

**"BENCHMARKING" THE REPRESENTATION
OF AFRICAN AMERICANS AND LATINOS
IN SELECTED JOB GROUPS AT FEDEX:
A REBUTTAL OF DR. MARY BAKER**

Marc Bendick, Jr., Ph.D.

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Marc Bendick, Jr., Ph.D.

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**BENDICK AND EGAN ECONOMIC CONSULTANTS, INC.
4411 WESTOVER PLACE, NW WASHINGTON, DC 20016
phone: (202) 686-0245 fax: (202) 363-4429
bendickegan@mindspring.com www.bendickegan.com**

I. Introduction

1. I am a principal in Bendick and Egan Economic Consultants, Inc., 4411 Westover Place, NW, Washington, D.C. 20016. I earned a Ph.D. in economics from the University of Wisconsin in 1975 and have engaged in the full-time practice of economics, specializing in employment, for approximately 30 years. Over that period, I have been a researcher, policy analyst, and university lecturer, as well as a consultant to employers in the public, corporate, and non-profit sectors. I am the author of more than 100 research publications, including books, articles in scholarly journals, and Congressional testimony. My resume has been provided as an attachment to an earlier report I presented in this case.¹

2 My professional activities have included litigation on employment discrimination, including analysis of the availability of job-seekers in different demographic groups; processes for recruiting, hiring, training, assigning, evaluating, compensating, promoting, and discharging employees; policies and practices for managing a demographically-diverse diverse workforce; and economic damages associated with denial or diminution of employment opportunities. I have participated in 137 cases, working on behalf of both employers and employees, and my expert testimony has been accepted in 18 federal district courts.²

¹ On December 16, 2004, I presented a report titled *The Expected Representation of Race/Ethnic Minorities When Selected Vacancies are Filled at Fedex Express: A Labor Market Perspective*. My resume was provided as Attachment A to that report.

That report discussed whether FedEx "casual" employees should be considered internal hires (as Dr. Drogin asserted) or external hires (as Dr. Baker then asserted). I strongly disagreed with Dr. Baker, and in subsequent analyses, she has apparently adopted my position.

² A list of these cases has been provided as attachment B to my earlier report (see footnote 1).

3. I have prepared the present report using the same sorts of procedures, information sources, and standards of care I use throughout my scholarly research, and I apply models, concepts, reasoning, and assumptions which command general acceptance among my professional peers. I hold the opinions I present to a reasonable degree of scientific certainty.

4. For my work on this case, I am being compensated at the rate of \$325 per hour, plus out-of-pocket expenses.

II. My Assignment

5. In *Satchell et al. v. Fedex Express*, I have been requested by plaintiffs' counsel to discuss Section IV (pages 9-15) of Dr. Mary Baker's report dated December 20, 2006 (hereafter, "*Baker December 2006 Report*"). That section is titled "Racial and Ethnic Composition of the Workforce," and it compares the composition of the FedEx workforce against that of other employers. Such comparisons are commonly referred to by economists and business analysts as "benchmarking."

6. In the present report,³ I discuss conceptual errors in Dr. Baker's benchmarking analysis. I then present an alternative benchmarking analysis which

³ In addition to the sources listed in Attachment C to my earlier report (see footnote 1), I have reviewed or had available the following documents while preparing the present report:

Report of Mary Dunn Baker, Ph.D., Satchell, et al., v. Fedex Express, December 20, 2006, with appendices (*Baker December 2006 Report*).

Rebuttal Report of Mary Dunn Baker, Ph.D., Satchell, et al., v. Fedex Express, September 8, 2006.

Richard Drogin, *Statistical Analyses of Race and Ethnic Patterns in Federal Express Workforce*, December 20, 2006.

Order Re: Plaintiffs' Motion for Class Certification, September 27, 2005.

corrects these errors. This corrected analysis shows substantial, statistically significant under-representation of African American and Latino employees, the opposite of the conclusions reached by Dr. Baker from her benchmarking analysis.

