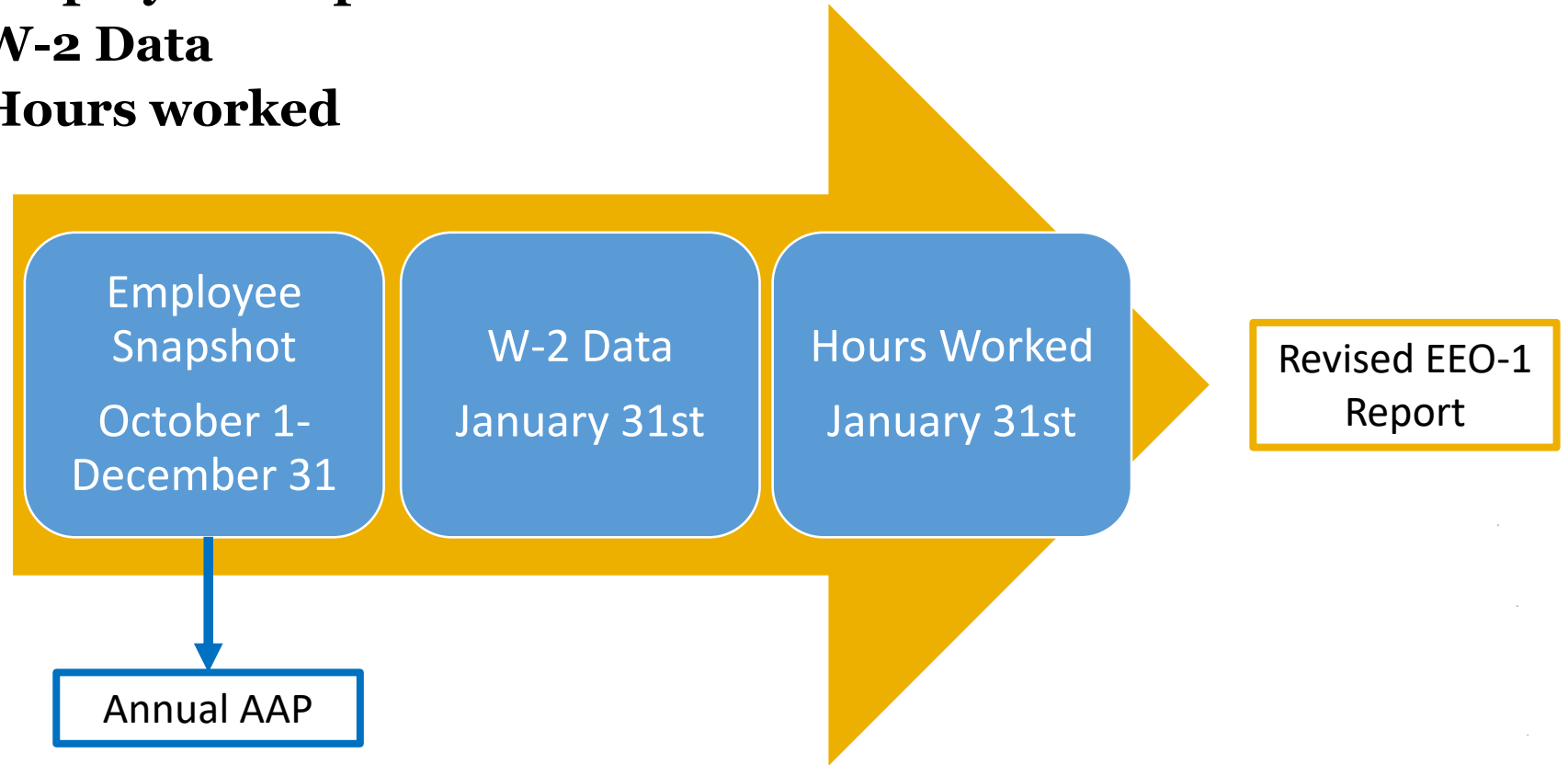


ID: 12345  
Name: John Smith  
Position: Accountant  
Race: W  
Gender: M  
EEO-1 Code: 2  
W-2(box 1): \$48,236  
HW: 2080  
FT  
Exempt

