

THE CALIFORNIA DRIVER PERFORMANCE EVALUATION PROJECT: AN EVALUATION OF A NEW DRIVER LICENSING ROAD TEST

By Robert A. Hagge

June 1994

Research and Development Branch Licensing Operations Division California Department of Motor Vehicles RSS-94-150

© California Department of Motor Vehicles, 1994

PREFACE

This report presents findings of an evaluation of a prototype drive test that was piloted in six California Department of Motor Vehicles field offices. The study represents the third stage in a four-stage project to develop an improved competency-based drive test for possible statewide implementation. The present report is being issued as an internal monograph of the Department of Motor Vehicles' Research and Development Section rather than an official report of the State of California. The findings and opinions may therefore not represent the views and policies of the State of California.

EXECUTIVE SUMMARY

<u>Introduction</u>

- In 1990 the California Department of Motor Vehicles (DMV) initiated a program to increase the level of driving competency of the California driver population. A key element of this program involves the development and implementation of an improved drive test.
- The present study evaluated the reliability and validity of a prototype on-road test that has been named the Driving Performance Evaluation (DPE). The study constitutes Stage 3 of a four-stage project that is in progress.
- The DPE differs from the current drive test in several important respects. For example, it is 5-10 minutes longer, includes freeway driving, and uses standardized scoring criteria in which maneuvers are observed and scored only at specific preplanned places and times during the test.

Methods

- Three groups of subjects—novice original license applicants, limited-term renewal applicants, and experienced good-driver volunteers—were administered the DPE in six DMV field offices from December through February 1993.
- Each DPE was scored by two drive test examiners—one in the front seat and the other in the back seat. The DPE included two parallel sets of maneuver items that were considered as two routes for the purpose of computing interroute reliability.
- Scores on the DPE and individual maneuvers were analyzed to evaluate the reliability, validity, and difficulty level of the test.

• Scores on a subset of DPE maneuvers were analyzed to simulate test statistics for a modified DPE to be piloted in 30 field offices in Los Angeles, Orange, and San Diego counties from July 1994 through June 1995 (Stage 4 of the drive test project).

Results

- The DPE was somewhat more difficult than the current drive test. Of original applicant subjects, 48% failed the DPE. This is somewhat higher than the 44% failure rate obtained for the current drive test in Stage 1 of the project. (The latter rate was believed to be inflated by examiner's knowledge that they were involved in a study and the fact that they were given refresher training in current drive test scoring criteria prior to the study. Before the Stage 1 study, the fail rate for the six offices was only 33%.)
- The DPE had an interrater reliability of .84 based on pass/fail scores for all original applicant subjects. For originals who were not automatically disqualified due to a serious error, the DPE had a .81 interrater reliability, a .83 interroute reliability, and a .78 net reliability. The current drive test was far less reliable, with coefficients of .69, .66, and .60 on the same three reliability measures, respectively.
- The DPE administered in the study was a valid test. The experienced good-driver volunteer group performed significantly better on the DPE than did the novice original driver group. The fail rates and average scores (number of errors) for these two groups were 5% vs. 48% and 10.6 vs. 15.8, respectively.
- The simulated shorter version of the DPE was passed by 83% of the original applicant subjects who were not automatically disqualified. This was only slightly higher than the 80% passing rate for the same subjects when scored on all DPE maneuvers.

Conclusions

- The DPE is more difficult than the current drive test, which is one of the objectives of the driver competency enhancement program.
- The DPE has psychometric properties that are superior to those of the current drive test.
- The DPE appears to have construct validity.
- The version of the DPE test to be piloted in Stage 4 of the project should be an improvement over the Stage 3 prototype.

TABLE OF CONTENTS

	<u>PAGE</u>
PREFACE	i
EXECUTIVE SUMMARY	i
INTRODUCTION	1
METHODS	2
Subjects	2
DPE Administration	. 3
Data Collection	3
Data Analysis	4
RESULTS	6
Subjects	
Test Difficulty	
Test Reliability	
Test Validity	
Item Analyses	
Error rate	
Item-total correlation	17
Interrater reliability	
Validity	
Validation of Parking Skill Test	
Evaluation of Stage 4 DPE	
Difficulty	
Interrater reliability	
Validity	
Average DPE Test Time	
DPE Compared to the Current Drive Test	
Difficulty	
Reliability	
DISCUSSION AND CONCLUSIONS	25
BIBLIOGRAPHY	25

TABLE OF CONTENTS (Continued)

APPENDICES

<u>NUM</u>	<u>IBER</u>	<u>PAGE</u>
A	Applicant/Test Information Form	26
В	Stage 4 DPE Score Sheet	28
C	Stage 3 DPE – Route 1 and Route 2 Designations	29
D	Results of Stage 3 Item Analysis	30
	D-1 Percentage of First Attempt Original Applicants Making an Error on Each DPE Maneuver	31
	D-2 Item-Total Correlation for Selected DPE Items Based on Scores for Original Applicants	34
	D-3 Interrater (LRE 1 x LRE 2) Reliability for Selected DPE Items	37
	D-4 Total Number of Errors Scored by the Front-Seat Examiner in Each Maneuver Category for Original Applicants, and Experienced Good-Driver Volunteers, Who Completed the DPE	40
E	Stage 4 DPE Scoring Criteria	44
NUM	LIST OF TABLES (BER	PAGE
1	Number of Subjects in Each Group by Office	
2	Number of Original Applicants by Front-Seat Examiner in Each Office	7
3	Characteristics of Original Applicants in Each Office	8
4	DPE Performance Results for Original Applicants in Each Office as Scored by the Front-Seat LRE	9
5	DPE Performance Results for Original Applicants in Each Office as Scored by Each Examiner	9
6	Number, Raw Percentage, and Cumulative Percentage of Subjects by DPE Point Score for Original Applicants Who Completed the DPE as Scored by the Front-Seat Examiner	10

TABLE OF CONTENTS (Continued)

LIST OF TABLES (Continued)

NUMI	<u>BER</u> <u>P</u>	AGE
7	Interrater (LRE 1 x LRE 2) Reliability for DPE Pass/Fail Result for Original Applicants in Each Office	11
8	Interrater (LRE 1 x LRE 2) Reliability for Separate and Combined DPE Routes in Each Office Based on Point Scores for Original Applicants Who Completed the DPE	. 12
9	Interroute (Route 1 x Route 2) Reliability for Each LRE in Each Office Based on Point Scores for Original Applicants Who Completed the DPE	13
10	Net (LRE x Route) Reliability in Each Office Based on Point Scores for Original Applicants Who Completed the DPE	14
11	DPE Results for Each Group of Subjects	. 15
12	Average DPE Point Score for Original Applicants and Good-Driver Volunteers Who Completed the DPE in Each Office	. 16
13	Number, Raw Percentage, and Cumulative Percentage of Subjects by Stage 4 DPE Point Score for Original Applicants Who Completed the Stage 3 DPE Based on Scores by the Front-Seat Examiner	20
14	Simulated Stage 4 DPE Performance Results for Original Applicants Who Completed the Stage 3 DPE in Each Office Based on Front-Seat LRE Scores	21
15	Interrater (LRE 1 x LRE 2) Reliability for the Stage 4 DPE in Each Office for Original Applicants Who Completed the Stage 3 DPE	22
16	Average Stage 4 DPE Point Score for Original Applicants and Good-Driver Volunteers Who Completed the Stage 3 DPE	. 22
17	Average Test Time in Minutes for Original Applicants in Each Office With and Without Automatic DQs Included	23
18	Percentage of Original Applicants in Each Office Failing the DPE and Current Drive Test as Scored by the Front-Seat LRE	. 24
19	Interrater, Interroute, and Net Reliability Coefficients for the Stage 3 DPE and the Current Drive Test Based on Total Point Score	24

INTRODUCTION

The primary purpose of this study was to evaluate the reliability and validity of the Driving Performance Evaluation (DPE) drive test that was piloted in six California Department of Motor Vehicles (DMV) field offices. This evaluation constitutes Stage 3 of a four-stage project for developing and evaluating a new drive test in California. Information obtained in this study was used to make improvements to the DPE prior to its pilot implementation in Los Angeles, Orange, and San Diego counties (Stage 4). The DPE evaluated in this study evolved from an earlier version of the DPE that was piloted in the Bellflower, Laguna Hills, Sacramento, and South Sacramento field offices (Stage 2). The reliability of the department's current drive test was evaluated in Stage 1 (Shumaker, 1994).

The DPE is based on Ray Engel's driver performance measurement model. This model, as applied to commercial road tests, is described in a report prepared by the Essex Corporation (Mackie et al., 1989). Since a review of the drive test literature is included in the Stage 1 final report, it will not be repeated here. Suffice it to say that the DPE differs from the current DMV drive test in several important respects, as summarized below.

Characteristic	Current drive test	DPE
Content	Narrow in scope and insufficiently challenging.	Represents common traffic conditions, including freeway driving. Emphasizes proper search of the traffic environment.
Vehicle check list	Not printed on score sheet.	Printed on score sheet.
Mechanical knowledge		Expanded.
Skills test	Not standardized and may be conducted during on-road testing.	Standardized and conducted before on-road testing.
On-road test	Scored in seven <u>error</u> categories. Errors on the same type of maneuver are marked in different areas on the score sheet.	Scored in six <u>maneuver</u> categories. Errors on the same type of maneuver are marked in one area on the score sheet.
Scoring	Indefinite number of possible errors. Every observed error is marked no matter where it occurs.	Fixed number of possible errors. Maneuvers are scored only at predetermined locations. Disqualifying errors are scored anywhere.
Length	Typically too short (10-15 minutes) to adequately sample relevant driving conditions.	DPE is 5 - 10 minutes longer than the current test.
Training	Examiners taught to look for errors at all times. Does not teach a standard scoring strategy.	Examiners taught to observe specific maneuvers at specific places and times. Teaches standard scoring criteria.

METHODS

<u>Subjects</u>

The study was conducted in Fullerton, Oxnard, San Jose, San Mateo, West Covina, and Westminster, the same field offices that participated in the Stage 1 evaluation of the current drive test. In addition, to the extent possible the study also used the same LREs, SMVRs, DL Supervisors, and Field Office Managers who participated in the Stage 1 study.

DPEs for the study were administered from December 2, 1993 through February 14, 1994. Data collection began immediately after 3 days of practice in the dual-examiner DPE testing procedures, which followed 1 week of DPE training provided by the department's Developmental Training Services section. A minimum of 50 DPEs were to be completed by first-attempt novice original applicants in each office. The subject pool included applicants who surrendered a license from a foreign country or who were administered a non-English written knowledge test. Applicants who were previously licensed in the military or in a United States state or territory other than California were not included as subjects unless they were given a non-English written test. Although participation in the study was required of original applicants, anyone who indicated that they were not prepared to drive on the freeway were not given the DPE at that time. These applicants had the DPE rescheduled and were instructed to gain additional experience driving on the freeway before taking the test. Participation in the study was represented as being mandatory and applicants were not to be told that they were subjects in a study. Applicants who refused to take the DPE were to be referred to the DL Supervisor for further discussion of the matter. If that didn't work, they were to be referred to the Field Office Manager for further persuasion or possible release from the study.