III. Dr. Baker's First Error:
Benchmarking Irrelevant
Job Groups

7. "Benchmarking" simply means making comparisons between a quantitative measure for one company (here, FedEx) and the same quantitative measure in some data source outside the company (here, 2000 Census data). The technique is potentially applicable to a wide range of human resource management processes -- for example, pay levels, promotional rates, or discipline rates. But in this case, Dr. Baker applies it only to *representation* -- the proportion of employees who are African American or Latino.⁴ She presents her representation findings in tables 1A for African Americans and 1L for Latinos in her report.

8. Those tables examine 24 Fedex Job Groups. However, five of those Job Groups -- Freight/Materials Handler, Checker/Sorter, Handler/Shuttle Driver, Operations Agent, and Handler -- command average pay rates of less than \$12 per hour and are what plaintiffs' expert Dr. Richard Drogin labels "low hourly" positions.⁵ As I understand the

Deposition of Robert Speroff, July 22, 2004.

If at a future date information relevant to this report is refined, corrected, or supplemented, I would like the opportunity to modify this report to reflect this additional information.

⁴ Dr. Baker describes her work as "...statistical analyses that compare the racial/ethnic composition of FedEx employees to minority representation in relevant occupations in the local labor markets [as reported in 2000 Census data]...." (*Baker December 2006 Report*, p. 11).

⁵ *Drogin Report of December 20, 2006*, Table 1, page 10.

issues in this case,⁶ plaintiffs allege that African Americans and Latinos are treated less favorably than their non-minority counterparts while employed in “low hourly” Job Groups but *do not* allege that they are under-represented in those “low hourly” positions. Logically, allegations concerning *treatment* while in a position -- for example, concerning pay, performance evaluations, terminations, and promotions -- cannot normally be tested by analyzing *representation* -- the proportion of positions held by African Americans and Latinos.

9. Plaintiffs *do* allege that African Americans and Latinos are under-promoted from “low hourly positions” to “high hourly positions + salaried” positions at FedEx, and such allegations *can* be tested through a representation benchmarking analysis, at least indirectly.⁷ However, the representation figures relevant to that examination are African American and Latino representation in the “high hourly + salaried” positions to which “low hourly” workers might be promoted, *not* the representation of African Americans and Latinos in the “low hourly” positions themselves.

10. This error in Dr. Baker’s analysis can be corrected by deleting the rows for the five “low hourly” Job Groups (Freight/Materials Handler, Checker/Sorter, Handler/Shuttle Driver, Operations Agent, and Handler) from Dr. Baker’s Tables 1A and

⁶See *Consolidated Amended Complaint and Demand For Jury Trial*, November 11, 2003, pp. 1-2, and *Order Re: Plaintiffs’ Motion for Class Certification*, September 27, 2005, pp. 1-3.

⁷I say “indirectly” because representation numbers in the higher level positions reflect not only promotions into these positions but also attrition from these positions, promotions or transfers out of these positions, and external hires into the positions. Minority representation in “higher hourly + salaried” positions at a rate lower than a Census benchmark is therefore consistent with an allegation of under-promotion into these positions, but not definitive proof of it.

11. The removed Job Groups accounted for about 30% of the employees Dr. Baker's analyzed in these tables.⁸

IV. Dr. Baker's Second Error:
Not Benchmarking the
Relevant Measure

11. As a standard of comparison for benchmarking minority representation in FedEx Job Groups, Dr. Baker uses data from the 2000 Census on the representation of African Americans and Latinos employed in the Census occupational categories which include the Fedex Job Groups at issue in this case. That is a reasonable standard of comparison.⁹

12. However, the benchmark which Baker computes from these Census data does not provide a direct, undistorted test of the allegations in this case. Concisely stated, the plaintiffs' overall allegation concerning promotions is that "...the representation of minorities drops at each step up the promotion ladder."¹⁰ Accordingly, the most directly relevant "benchmarking" test of this allegation would divide minority representation in "higher level" positions by their representation in lower level positions to compute a

⁸ This figure is based on the DGO and AGFS divisions combined. The errors I am correcting apply to both.