# Data Challenges – Aligning Data

- **Aligning data**

- **Employee Snapshot**
- **W-2 Data**
- **Hours worked**





# Data Challenges – Merging Data

- **Snapshot Date – December 31, 2017**
  - **Can be from a payroll period between October 1 – December 31**

HRIS Employee ID	Payroll Employee ID	Timekeeping Employee ID	EEO – Data File
Not Present	Not Present	Not Present	Record is NOT included
Not present	Not Present	Present	Record is NOT included
Not Present	Present	Not Present	Record is NOT included
Not present	Present	Present	Record is NOT included
Present	Not Present	Not Present	<b>Include Record; Data issue</b>
Present	Not Present	Present	<b>Include Record; Data issue</b>
Present	Present	Not Present	<b>Include Record; Data issue</b>
Present	Present	Present	Include Record



# Data Challenges – Reconciling Data

- **Workforce snapshot**
  - Includes all active employees on payroll snapshot date
  - Also serves as AAP annual employee workforce snapshot
- **Reporting pay data**
  - Reported for employee records on workforce snapshot
  - Pay is based on W-2 Box 1 earnings
  - Pay can not be annualized



# Data Challenges – Reconciling Data

- Reporting hours worked
  - Reported for employee records on workforce snapshot
  - **Will NOT report individual earnings and hours worked**
  - Use FLSA – Hours worked under FLSA
    - For **FLSA non-exempt employees**, use the number of hours worked under the FLSA that year
    - For **FLSA exempt employees**, employers have some options:
      - 40 hours/week for full-time and 20 hours/week for part time multiplied by the number of weeks worked that year
      - Actual hours worked could be used if desire. NOTE: **Employers are not required to start keeping records for exempt employees**





# Data Challenges – Standard Checks

- **Best practices**

- **Check data for validity, consistency, and missing information**
  - **Race, gender, EEO-1 job category codes, locations (establishments), job titles**
- **Consistency - verify job titles vs EEO-1 job categories**
- **Verify current data vs previous year filing**
  - **Number of locations (greater than 50)**
  - **Employee counts**
  - **Job titles by EEO-1 job category**
  - **Location address information, e.g., unitIDs**





# Data – Best Practice Tips

# Managing Data – Best Practices

- **Determine a common key (identifier) across all systems: HRIS, Timekeeping and Payroll**
- **Processing data**
  - **Best Practice: To facilitate AAP and EEO-1 data production – generate the workforce snapshot data file for both reports, e.g., December 31<sup>st</sup>**
- **Merging data**
  - **Produce the workforce snapshot**
  - **Produce the separate data files from Payroll and Timekeeping**
  - **Merge the payroll and timekeeping data into EEO-1 Data file**
    - **Translate the pay data to one of the 12 Bands (don't include the actual w-2 amount on the data file)**