The study offices were also instructed to administer DPEs to all limited-term renewal applicants starting January 10, 1994. These applicants were treated the same as original license subjects, except that those who objected to driving on the freeway were given a modified DPE that did not include freeway driving. LREs were instructed not to mention the modified-DPE option unless the limited-term applicant indicated that he or she did not want, or was not competent, to drive on the freeway. Applicants who were not tested on the freeway were not used as subjects.

The DPE was also administered to a small sample of experienced good-driver volunteers in order to evaluate the test's validity. This sample consisted of 16 employees of the Auto Club of Southern California and 22 employees of the six DPE study DMV field offices. These subjects indicated that they:

- (1) were under 50 years of age;
- (2) had no accidents or traffic citations during the past 3 years;

- (3) had held a California driver license for at least 5 years;
- (4) drove an average of at least 100 miles per week;
- (5) were experienced and comfortable driving on the freeway;
- (6) had no experience as a drive test examiner; and
- (7) had no physical or mental condition that would adversely affect driving.

The Auto Club volunteers were administered the DPE in the Fullerton, West Covina, and Oxnard field offices. DMV volunteers were given the DPE in the offices in which they worked.

DPE Administration

The two designated study LREs (LRE 1 and LRE 2) in each office administered the DPE to each subject in a manner similar to that used for the Stage 1 study of the current drive test. Both LREs were in the vehicle at the same time—one in the front seat and the other in the back seat. The LREs switched seat position after each study DPE. Only the front-seat examiner conducted the vehicle inspection. Each LRE independently scored the applicant's performance on the remainder of the DPE on a separate score sheet, and recorded their seat position in the top right corner of the form. The examiners were told not to collaborate in scoring the test.

In the Stage 1 study of the current drive test, subjects were tested over two distinct "subroutes" in order to compute interroute (sampling) reliability. This was not necessary in the present study because it was possible to compute interroute reliability from two parallel sets of items embedded within the DPE.

Only the front-seat LRE had authority to terminate the test early due to errors requiring immediate disqualification. If the back-seat LRE observed a disqualification (DQ) error, he or she marked the error on the score sheet as a DQ and continued scoring the test. If the subject made a DQ error on one of the Parking Skill maneuvers, the LREs were to score the error as a 1-point deduction and continue the DPE. In addition, the back-seat LRE was to note that a parking skill DQ error occurred in the comments section of their DPE score sheet or on the Applicant/Test Information form discussed below. The DPE was continued following the parking skill DQ error in order to evaluate whether parking skill performance could be used for detecting highly incompetent drivers who are too unsafe for a road test.

Data Collection

The back-seat LRE completed an Applicant/Test Information form (see Appendix A) for each applicant selected to take the DPE, including those who were not experienced enough to drive on the freeway, were DQed, or did not complete the DPE for some other reason. The DPE start and end times were recorded on this form. (The start time was when the front-seat LRE began the vehicle check and the end time was when the critique of the subject's drive test performance ended, just before exiting the vehicle.)

Any relevant comments, observations, or concerns were recorded on the bottom of the form. Each day, completed forms were attached to the partially-completed or completed DPE score sheets and sent to the Research and Development Section (R&D). If the applicant was selected as a subject but then excused from the study because he or she was not experienced in freeway driving, only the Applicant/Test Information form was submitted.

The data collection forms and DPE score sheets were screened and analyzed by R&D and key entered by Data Entry. In addition, the department's Driver License (DL) Policy unit reviewed copies of the DPE score sheets for any information that may have provided clues for improving the test. (Results of DL Policy's review are not included in this report.)

Data Analysis

Test and test-item statistics were computed from scores on the DPE score sheets submitted from the six study offices. The specific computation procedures for some of the statistics are described in the Results section rather than here because the tables presenting the results clearly indicate the way DPE scores were configured in the calculations.

Test and test-item fail rates were computed based on front-seat LRE scores for all original applicants in the study. The computation of average test scores and item-total correlations were based on front-seat LRE scores for original applicant subjects who completed the DPE (i.e., passed or failed based on total points). Because the LREs switched seat position after each study DPE, the measures based on front-seat LRE scores would be expected to reflect the scoring characteristics of all study LREs. The item-total correlation is the correlation of the score on the item (error vs. no error) with the total point score. The item-total correlation coefficient may range from -1.0 to 1.0. The higher the correlation coefficient, the more the item discriminates in the same way that the overall test discriminates with respect to subject's level of driving competence. Thus, items with high item-total correlations contribute to the overall reliability of the DPE by measuring the same underlying traits or performance dimension.

Three types of test reliability were computed: interrater, interroute, and net (or total). The reliability measures in this study express the degree of relationship between two sets of scores. Interrater reliability indicates the amount of agreement between two different examiners scoring the same set of driving behaviors. Interroute reliability refers to the similarity of scores given by the same examiner over the two DPE subroutes (parallel sets of maneuvers). Net reliability represents the degree of consistency in test-retest scoring when both the examiner and the route change from one test administration to the other. Each of these forms of reliability theoretically may range in magnitude from -1.0 to 1.0. A reliability of 1.0 would indicate perfect correlation between the two sets of scores—with paired scores rising and falling in

unison. A reliability of -1.0 would indicate a perfect inverse relationship between scores—e.g., LRE 1 would score high when LRE 2 scored low, and visa versa. A complete absence of any relationship between scores would be indicated by a reliability of zero.

The validity of the DPE was assessed by comparing the average point scores for original applicants, experienced good-driver volunteers, and limited-term renewals who completed the test. If the DPE were a valid test, one would expect healthy and highly experienced drivers to perform better than novice drivers or drivers impaired by advanced age and/or physical disabilities. To obtain additional validation measures, subject status (original vs. volunteer) was correlated with both DPE result (pass vs. fail) and total point score.

The validity of individual DPE maneuvers, except Parking Skill items, was evaluated by comparing all original applicant subjects and all good-driver volunteer subjects on the average number of errors made on each type of maneuver. DPEs that were not completed due to an automatic DQ error were not used for this comparison. The validity of each Parking Skill item was assessed by comparing these two groups on the item, using all (DQ and non-DQ) DPEs administered in the Fullerton, Oxnard, and Westminster offices. Subjects tested in San Jose, San Mateo, and West Covina were excluded from the analysis of Parking Skill items because these offices used a diagonal parking space rather than a perpendicular one (as required) for the skill test.

The DPE test to be piloted in Stage 4 was developed based on results of the present evaluation and other information, including feedback given by study LREs during a 1-day debriefing session held a few weeks after Stage 3 DPE testing. The Stage 4 DPE score sheet is reproduced in Appendix B. The types of maneuvers on the Stage 4 DPE are nearly identical to those on the Stage 3 DPE. The Stage 4 DPE is basically what is left of the Stage 3 DPE after removing STRAIGHT BUSINESS/RESIDENTIAL maneuvers under "B2" and "R2," one set of LANE CHANGES - BUSINESS OR RESIDENTIAL maneuvers under both "L" and "R," FREEWAY maneuvers under "2," and CURVE maneuvers under "R." (Either a left or right curve can be used for the CURVE maneuvers in the Stage 4 DPE .) The removed maneuvers mentioned above were included in the Stage-3 DPE only for the purpose of creating two parallel sets of maneuvers that could be used to compute interroute reliability.

The validity of using parking skill performance to identify marginally-competent drivers was evaluated by correlating original applicant's overall performance on the Parking Skill maneuvers (DQ vs. non-DQ) with their performance on the DPE, as scored by the front-seat LRE. Two measures of DPE performance were used for this computation—test result (pass vs. fail) and whether there was an automatically disqualification (DQ vs. non-DQ). In addition, only subjects in Fullerton, Westminster, and Oxnard were included in this analysis because, as stated above, the other three field

offices did not use a perpendicular space for the skills test as required in the DPE guidelines.

The difficulty level and interrater reliability of the Stage 4 DPE were simulated using front-seat LRE scores for only the maneuvers that were to be included in that test. The actual psychometric characteristics of the Stage 4 DPE could not be rigorously estimated because the performance data collected in this study reflect the unmodified Stage 3 DPE scoring criteria. The actual reliability of the Stage 4 DPE would probably be higher than the estimates from this simulation because of improvements in both DPE scoring criteria and DPE training made subsequent to the Stage 3 test administrations.

RESULTS

Subjects

Table 1 presents the number of subjects taking a DPE in each study office. It should be noted that some of the offices stopped giving study DPEs for long periods during the study. The LREs in these offices indicated that the primary reason for this was that they were often forced to administer DPEs without the second study LRE in the vehicle in order to keep up with heavy drive test workloads. Apparently, this problem occurred because sufficient staff resources were not made available to backup the designated LREs during the study. However, there is no reason to believe that the discontinuity in DPE testing for the study would have meaningfully biased the results of any of the analyses.

Table 1

Number of Subjects in Each Group by Office

Office	Originals	Auto Club volunteers	DMV volunteers	Limited-term renewals
San Jose	64	0	2	1
San Mateo	73	0	6	8
Fullerton	107	9	5	1
Westminster	80	0	6	2
West Covina	61	3	3	0
Oxnard	95	4	0	1
Total	480	16	22	13

The number of original applicants who were selected as subjects but, for whatever reason, refused to participate in the study is unknown. However, study LREs indicated that this happened only very rarely if at all.

Seventy-three Test/Applicant Information forms for original applicants were received without accompanying DPE score sheets. Ten of these were for applicants who were not given a DPE due to a vehicle-failure disqualification. The remaining 63 (11.4 % of the 553 total applicants selected for the study) were for applicants who were not prepared to drive on the freeway. However, the actual percentage of applicants who indicated that they lacked the required freeway driving experience and therefore had the DPE rescheduled is believed to be greater than 11.4%. The reason is that some of the study LREs indicated that they were not aware until late in the study that an Applicant/Test Information form was to be submitted for these applicants. Limited-term renewals are also believed to be greatly underrepresented in the study because they were not required to drive on the freeway and, according to study LREs, little or no effort was made to hide this fact from the applicant.

Table 2 presents the number of DPEs taken by original applicants in each office when LRE 1 or LRE 2 was the front-seat examiner. As can be seen, in each office both examiners were in the front seat about the same number of times, as would be expected from the examiners' switching seat positions after each DPE.