⁹ However, it is not the only reasonable standard, or even the most reasonable one. In particular, reflecting extensive research by economists and other social scientists demonstrating that employment discrimination against African American and Latinos continues to operate throughout the American labor market (see paragraph 27, below), it might be argued that African Americans and Latinos are under-represented in Census data for some or all of the "higher hourly + salaried" occupations because of discrimination against them by employers other than FedEx. In that circumstance, an alternative standard of availability less subject to occupational discrimination might be more appropriate than Dr. Baker's occupationally-based approach. For example, a standard might be based on 2000 Census data for all non-disabled blue-collar workers who are high school graduates but not college graduates. Exploration of such alternatives is beyond the present scope of my rebuttal.

¹⁰ *Order Re: Plaintiffs' Motion for Class Certification*, September 27, 2005, p. 2.

“promotional ratio” between the two levels. That “promotional ratio” can then be directly compared against the parallel ratio computed from counts of FedEx’s workforce.

13. In Bendick Table One, I use 2000 Census data¹¹ to generate those benchmarks promotional ratios. Row (27) of Bendick Table One reports that, for African Americans, the promotional ratio is 52.8%. This means that, among all persons in the 2000 Census in the relevant Census occupational titles, African Americans are represented in “higher hourly + salaried” positions at 52.8% the rate they are represented in “low hourly” positions. Similarly, row (27) of Bendick Table One reports that the Census benchmark promotional ratio for Latinos is 69.3%.

14. In Bendick Table Two, I use FedEx employment counts for 2000¹² to compute FedEx’s promotional ratios, so that they can be compared against the Census benchmark promotional ratios. Row (27) of Bendick Table Two reports that FedEx’s promotional ratio for African Americans is 49.7%, which is 3.1 percentage points *lower* than the Census benchmark promotional ratio of 52.8%. Row (27) of Bendick Table Two also reports that FedEx’s promotional ratio for Latinos is 57.7%, which is 11.6 percentage points *lower* than the Census benchmark promotional ratio of 69.3%.

15. The finding that FedEx’s promotional ratios for African Americans and Latinos are lower than the Census benchmarks is consistent with the plaintiffs’ allegation, stated in paragraph 12 above, that “...the representation of minorities drops at each step up the promotion ladder.” The findings are *inconsistent* with the conclusions Dr. Baker

¹¹ I use Census figures supplied by Dr. Baker in her Tables 1A and 1L without independently verifying their accuracy.

¹² I again use data from Dr. Baker’s Tables 1A and 1L without independently verifying their accuracy. Although Dr. Baker analyzes a range of years, in my report I discuss only 2000, the year most directly comparable to the 2000 Census. The errors apply in parallel to other years as well.

Bendick Table One**Derivation from Dr. Baker's 2000 Census Data* of Benchmark
African American and Latino "Promotion Ratios"**