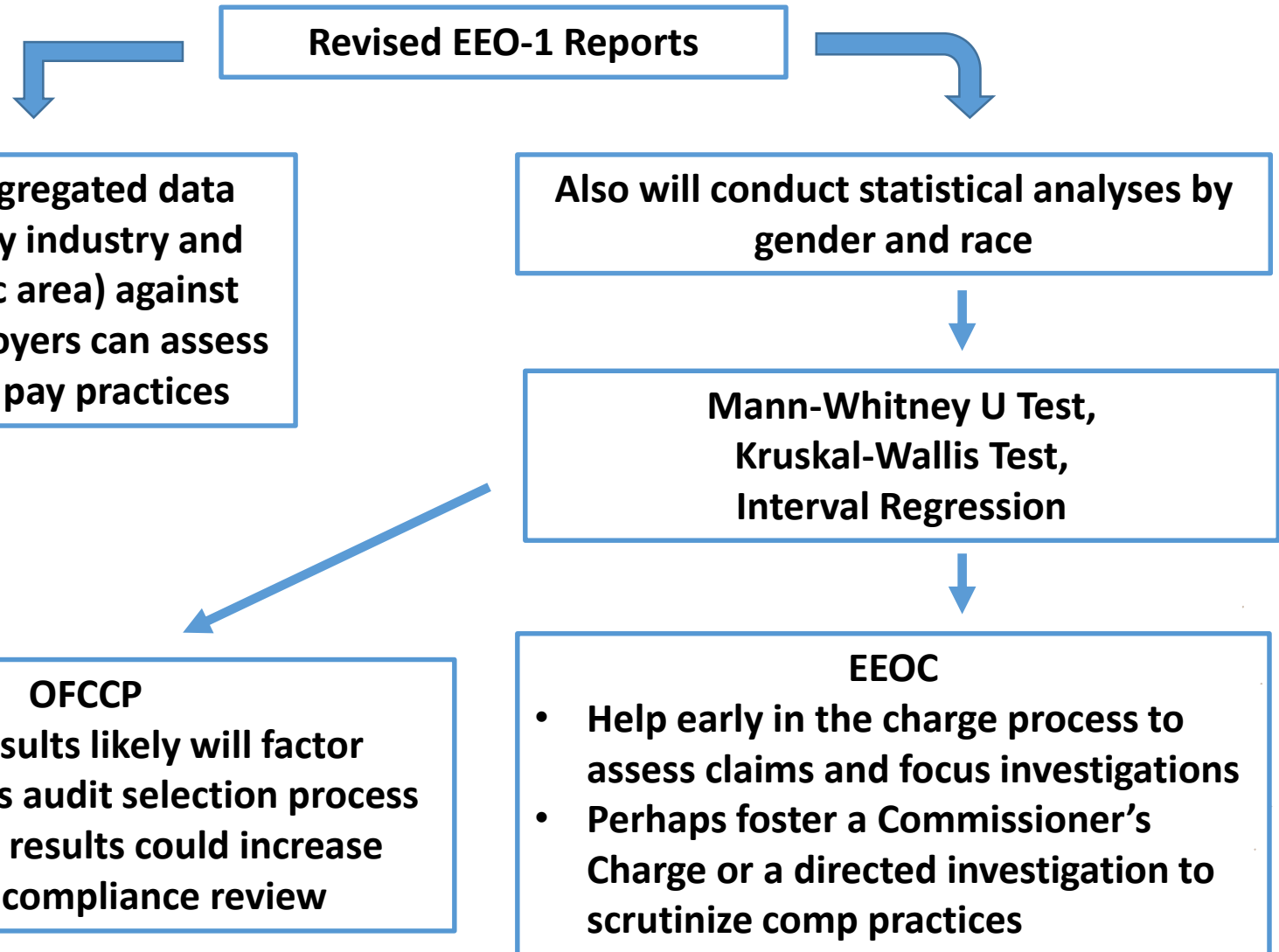






# And Now for the Forest!

# How Will EEOC/OFCCP Utilize the Revised EEO-1 Reports?



# Statistical Tests – What Questions Do They Address?

- **Mann-Whitney U Test (a.k.a. Rank Sum Test)**
  - **Compares two groups (Females v. Males or Minorities v. Non-Minorities)**
  - **Key question: Are males clustered disproportionately among the higher pay bands and females among the lower pay bands? Or vice versa?**





# Statistical Tests – What Questions Do They Address?

- **Kruskal-Wallis Test**

- **Compares more than two groups (Whites, Blacks, Hispanics, Asians, etc.)**
- **Key question: Is one or more racial groups clustered disproportionately among the higher pay bands? Or among the lower pay bands?**



# Statistical Tests – What Questions Do They Address?

- **Interval Regression**

- **Seeks to model W-2 earnings as a function of hours worked, gender and race when the analyst knows only the ordered category (that is, the W-2 pay band) in which each employee falls but not each employee's exact W-2 earnings**