Table 2

Number of Original Applicants by Front-Seat Examiner in Each Office

	Fre	Front-seat examiner			
Office	LRE 1	LRE 2			
San Jose	33	31			
San Mateo	38	35			
Fullerton	52	55			
Westminster	39	41			
West Covina	33	28			
Oxnard	51	44			

Table 3 presents descriptive information from the Applicant/Test Information forms for original applicant subjects in each office. The average years of age of subjects ranged from 22.5 in West Covina to 25.0 in San Jose and was 24.3 overall. The percentage of applicants who surrendered a foreign license ranged from none in West Covina to 4.4% in San Mateo and averaged 1.5% for all offices combined. (This measure is suspect because some study LREs indicated after the study that they were confused about when to consider a license "surrendered" in light of the fact that DMV does not ordinarily

actually take and keep foreign licenses.) In every office, a majority of applicants were judged by the back-seat LRE as being either Hispanic or Asian; the percentage of such applicants ranged from 52.5% in West Covina to 79.7% in San Jose and averaged 67.6% across offices. The percentage of subjects who had taken a driver license written test in a nonEnglish language ranged from 15.7% in San Mateo to 57.9% in Fullerton, and averaged 43.8% across offices. The percentage of subjects whom were judged by the back-seat LRE to have marginal or poor English fluency ranged from

Table 3

Characteristics of Original Applicants in Each Field Office

Office	Average years of age	% surrendering a foreign license	% Hispanic or Asian	% taking a nonEnglish	% with marginal or	% requiring nonEnglish
				written test	poor English fluency	instruction
San Jose	25.0	1.6	79.7	51.6	42.2	21.3
San Mateo	24.9	4.1	55.6	15.7	25.0	17.8
Fullerton	24.7	2.9	73.8	57.9	60.6	46.7
Westminster	24.7	4.4	66.2	51.3	51.4	29.9
West Covina	22.5	0.0	52.5	36.7	30.5	5.0
Oxnard	23.7	2.1	72.4	41.5	43.6	43.6
Total	24.3	1.5	67.6	43.8	43.9	30.3

25.0% in San Mateo to 60.6% in Fullerton and averaged 43.9% overall. The lack of English fluency of some subjects made it necessary in every office to give some or all drive test instructions in a nonEnglish language or by hand motions. The percentage of applicants needing some nonEnglish instructions ranged from 5.0% in West Covina to 46.7% in Fullerton and averaged 30.3% overall.

Test Difficulty

Table 4 presents DPE results for original applicants in each office as scored by the front-seat examiner. Again, because seat position was counterbalanced in each office, these figures reflect the overall scoring by all study LREs. The percentage of subjects who failed the DPE was 47.7% overall and ranged from 28.8% in San Mateo to 61.1% in Oxnard. The percentage of subjects who were automatically DQed was 35.0% overall and ranged from 16.4% in San Mateo to 50.5% in Oxnard. It is interesting to note that the contribution of DQs to the fail rate was much greater in some offices than in others. For example, the percentage of DPE failures that were due to DQs was 83% (50.5/61.1) in Oxnard but only 33% (18.8/57.8) in San Jose. This may be due to between-office differences in the level of driving competency of applicants, the degree of willingness of LREs to utilize the DQ option, the level of LRE understanding of DQ criteria, or a combination of these factors. The average DPE score for subjects who passed or failed based on total point score ranged from 12.4 in Fullerton to 23.5 in San Jose and averaged 15.8 overall.

Table 4

DPE Performance Results for Original Applicants in Each Office as Scored by the Front-Seat LRE

Office	% failing	% making a DQ error	Average point score
San Jose	57.8	18.8	23.5
San Mateo	28.8	16.4	16.1
Fullerton	44.9	40.2	12.4
Westminster	41.3	35.0	12.8
West Covina	52.5	41.0	15. <i>7</i>
Oxnard	61.1	50.5	15.2
Total	47.7	35.0	15.8

Note. The average point scores are for subjects who completed the DPE.

Table 5 presents the same DPE performance measures for each study LRE in each office. These results show how the two LREs in each office compared in their scoring. Each entry in the table is based on a counterbalancing of seat position and therefore reflects each examiner's average scoring in the front and back seats. The results indicate that scoring by LREs in each pair was fairly similar in all offices except San Jose and Oxnard, and even these two offices are not highly disparate.

Table 5

DPE Performance Results for Original Applicants in Each Office as Scored by Each Examiner

Office	Examiner	% failing	% disqualified	Average point score
San Jose	LRE 1	67.2	23.4	23.7
	LRE 2	56.3	23.4	20.4
San Mateo	LRE 1	31.5	16.4	15.6
	LRE 2	28.8	17.8	16.5
Fullerton	LRE 1	42.1	40.2	11.7
	LRE 2	45.8	40.2	12.1
Westminster	LRE 1	42.3	35.0	13.0
	LRE 2	41.3	36.3	12.4
West Covina	LRE 1	52.5	42.6	14.6
	LRE 2	54.1	41.0	17.0
Oxnard	LRE 1	62.1	51.6	15.5
	LRE 2	54.7	47.4	13.5

<u>Note</u>. Average point score is for subjects who completed the DPE. The figures reflect a counterbalancing of seat position, since LRE 1 and LRE 2 were in the front seat about an equal number of times.

Table 6 shows the frequency, raw percentage, and cumulative percentage of original applicants completing the DPE by total point score given by the front-seat examiner.

Percentages in the last column represent non-DQed subjects who made the specified number of errors or fewer (and therefore would have passed the DPE if that had been the passing score). The shaded row is for the 20-point passing score used to make licensing decisions in the study. The distinct drop in the raw percentage at 21 errors may indicate a possible examiner tendency to pass applicants who in reality were just below the pass threshold.

Table 6

Number, Percentage, and Cumulative Percentage of Subjects by DPE Point Score for Original Applicants Who Completed the DPE as Scored by the Front-Seat Examiner

Point score (errors)	Number of subjects	%	Cumulative %
2	2	0.6	0.6
3 5	1	0.3	1.0
5	7	2.2	3.2
6	6	1.9	5.1
7	11	3.5	8.7
8	14	4.5	13.1
9	20	6.4	19.6
10	23	7.4	26.9
11	19	6.1	33.0
12	13	4.2	37.2
13	24	7.7	44.9
14	22	7.1	51.9
15	16	5.1	57.1
16	10	3.2	60.3
17	11	3.5	63.8
18	13	4.2	67.9
19	21	6.7	74.7
20	18	5.8	80.4
21	5	1.6	82.1
22	8	2.6	84.6
23	7	2.2	86.9
24	4	1.3	88.1
25	2	0.6	88.8
26	4	1.3	90.1
27	2	0.6	90.7
28	3	1.0	91.7
29	6	1.9	93.6
30	6	1.9	95.5
31	4	1.3	96.8
32	1	0.3	97.1
33	1	0.3	97.4
36	3	1.0	98.4
37	1	0.3	98.7
39	1	0.3	99.0
41	1	0.3	99.4
51	1	0.3	99.7
54	1	0.3	100.0
Total	312	100.0	100.0

Test Reliability

Table 7 presents the pass/fail interrater reliability coefficient for each LRE pair based on overall DPE results. These figures were derived by correlating the DPE result (pass vs. fail) based on LRE 1 scores with that based on LRE 2 scores for all 480 original applicant subjects, including those who were automatically DQed. Interrater reliability was fairly high in all offices except San Jose and Oxnard, although even in these two offices the coefficient exceeded .65, which is higher than typically found for driving tests. The .84 reliability coefficient obtained for pooled subjects indicates that there was a high level of agreement between examiners in each pair as to whether an applicant performed above minimum standards on the DPE. A reliability coefficient of .84 indicates that only 16% ([1.00 - .84] x 100%) of the variance in pass/fail scores was explained by interscorer differences.

Table 7

Interrater (LRE 1 x LRE 2) Reliability for DPE
Pass/Fail Result for Original Applicants in Each Office

Office	Number of subjects	Interrater reliability
San Jose	64	.66
San Mateo	73	.94
Fullerton	107	.89
Westminster	80	.95
West Covina	61	.90
Oxnard	95	.68
Total	480	.84

Table 8 presents interrater reliability measures based on point scores for original applicants who were not automatically DQed by the front-seat LRE. (Again, the back-seat LRE continued scoring the DPE even if they observed a DQ maneuver, as long as the applicant was not automatically disqualified by the front-seat LRE.) Correlations were computed for each of the two subroutes (routes 1 and 2) and for both routes combined (the entire DPE). The routes were created by splitting the DPE into parallel sets of items as shown in Appendix C. Route 1 included the odd numbered maneuvers (e.g., LEFT TURNS 1 and 3) and route 2 included the even numbered maneuvers (e.g., RIGHT TURNS 2 and 4). The two halves were not entirely parallel in content because the Parking Skill and Street Parking items were entering maneuvers in route 1 and exiting maneuvers in route 2. Another difference is that left-curve maneuvers were scored in route 1 while right-curve maneuvers were scored in route 2. The two routes are related time-sequentially to some degree in the sense that route 1 maneuvers generally occur earlier than route 2 maneuvers.

Table 8

Interrater (LRE 1 x LRE 2) Reliability For Separate and Combined DPE Routes in Each Office Based on Point Scores for Original Applicants Who Completed the DPE

Office	Route 1	Route 2	Within-route	Combined
			average	routes
San Jose	.63	.73	.68	.71
San Mateo	.85	.82	.84	.92
Fullerton	.58	.65	.62	.68
Westminster	.93	.83	.88	.94
West Covina	.79	.85	.82	.88
Oxnard	.71	.75	.73	.79
Total	.75	.76	.76	.81

The interrater reliability coefficient was higher for routes 1 and 2 combined than for either route individually because reliability tends to increase as the number of scored maneuvers increases. For both routes combined, interrater reliability ranged from .68 in Fullerton to .94 in Westminster, and was .81 for all subjects pooled. Note that Fullerton fell considerably in rank from its relative position in Table 7, suggesting that its high reliability in Table 7 was more dependent on the inclusion of DQs and the pass vs. fail criterion.

Table 9 presents an interroute reliability coefficient for each study LRE in each office based on the point scores for original applicants who completed the DPE. These measures were obtained by correlating each LRE's scores on route 1 with their scores on route 2. Average within-LRE reliability ranged from .54 in Fullerton to .75 in Oxnard, and was .71 for subjects pooled across offices. Because routes 1 and 2 were derived by splitting the DPE into two parallel halves, these results underestimate the true interroute reliability of the DPE by artificially reducing the length of the test. The interroute reliability of the entire DPE (routes 1 and 2 combined) for pooled subjects was estimated as .83 using the Spearman-Brown Prophecy formula. This result indicates that only 17% ([1.00 - .83] x 100%) of the variance in DPE point scores was explained by interroute differences.

Table 9

Interroute (Route 1 x Route 2) Reliability for Each LRE in Each Office Based on Point Scores for Original Applicants Who Completed the DPE

Office	LRE 1	LRE 2	Within-LRE average
San Jose	.76	.59	.68
San Mateo	.64	.63	.64
Fullerton	.60	.47	.54
Westminster	.63	.61	.62
West Covina	.74	.65	.70
Oxnard	.81	.69	.75
Total	.76	.65	.71

The consistency in scoring over the two routes appears to have been generally higher for LRE 1 examiners than for LRE 2 examiners. However, this difference is irrelevant to the evaluation of the DPE because the designation of each examiner as LRE 1 or LRE 2 in the analysis was made arbitrarily.

Table 10 presents the net reliability measure for each office. As mentioned in the Methods section, net reliability represents the consistency in scoring by different examiners over different routes. Figures in the first column are correlations of LRE 1's point scores on route 2. Similarly, entries in the second column are correlations of LRE 2's point scores on route 1 with LRE 1's scores on route 2. The average net reliability ranged from .45 in Fullerton to .68 in San Mateo, and was .64 for pooled subjects. The net reliability for the DPE based on pooled subjects' scores was estimated to be .78, using the Spearman-Brown Prophecy formula to adjust for attenuation of test length. A net reliability coefficient of .78 indicates that only 22% ([1.00 - .78] x 100%) of the variance in point scores was explained by a combination of interscorer and interroute differences.