(a) Job Group	(b) Average Pay Rate	(c) African Americans		(e) Latinos	
		Total FedEx Employees (African American + White)	Census 2000 % African American Representation in Relevant Occupations	Total FedEx Employees (Latinos + Non-Hispanic Whites)	Census 2000 % Latino Representation in Relevant Occupations
(1) Operations Manager	\$4,558.98	627	7.8%	494	18.6%
(2) Dispatcher	\$19.14	172	12.2%	160	20.8%
(3) Ramp Driver	\$17.60	801	13.7%	724	26.3%
(4) Ramp Agent/Trunk	\$17.30	218	12.7%	220	19.7%
(5) Courier/Ramp Agent	\$17.42	1	1.2%	1	4.7%
(6) Courier/Feeder Agent	\$16.95	60	2.5%	68	16.4%
(7) Courier	\$16.53	3,841	12.5%	4,000	29.5%
(8) Courier/Swing Driver	\$16.00	550	12.1%	588	29.8%
(9) Service Assurance Agent	\$15.99	71	15.4%	63	21.5%
(10) Service Agent	\$15.43	760	18.1%	694	27.3%
(11) Team Leader	\$14.99	281	19.0%	170	21.8%
(12) Shuttle Driver	\$13.93	189	16.5%	174	38.4%
(13) Ramp Agent/Feeder	\$13.46	1	22.2%	1	48.5%
(14) Courier/Handler	\$13.19	45	17.3%	64	43.4%
(15) Truck Control Agent	\$12.83	43	25.1%	20	21.3%
(16) Intl Checker	\$12.49	41	38.3%	13	33.0%
(17) Input Auditor	\$12.35	61	36.1%	15	53.9%
(18) Information Agent	\$12.35	71	20.8%	49	27.2%
(19) Dangerous Goods Agent	\$12.18	82	22.5%	79	32.5%
(20) Weighted Average for "High Hourly + Salaried" Job Groups		7,915	13.6%	7,597	27.8%
(21) Freight/Material Handler	\$11.91	723	29.2%	479	50.5%
(22) Checker/Sorter	\$11.84	457	34.3%	164	49.9%
(23) Handler/Shuttle Driver	\$11.56	101	22.2%	95	33.6%
(24) Operations Agent	\$11.41	72	20.6%	38	26.6%
(25) Handler/Shuttle Driver	\$10.82	2,610	23.6%	2,041	37.5%
(26) Weighted Average for "Low Hourly" Job Groups		3,963	25.8%	2,817	40.1%
(27) CENSUS BENCHMARK "PROMOTION RATIO" [row (20) / row (26)]			52.8%		69.3%

* Data are from Tables 1A and 1L in the Baker December 2006 Report.

Bendick Table Two**Derivation from Dr. Baker's FedEx Data* of FedEx's
African American and Latino "Promotion Ratios"**

	(a)	(b)	(c)			(d)			(e)			(f)		
	Job Group	Average Pay Rate	African Americans			Latinos								
			Total FedEx Employees (African American + White)	African American Employees	Census 2000 % African American Representation in Relevant Occupations	Total FedEx Employees (Latinos + Non- Hispanic Whites)	Latino Employees	Census 2000 % Latino Representation in Relevant Occupations						
(1)	Operations Manager	\$4,558.98	627	188	30.0%	494	55	11.1%						
(2)	Dispatcher	\$19.14	172	38	22.1%	160	26	16.3%						
(3)	Ramp Driver	\$17.60	801	250	31.2%	724	173	23.9%						
(4)	Ramp Agent/Trunk	\$17.30	218	55	25.2%	220	57	25.9%						
(5)	Courier/Ramp Agent	\$17.42	1	0	0.0%	1	0	0.0%						
(6)	Courier/Feeder Agent	\$16.95	60	1	1.7%	68	9	13.2%						
(7)	Courier	\$16.53	3,841	891	23.2%	4,000	1,050	26.3%						
(8)	Courier/Swing Driver	\$16.00	550	140	25.5%	588	178	30.3%						
(9)	Service Assurance Agent	\$15.99	71	19	26.8%	63	11	17.5%						
(10)	Service Agent	\$15.43	760	246	32.4%	694	180	25.9%						
(11)	Team Leader	\$14.99	281	165	58.7%	170	54	31.8%						
(12)	Shuttle Driver	\$13.93	189	109	57.7%	174	94	54.0%						
(13)	Ramp Agent/Feeder	\$13.46	1	0	0.0%	1	0	0.0%						
(14)	Courier/Handler	\$13.19	45	19	42.2%	64	38	59.4%						
(15)	Truck Control Agent	\$12.83	43	33	76.7%	20	10	50.0%						
(16)	Intl Checker	\$12.49	41	36	87.8%	13	8	61.5%						
(17)	Input Auditor	\$12.35	61	53	86.9%	15	7	46.7%						
(18)	Information Agent	\$12.35	71	38	53.5%	49	16	32.7%						
(19)	Dangerous Goods Agent	\$12.18	82	32	39.0%	79	29	36.7%						
(20)	Weighted Average for "High Hourly + Salaried" Job Groups		7,915	2,313	30.4%	7,597	1,995	26.3%						
(21)	Freight/Material Handler	\$11.91	723	456	63.1%	479	212	44.3%						
(22)	Checker/Sorter	\$11.84	457	407	89.1%	164	114	69.5%						
(23)	Handler/Shuttle Driver	\$11.56	101	42	41.6%	95	36	37.9%						
(24)	Operations Agent	\$11.41	72	44	61.1%	38	10	26.3%						
(25)	Handler/Shuttle Driver	\$10.82	2,610	1,478	56.6%	2,041	909	44.5%						
(26)	Weighted Average for "Low Hourly" Job Groups		3,963	2,427	61.2%	2,817	1,281	45.5%						
(27)	FEDEX "PROMOTION RATIO" [row (20) / row (26)]		49.7%			57.7%								