# Example

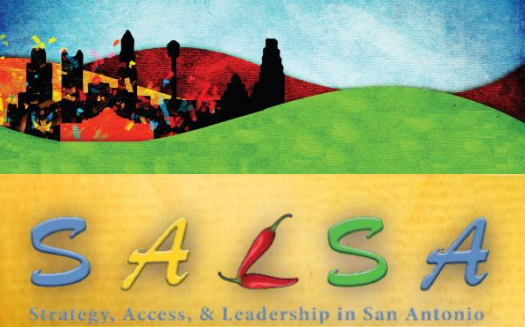
**Simpson, Inc.**

**EEO-1 Pay and Hours Study  
for Consolidated Report**



# Simpson, Inc.

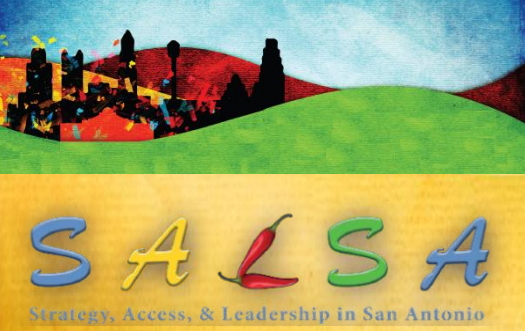
## Consolidated EEO-1 Report: Operatives



OPERATIVES - EEO CODE 7 (Number of Employees)															
W-2 Earnings	Race/Ethnicity														Total
	Hsp or Latino		Male						Female						
	Hsp M	Hsp F	Wht M	Blk M	Pac M	Asn M	Nat Am M	Two M	Wht F	Blk F	Pac F	Asn F	Nat Am F	Two F	
2. \$19,240 - \$24,439	9	3	6	1	0	1	0	0	7	1	0	0	0	0	28
3. \$24,440 - \$30,679	40	7	40	3	0	3	0	0	7	2	0	1	0	0	103
4. \$30,680 - \$38,999	22	9	47	9	0	15	0	0	4	0	0	6	0	0	112
5. \$39,000 - \$49,919	43	44	166	32	0	19	0	0	31	3	0	6	0	0	344
6. \$49,920 - \$62,919	44	24	116	1	0	22	0	0	5	1	0	3	0	0	216
7. \$62,920 - \$80,079	8	1	25	0	0	11	0	0	0	0	0	0	0	0	45
8. \$80,080 - \$101,919	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
<b>Total Operatives</b>	<b>166</b>	<b>88</b>	<b>400</b>	<b>46</b>	<b>0</b>	<b>73</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>7</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>850</b>

# Simpson, Inc.

## Consolidated EEO-1 Report: Operatives



### OPERATIVES - EEO CODE 7 (Total Number of Hours Worked)

W-2 Earnings	Race/Ethnicity														Total
	Hsp or Latino		Male						Female						
	Hsp M	Hsp F	Wht M	Blk M	Pac M	Asn M	Nat Am M	Two M	Wht F	Blk F	Pac F	Asn F	Nat Am F	Two F	
2. \$19,240 - \$24,439	18933	6401	10494	2806	0	1581	0	0	14366	2020	0	0	0	0	56601
3. \$24,440 - \$30,679	85694	14562	108745	7319	0	7035	0	0	14288	4758	0	2550	0	0	244951
4. \$30,680 - \$38,999	44394	20669	98853	20860	0	38116	0	0	7892	0	0	15592	0	0	246376
5. \$39,000 - \$49,919	99866	102758	352196	70803	0	44569	0	0	65588	6518	0	14112	0	0	756410
6. \$49,920 - \$62,919	100650	54148	245292	2101	0	52576	0	0	10627	2226	0	7062	0	0	474682
7. \$62,920 - \$80,079	19478	2467	63615	0	0	29168	0	0	0	0	0	0	0	0	114728
8. \$80,080 - \$101,919	0	0	0	0	0	5346	0	0	0	0	0	0	0	0	5346
<b>Total Operatives</b>	<b>369015</b>	<b>201005</b>	<b>879195</b>	<b>103889</b>	<b>0</b>	<b>178391</b>	<b>0</b>	<b>0</b>	<b>112761</b>	<b>15522</b>	<b>0</b>	<b>39316</b>	<b>0</b>	<b>0</b>	<b>1899094</b>



# Rank Sum Analysis of Females v. Males



# Gender Analysis



## OPERATIVES (EEO CODE 7)

W-2 Earnings	Female	Male	Total
2. \$19,240 - \$24,439	11	17	28
3. \$24,440 - \$30,679	17	86	103
4. \$30,680 - \$38,999	19	93	112
5. \$39,000 - \$49,919	84	260	344
6. \$49,920 - \$62,919	33	183	216
7. \$62,920 - \$80,079	1	44	45
8. \$80,080 - \$101,919	0	2	2
<b>Total Operatives</b>	<b>165</b>	<b>685</b>	<b>850</b>

# Gender Analysis - Rank Sum Test

Question Rank Sum Test seeks to answer: Are males clustered disproportionately among the higher pay bands and females among the lower pay bands? Or vice versa?