Table 10

Net (LRE x Route) Reliability in Each Office Based on Point Scores for Original Applicants Who Completed the DPE

Office	LRE 1/route 1 x LRE 2/route 2	LRE 1/route 2 x LRE 2/route 1	Average
San Jose	.58	.45	.52
San Mateo	.69	.67	.68
Fullerton	.44	.46	.45
Westminster	.59	.68	.64
West Covina	.59	.75	.67
Oxnard	.58	.72	.65
Total	.64	.63	.64

Test Validity

Table 11 presents the DPE fail rate, automatic DQ rate, and average DPE point score for novice originals, experienced good-driver volunteers, and limited-term renewals. The average point scores are for subjects who completed the DPE. The difference between groups on each performance measure was statistically significant (p<.001 for fail and DQ rates and p<.05 for average DPE score). Using Scheffé post-hoc significance tests, it was found that the good-driver volunteer group had significantly lower DPE fail and DQ rates than did each of the other two groups, and a significantly lower point score than did the novice driver group. All other observed differences between groups were not statistically significant. The finding that experienced good-driver volunteers performed better on the DPE than did novice originals supports the validity of the DPE.

Table 11

DPE Results for Each Group of Subjects

Group	% failing	% making a DQ error	Average point score
Novice original	47.7 $(n = 480)$	35.0 $(n = 480)$	15.8 $(n = 312)$
Good-driver volunteer	5.3 $(n = 38)$	5.3 $(n = 38)$	10.6 $(n = 36)$
Limited-term renewal	46.2 ($n = 13$)	46.2 (n = 13)	$ \begin{array}{l} 16.0 \\ (n = 7) \end{array} $

Note. The average point scores are for subjects who completed the DPE.

The above validation analysis did not take into account the fact that subjects in the three applicant groups were not matched on office. Therefore, a comparison was made of the original and good-driver renewal groups on DPE point score within each office. (Limited-term renewals were not included in the analysis due to their small sample size. In addition, within-office comparisons were not made on DPE fail and DQ rates because only two renewal volunteers failed the DPE and these were automatic DQs that occurred in Oxnard.) The results are shown in Table 12. A two-way (office x group) analysis of variance conducted on DPE point scores found the main effect of group to be significant (p<.01), the main effect of office to be non-significant (p>.10), and the groupby-office interaction non-significant (p>.65). The significant main effect of group and the absence of a significant interaction effect indicates that the volunteers outperformed the originals fairly consistently, as would be expected if the DPE were a valid test. Obviously, these results should be interpreted with caution because of the very small number of volunteers tested in each office. Another possible source of caution is potential bias stemming from the LRE's knowledge of the criterion status (group) of the applicant. Although some expectancy and halo bias is possible, it seems unlikely it could have produced differences of the magnitude obtained.

Table 12

Average DPE Point Score for Novice Original Applicants and Good-Driver Volunteers Who Completed the DPE in Each Office

Office	Group	Number of subjects	Average point score
San Jose	Original	52	23.5
	Good-driver volunteer	2	17.5
San Mateo	Original	61	16.1
	Good-driver volunteer	6	14.2
Fullerton	Original	64	12.4
	Good-driver volunteer	14	7.3
Westminster	Original	52	12.8
	Good-driver volunteer	6	14.2
West Covina	Original	36	15.7
	Good-driver volunteer	6	9.3
Oxnard	Original	47	15.2
	Good-driver volunteer	2	8.5
Total	Original	312	15.8
	Good-driver volunteer	36	10.6

Item Analyses

Error rate. The percentage of subjects making an error on individual DPE maneuvers is shown in Table D-1 in Appendix D. The table is formatted to match the layout of the DPE score sheet. The estimates for items under PRE-DRIVE CHECK LIST, AUTOMATIC DISQUALIFICATION, and PARKING/Parking Skill are based on scores for all 480 original applicants. The remainder of the items are based on scores for the 312 original applicants who completed the DPE (no DQs). Some of the DPE maneuvers were not observed or scored on a small number of drive tests. The error rates for these maneuvers were computed using only the subset of cases (tests) in which the maneuver in question was scored. In addition, the four left and four right TURNS/If Stop maneuvers were very often not scored because many of the turns did not require stopping. LREs were instructed to circle the turn number (1 through 4) on the score sheet corresponding to any left or right turn that was not scored. However, because this was not done correctly or consistently by the study LREs, it was decided to compute the fail rates for the TURNS/If Stop items as if the maneuvers were always scored. Therefore, the fail rate estimates for these maneuvers underestimate the items' true difficulty levels.

The computation of error rates for the PRE-DRIVE CHECK LIST items excluded 10 applicants who had their DPEs rescheduled due to a vehicle-failure disqualification. These disqualifications were for turn signals (one), brake lights (five), foot brake (one), horn (one), and seat belts (two).

The scoring criteria for items with very low error rates were reviewed to determine whether any of these items should be dropped from the test or merged with other items to form more molar maneuver categories. However, members of the drive test task force decided to retain practically all of the items in their original form because there was no shortage of space on the score sheet. Any ambiguities in wording or other problems found in the review of scoring criteria have since been corrected.

Item-total correlation. Table D-2 in Appendix D presents the item-total correlation for each DPE item except those under PRE-DRIVE CHECK LIST and AUTOMATIC DISQUALIFICATION. Only scores for original applicants who completed the DPE were included in the analysis because a total point score was not available for subjects who made a DQ error. Cases in which the individual maneuver was not scored were not included in the error rate computation for that item (except for TURNS/If Stop items, which for reasons stated above were assumed in the analysis to have always been scored). The scoring criteria for items with correlation coefficients below .10 were reviewed for possible ambiguity and lack of clarity. Several problems were identified and have since been corrected as a result of this effort. It should be noted that a very low item-total correlation coefficient does not necessarily mean that there was a problem with the item. The coefficient could be low as a result of almost no applicants making an error on the item in question. A dash entry indicates that a correlation coefficient could not be computed due to zero item-score variance.

<u>Interrater reliability</u>. Table D-3 in Appendix D presents the interrater reliability coefficient for each DPE item. The coefficient is the correlation of LRE 1 scores with LRE 2 scores on the same item for original license applicants. Subjects who were automatically **DOed** included analysis of **AUTOMATIC** were in the DISQUALIFICATION and PARKING/Parking Skill maneuvers, but were excluded from the analysis of the remaining DPE maneuvers. In addition, with the exception of TURNS/If Stop maneuvers, cases in which an item was not scored (as indicated by a vertical line drawn through the score-bubble column on the score sheet) were excluded from the computation for that item. A dash entry in the table indicates that the correlation could not be computed because none of the subjects made an error on that maneuver. The scoring criteria for items interrater reliabilities below .30 were reviewed

for ambiguity in wording or other problems. Any deficiencies that were identified have since been corrected.

<u>Validity</u>. Table D-4 in Appendix D compares the original and good-driver volunteer groups on their performance on various DPE maneuvers. The analysis of the PARKING/Parking Skill maneuvers included only subjects in Fullerton, Westminster, and Oxnard because the other offices did not use a perpendicular space for the skill test as required in the DPE guidelines. Automatic DQs were also included in the computations for the PARKING/Parking Skill items. All entries other than those under PARKING and CURVE are for total errors over all maneuvers of the same type. For example, the figures for the INTERSECTIONS/Driving Through/Traffic check category represent all traffic check errors made while driving through all four scored throughintersections. As another example, the figures for TURNS LEFT/Approach/Traffic check represent all traffic check errors made when approaching all four scored left turns.

Scoring criteria for DPE maneuvers on which the group of volunteers did not perform substantially better than the group of original applicants were reviewed for possible problems in the scoring criteria. Several problems were discovered and subsequently corrected. The lack of superior performance of the volunteer group did not necessarily indicate that the maneuver item was problematic. It was expected that experienced drivers would perform worse on some maneuvers (e.g., stopping at the proper distance from the gap or limit line at a stop-intersection) because of bad driving habits they had developed over years of driving. In addition, the extremely small number of errors made by both groups made the results for some maneuvers too unstable to use for validation purposes.

It should also be noted that the item-validation results are based on a pooling of subjects across offices. Because subjects in the original-applicant and volunteer groups were not matched on office, between-group differences on maneuver error rates could have been at least partially due to examiner variability. Therefore, a follow-up comparison between the two groups was also made within each office. (In the interest of simplicity, the results of this analysis are not included in this report.) The scoring criteria for any maneuver on which the volunteers did not perform substantially better in two or more offices were scrutinized. This review lead to the identification of additional problems that were not discovered in the review based on the pooling of subjects across offices. These problems have subsequently been corrected.

Validation of Parking Skill Test

Performance on the Parking Skill maneuvers (DQ vs. non-DQ) was correlated with Stage 3 DPE result (pass vs. fail) and DQ status (DQ vs. non-DQ) for original applicants in the Fullerton, Westminster, and Oxnard offices. Of the 282 original-applicant subjects in these offices, only 13 (4.6%) were identified on the DPE score sheet or Test/Applicant Information form as having made a DQ error on one or more of the parking skill maneuvers. The correlations for the two DPE performance measures were -.05 and .02, respectively. Neither of these correlations was statistically significant (p>.05). These results do not support the hypothesis that skill on the Parking Skill maneuvers is related to driving competency as measured by the DPE test. However, failure to find a significant relationship may be an artifact of LREs' not consistently recording on the DPE score sheet or Test/Applicant Information form that an applicant made an error on the parking skill test that would be considered an automatic disqualification under the DPE scoring guidelines. LREs acknowledged this underreporting in the LRE debriefing following data collection. Some of the LREs also said they were not sure what behaviors on the individual parking skill maneuvers were to be considered a DQ. The DPE scoring criteria were subsequently modified to clarify this issue.

As an additional assessment of the validity of the parking skill test, total 1-point errors made on all Parking Skill maneuvers was correlated with DPE pass/fail result and DQ status for the same subjects. The respective results were .16 (p<.01) and .10 (p>.05). The significant relationship between parking performance and DPE pass/fail result supports the validity of the set of Parking Skill maneuvers. Given this suggestive evidence, it was the consensus of the study LREs and members of the drive test task force that the parking skill test should be retained for further evaluation in Stage 4.

Evaluation of Stage 4 DPE

<u>Difficulty</u>. Table 13 presents the frequency, raw percentage, and cumulative percentage of original applicants in all offices by total point score on the simulated Stage 4 DPE. The shaded row indicates the 16-point passing score to be used in Stage 4. The cumulative percentage for this point score indicates that 83.1% of subjects who completed the Stage 3 DPE passed the simulated Stage 4 DPE, which is slightly higher than the 80.4% passing rate for the same subjects for the Stage 3 DPE.