* Data are from Tables 1A and 1L in the Baker December 2006 Report.

drew from her benchmarking analysis that:¹³

In every year of the study period, FedEx employed, at every level, at least twice as many African-Americans as their presence in the relevant external labor market would predict.

And:¹⁴

In every year, except 1999, the overall number of Latinos employed in the Western Region was consistent with or greater than the expectation, given their representation in the external labor market.

16. How did Dr. Baker's benchmarking analysis lead her to these erroneous conclusions? The problem arises from her approach of benchmarking minority representation in each "high hourly + salaried" FedEx Job Group *directly* against Census representation data. That approach ignores the circumstance that entry into these Job Groups at FedEx is obtained largely by promotion from within FedEx,¹⁵ and that FedEx's minority representation in the "low hourly" Job Groups from which employees are promoted is substantially higher than in Census data for those "low hourly" occupations. Thus, in Dr. Baker's calculations, Fedex's lower-than-benchmark promotional ratios are obscured by the company's higher-than-benchmark minority representation in "low hourly" positions.

¹³ Baker December 2006 Report, p. 2.

¹⁴ Baker December 2006 Report, p. 13.

¹⁵ FedEx's policy of promoting from within is set forth, for example, in the company's *People Manual*, especially Section 4-15, and discussed in the *Deposition of Robert Speroff*, July 22, 2004, pp. 30-31.

**V. Translating Correct
Benchmarks into Shortfalls**

17. Dr. Baker's benchmarking analysis does have one virtue, however. It states its results in a clear, relevant form -- as a shortfall in the number of FedEx employees in the "high hourly + salaried" Job Groups. To report my benchmarking analysis in this same clear, relevant form, I have prepared Bendick Table Three, which is a corrected version of Dr. Baker's Table 1A (for African Americans) and Bendick Table Four, which is a corrected version of Dr. Baker's Table 1L (for Latinos).¹⁶

18. My two tables parallel Dr. Baker's Tables 1A and 1L except for three corrections:

- a. Based on Section III above, I have removed from the tables the five rows for "low hourly" Job Groups.
- b. Based on Section IV above, I have replaced Dr. Baker's Census 2000 expected representation of African Americans and Latinos with a figure which applies the Census benchmark promotional ratios for these groups to FedEx's own representation of these groups in the "low hourly" Job Groups from which promotions are made.¹⁷

¹⁶ These tables present results only for 2000. The same corrections can be applied in parallel to all the years Dr. Baker analyzed, and they will have a parallel effect on her findings.

¹⁷ According to row (26) of Bendick Table Two, African American represent 61.2% of "low hourly" FedEx employees. According to row (27) of Bendick Table One, the Census benchmark promotion ratio for African Americans is 52.8%. The product of these figures is an expected representation of 32.8% in FedEx's "high hourly + salaried" Job Groups. Accordingly, 32.8% appears in column (d) of Table Three.

