



Bias audit report

for Resume Screening Tool

Compliance framework	NYC Local Law 144
Metric	Selection rate (4/5ths rule)
Audit date	April 13, 2026
Auditor	Jane Smith
Auditor role	Compliance Officer
Independence	Internal (company employee, not the tool vendor)

Overall assessment

Disparate impact

Significant adverse impact detected — action required

Data completeness

Gaps noted

This audit analyzed 984 records across Impact ratios by sex, Impact ratios by race/ethnicity. 12 group(s) were flagged as having an impact ratio substantially below the threshold. The lowest impact ratio observed was 0.419 for Female - Hispanic or Latino.

Scope of this audit

In scope

- Categories tested: Impact ratios by sex, Impact ratios by race/ethnicity
- Intersectional analysis: sex x race_ethnicity
- Metric used: Selection rate (4/5ths rule)
- Threshold value: 0.8
- Data period: 2025-01-01 to 2025-12-31

Out of scope

- Does not certify the assessed tool as “bias-free”
- Does not test categories beyond those provided in the dataset
- Does not determine whether the system is an AEDT under LL144
- Not intended for compliance with other legislation

Compliance checklist

Requirement	Status	Notes
System description provided	✓	System name and description are documented.
Sex/gender category tested	✓	Results include sex/gender analysis.
Race/ethnicity category tested	✓	Results include race/ethnicity analysis.
Intersectional analysis performed	✓	Intersectional analysis was included.
Auditor independence	✓	Auditor type: internal.

Audit timeliness



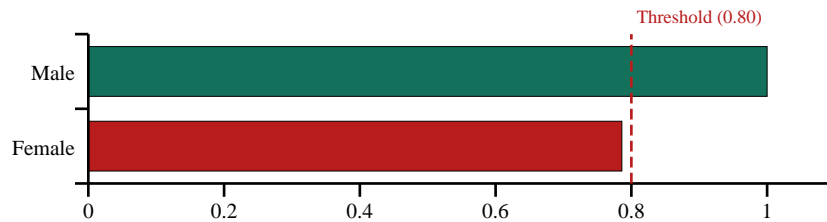
Ensure this audit is no more than 1 year old at time of AEDT use.

Executive summary

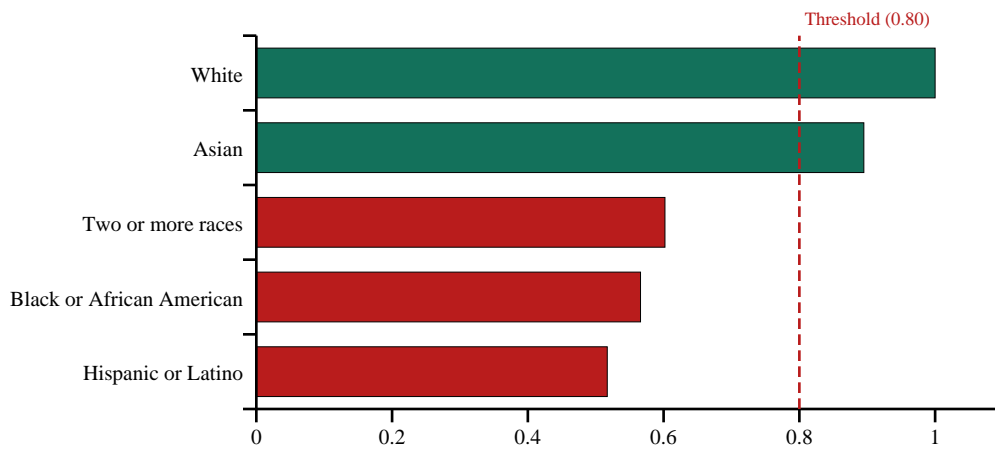
Total records	984
Total selected	441
Overall rate	44.8%
Flagged groups	12
Excluded groups	6
Records with missing data	16

Audit analyzed 984 applicants (overall rate: 44.8%). 16 rows excluded due to missing data. 12 group(s) flagged with impact ratio below 0.80 threshold.

