

PR-02-03

**ANALYSIS OF THE  
JULY 2002 CALIFORNIA BAR EXAMINATION**

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**December 16, 2002**

## SUMMARY

The July 2002 exam had two sections: the Multistate Bar Examination (MBE), a 200-item multiple choice test; and a Written Examination composed of six essay questions and two Performance Test (PT) problems. There were 7477 applicants who completed both sections, 31% of whom had taken the GBX at least once before.

MBE raw scores (the number of questions answered correctly) were converted to scale scores that controlled for possible differences in average item difficulty from one administration of the exam to the next. Essay and PT answers were graded on a 40 to 100 point scale. Scores on this scale were assigned in 5-point intervals. Each PT score was then multiplied by 2 so that the maximum possible Written raw score was 1,000 points.

Written raw scores were converted to the same scale of measurement as was used on the MBE. This was done to adjust for possible differences over time in the difficulty of the questions asked and the leniency with which the answers to them are graded. An applicant's total score was computed using the formula below:

$$\text{Total Scale Score} = (.35)(\text{MBE Scale}) + (.65)(\text{Essay Scale})$$

A three-phased grading process was used to determine an applicant's pass/fail status. In Phase 1, the applicant was failed if the total scale score was less than 1390, passed if it was 1466 or higher, and placed in reread if it was at least 1390 but below 1466.

In Phase 2, applicants in the reread group had all of their essay and PT answers read a second time. At the end of this phase, applicants were: failed if their Total scores were below 1412, passed if their scores were 1440 or higher, and placed in reappraisal if their scores were in the 1412 - 1439.9999 range. Applicants also were placed in reappraisal if their total scores after the first reading were 1440 or higher (i.e., even if their average was less than 1412).

An applicant in the reappraisal group had all of his or her answers and scores reviewed as a set by a member of the Board of Reappraisers who then made a final pass/fail decision. Thus, an applicant's answers were read once, twice, or three times depending upon how close that applicant came to the pass/fail line of 1440.

The major findings with the applicants who had all of their answers read at least once and the group of 1588 applicants who had them read at least twice were as follows:

- After the first reading of all answers, 37% of the applicants failed and 42% passed. The total percent passing after the second reading and the reappraisal process were 49% and 51%, respectively.
- California applicants scored higher than the national average on five of the six MBE subjects.

- The reliability of the Written and Total scores (.72 and .84, respectively) was comparable to that of previous July exams.
- The correlation between MBE and Written scores (.64) was in the normal range for a July exam.
- The phased grading cutoff scores led to rereading and reappraising the answers of the applicants who were most likely to benefit from these additional reviews.
- Males tended to earn higher scale scores on the MBE than on the Written section. The reverse was true for females. Racial and ethnic minority applicants tended to earn the same scale scores on the MBE as they did on the Written section.
- First timers had a higher passing rate than second timers who in turn had a higher rate than those taking the exam three or more times. The corresponding passing rates were 65%, 25%, and 18%.

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## TEST SECTIONS

The July 2002 exam had two sections: the Multistate Bar Examination (MBE), a 200-item multiple choice test; and a Written section composed of six (1-hour) essay questions and two (3-hour) Performance Test (PT) problems. The exam was administered over three consecutive days, with two 3-hour sessions per day. Day 1 consisted of essay questions 1 - 3 and PT problem A. Day 2 was devoted to the MBE. Day 3 consisted of essay questions 4 - 6 and PT problem B.