According to row (26) of Bendick Table Two, Latinos represent 45.5% of "low hourly" FedEx employees. According to row (27) of Bendick Table One, the Census benchmark promotion ratio for Latinos is 69.3%. The product of these figures is an expected representation of 31.5% in FedEx's "high hourly + salaried" Job Groups. Accordingly, 31.5% appears in column (d) of Table Four.

Bendick Table Three

**Benchmarking Analysis of African American Representation in the
FedEx Workforce (Corresponding to Dr. Baker's Table 1A)
After Correcting Three Errors in Dr. Baker's Benchmarking ***

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Job Group	Average Pay Rate	Total Employees (African Americans + Whites)	Census 2000 Benchmark for Expected African American Representation	Actual Number of FedEx African American Employees	Expected Number of African American Employees	Difference between Actual and Expected (- means shortfall)	Continuity Corrected Number of Standard Deviations
(1) Operations Manager	\$4,558.98	627	32.8%	188	205.7	-17.7	
(2) Dispatcher	\$19.14	172	32.8%	38	56.4	-18.4	
(3) Ramp Driver	\$17.60	801	32.8%	250	262.7	-12.7	
(4) Ramp Agent/Trunk	\$17.30	218	32.8%	55	71.5	-16.5	
(5) Courier/Ramp Agent	\$17.42	1	32.8%	0	0.3	-0.3	
(6) Courier/Feeder Agent	\$16.95	60	32.8%	1	19.7	-18.7	
(7) Courier	\$16.53	3,841	32.8%	891	1,259.8	-368.8	
(8) Courier/Swing Driver	\$16.00	550	32.8%	140	180.4	-40.4	
(9) Service Assurance Agent	\$15.99	71	32.8%	19	23.3	-4.3	
(10) Service Agent	\$15.43	760	32.8%	246	249.3	-3.3	
(11) Team Leader	\$14.99	281	32.8%	165	92.2	72.8	
(12) Shuttle Driver	\$13.93	189	32.8%	109	62.0	47.0	
(13) Ramp Agent/Feeder	\$13.46	1	32.8%	0	0.3	-0.3	
(14) Courier/Handler	\$13.19	45	32.8%	19	14.8	4.2	
(15) Truck Control Agent	\$12.83	43	32.8%	33	14.1	18.9	
(16) Intl Checker	\$12.49	41	32.8%	36	13.4	22.6	
(17) Input Auditor	\$12.35	61	32.8%	53	20.0	33.0	
(18) Information Agent	\$12.35	71	32.8%	38	23.3	14.7	
(19) Dangerous Goods Agent	\$12.18	82	32.8%	32	26.9	5.1	
(20) TOTAL		7,915	32.8%	2,313	2,596.1	-283.1	7.0

* The three corrections are to:

1. Exclude five "low hourly" Job Groups for which Plaintiffs make no allegation of under-representation.
2. Base the Census 2000 benchmark for expected African American representation on actual Fedex African American representation in "low hourly" Job Groups multiplied by the Census-based "promotion ratio" for African Americans.
3. Compute standard deviations for all Job Groups together.

Bendick Table Four

**Benchmarking Analysis of Latino Representation in the
FedEx Workforce (Corresponding to Dr. Baker's Table 1B)
After Correcting Three Errors in Dr. Baker's Benchmarking ***