OPERATIVES (EEO CODE 7)		
W-2 Earnings	Female % Distribution	Male % Distribution
2. \$19,240 - \$24,439	6.67%	2.48%
3. \$24,440 - \$30,679	10.30%	12.55%
4. \$30,680 - \$38,999	11.52%	13.58%
5. \$39,000 - \$49,919	50.91%	37.96%
6. \$49,920 - \$62,919	20.00%	26.72%
7. \$62,920 - \$80,079	0.61%	6.42%
8. \$80,080 - \$101,919	0.00%	0.29%
<b>Total Operatives</b>	<b>100.00%</b>	<b>100.00%</b>



# Gender Analysis - Rank Sum Test



OPERATIVES (EEO CODE 7)					
W-2 Earnings	Female	Male	Total	Average Rank	Female Rank Sum
2. \$19,240 - \$24,439	11	17	28	14.5	159.5
3. \$24,440 - \$30,679	17	86	103	80.0	1,360.0
4. \$30,680 - \$38,999	19	93	112	187.5	3,562.5
5. \$39,000 - \$49,919	84	260	344	415.5	34,902.0
6. \$49,920 - \$62,919	33	183	216	695.5	22,951.5
7. \$62,920 - \$80,079	1	44	45	826.0	826.0
8. \$80,080 - \$101,919	0	2	2	849.5	0.0
<b>Total Operatives</b>	<b>165</b>	<b>685</b>	<b>850</b>		<b>63,761.5</b>

Female Rank Sum	63,761.5
Expected Rank Sum	70,207.5
Difference	-6,446.0
Stated as # of Std Devs	-2.38





# Kruskal-Wallis Analysis of Racial Groups

**Question: Is one or more racial groups clustered disproportionately among the higher pay bands? Or among the lower pay bands?**

# Race Analysis – Kruskal-Wallis Test



OPERATIVES (EEO CODE 7)										
W-2 Earnings	Wht	Blk	Hsp	Asn	Total	Average Rank	Wht Rank Sum	Blk Rank Sum	Hsp Rank Sum	Asn Rank Sum
2. \$19,240 - \$24,439	13	2	12	1	28	14.5	188.5	29.0	174.0	14.5
3. \$24,440 - \$30,679	47	5	47	4	103	80.0	3,760.0	400.0	3,760.0	320.0
4. \$30,680 - \$38,999	51	9	31	21	112	187.5	9,562.5	1,687.5	5,812.5	3,937.5
5. \$39,000 - \$49,919	197	35	87	25	344	415.5	81,853.5	14,542.5	36,148.5	10,387.5
6. \$49,920 - \$62,919	121	2	68	25	216	695.5	84,155.5	1,391.0	47,294.0	17,387.5
7. \$62,920 - \$80,079	25	0	9	11	45	826.0	20,650.0	0.0	7,434.0	9,086.0
8. \$80,080 - \$101,919	0	0	0	2	2	849.5	0.0	0.0	0.0	1,699.0
<b>Total Operatives</b>	<b>454</b>	<b>53</b>	<b>254</b>	<b>89</b>	<b>850</b>		<b>200,170.0</b>	<b>18,050.0</b>	<b>100,623.0</b>	<b>42,832.0</b>

Kruskal-Wallis Stat	16.35
# of Std Devs	3.30

Average Rank	440.9	340.6	396.2	481.3
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**Don't Delay,  
Start Preparing Now**



