Subchapter T: Automated Employment Decision Tools

§ 5-300 Definitions.

As used in this subchapter, the following terms have the following meanings:

Automated Employment Decision Tool. "Automated employment decision tool" or " AEDT" means "Automated employment decision tool" as defined by § 20-870 of the Code where the phrase "to substantially assist or replace discretionary decision making" means:

  i.   to rely solely on a simplified output (score, tag, classification, ranking, etc.), with no other factors considered; or

  ii. to use a simplified output as one of a set of criteria where the simplified output is weighted more than any other criterion in the set; or

  iii. to use a simplified output to overrule conclusions derived from other factors including human decision-making.

Bias Audit. "Bias audit" means "Bias audit" as defined by § 20-870 of the Code.

Candidate for Employment. "Candidate for employment" means a person who has applied for a specific employment position by submitting the necessary information or items in the format required by the employer or employment agency.

Category. "Category" means any component 1 category required to be reported by employers pursuant to subsection (c) of section 2000e-8 of title 42 of the United States Code as specified in part 1602.7 of title 29 of the Code of Federal Regulations, as designated on the Equal Employment Opportunity Commission Employer Information Report EEO-1.

Code. "Code" means the Administrative Code of the City of New York.

Distribution Date. "Distribution date" means the date the employer or employment agency began using a specific AEDT.

Employment Decision. "Employment decision" means "Employment decision" as defined by § 20-870 of the Code.

Employment Agency. "Employment agency" means "Employment agency" as defined by 6 RCNY § 5-249 .

Historical data. "Historical data" means data collected during an employer or employment agency's use of an AEDT to assess candidates for employment or employees for promotion.

Independent Auditor. "Independent auditor" means a person or group that is capable of exercising objective and impartial judgment on all issues within the scope of a bias audit of an AEDT. An auditor is not an independent auditor of an AEDT if the auditor:

  i.   is or was involved in using, developing, or distributing the AEDT;

  ii. at any point during the bias audit, has an employment relationship with an employer or employment agency that seeks to use or continue to use the AEDT or with a vendor that developed or distributes the AEDT; or

  iii. at any point during the bias audit, has a direct financial interest or a material indirect financial interest in an employer or employment agency that seeks to use or continue to use the AEDT or in a vendor that developed or distributed the AEDT.

Impact Ratio. "Impact ratio" means either (1) the selection rate for a category divided by the selection rate of the most selected category or (2) the scoring rate for a category divided by the scoring rate for the highest scoring category.

$$\text{Impact Ratio} = \frac{\text{selection rate for a category}}{\text{selection rate of the most selected category}}$$

OR

$$\text{Impact Ratio} = \frac{\text{scoring rate for a category}}{\text{scoring rate of the highest scoring category}}$$

Machine learning, statistical modeling, data analytics, or artificial intelligence . "Machine learning, statistical modeling, data analytics, or artificial intelligence" means a group of mathematical, computer-based techniques:

  i.   that generate a prediction, meaning an expected outcome for an observation, such as an assessment of a candidate's fit or likelihood of success, or that generate a classification, meaning an assignment of an observation to a group, such as categorizations based on skill sets or aptitude; and

  ii. for which a computer at least in part identifies the inputs, the relative importance placed on those inputs, and, if applicable, other parameters for the models in order to improve the accuracy of the prediction or classification.

Scoring Rate. "Scoring Rate" means the rate at which individuals in a category receive a score above the sample's median score, where the score has been calculated by an AEDT.

Screen. "Screen" means to make a determination about whether a candidate for employment or employee being considered for promotion should be selected or advanced in the hiring or promotion process.

Selection Rate. "Selection rate" means the rate at which individuals in a category are either selected to move forward in the hiring process or assigned a classification by an AEDT. Such rate may be calculated by dividing the number of individuals in the category moving forward or assigned a classification by the total number of individuals in the category who applied for a position or were considered for promotion.

  Example: If 100 Hispanic women apply for a position and 40 are selected for an interview after use of an AEDT, the selection rate for Hispanic women is 40/100 or 40%.