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Job Group	Average Pay Rate	Total Employees (Latinos + non- Hispanic Whites)	Census 2000 Benchmark for Expected Latino Representa- tio	Actual Number of FedEx Latino Employees	Expected Number of Latino Employees	Difference between Actual and Expected (- means shortfall)	Continuity Corrected Number of Standard Deviations
(1)	Operations Manager	\$4,558.98	494	31.5%	55	155.6	-100.6	
(2)	Dispatcher	\$19.14	160	31.5%	26	50.4	-24.4	
(3)	Ramp Driver	\$17.60	724	31.5%	173	228.1	-55.1	
(4)	Ramp Agent/Trunk	\$17.30	220	31.5%	57	69.3	-12.3	
(5)	Courier/Ramp Agent	\$17.42	1	31.5%	0	0.3	-0.3	
(6)	Courier/Feeder Agent	\$16.95	68	31.5%	9	21.4	-12.4	
(7)	Courier	\$16.53	4,000	31.5%	1,050	1,260.0	-210.0	
(8)	Courier/Swing Driver	\$16.00	588	31.5%	178	185.2	-7.2	
(9)	Service Assurance Agent	\$15.99	63	31.5%	11	19.8	-8.8	
(10)	Service Agent	\$15.43	694	31.5%	180	218.6	-38.6	
(11)	Team Leader	\$14.99	170	31.5%	54	53.6	0.5	
(12)	Shuttle Driver	\$13.93	174	31.5%	94	54.8	39.2	
(13)	Ramp Agent/Feeder	\$13.46	1	31.5%	0	0.3	-0.3	
(14)	Courier/Handler	\$13.19	64	31.5%	38	20.2	17.8	
(15)	Truck Control Agent	\$12.83	20	31.5%	10	6.3	3.7	
(16)	Intl Checker	\$12.49	13	31.5%	8	4.1	3.9	
(17)	Input Auditor	\$12.35	15	31.5%	7	4.7	2.3	
(18)	Information Agent	\$12.35	49	31.5%	16	15.4	0.6	
(19)	Dangerous Goods Agent	\$12.18	79	31.5%	29	24.9	4.1	
(20)	TOTAL		7,597	31.5%	1,995	2,393.1	-398.1	10.4

* The three corrections are to:

1. Exclude five "low hourly" Job Groups for which Plaintiffs make no allegation of under-representation.
2. Base the Census 2000 benchmark for expected Latino representation on actual FedEx Latino representation in "low hourly" Job Groups multiplied by the Census-based "promotion ratio" for Latinos.
3. Compute standard deviations for all Job Groups together.

- c. I have computed the "statistical significance" of these shortfalls -- that is, the number of standard deviations -- not for individual "high hourly + salaried" Job Groups but for the 19 Job Groups together. This approach corresponds to plaintiffs' allegations, which concern the overall promotional process from "low hourly" positions *as a group* to "high hourly + salaried" positions" *as a group*, not to any Job Group individually.

19. According to row (20) of Table Three, in 2000, FedEx had a *shortfall of 283 African American employees* in "high hourly + salaried" Job Groups, compared to the number it would have had if it had been promoting them from "low hourly" Job Groups at Census benchmark rates. According to row (20) of Table Four, in 2000, FedEx had a *shortfall of 398 Latino employees* in "high hourly + salaried" Job Groups, compared to the number it would have had if it had been promoting them from "low hourly" Job Groups at Census benchmark rates.

20. Both shortfalls are strongly "statistically significant," with the African American shortfall corresponding to 7.0 standard deviations and the Latino shortfall corresponding to 10.4 standard deviations.

21. Both shortfalls directly contradict Dr. Baker's conclusion, quoted in paragraph 15 above, that Fedex had a "longfall" of both African American and Latino employees in these Job Groups -- that is, more African American and Latino employees than would be expected based on a Census benchmark.

**VI. Dr. Baker's Further
Misinterpretations
of Benchmarking**

22. In interpreting findings from her own benchmarking analyses, Dr. Baker incorrectly applies the logic underlying such analyses in two important ways.

23. The first error in logic appears in Dr. Baker's attempts, on pp. 14-15 of her report, to "explain away" the under-representation of Latinos in 1999 which her own benchmarking analysis reports.

24. The primary benefit of the benchmarking technique as it is being applied in this case is that it separates questions of the availability of qualified workers from questions of the employers' treatment of those workers. It does so by basing the benchmark on persons already employed in the relevant occupations and therefore presumably qualified to hold such positions. In that circumstance, *differences* between an employer's representation figures and the benchmark representation figures cannot be explained by lack of workers' qualifications because the presence or absence of those qualifications is reflected in *both* the company's representation numbers and the benchmark representation numbers.