Impact ratios by sex



Impact ratios by race/ethnicity



System description

Name	Resume Screening Tool
Version	<i>not provided</i>
Description	AI-powered resume screening tool for initial candidate filtering
Deployment context	Pre-interview candidate screening

Data description

Source	HRIS Export
Date range	2025-01-01 to 2025-12-31
Total records	984
Records with missing data	16

Records per demographic category

Impact ratios by sex

Group	Records	Share
Female	510	51.8%
Male	474	48.2%

Impact ratios by race/ethnicity

Group	Records	Share
Hispanic or Latino	192	19.5%
Black or African American	166	16.9%
Two or more races	53	5.4%
Asian	115	11.7%
White	431	43.8%
American Indian or Alaska Native	16	1.6%
Native Hawaiian or Other Pacific Islander	11	1.1%

Methodology

The audit uses the **selection rate** metric. For each demographic group, the selection rate is computed as the number of selected records divided by the total number of records in that group. Each group's rate is then

compared to the group with the highest selection rate to produce an **impact ratio**.

This audit uses a threshold of **0.8**, derived from the **4/5ths rule** (also known as the EEOC adverse impact standard). Under this rule, a selection rate for any demographic group that is less than four-fifths (80%) of the rate for the group with the highest selection rate is generally regarded as evidence of adverse impact. A threshold of 0.8 means that any group whose impact ratio falls below 0.8 is flagged for further review. A flag does not automatically indicate a legal violation; it is a statistical indicator that warrants closer examination. Reference: Uniform Guidelines on Employee Selection Procedures (1978), 29 C.F.R. Part 1607, § 60-3.4.D.

Small-sample exclusion. Groups representing fewer than 2.0% of the total records are excluded from impact ratio calculations to avoid statistically unreliable results.

Intersectional analysis is included: compound groups formed by combining sex x race_ethnicity are also evaluated against the same threshold.

Results

Impact ratios by sex

Highest-rate group: **Male** (50.4%)

Group	Records	Selected	Rate	Impact ratio	Status
Female	510	202	39.6%	0.786	Flagged
Male	474	239	50.4%	1.000	Pass

Female: impact ratio 0.786 — this group is selected at 78.6% the rate of the highest group (Male, 50.4%), which is below the 0.80 threshold.

Impact ratios by race/ethnicity

Highest-rate group: **White** (56.4%)

Group	Records	Selected	Rate	Impact ratio	Status
Hispanic or Latino	192	56	29.2%	0.517	Flagged
Black or African American	166	53	31.9%	0.566	Flagged
Two or more races	53	18	34.0%	0.602	Flagged
Asian	115	58	50.4%	0.895	Pass
White	431	243	56.4%	1.000	Pass
American Indian or Alaska Native	16	8	50.0%	—	Excluded
Native Hawaiian or Other Pacific Islander	11	5	45.5%	—	Excluded

Hispanic or Latino: impact ratio 0.517 — this group is selected at 51.7% the rate of the highest group (White, 56.4%), which is below the 0.80 threshold.

Black or African American: impact ratio 0.566 — this group is selected at 56.6% the rate of the highest group (White, 56.4%), which is below the 0.80 threshold.

Two or more races: impact ratio 0.602 — this group is selected at 60.2% the rate of the highest group (White, 56.4%), which is below the 0.80 threshold.

Impact ratios by intersectional category

Highest-rate group: **Male - White** (64.5%)

Group	Records	Selected	Rate	Impact ratio	Status
Female - Hispanic or Latino	100	27	27.0%	0.419	Flagged
Female - Black or African American	84	23	27.4%	0.425	Flagged
Male - Hispanic or Latino	92	29	31.5%	0.489	Flagged
Male - Two or more races	30	10	33.3%	0.517	Flagged
Female - Two or more races	23	8	34.8%	0.539	Flagged
Male - Black or African American	82	30	36.6%	0.567	Flagged
Female - Asian	68	30	44.1%	0.684	Flagged
Female - White	217	105	48.4%	0.750	Flagged
Male - Asian	47	28	59.6%	0.924	Pass
Male - White	214	138	64.5%	1.000	Pass
Female - American Indian or Alaska ...	10	5	50.0%	—	Excluded
Female - Native Hawaiian or Other P...	8	4	50.0%	—	Excluded
Male - American Indian or Alaska Na...	6	3	50.0%	—	Excluded
Male - Native Hawaiian or Other Pac...	3	1	33.3%	—	Excluded