## SCORING RULES, FORMULAS, AND PHASED GRADING

MBE raw scores (the number of MBE questions answered correctly) were converted by the American College Testing Program (ACT) to equated ("scaled") scores and then multiplied by 10 using the formula below. This procedure adjusts raw scores for possible differences in mean question difficulty from one administration of the MBE to another.

$$\text{MBE Scale} = (8.6013 \times \text{MBE Raw}) + 294.3741$$

Each essay answer was graded in 5-point intervals on a 40 to 100-point scale. The same procedure was used to grade each PT answer. PT scores were then multiplied by 2 so that the maximum possible Written raw score was 1,000 points (6 essays at 100 points each plus 2 PT problems at 200 points each). Written raw scores were converted to a score distribution that had the same mean and standard deviation as the applicants' MBE scores. This scaling was done using the MBE and Written scores of the random sample of about 1,000 applicants who had their Written answers graded first. The formula used to convert written raw scores to scale scores was:

$$\text{Written Scale} = (3.0256 \times \text{Written Raw}) - 473.9788$$

An applicant's Total scale score was a weighted combination of that applicant's MBE and Written scale scores. The formula for computing Total scale scores was:

$$\text{Total Scale Score} = (.35)(\text{MBE Scale}) + (.65)(\text{Written Scale})$$

A three-phased grading process was used to determine an applicant's pass/fail status. In Phase 1, applicants failed if their total scale score was less than 1390, passed if it was 1466 or higher, and placed in reread if it was at least 1390 but below 1466.0. In Phase 2, the applicants in reread had all of their essay and PT answers read a second time. The second reader on an answer was a different grader than the first reader and the second reader did not know the score assigned by the first reader. The scores assigned on the first and second readings were averaged and a new total computed using the formulas above. At the end of Phase 2, applicants failed if the new total was below 1412, passed if it was 1440 or higher, and placed in reappraisal if it was above 1411.9999 but below 1440.

Applicants also were placed in reappraisal if their total scale score on the first reading was 1440 or higher even if their mean total after two readings was below 1412. An applicant in the reappraisal group had all of his or her answers and scores reviewed as a set by a member of the Board of Reappraisers who then made a final pass/fail decision. Thus, an applicant's answers were read once, twice, or three times depending upon how close that applicant was to the pass/fail line of 1440.

## **SAMPLE**

Analyses were conducted with the 7477 applicants who had both an MBE and a Written score. This sample contained 5159 applicants who were taking the exam for the first time and 2318 repeaters. The percentage of applicants from ABA approved, California Accredited, and Non-accredited schools were 73, 10, and 3, respectively. The remaining applicants took correspondence courses or were otherwise not assigned to a school.

## **MULTISTATE BAR EXAMINATION (MBE)**

Table 1 shows California applicants scored higher than the national average on five of the six MBE subtests. California's mean total raw score (the average number of questions answered correctly) was about 3.5 points higher than the national average (which included California scores).

Table 1 - NATIONAL AND CALIFORNIA MEAN MBE SCORES  
AND THE DIFFERENCE BETWEEN THESE MEANS

Test Score	Number of Items	National Mean	California Mean	Difference
Constitutional Law	33	24.7	20.4	4.3
Contracts	34	22.4	21.0	-1.4
Criminal Law	33	19.7	22.8	3.1
Evidence	33	20.4	25.1	4.7
Real Property	33	20.5	21.0	0.5
Torts	34	22.6	23.6	1.0
Total Raw	200	130.3	133.8	3.5
NCBE/ACT Scale	200	141.2	144.5	3.3

## WRITTEN SECTION

There were 1588 applicants who had their answers read at least twice. On the average, an applicant's total written raw score on the first reading was 4 points higher than it was on the second reading. The correlation between these scores was .40. This value underestimates the true degree of agreement between readers because reread was limited to applicants near the pass/fail line. Table 2 shows the means and standard deviations on each question after all readings.

Table 2 - SUMMARY STATISTICAL DATA ON THE WRITTEN SECTION AFTER ALL READINGS

Question Number	Essay Content Area(s) and PT Tasks	Mean Score	Standard Deviation
1	Wills	63.3	10.2
2	Real Property	63.5	6.8
3	Professional Responsibility	65.3	9.2
4	Contracts	62.4	8.2
5	Torts	61.2	8.3
6	Community Property	63.2	7.7
PT-1	Memo regarding constitutionality and changes	60.8	8.8
PT-2	Analysis of criminal law statute and ethical issues	65.8	7.4

## SUMMARY STATISTICS

Table 3 presents summary statistical data on each section after all readings. There was a .64 correlation between MBE and Written scores. Law School Admission Test (LSAT) scores correlated .61, .48, and .57 with MBE, Written, and Total Scale scores, respectively. There were 6764 applicants with useable LSAT scores.