Simplified output. "Simplified output" means a prediction or classification as specified in the definition for "machine learning, statistical modelling, data analytics, or artificial intelligence." A simplified output may take the form of a score (e.g., rating a candidate's estimated technical skills), tag or categorization (e.g., categorizing a candidate's resume based on key words, assigning a skill or trait to a candidate), recommendation (e.g., whether a candidate should be given an interview), or ranking (e.g., arranging a list of candidates based on how well their cover letters match the job description). It does not refer to the output from analytical tools that translate or transcribe existing text, e.g., convert a resume from a PDF or transcribe a video or audio interview.

Test data. "Test data" means data used to conduct a bias audit that is not historical data.

(Added City Record 4/6/2023, eff. 5/6/2023)

§ 5-301 Bias Audit.

(a)   An employer or employment agency may not use or continue to use an AEDT if more than one year has passed since the most recent bias audit of the AEDT.

(b)   Where an AEDT selects candidates for employment or employees being considered for promotion to move forward in the hiring process or classifies them into groups, a bias audit must, at a minimum:

(1)   Calculate the selection rate for each category;

(2)   Calculate the impact ratio for each category;

(3)   Ensure that the calculations required in paragraphs (1) and (2) of this subdivision separately calculate the impact of the AEDT on:

i.   Sex categories (e.g., impact ratio for selection of male candidates vs female candidates),

ii.   Race/Ethnicity categories (e.g., impact ratio for selection of Hispanic or Latino candidates vs Black or African American [Not Hispanic or Latino] candidates), and

iii.   intersectional categories of sex, ethnicity, and race (e.g., impact ratio for selection of Hispanic or Latino male candidates vs. Not Hispanic or Latino Black or African American female candidates).

(4)   Ensure that the calculations in paragraphs (1), (2), and (3) of this subdivision are performed for each group, if an AEDT classifies   candidates for employment or employees being considered for promotion into specified groups (e.g., leadership styles); and

(5)   Indicate the number of individuals the AEDT assessed that are not included in the required calculations because they fall within an unknown category.

Example: An employer wants to use an AEDT to screen resumes and schedule interviews for a job posting. To do so, the employer must ensure that a bias audit of the AEDT was conducted no more than a year before the planned use of the AEDT. This bias audit is necessary even though the employer is not using the AEDT to make the final hiring decision, but only to screen at an early point in the application process. The employer asks the vendor for a bias audit. The vendor provides historical data regarding applicant selection that the vendor has collected from multiple employers to an independent auditor who will conduct a bias audit as follows:

Sex Categories				
	# of Applicants	# Selected	Selection Rate	Impact Ratio
Male	1390	667	48%	1.00
Female	1181	555	47%	0.979

Race/Ethnicity Categories				
	# of Applicants	# Selected	Selection Rate	Impact Ratio
Race/Ethnicity Categories				
	# of Applicants	# Selected	Selection Rate	Impact Ratio
Hispanic or Latino	408	204	50%	0.97
White (Not Hispanic or Latino)	797	412	52%	1.00
Black or African American (Not Hispanic or Latino)	390	170	44%	0.84
Native Hawaiian or Pacific Islander (Not Hispanic or Latino)	119	52	44%	0.85
Asian (Not Hispanic or Latino)	616	302	49%	0.95
Native American or Alaska Native (Not Hispanic or Latino)	41	18	44%	0.85
Two or More Races (Not Hispanic or Latino)	213	96	45%	0.87

Intersectional Categories					
		# of Applicants	# Selected	Selection Rate	Impact Ratio
Intersectional Categories					
		# of Applicants	# Selected	Selection Rate	Impact Ratio
Hispanic or Latino	Male	205	90	43.9%	0.841
	Female	190	82	0.827	43.2%
	White	412	215	52.2%	1.000
	Black or African American	226	95	42.0%	0.806
	Native Hawaiian or Pacific Islander	87	37	42.5%	0.815
Male	Asian	321	167	52.0%	0.997

Non/Hispanic or Latino		Native American or Alaska Native	24	11	45.8%	0.878
		Two or More Races	115	52	45.2%	0.866
	Female	White	385	197	51.2%	0.981
		Black or African American	164	75	45.7%	0.876
		Native Hawaiian or Pacific Islander	32	15	46.9%	0.898
		Asian	295	135	45.8%	0.877
		Native American or Alaska Native	17	7	41.2%	0.789
		Two or More Races	98	44	44.9%	0.860

Note: The AEDT was also used to assess 250 individuals with an unknown sex or race/ethnicity category. Data on those individuals was not included in the calculations above.