Recommended actions

1. Investigate root causes of the observed disparities in selection or scoring rates.
2. Document any business necessity defense for the continued use of the tool (see 42 U.S.C. § 2000e-2(k)).
3. Consider alternative selection procedures with less adverse impact.
4. Ensure the audit summary is publicly posted on the employer's website (NYC Admin Code § 20-871(b)(3)).
5. Provide notice to candidates at least 10 business days before the tool's use (6 RCNY § 5-303).

Regulatory context

NYC Local Law 144 (Int. 1894-A), codified at NYC Admin Code §§ 20-870 through 20-874, requires employers and employment agencies in New York City that use an automated employment decision tool (AEDT) to conduct an annual bias audit, publicly post the audit summary on their website, and provide notice to candidates before the tool is used.

An “independent auditor” under LL144 is a person or entity that is not involved in using or developing the AEDT and that exercises objective and impartial judgment in conducting the bias audit (6 RCNY § 5-300).

The **4/5ths rule** originates from the EEOC Uniform Guidelines on Employee Selection Procedures (1978), § 60-3.4.D. It states that a selection rate for any demographic group that is less than four-fifths of the rate for the group with the highest rate is generally regarded as evidence of adverse impact.

A flag in this audit is a **statistical indicator** that a particular group’s selection or scoring rate falls below the established threshold relative to the highest-performing group. It does not automatically constitute a legal violation or proof of intentional discrimination.

Glossary

AEDT (Automated Employment Decision Tool)

A computational process, derived from machine learning, statistical modeling, data analytics, or artificial intelligence, that issues simplified output to substantially assist or replace discretionary decision making for employment decisions (NYC Admin Code § 20-870).

Adverse impact

A substantially different rate of selection in hiring, promotion, or other employment decision that works to the disadvantage of members of a protected group.

Impact ratio

The ratio of a demographic group’s selection or scoring rate to the rate of the group with the highest rate. A ratio below the threshold indicates potential adverse impact.

Selection rate

The proportion of applicants or candidates in a demographic group who are selected (hired, promoted, or advanced) by the tool.

Scoring rate

The proportion of applicants or candidates in a demographic group who receive a score above the median score, as reported to the employer.

4/5ths rule

A guideline from the EEOC Uniform Guidelines (1978) stating that a selection rate below 80% of the highest group’s rate is generally regarded as evidence of adverse impact.

Intersectional analysis

An analysis that examines the combined effect of two or more demographic categories (e.g., race x sex) rather than each category independently.

Conclusion

This audit of Resume Screening Tool analyzed 984 records across Impact ratios by sex, Impact ratios by race/ethnicity. 12 of 17 evaluated groups were flagged as having an impact ratio below the threshold. The most significant disparity was observed for Female - Hispanic or Latino (impact ratio: 0.419). These findings warrant further investigation and may require remedial action to ensure compliance with NYC Local Law 144.

Limitations

- The audit measures statistical disparity, not causation. A flagged group does not imply the tool is the cause of that disparity.
- Results are specific to the dataset provided. They do not automatically generalize to different deployment contexts, time periods, or populations.
- Compliance obligations vary by jurisdiction. A passing audit under one framework does not imply compliance with all applicable laws.
- The audit does not evaluate the quality, relevance, or job-relatedness of the underlying features used by the tool.
- Readers should consult qualified legal counsel for interpretation of these results in their specific regulatory context.
- This audit is scoped to NYC Local Law 144 and the EEOC 4/5ths rule. It does not evaluate compliance with other federal, state, or local anti-discrimination laws, nor does it assess the tool's validity or job-relatedness under the Uniform Guidelines on Employee Selection Procedures.