Table 13

Number, Percentage, and Cumulative Percentage of Subjects by Stage 4 DPE Point Score for Original Applicants Who Completed the Stage 3 DPE Based on Scores by the Front-Seat Examiner

Point score (errors)	Number of subjects	%	Cumulative %
0	16	3.3	3.3
1	4	0.8	4.2
2	5	1.0	5.2
3	11	2.3	7.5
4	22	4.6	12.1
5	21	4.4	16.5
6	19	4.0	20.4
7	32	6.7	27.1
8	31	6.5	33.5
9	43	9.0	42.5
10	37	7.7	50.2
11	33	6.9	57.1
12	34	7.1	64.2
13	28	5.8	70.0
14	26	5.4	75.4
15	22	4.6	80.0
16	15	3.1	83.1
17	16	3.3	86.5
18	9	1.9	88.3
19	10	2.1	90.4
20	10	2.1	92.5
21	5	1.0	93.5
22	8	1.7	95.2
23	6	1.2	96.5
24	1	0.2	96.7
25	1	0.2	96.9
26	5	1.0	97.9
27	4	0.8	98.7
28	1	0.2	99.0
29	2	0.4	99.4
31	1	0.2	99.6
36	1	0.2	99.8
38	1	0.2	100.0
Total	312	100.0	100.0

Table 14 presents the average score and fail rate for the simulated Stage 4 DPE in each office for original applicants who completed the Stage 3. The figures are based on front-seat LRE scores. As would be expected, the average scores on the Stage 4 DPE are

practically identical in pattern to those for the somewhat longer Stage 3 DPE. The average score ranged from 10.2 in Fullerton to 17.0 in San Jose, and was 12.3 for subjects pooled across offices. Of original applicants who completed the Stage 3 DPE, the percentage who failed the Stage 4 DPE based on total point score ranged from 14.1% in Fullterton to 53.9% in San Jose, and was 24.0% for subjects pooled across offices.

Unfortunately, the automatic DQ rate for the simulated Stage 4 DPE could not be estimated because it was not possible to determine at what point in the DPE the disqualification error was made. However, it is likely that the DQ rate for the Stage 4 DPE would be lower than the 35.0% DQ rate obtained for the Stage 3 DPE, since the former test is shorter and therefore would allow fewer opportunities to score automatic disqualification errors.

Table 14
Simulated Stage 4 DPE Performance Results for Original Applicants Who Completed the Stage 3 DPE in Each Office Based on Front-Seat LRE Scores

Office	Number of subjects	% failing	Average point score
San Jose	52	53.9	17.0
San Mateo	61	18.0	12.2
Fullerton	64	14.1	10.2
Westminster	52	15.4	10.9
West Covina	36	22.2	12.3
Oxnard	47	23.4	11.9
Total	312	24.0	12.3

<u>Note</u>. Table entries are for subjects who completed the Stage 3 DPE. Original applicants who were automatically DQed are not represented because it was not possible to determine at what point in the DPE the DQ error occurred.

Interrater reliability. Table 15 presents the interrater reliability coefficient for the Stage 4 DPE in each office based on point scores for original applicants who completed the Stage 3 DPE. The coefficient represents the correlation of LRE 1 scores with LRE 2 scores for all Stage 4 DPE maneuvers. The coefficient ranged from .67 in San Jose to .95 in Westminster, and was .77 for subjects pooled across offices. It is not surprising that the .77 coefficient obtained here is lower than the .84 coefficient obtained for the Stage 3 DPE, since the simulated Stage 4 DPE is a subset of Stage 3 DPE maneuvers.

Within-route interrater reliability was not computed because the simulated Stage 4 DPE did not have parallel sets of items to use as subroutes. This also made it impossible to compute interroute and net reliability coefficients for the Stage 4 DPE.

Table 15

Interrater (LRE 1 x LRE 2) Reliability for the Stage 4 DPE in Each Office for Original Applicants Who Completed the Stage 3 DPE

Office	Number of subjects	Interrater reliability
San Jose	49	.67
San Mateo	61	.90
Fullerton	64	.68
Westminster	52	.95
West Covina	35	.83
Oxnard	46	.77
Total	307	.77

<u>Validity</u>. Table 16 presents the average point score on the simulated Stage 4 DPE for original applicants and volunteer subjects as scored by the front-seat LRE. The volunteers performed significantly better than did the originals (p<.01); scores for the two groups were 12.3 and 9.0 respectively. The correlation of group (original vs. volunteer) with point score was -.18 (p<.01). The negative correlation coefficient indicates that more experienced drivers tended to perform better on the test. These results are consistent with the Stage 3 DPE validity findings showing evidence of test validity. The validity of the Stage 4 DPE using pass/fail result as the criterion could not be evaluated because, as stated above, it was not possible to determine on what maneuvers DQ errors were made.

Table 16

Average Stage 4 DPE Point Score for Original Applicants and Good-Driver Volunteers Who Completed the Stage 3 DPE

Group	Number of subjects	Average point score
Originals	312	12.3
Good-driver volunteers	36	9.0

Average DPE Test Time

Table 17 presents the average DPE test time in each office for all original applicants, and for only original applicants who completed DPE. Test time data were missing on 14 (2.9%) of the 480 DPE score sheets collected for these subjects; these cases were excluded from the computations. Entries represent the time in minutes between the start of the vehicle check and the end of the critique of the applicant's performance (just before exiting the vehicle). As would be expected, the average test time for all DPEs was smaller than that for completed (non-DQ) DPEs only. The average test time for DQ and non-DQ DPEs combined ranged from 28.5 in Westminster to 40.0 in Oxnard, and was 33.6 across offices. The average test time for non-DQ DPEs ranged from 33.4 in Westminster to 41.2 in West Covina, and was 37.3 across offices. Of course, the average DPE test time would be expected to be considerably less in Stage 4 because the Stage 4 DPE includes fewer maneuvers than the DPE evaluated in this study.

Table 17

Average Test Time in Minutes for Original Applicants in Each Office With and Without Automatic DQs Included

Office	Total	DQs excluded
San Jose	32.6	34.7
San Mateo	36.1	37.5
Fullerton	35.0	40.7
Westminster	28.5	33.4
West Covina	35.0	41.2
Oxnard	40.0	36.8
Total	33.6	37.3

DPE Compared to the Current Drive Test

<u>Difficulty</u>. Table 18 presents the test failure rates for the Stage 3 DPE and the current drive test in each office. The results are based on front-seat LRE scores for original applicants including DQs. Overall, the DPE was somewhat more difficult than the current drive test. This finding runs counter to the objective of making the DPE more difficult than the current test. However, it is believed that the fail rate for the current drive test was inflated by LRE knowledge that they were involved in a study and the fact that they had been given refresher training in current drive test scoring criteria prior to the test administrations. This artificial increase in the fail rate for the current drive test is evidenced by the much lower, 33% fail rate obtained for these six offices prior to Stage 1 (Williams and Shumaker, 1994).

Table 18

Percentage of Original Applicants in Each Office Failing the DPE and Current Drive Test as Scored by the Front-Seat LRE

Office	DPE (%)	Current test (%)
San Jose	58	49
San Mateo	29	32
Fullerton	45	45
Westminster	41	30
West Covina	52	45
Oxnard	61	59
Total	48	44

Reliability. Table 19 presents the interrater, interroute, and net reliability coefficients for the Stage 3 DPE and the current drive test evaluated in Stage 1. The reliabilities for the current drive test are taken from the Stage 1 study (Shumaker, 1994). The results are for original applicants who were not automatically DQed. The results indicate that the DPE is more reliable than the current drive test. The .77 interrater reliability of the simulated Stage 4 DPE also exceeded the .69 value for the current drive test. (Recall that the actual interrater reliability of the DPE administered in Stage 4 is expected to be higher than .77 due to various improvements to the DPE scoring criteria and DPE training that have been made since this study was conducted.)

No attempt is made here to further compare the results of this study to those obtained in the Stage 1 evaluation of the current drive test because the detailed Stage-1 findings were not available as of the writing of this report.

Table 19

Interrater, Interroute, and Net Reliability Coefficients for the Stage 3 DPE and the Current Drive Test Based on Total Point Score

Test	Interrater	Interroute	Net
Stage 3 DPE	.81	.83	.78
Current drive test	.69	.66	.60

<u>Note</u>. The interroute and net reliability coefficients for the DPE were obtained by applying the Spearman-Brown Prophesy formula to the results for DPE routes 1 and 2.

DISCUSSION AND CONCLUSIONS

The results of this study provide support for the primary objective of the DPE driver competency enhancement project, which was to construct a competency-based drive test with superior psychometric properties to the current drive test, particularly as it relates to test reliability. The new test also appears to have construct validity, as evidenced by its ability to discriminate between novice and experienced drivers. Although the DPE failure rates are not much higher than those obtained in the Stage 1 study of the current drive test, it is apparent that the Stage 1 failure rates were artificially increased by LRE knowledge that they were involved in a special study. This influence is clear from the much lower failure rate reported by Williams and Shumaker (1994) for the same offices prior to Stage 1. The version of the DPE test to be used in Stage 4 should be somewhat of an improvement over the Stage 3 prototype. (The final DPE scoring criteria are presented in Appendix E.) In addition, the Stage 4 effort will involve a much larger number of offices and subjects than Stage 3 and will investigate the ability of the DPE to discriminate between high-accident and accident-free applicants.

BIBLIOGRAPHY

- Mackie, R. R., Wylie, C. D., Shultz, T., Engel, R., Townsend, M., Lammlein, S. E., & Johnson, S. (1989). <u>Development of a recommended testing program for commercial motor vehicle operators (the CDL system)</u>. Lincoln, NE: Nebraska Department of Motor Vehicles and Washington DC: American Association of Motor Vehicle Administrators.
- Shumaker, N. C. (1994). <u>The California driver performance evaluation project: An evaluation of the current driver licensing road test</u>. Sacramento, CA: California Department of Motor Vehicles.
- Williams, R. L., & Shumaker, N. C. (1994). <u>Class C drive test baseline study:</u> <u>Preliminary report</u>. Sacramento, CA: California Department of Motor Vehicles.

APPENDIX A

Applicant/Test Information Form

APPLICANT/TEST INFORMATION (To be completed by back-seat examiner.)