(c)   Where an AEDT scores candidates for employment or employees being considered for promotion , a bias audit must, at a minimum:

(1)   Calculate the median score for the full sample of applicants;

(2)   Calculate the scoring rate for individuals in each category;

(3)   Calculate the impact ratio for each category;

(4)   Ensure that the calculations required in paragraphs (1), (2), and (3) of this subdivision separately calculate the impact of the AEDT on:

i.   Sex categories (i.e., impact ratio for selection of male candidates vs female candidates),

ii.   Race/Ethnicity categories (e.g., impact ratio for selection of Hispanic or Latino candidates vs Black or African American [Not Hispanic or Latino] candidates), and

iii.   intersectional categories of sex, ethnicity, and race (e.g., impact ratio for selection of Hispanic or Latino male candidates vs. Not Hispanic or Latino Black or African American female candidates); and

(5)   Indicate the number of individuals the AEDT assessed that are not included in the required calculations because they fall within an unknown category.

(d)   Notwithstanding the requirements of paragraphs (2) and (3) of subdivision (b) and paragraphs (3) and (4) of subdivision (c), an independent auditor may exclude a category that represents less than 2% of the data being used for the bias audit from the required calculations for impact ratio. Where such a category is excluded, the summary of results must include the independent auditor's justification for the exclusion, as well as the number of applicants and scoring rate or selection rate for the excluded category.

Example: An employer uses an AEDT to score applicants for "culture fit." To do so, the employer must ensure that a bias audit of the AEDT was conducted no more than a year before the use of the AEDT. The employer provides historical data on "culture fit" score of applicants for each category to an independent auditor to conduct a bias audit as follows:

Sex Categories			
	# of Applicants	Scoring Rate	Impact Ratio
Male	92	54.3%	1.00
Female	76	44.7%	0.82

Race/Ethnicity Categories			
	# of Applicants	Scoring Rate	Impact Ratio
Race/Ethnicity Categories			
	# of Applicants	Scoring Rate	Impact Ratio
Hispanic or Latino	28	64.2%	1.00
White (Not Hispanic or Latino)	40	37.5%	0.58
Black or African American (Not Hispanic or Latino)	32	50.0%	0.78
Native Hawaiian or Pacific Islander (Not Hispanic or Latino)	8	62.5%	0.97
Asian (Not Hispanic or Latino)	24	41.7%	0.65
Native American or Alaska Native (Not Hispanic or Latino)	16	62.5%	0.97
Two or More Races (Not Hispanic or Latino)	20	50.0%	0.78

Intersectional Categories

		# of Applicants	Scoring Rate	Impact Ratio
		Intersectional Categories		
		# of Applicants	Scoring Rate	Impact Ratio
Hispanic or Latino	Male	16	75%	1.00
	Female	12	50%	0.67
Non/Hispanic or Latino	Male — White	20	35%	0.47
	Male — Black or African American	20	50%	0.67
	Male — Native Hawaiian or Pacific Islander	4	75%	1.00
	Male — Asian	12	58.3%	0.78
	Male — Native American or Alaska Native	8	62.5	0.83
	Male — Two or More Races	12	50%	0.67
	Female — White	20	40%	0.53
	Female — Black or African American	12	50%	.67
	Female — Native Hawaiian or Pacific Islander	4	50%	0.67
	Female — Asian	12	25%	0.33
	Female — Native American or Alaska Native	8	62.5%	0.83
	Female — Two or More Races	8	50%	0.67

Note: The AEDT was used to assess 15 individuals with an unknown sex or race/ethnicity category. Data on these individuals was not included in the calculations above.

(Added City Record 4/6/2023, eff. 5/6/2023)

§ 5-302 Data Requirements.

(a) *Historical Data.* A bias audit conducted pursuant to 6 RCNY § 5-301 must use historical data of the AEDT. The historical data used to conduct a bias audit may be from one or more employers or employment agencies that use the AEDT. However, an individual employer or employment agency may rely on a bias audit of an AEDT that uses the historical data of other employers or employment agencies only in the following circumstances: if such employer or employment agency provided historical data from its own use of the AEDT to the independent auditor conducting the bias audit or if such employer or employment agency has never used the AEDT.