# 1. Conduct Report Prep “Stress Test”

Obtain HRIS,  
Payroll, and  
Timekeeping  
extracts

Determine  
hours worked  
for exempt  
employees

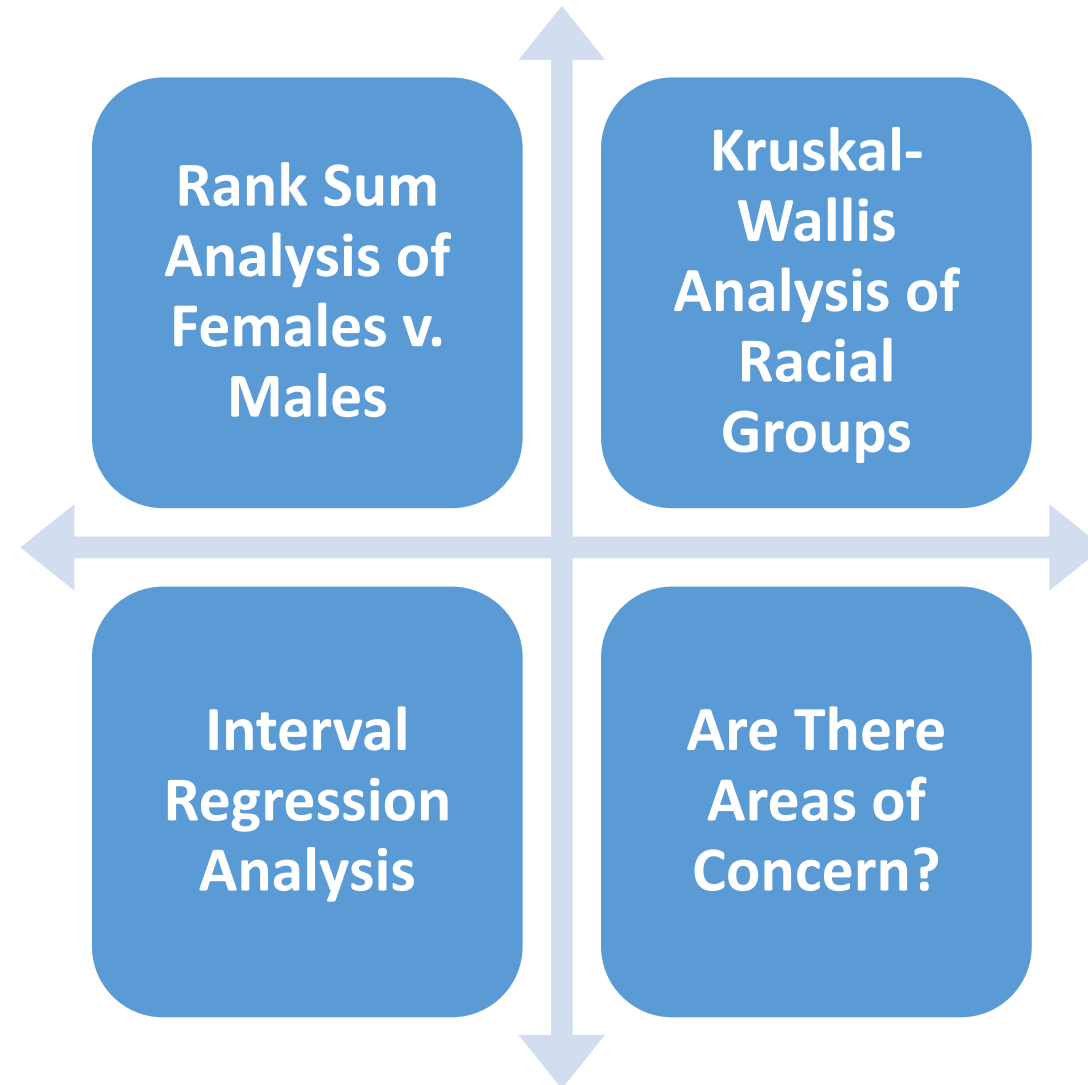
Cleanse &  
merge data

Produce  
revised EE0-1  
report





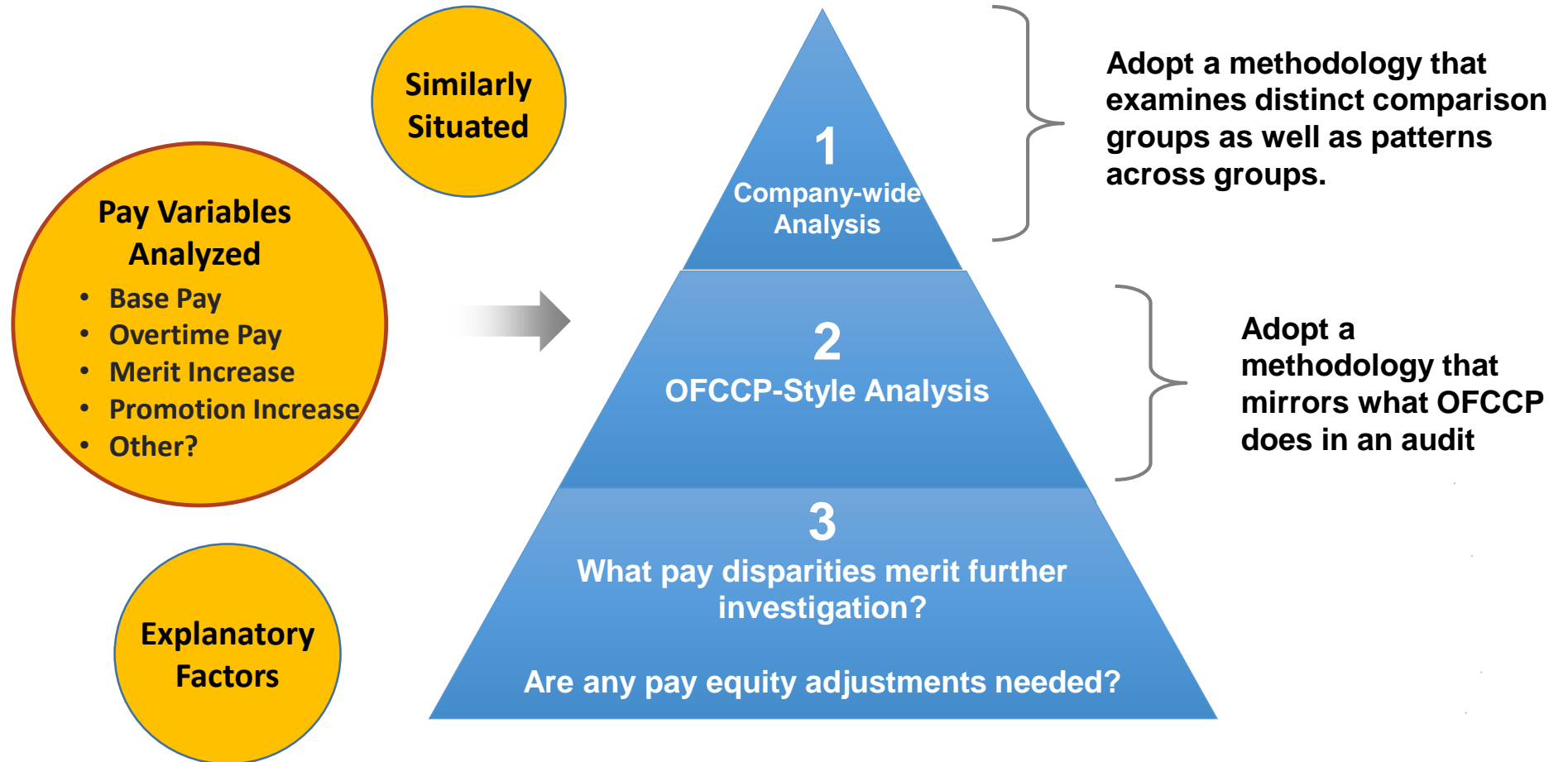
## 2. Perform Statistical Analyses of Test Report



# 3. Conduct a Comprehensive Pay Equity Study



**SALSA**  
Strategy, Access, & Leadership in San Antonio





# Summary



Report Prep  
Stress Test

+

Analysis of Test  
Report

+

Comprehensive  
Pay Equity Study



EEOC

OFCCP

Pay  
Discrimination  
Claims



# Questions?







# Thank You

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