Test Start Time:
Test End Time:
Last Name:
DL Number:
Birth Year:
Applicant Status (Check One)first-attempt novice originalauto club volunteerlimited-term renewalother (please specify:)
Foreign License Surrendered?yesno
Knowledge Test (Check One)EnglishnonEnglish
Ethnicity (Check One) HispanicAsianother
English Language Fluency (Check One)goodmarginalpoor
Was Drive Test Administered in English?yesno
Comments:

APPENDIX B

Stage 4 DPE Score Sheet

Due to security considerations the DPE Score Sheet is not distributed outside the department

APPENDIX C

Stage 3 DPE – Route 1 and Route 2 Designations

Due to security considerations the route designations are not distributed outside the department

APPENDIX D

Results of Stage 3 DPE Item Analysis

Table D-1
Percentage of First-Attempt Original Applicants Making an Error on Each DPE Maneuver

		11		
PRE	-DRIVE CHECK LIST			
1.	Windshield	0.0		
2.	Rear view mirrors	0.0		
3.	Turn signals	0.0		
4.	Brake lights	0.0		
5.	Tires	0.0		
6.	Foot brake	0.0		
7.	Horn	0.2		
8.	Emergency/parking brake	1.7		
9.	Driver window	0.0		
10.	Arm signals	5.8		
11.	Windshield wipers	3.8		
12.		16.9		
13.		11.3		
	Headlights	4.2		
	Gears/clutch	0.0		
		0.0		
	Passenger door Glove box	0.0		
18.	Seat belts	0.0		
AUT	TOMATIC DISQUALIFICATION			
	rvention by examiner	12.1		
	kes object	0.0		
	and over curb or sidewalk	0.2		
	res in oncoming traffic lane	1.7		
	beys traffic sign or signal	3.3		
	gerous maneuver	10.2		
	etion to school bus	0.2		
	ction to sensor bus	0.0		
Spee		9.0		
	iliary equipment use	0.4		
	ning from improper lane	2.1		
Tull	mig from improper falle	2.1		
PAR	RKING			
Park	ring Skill	E	X	
Traf	fic check	15.4	9.6	
Spee	ed	0.6	0.4	
Brak		1.3	0.6	
	icle position	11.0	9.6	
	_			
	king Lot Driving	1	2	
	fic check	14.1	5.1	
Spee	ed	1.6	2.6	
Stre	et Park	E	X	
	fic check	34.3	28.9	
Sign		20.8	31.4	
Spee		0.0	0.0	
Park		36.9	0.6	
Para	•	4.2	-	
1 414		1, ∠	· ·	

Table D-1 (Continued)

INTERSECTIONS										
Driving Through	1	1	2		3		4		Avg.	
Traffic check	48		43.9		45.5		57.8		50.0	
Yield		.0	1.0		0.6		0.7		0.6	
Speed		.6	2.6		3.5		2.7		2.4	
Specu	O	.0	2.0	,	3.3		2.7		2,1	
Stopping										
Traffic check		.6	2.6		2.4		0.7		1.8	
Speed	0	.0	1.0)	0.7		0.7		0.6	
Full stop	6	.1	3.2	<u>)</u>	1.7		5.9		4.2	
Gap or limit line	20	.3	12.5	;	7.1		13.4		13.3	
Starting										
Traffic check	1	.6	2.3	}	6.8		2.9		3.4	
Yield		.6	0.3		1.4		1.3		1.2	
Speed		.3	0.3		1.0		0.3		0.5	
					1.0			DICIT		
TURNS Approach	1	2	LEFT 3	4	A 27.07	1	2	RIGHT 3	4	Λνα
Traffic check	1.9	6.1	2.6	16.4	Avg. 6.8	1.0	12.8	16.4	3.9	Avg. 8.5
	1.3	0.0	2.3	0.6	1.1	0.3	0.6	0.3	0.3	0.4
Signal	4.5	3.5	2.6	4.5	3.8	2.2	1.6	4.2	1.0	2.3
Speed	1.0	0.3	2.9	1.0	1.3	1.3	3.9	4.2	9.0	4.6
Lane	1.0	0.3	2.9	1.0	1.3	1.5	3.9	4.2	9.0	4.0
If Stop										
Necessary	2.6	0.6	2.2	1.3	1.7	3.9	1.9	1.0	0.3	1.8
Full stop	1.3	0.0	0.0	0.6	0.5	7.4	4.8	6.7	9.3	7.1
Gap or limit line	8.3	1.9	2.9	3.5	4.2	17.0	13.8	12.2	13.5	14.1
Wheels straight	1.9	0.3	0.0	0.0	0.6	-	-	-	-	
Turn/Complete										
Traffic check	5.8	3.5	3.6	8.0	5.2	4.2	1.3	4.5	1.3	2.8
Steering control	0.6	0.6	0.3	0.0	0.4	1.0	1.3	0.3	0.6	0.8
Not too wide	1.6	2.2	1.0	0.3	1.3	1.3	2.9	1.9	3.5	2.4
Not too short	4.8	2.2	10.3	4.5	5.5	0.0	0.3	0.0	0.0	0.1
Correct lane	0.0	1.2	0.7	0.0	0.5	1.0	0.6	0.6	2.6	1.2
Speed	2.3	3.2	2.3	1.3	2.3	1.0	1.1	1.9	2.3	1.6
Signal	0.0	1.0	0.3	0.0	0.3	0.0	0.0	0.3	0.6	0.2
STRAIGHT BUSINES	S/RESII	DENTIA	L							
	B1		B2		vg.	R1		R2	Avg.	
Traffic checks	18.6		18.6	18		35.9	3	36.2	36.1	
Lane position	2.2		1.0		.6	0.3		0.6	0.5	
Speed	11.5		15.1	13		14.4	2	25.3	19.9	
Spacing	2.2		1.0	1	.6	0.0		0.0	0.0	
LANE CHANGES - BU	JSINESS	OR RE	SIDENT	IAL						
Lane Changes	L		R	Av	vg.	L		R	Avg.	
Traffic check	21.9		18.0	20		18.0		9.8	13.9	
Signal	2.9		0.6	1	.8	0.6		2.6	1.6	
Spacing	5.8		3.2		.5	3.2		1.3	2.3	
Speed	3.2		4.5		.9	4.5		2.3	3.4	
Steering control	0.0		0.3	0	.2	0.3		2.0	1.2	
-										

Table D-1 (Continued)

FREEWAY			
Entering	1	2	Avg.
Traffic check	22.4	23.7	23.3
Signal	9.0	8.7	8.9
Speed	13.1	7.0	10.1
Spacing	1.0	0.6	0.8
Lane position	10.3	3.2	6.8
Merge	1	2	Avg.
Traffic check	22.4	31.7	27.1
Signal	15.1	12.5	13.8
Spacing	4.2	2.2	3.2
Speed	21.5	14.7	18.1
Steering control	1.9	1.6	1.8
Lane Use	1	2	Avg.
Traffic check	11.9	13.8	12.9
Lane position	7.1	5.1	6.1
Speed	26.0	20.5	23.3
Spacing	0.3	1.3	0.8
Exiting	1	2	Avg.
Traffic check	23.7	25.0	24.4
Signal	9.3	7.1	8.2
Spacing	1.0	0.3	0.7
Lane position	6.4	4.8	5.6
Speed	13.8	11.5	12.7
Steering control	1.0	0.6	0.8
CURVE			
	L	R	
Entering speed	1.6	4.5	
Through speed	5.8	4.8	
Lane position	5.1	3.2	

Table D-2

Item-Total Correlation for Selected DPE Items Based on Scores for Original Applicants

PARKING					
Parking Skill	E		X		
Traffic check	.28	3	.30		
Speed	.07	7	.26		
Braking	-		=		
Vehicle position	.08	}	08		
Parking Lot Driving	1		2		
Traffic check	.37	7	.18		
Speed	.09)	.14		
Street Park	E		X		
Traffic check	30.		.27		
Signal	.00)	.17		
Speed	-		-		
Parking	.15		06		
Parallel	.09)	-		
INTERSECTIONS					
Driving Through	1	2	3	4	
Traffic check	.22	.08	.18	.18	
Yield	-	.26	.12	.12	
Speed	.13	.31	.14	.10	
Stopping					
Traffic check	.24	.13	.14	.00	
Speed	-	.11	.07	.07	
Full stop	.28	.01	.31	.25	
Gap or limit line	.28	.06	.18	.19	
Starting					
Traffic check	.09	.15	.07	04	
Yield	.16	03	.13	.08	
Speed	.08	.05	.13	.16	

Table D-2 (Continued)

TURNS		L	EFT			RIC	GHT		
Approach	1	2	3	4	1	2	3	4	
Traffic check	.08	05	.20	.03	01	.39	.07	.01	
Signal	.00	-	.19	01	01	.09	02	.03	
Speed	.41	.30	.15	.22	.06	.16	.13	.16	
Lane	.20	.26	.07	02	.18	.04	.00	.10	
If Stop									
Necessary	.26	.17	04	.14	07	.07	06	.00	
Full stop	.08	-	_	.13	.33	.30	.34	.44	
Gap or limit line	.21	.26	.23	.25	.25	.18	.05	.07	
Wheels straight	.13	.11	-	-	-	-	-	-	
Turn/Complete									
Traffic check	.16	.05	.09	.18	03	.08	.14	.11	
Steering control	.03	.08	.00	-	.01	.32	06	.01	
Not too wide	.00	.01	.07	.02	.02	.00	.12	.02	
Not too short	.14	.10	.31	.07	-	04	_	-	
Correct lane	-	01	.06	-	.13	06	.02	.00	
Speed	.12	.14	.15	.05	.16	.03	.02	03	
Signal	-	.05	.00	-	-	-	.06	.05	
STRAIGHT BUSINES	SS/RESII	DENTIA	L						
	B1		B2	R1	R2				
Traffic checks	.27		.36	.30	.34				
Lane position	.15		.30	.15	.29				
Speed	.16		.39	.26	.25				
Spacing	.15		02	_	-				
LANE CHANGES - BI		OR RI							
Lane Changes	L		R	L	R				
Traffic check	.40		.27	.32	.18				
Signal	.21		.26	.27	.13				
Spacing	.32		.12	.28	.13				
Speed	.10		.20	.21	.07				
Steering control	-		.16	03	.19				

Table D-2 (Continued)

FREEWAY			
Entering	1	2	
Traffic check	.31	.42	
Signal	.15	.13	
Speed	.18	.24	
Spacing	.00	.04	
Lane position	03	.07	
Merge	1	2	
Traffic check	.19	.23	
Signal	.07	.25	
Spacing	.04	.02	
Speed	.20	.28	
Steering control	.10	.07	
Steering control	.10	.07	
Lane Use	1	2	
Traffic check	.31	.36	
Lane position	.39	.21	
Speed	.34	.26	
Spacing	.00	.21	
Exiting	1	2	
Traffic check	.13	.07	
Signal	.34	.25	
Spacing	.02	.10	
Lane position	.13	.07	
Speed	.18	.20	
Steering control	.06	.08	
CURVE			
	L	R	
Entering speed	.20	.17	
Through speed	.29	.31	
Lane position	.10	.14	

Table D-3 $\label{eq:D-3}$ Interrater (LRE 1 x LRE 2) Reliability for Selected DPE Items

AUTOMATIC DISQUA	ALIFICATIO)N				
Intervention by examine			.80)		
Strikes object			-			
Up and over curb or side	ewalk		1.00)		
Drives in oncoming traff	fic lane		.75	5		
Disobeys traffic sign or s	signal		.61			
Dangerous maneuver			.65	5		
Reaction to school bus			-			
Reaction to emergency v	rehicle		-			
Speed			.68	3		
Auxiliary equipment use			.82			
Turning from improper	lane		.90)		
PARKING						
Parking Skill		E		X		
Traffic check		.55		.52		
Speed		.50		.71		
Braking		.33		.00		
Vehicle position		.81		.81		
Parking Lot Driving		1		2		
Traffic check		.45		.30		
Speed		.19		.82		
Эреси		.17		.02		
Street Park		E		X		
Traffic check		.55		.86		
Signal		.70		.83		
Speed		-		-		
Parking		.93		.71		
Parallel		.34		-		
INTERSECTIONS						
Driving Through	1		2	3	4	
Traffic check	.53		.56	.54	.55	
Yield	-		.50	-	-	
Speed	.28		.14	.30	.44	
Stopping						
Traffic check	01		.12	01	.35	
Speed	-		.50	.00	.50	
Full stop	.42		.50	.46	.56	
Gap or limit line	.63		.60	.32	.49	
Starting						
Traffic check	.45		.36	.37	.40	
Yield	.69		-	01	.51	
Speed	-		_	.00	.00	
- r						