25. On pages 14-15 of her report, Dr. Baker speculates that the under-representation of Latinos in 1999 estimated in her own benchmarking analysis might be explained by Latinos' lack of English language fluency or U.S. citizenship. But, for the reason just explained in paragraph 24, such an explanation is a *non sequitur* which cannot possibly explain such a shortfall. Language and citizenship considerations have already been "factored out" by the benchmarking technique itself.

26. A related error in logic infects Dr. Baker's benchmarking analysis more fundamentally. On page 10 of her report, she notes, "Census 2000 data....show that, in general, the percent African-American and the percent Latino among workers tends to be higher amonglower paid than higher paid Census occupations." She illustrates this point with her Figures 1 and 2, which present Census data for the occupations containing the FedEx Job Groups at issue in this case in four local labor markets.

27. What Dr. Baker appears to be implying here is that, because racial inequality in employment is widespread among employers other than FedEx, it cannot possibly be due to discrimination because employers in general do not discriminate. Unfortunately, the assumption that employers in general do not discriminate is directly contradicted by decades of research by economists and other social scientists which clearly documents that discrimination against racial/ethnic minorities continues to operate in major ways throughout the American labor market today.¹⁸ In that circumstance, the benchmark Census figures to which FedEx is being compared almost certainly incorporate some degree of less favorable treatment of minority employees than their equally-qualified counterparts by employers other than FedEx.

28. Throughout her benchmarking analysis, Dr. Baker implies that, so long as the degree of race/ethnic inequality at FedEx is no greater than that in the benchmark Census data, then the benchmarking analysis proves that FedEx is not treating its minority employees less favorably than its equally-qualified non-minority employees.

¹⁸ The research underlying this statement is far too voluminous to summarize easily. Useful overviews can be found in Ronald G. Ehrenberg and Robert S. Smith, *Modern Labor Economics*, Ninth Edition, Chapter 12 ("Gender, Race and Ethnicity in the Labor Market"), and Marc Bendick, Jr. "Adding Testing to the Nation's Portfolio of Information on Employment Discrimination," In Michael Fix and Margery Turner (eds), *A National Report Card on Discrimination in America: The Role of Testing*. Washington: The Urban Institute, 1999, pp. 47-68.

But the discussion in paragraph 27 makes clear that such a conclusion cannot be drawn. Estimated shortfalls of minority representation at FedEx compared to what would be expected based on a Census benchmark are not estimates of the total shortfall due to FedEx's less favorable treatment of its minority employees . Instead, they are only estimates of the shortfall due to greater unfavorable treatment of minorities at FedEx than by the average employer employing workers in the same occupations in the same local labor markets. The total shortfall, compared to a situation of completely equal treatment of minorities and their equally-qualified counterparts, is undoubtedly larger than the figures estimate either by Dr. Baker in her report (see her tables 1A and 1L) or by me in the present report.

VII. Conclusions

29. Based paragraphs 7 though 28 above, I draw four principal conclusions.
 - a. First, representation benchmarking is a useful analytical technique for testing plaintiffs' allegations of under-promotion in this case.
 - b. Second, Dr. Baker's version of representation benchmarking is so flawed that her findings and conclusions provide essentially no meaningful information about the correctness of those allegations. However, appropriate modifications can readily convert her analysis into a meaningful test of the allegations.
 - c. Third, that modified analysis demonstrates that African Americans and Latinos are under-represented in "high hourly + salaried" positions within FedEx in a way consistent with plaintiffs' allegation of under-promotion

from “low hourly” to “high hourly + salaried” positions. The shortfalls for both groups are substantial (in 2000, at least 283 positions for African Americans and 398 positions for Latinos) and strongly statistically significant.

- d. The estimated shortfalls stated in the third conclusion, which are based on benchmarking FedEx against the average employer employing similar workers, conservatively under-estimate the total shortfall in minority representation compared to situation of completely equal treatment of minority employees and their equally-qualified non-minority counterparts.