(b) *Test Data.* Notwithstanding the requirements of subdivision (a) of this section, an employer or employment agency may rely on a bias audit that uses test data if insufficient historical data is available to conduct a statistically significant bias audit. If a bias audit uses test data, the summary of results of the bias audit must explain why historical data was not used and describe how the test data used was generated and obtained.

Example 1: An employer is planning to use an AEDT for the first time. The employer may rely on a bias audit conducted using the historical data of other employers or employment agencies, or on a bias audit conducted using test data.

Example 2: An employment agency has been using an AEDT for 6 months. The bias audit the employment agency relied on before its first use of the AEDT was conducted 10 months ago using test data. The employment agency will need an updated bias audit if it will continue to use the AEDT once 12 months have passed since the bias audit it first relied on was conducted. The employment agency's data from 6 months of use of the AEDT is not sufficient on its own to conduct a statistically significant bias audit. The employment agency may rely on a bias audit using the historical data of other employers and employment agencies if it provides its 6 months of historical data to the independent auditor for use and consideration. The employment agency may also rely on a bias audit that uses test data.

Example 3: An employer has been using an AEDT for 3 years and will soon need an updated bias audit. The employer has statistically significant data from its 3 years of use of the AEDT. The employer may rely on a bias audit conducted using historical data from multiple employers if it provides its 3 years of historical data to the independent auditor for use and consideration. The employer may also rely on a bias audit conducted using historical data from its own use of the AEDT, without any data from other employers or employment agencies. The employer may not rely on a bias audit conducted using test data.

(Added City Record 4/6/2023, eff. 5/6/2023)

§ 5-303 Published Results.

(a) Before the use of an AEDT, an employer or employment agency in the city must make the following publicly available on the employment section of their website in a clear and conspicuous manner:

(1) The date of the most recent bias audit of the AEDT and a summary of the results, which shall include the source and explanation of the data used to conduct the bias audit, the number of individuals the AEDT assessed that fall within an unknown category, and the number of applicants or candidates, the selection or scoring rates, as applicable, and the impact ratios for all categories; and,

(2) The distribution date of the AEDT.

(b) The requirements of subdivision (a) of this section may be met with an active hyperlink to a website containing the required summary of results and distribution date, provided that the link is clearly identified as a link to results of the bias audit.

(c) An employer or employment agency must keep the summary of results and distribution date posted for at least 6 months after its latest use of the AEDT for an employment decision.

§ 5-304 Notice to Candidates and Employees.

(a)   The notice required by § 20-871(b)(1) of the Code must include instructions for how an individual can request an alternative selection process or a reasonable accommodation under other laws, if available. Nothing in this subchapter requires an employer or employment agency to provide an alternative selection process.

(b)   To comply with § 20-871(b)(1) and (2) of the Code, an employer or employment agency may provide notice to a candidate for employment who resides in the city by doing any of the following:

(1)   Provide notice on the employment section of its website in a clear and conspicuous manner at least 10 business days before use of an AEDT;

(2)   Provide notice in a job posting at least 10 business days before use of an AEDT; or,

(3)   Provide notice to candidates for employment via U.S. mail or e-mail at least 10 business days before use of an AEDT.

(c)   To comply with § 20-871(b)(1) and (2) of the Code, an employer or employment agency may provide notice to an employee being considered for promotion who resides in the city by doing any of the following:

(1)   Provide notice in a written policy or procedure that is provided to employees at least 10 business days before use of an AEDT;

(2)   Provide notice in a job posting at least 10 business days before use of an AEDT; or,

(3)   Provide notice via U.S. mail or e-mail at least 10 business days before use of an AEDT.

(d)   To comply with § 20-871(b)(3) of the Code, an employer or employment agency must:

(1)   Provide information on the employment section of its website in a clear and conspicuous manner about its AEDT data retention policy, the type of data collected for the AEDT, and the source of the data;

(2)   Post instructions on the employment section of its website in a clear and conspicuous manner for how to make a written request for such information, and if a written request is received, provide such information within 30 days; and

(3)   Provide an explanation to a candidate for employment or employee being considered for promotion why disclosure of such information would violate local, state, or federal law, or interfere with a law enforcement investigation.