Table D-3 (Continued)

TURNS		L	EFT			RIC	GHT		
Approach	1	2	3	4	1	2	3	4	
Traffic check	.14	.48	.60	.48	.61	.27	.75	.37	
Signal	.63	-	.15	-	.35	01	.00	_	
Speed	.37	.53	.44	.43	.63	.36	.29	01	
Lane	.58	-	.56	01	.28	.46	.69	.48	
If Stop									
Necessary	.91	-	.79	1.00	.95	.77	.70	-	
Full stop	.50	-	-	.70	.40	.51	.54	.57	
Gap or limit line	.65	.52	.74	.81	.57	.71	.58	.69	
Wheels straight	.91	1.00	-	-					
Turn/Complete									
Traffic check	.45	.51	.11	.28	.34	01	.30	.28	
Steering control	01	.25	-	-	.00	.50	-	.00	
Not too wide	.70	.53	.40	01	01	.59	.51	.59	
Not too short	.44	.29	.57	.63	-	-	-	-	
Correct lane	-	.44	.00	-	.82	.82	.50	.94	
Speed	.21	.15	.17	01	.40	01	.21	.19	
Signal	-	1.00	1.00	-	-	-	-	.00	
STRAIGHT BUSINE	ESS/RESI	DENTIA	L						
	B1		B2	R1	R2				
Traffic checks	.08		.27	.42	.37				
Lane position	.30		01	-	.01				
Speed	.55		.63	.50	.40				
Spacing	.59		.35	-	-				
LANE CHANGES - 1		S OR RI							
Lane Changes	L		R	L	R				
Traffic check	.80		.61	.77	.62				
Signal	.51		.19	.25	.39				
Spacing	.61		.40	.51	01				
Speed	.23		.39	.27	.63				
Steering control	-		.61	.00	.25				

Table D-3 (Continued)

FREEWAY			
Entering	1	2	
Traffic check	.55	.60	
Signal	.36	.26	
Speed	.34	.29	
Spacing	-	01	
Lane position	.41	.23	
1			
Merge	1	2	
Traffic check	.55	.51	
Signal	.56	.42	
Spacing	.60	.67	
Speed	.51	.45	
Steering control	.46	.23	
O			
Lane Use	1	2	
Traffic check	.53	.44	
Lane position	.53	.48	
Speed	.68	.56	
Spacing	.33	.43	
1 0			
Exiting	1	2	
Traffic check	.61	.57	
Signal	.48	.40	
Spacing	.24	.00	
Lane position	.55	.30	
Speed	.42	.49	
Steering control	.40	.00	
CURVE			
	L	R	
Entering speed	.33	.46	
Through speed	.29	.29	
Lane position	.18	.19	

Table D-4

Total Number of Errors Scored by the Front-Seat Examiner in Each Maneuver Category for Original Applicants, and Experienced Good-Driver Volunteers, Who Completed the DPE

Maneuver	Originals	Good-driver volunteers
PARKING ENTERING (E)	-	
Parking Skill		
Traffic check	0.14	0.00
Speed	0.00	0.00
Braking	0.02	0.00
Vehicle position	0.14	0.04
Parking Lot Driving		
Traffic check	0.14	0.00
Speed	0.02	0.00
Street Park		
Traffic check	0.34	0.31
Signal	0.21	0.25
Speed	0.00	0.00
Parking	0.37	0.47
Parallel	0.04	0.00
PARKING EXITING (X)		
Parking Skill		
Traffic check	0.10	0.00
Speed	0.00	0.00
Braking	0.01	0.00
Vehicle position	0.12	0.04
Parking Lot Driving		
Traffic check	0.05	0.02
Speed	0.03	0.00
Street Park		
Traffic check	0.29	0.33
Signal	0.25	0.25
Speed	0.00	0.00
Parking	0.01	0.00
	0.01	0.00
INTERSECTIONS		
Driving Through Traffic check	1.94	1.61
Yield	0.02	0.00
Speed	0.02	0.03
-	0.09	0.03
Stopping Traffic aloads	0.07	0.00
Traffic check	0.07	0.00
Speed Evil store	0.02	0.00
Full stop	0.17	0.11
Gap or limit line	0.53	1.00
Starting	0.12	0.02
Traffic check	0.13	0.03
Yield	0.04	0.00
Speed	0.02	0.06

Table D-4 (Continued)

TURNS LEFT		
Approach		
Traffic check	0.55	0.69
Signal	0.04	0.00
Speed	0.15	0.00
Lane	0.05	0.00
Lane	0.03	0.00
If Stop	0.07	0.03
Necessary	0.02	0.03
Full stop	0.17	0.14
Gap or limit line	0.17	0.14
Wheels straight	0.02	0.00
Turn/Complete		
Traffic check	0.21	0.11
Steering control	0.02	0.11
Not too wide	0.05	0.00
Not too short	0.22	0.17
Correct lane	0.02	0.00
Speed	0.09	0.00
Signal	0.01	0.00
TURNS RIGHT		
Approach		
Traffic check	0.34	0.14
Signal	0.02	0.00
	0.09	0.00
Speed		0.00
Speed Lane		0.00
Lane	0.18	
Lane If Stop	0.18	0.00
Lane If Stop Necessary	0.18	0.00
Lane If Stop Necessary Full stop	0.18 0.07 0.28	0.00 0.00 0.08
Lane If Stop Necessary	0.18	0.00
Lane If Stop Necessary Full stop Gap or limit line	0.18 0.07 0.28	0.00 0.00 0.08
Lane If Stop Necessary Full stop	0.18 0.07 0.28	0.00 0.00 0.08
Lane If Stop Necessary Full stop Gap or limit line Turn/Complete Traffic check	0.18 0.07 0.28 0.56	0.00 0.00 0.08 0.78
Lane If Stop Necessary Full stop Gap or limit line Turn/Complete	0.18 0.07 0.28 0.56	0.00 0.00 0.08 0.78
Lane If Stop Necessary Full stop Gap or limit line Turn/Complete Traffic check Steering control	0.18 0.07 0.28 0.56 0.11 0.03	0.00 0.00 0.08 0.78 0.08 0.00
If Stop Necessary Full stop Gap or limit line Turn/Complete Traffic check Steering control Not too wide	0.18 0.07 0.28 0.56 0.11 0.03 0.10	0.00 0.00 0.08 0.78 0.08 0.00 0.06
If Stop Necessary Full stop Gap or limit line Turn/Complete Traffic check Steering control Not too wide Not too short	0.18 0.07 0.28 0.56 0.11 0.03 0.10 0.00	0.00 0.00 0.08 0.78 0.08 0.00 0.06 0.00
If Stop Necessary Full stop Gap or limit line Turn/Complete Traffic check Steering control Not too wide Not too short Correct lane	0.18 0.07 0.28 0.56 0.11 0.03 0.10 0.00 0.05	0.00 0.00 0.08 0.78 0.08 0.00 0.06 0.00 0.00 0.08

Table D-4 (Continued)

STRAIGHT BUSINESS		
Traffic checks	0.37	0.22
Lane position	0.03	0.00
Speed	0.27	0.14
Spacing	0.03	0.06
1 0		
STRAIGHT RESIDENTIAL		
Traffic checks	0.72	0.17
Lane position	0.01	0.00
Speed	0.40	0.31
Spacing	0.00	0.00
A ANTE CHANGE ON ON THE CO		
LANE CHANGES BUSINESS		
Lane Changes	0.40	0.00
Traffic check	0.40	0.39
Signal	0.04	0.00
Spacing	0.09	0.00
Speed	0.08	0.03
Steering control	0.00	0.00
LANE CHANGES		
RESIDENTIAL		
Lane Changes		
Traffic check	0.22	0.31
Signal	0.05	0.08
Spacing	0.03	0.00
Speed	0.06	0.03
Steering control	0.04	0.00
Steering control	0.04	0.00
FREEWAY		
Entering		
Traffic check	0.46	0.14
Signal	0.18	0.14
Speed	0.20	0.06
Spacing	0.02	0.00
Lane position	0.13	0.08
Zwie position	0.10	0.00
Merge		
Traffic check	0.54	0.31
Signal	0.28	0.11
Spacing	0.06	0.06
Speed	0.36	0.02
Steering control	0.04	0.00

Table D-4 (Continued)

FREEWAY (continued)				
Lane Use				
Traffic check	0.26	0.06		
Lane position	0.12	0.03		
Speed	0.46	0.14		
Spacing	0.02	0.00		
Exiting				
Traffic check	0.49	0.39		
Signal	0.16	0.06		
Spacing	0.01	0.00		
Lane position	0.11	0.08		
Speed	0.25	0.11		
Steering control	0.02	0.00		
CURVE LEFT (L)				
Entering speed	0.02	0.00		
Through speed	0.06	0.00		
Lane position	0.05	0.14		
CURVE RIGHT (R)				
Entering speed	0.05	0.00		
Through speed	0.05	0.00		
Lane position	0.03	0.00		

APPENDIX E

Stage 4 DPE Scoring Criteria

DRIVING PERFORMANCE EVALUATION

OVERVIEW

Introduction

This chapter includes basic procedural information concerning the administration of Driving Performance Evaluation (DPE).

Contents

This chapter is divided into the following sections:

	Starts on
Title	Page
General Information	2
Registration and Insurance	3
Elements of the DPE	4
Scoring of DPE	6
Scoring Criteria for DPE	9
Conduct During DPE	33
Processing Summary	35
Turn and Stop Diagram	Appendix
	A

CLASS C DRIVING PERFORMANCE EVALUATION

GENERAL INFORMATION

What is DPE

The Driving Performance Evaluation (DPE) is an in-vehicle evaluation of an applicant's Class C driving competency.

Main objective

The DPE determines whether the applicant:

- Has the ability to operate a vehicle safely.
- Has formed proper habits for safe driving.
- Can translate knowledge of traffic laws into actual practice
- Compensates for any physical conditions that might be present, such as subnormal vision, poor hearing, or loss of limb.

NOTE: Another objective of the DPE is to call the applicant's attention to those deficiencies in skill or habit that are unsafe, but do not necessarily disqualify the applicant from obtaining a license.

Verification of accompanying driver and insurance

Verbal verification by the applicant of an accompanying driver and presenting evidence of insurance is to be performed inside the field office at the time the applicant reports for the DPE.

Turn signals

Inform the applicant that electric turn signals will be required during the evaluation even on occasions when not actually required by law, i.e., when no other vehicle would be affected by the maneuver.

Use of brake pedal

The department is neutral regarding which foot should be used on the brake pedal. The examiner should only be concerned with the proper control and effective use of the brakes.