Table 3 - SUMMARY TEST STATISTICS AFTER ALL READINGS

Test Statistic	MBE Scale	Written Raw	Total Scale
Mean Score	1445.1	1438.3	1440.7
Standard Deviation	155.2	154.2	141.2
Reliability	0.89	0.72	0.84

The MBE's reliability was computed by ACT using national data.

## SUBGROUP ANALYSES

On the average, women scored 31 points higher on the Written section than on the MBE whereas there was a 43 point average differential in the opposite direction for male applicants (Table 4). On the average, racial and ethnic minority groups scored about as highly on the Written section as they did on the MBE.

Table 4 - MEAN SCALE SCORES WITHIN RACIAL/ETHNIC AND GENDER GROUPS AND THE NUMBER OF APPLICANTS AND PERCENTAGE OF MALES WITHIN EACH GROUP\*

Test	Racial/Ethnic Group				Gender	
	Anglo	Asian	Black	Hispanic	Female	Male
Written	1461	1440	1351	1404	1464	1416
MBE	1475	1423	1359	1398	1433	1459
Total	1465	1434	1353	1402	1453	1431
N	4333	1112	535	717	3636	3766
% Male	52%	46%	46%	50%	0%	100%

\* There were 708 applicants who did not fall in one of the four largest racial/ethnic groups and 57 applicants who did not provide all demographic data.

## PHASED GRADING

A three-phased grading process was used to focus reader time on the applicants who were near the pass/fail line. Table 5 presents the number and percentage of applicants in each of the exam's pass/fail categories. Overall, 3793 (50.7%) of the applicants passed.

Table 5 - NUMBER AND PERCENTAGE OF APPLICANTS WHO PASSED AND FAILED IN EACH PHASE OF THE MULTIPHASED GRADING PROCESS

Phase	Fail		Pass		Total	
	Number	Percent	Number	Percent	Number	Percent
1	2739	36.6	3150	42.1	5889	78.8
2	544	7.3	492	6.6	1036	13.8
3	401	5.4	151	2.0	552	7.4
Total	3684	49.3	3793	50.7	7477	100.0

APPENDIX A: SUMMARY TEST STATISTICS ON FEBRUARY EXAMS

Exam	N	Percent Passing	Mean MBE Scale Score	Written Raw Score		
				Mean	Reliability	Correlation with MBE
1991	3685	51	1430	667	.68	.58
1992	3907	51	1432	663	.69	.60
1993	3682	45	1418	666	.73	.59
1994	3638	44	1421	657	.68	.59
1995	3488	42	1412	653	.74	.60
1996	3834	44	1417	646	.67	.58
1997	4103	49	1434	651	.66	.59
1998	3871	40	1412	650	.70	.60
1999	4309	41	1416	642	.65	.55
2000	4447	40	1415	638	.66	.57
2001	4461	38	1405	640	.72	.58
2002	4030	34	1396	633	.71	.53

APPENDIX B: SUMMARY TEST STATISTICS ON JULY EXAMS

Exam	N	Percent Passing	Mean MBE Scale Score	Written Raw Score		
				Mean	Reliability	Correlation with MBE
1990	6963	58	1451	684	.76	.67
1991	7219	55	1454	674	.75	.67
1992	7108	60	1464	674	.71	.64
1993	7018	59	1465	671	.77	.68
1994	7027	64	1482	672	.76	.70
1995	7109	60	1471	660	.75	.68
1996	7445	56	1458	667	.76	.70
1997	7678	62	1478	655	.75	.68
1998	7548	53	1446	656	.74	.65
1999	7684	51	1449	644	.75	.66
2000	7603	56	1460	645	.74	.62
2001	7585	57	1468	637	.77	.64
2002	7477	51	1445	632	.72	.64