It is not an error when an applicant uses the left foot on the brake (when there is no clutch pedal) unless the applicant is pressing the right foot on the accelerator while simultaneously braking with the left foot

Page 3

REGISTRATION AND INSURANCE

Registration and insurance requirement

All vehicles used in a DPE must have a license plate located at the rear of the vehicle displaying current registration sticker(s) and must be insured. The following indicates what is acceptable for plates, registration sticker(s), and proof of insurance.

If any requirement is not satisfied, the DPE is to be rescheduled, if possible, for a later time that day.

Item	Requirement	
Plate(s)/Registration Sticker(s)	California registered or out-of-state registered vehicle must display	
	At least one plate and current sticker(s), or	
	California Temporary Operation Permit (Reg 19), or	
	California trip permit	
	NOTE: Presentation of a registration card is not mandatory for the DPE.	
Insurance	Evidence of insurance may be:	
	Any document with the insurance policy number or surety bond number and the name of the insurer.	
	A certificate or acknowledgment of deposit issued by the DMV to an owner who is self-insured or a depositor.	
	Current insurance "binder" agreement.	
	IMPORTANT: For a rental vehicle, the applicant's name must appear on the rental agreement and the contract must not exclude driving tests.	
	NOTE: If the office manager or designee is satisfied that coverage does exist, the DPE will be given.	

CLASS C DRIVING PERFORMANCE EVALUATION

ELEMENTS OF THE DPE

Pre-drive checklist

The pre-drive checklist is used to determine whether the driver's vehicle and the driver's knowledge of the vehicle meet the department's minimum safety standard.

Turn and Stop

The turn and stop element is used to help determine whether the driver can be safely evaluated on the road test portion or the DPE.

The driver is directed to turn into and exit from a space marked by 7 stanchions (see Appendix for details). If the test vehicle is an oversized Class C vehicle, e.g., motor home, or a straight struck, see **Oversized Class C Vehicles** towards the end of this chapter.

Road test

The road elements are used to determine whether the driver can operate the vehicle safely in varying driving situations after passing the pre-drive and Turn and Stop.

- parking lot driving.
- street park.
 - ✓ applicant pulls to the side of the road and parks, then pulls back into traffic.
- eight intersections.
 - ✓ two controlled by a light (red, yellow, and green).
 - ✓ two controlled by a stop sign.
 - ✓ two through (straight ahead) intersections not involving stops.
 - ✓ two additional intersections (preferably intersections controlled by traffic lights, but can be any of the above).
- for left and four right turns.
 - ✓ mixed difficulty levels.
 - ✓ at least two left and two right turns should have multiple lanes requiring correct lane choice on approach and finish.
 - ✓ two at signal controlled locations
 - -- one left
 - -- one right
 - ✓ two additional turns (preferably at intersections controlled by stop signs, but may be uncontrolled with limit lines, crosswalks, turn lanes, etc.

Page 5

ELEMENTS OF THE DPE, continued

Road test, continued

- one straight residential section.
 - ✓ minimum 3 blocks; preferably a narrow street.
- one straight business section.
 - ✓ minimum 3 blocks.
 - ✓ moderate traffic density.

Note: The objective of the residential and business section is to put the applicant at ease so that the applicant will more likely drive as if not being evaluated.

two lane changes.

- ✓ one lane change to the right
- ✓ one lane change to the left
- ✓ located anywhere on the route; preferably at higher speeds.

• one curve.

- ✓ preferably a left curve.
- ✓ lanes should be marked if possible.
- ✓ must require driver to adjust speed.
- ✓ located anywhere on the route (freeway, freeway entrances, residential area, etc.)

• one segment of freeway driving.

- ✓ minimum of one-half mile, preferred
- ✓ must have merge on-ramp and exit lane or ramp.
- ✓ if there is no merge on-ramp, a merge elsewhere on the route may be used.

NOTE: A four-lane highway with a minimum speed of 45 mph and with an acceleration and deceleration lane may be substituted for a freeway only if a freeway is not available.

Freeway driving

When it becomes necessary to eliminate the freeway component for a limited period of time (road construction, major accident, etc.) the office is to use the alternative route to evaluate the applicant's ability to merge on and off a major road.

DO NOT restrick original drivers to non-freeway driving because it was not included on the DPE. However, for limited term and special drive applicants, a non-freeway driving restriction will still be utilized as needed for P&M conditions.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING OF DPE

Scoring objective

The DPE examiner scores a series of maneuvers at predetermined locations. The score sheet and scoring criteria break down each maneuver into a series of task and behaviors that the driver must perform correctly. The scoring criteria provides the examiner with explicit objective cues and standards for deciding if a behavior was performed correctly. If the task and/or behavior is not performed according to the criteria, the examiner marks the appropriate space on the score sheet.

Score sheet

The score sheet consists of a pre-drive, nine driving maneuvers, and a list of the different types of automatic disqualifications.

The three principal purposes of score sheets are:

- To document the standard of driving required of all applicants.
- To make examining techniques and passing requirements uniform
- To record the driving performance results.

Disposition of score sheet

The original copy of the score sheet is given to the applicant.

The department copy of the score sheet is retained in one of two files in date order.

- Retain passing score sheets for two months.
- Retain failing score sheets for twelve months.

Scoring the pre-drive

The DPE starts with a pre-drive checklist. Each item has a box next to it. If the vehicle and/or the applicant meets the criteria check the box for that item. If the criteria is not met, circle the number of the item.

Page 7

SCORING OF DPE, continued

Scoring the road test maneuvers

There are nine driving maneuver categories. For each category, there is:

- A list of driver behaviors to be scored.
- Beside each behavior within the category there is a 0 to be used for marking the driver behavior.
- At the top of each column of 0s is a bolded letter or number.

Us the following method for tracking when a maneuver is scored:

- Immediately before scoring a list of driver behaviors circle the bolded letter or number at the top of the column of 0s.
- If the driver performs the maneuver incorrectly, draw a line through the 0.
- If the driver performs the maneuver correctly, **do not** make a mark through the 0.
- If for some reason a maneuver is not scored, draw a vertical line through the entire column of 0s for that maneuver.

NOTE: Do not score items unless you actually observe them. If the route or traffic conditions do not permit a maneuver to be scored at the designated location, draw a line through the entire column of 0s for that maneuver.

Scoring automatic disqualifications

If an Automatic Disqualification error occurs anywhere on the route, score the error in the Automatic Disqualification section of the score sheet and end the DPE. Direct the applicant back to the office by the most suitable route.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING OF DPE, continued

Score as you go

Mark the score sheet when a driver does not perform a maneuver according to the scoring criteria at the time the maneuver is to be performed. *Do not* depend on your memory to do so later.

Do not instruct

Never coach or instruct the driver while scoring. A good job of scoring will take all of your time. Give directions, not instructions.

Completing the score sheet

At the end of the evaluation complete the Comments section. Review the scoring form and check that everything is marked clearly and correctly. Be sure you lined out the maneuvers that were not performed during the evaluation. Carefully add up the number of marked 0s and write in the total in the space opposite "Number of errors:." Passing is 15 errors or less.

EXCEPTION: An immediate automatic disqualification does not have a numeric score, only the letters "DQ."

Always double check calculations

Before informing the applicant of the test results, and before entering the total number of errors in the Result box, **always** double check to be sure that you have added the score correctly.

Comments section

This section provides an area on the score sheet to:

- Describe how the driver failed to meet the specific scoring criteria for satisfactory performance.
- Describe in detail the circumstances of any automatic disqualification.

NOTE: It is *extremely* important on point failures and automatic disqualifications that the error(s) be documented in the Comments section of the score sheet.

Page 9

SCORING CRITERIA FOR DPE

Scoring the road test maneuvers

The DPE scoring criteria apply to all Class C DPEs.

The detailed scoring criteria are designed to maximize scoring consistency. Nevertheless, it is not possible to develop scoring criteria that are so explicit or rigid that examiners will always agree on every driver behavior.

NOTE: The Class C DPE scoring criteria do not apply to Commercial Class C applicants.

Pre-drive checklist

This section specifies the requirements for each item on the Predrive Checklist. If any one of items 1-8 or 15-17 is not satisfactory, the DPE is to be re-scheduled for a later time that day if possible. If it is not possible to re-schedule for the same day, the DPE is to be postponed.

If four or more of items 9-14 (bold) are not satisfactory, the applicant is disqualified. This result is keyed as a failure on the Test Result screen in the automate system.

Item	Requirement
1. Driver window	The window on the driver side must open. (If the window is closed, have the applicant open the window.)
	NOTE: The window may be closed again after the demonstration.
2. Windshield*	The windshield must provide a full unobstructed field of view for both driver and examiner.
3. Rear view mirrors	The vehicle must have at least two mirrors. One must be located outside on the left side of the vehicle. The other may be located inside center or on the outside on the right side of the vehicle. Mirrors must be secure and provide clear visibility to the rear.

^{*}In the agreement covering Bargaining Unit 7, Protective

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Pre-driver checklist, continued

4. Turn Signals Both right and left turn signals and back of the vehicle must w 5. Brake lights Both brake lights (one each sid vehicle) must work.	ork.	
5. Brake lights Both brake lights (one each sid		
O ,		
vohicle) must work	e of the	
verucie) iliust work.		
NOTE: Both does not include t	the	
"cyclops" light on newer vehic	eles.	
6. Tires* Each tire must have 1/32" trea		
and two major adjacent tread g		
, ,	,	
NOTE: The major grooves are	in	
different locations, depending		
type of tire.	r	
7. Foot brake There must be at least one inch	n of	
clearance between the pedal ar		
floor board when the pedal is a		
	The horn must be:	
Designed for a vehicle and	in proper	
working condition.	working condition.	
Audible from a distance of	at least	
200 feet.	200 feet.	
NOTE: The horn cannot be a b	icycle	
horn.	Š	
9. Emergency/ Correctly locates the emergence	cv/	
parking brake parking brake control.		
10. Arm signals Correctly demonstrates arm signals	gnals for:	
Left turn		
Right turn		
Slowing down or stopping		
11. Windshield Correctly locates the windshield	ld-wipers	
wipers switch.	_	

^{*}In the agreement covering Bargaining Unit 7, Protective Services/Public Safety.

Page 11

SCORING CRITERIA FOR DPE, continued

Pre-driver checklist, continued

Item	Requirement	
13. Emergency	Correctly locates the emergency flasher	
flasher (4 way	switch if vehicle is equipped with	
flashers)	emergency flashers.	
14. Headlights	Correctly locates the headlight switch.	
15. Passenger door*	Passenger side door must open and close	
	properly.	
16. Glove box*	Glove box door must be closed and	
	securely shut.	
17. Seat belts	• Starting with 1968 passenger vehicles	
	and 1972 house cars and trucks	
	weighing less than 6001 pounds, the	
	vehicle must have seat belts for both	
	the driver and examiner.	
	Both seat belts must work properly.	

^{*}In the agreement covering Bargaining Unit 7, Protective Services/Public Safety.

NOTE: In inclement weather, the applicant must demonstrate that items 11-14 are working properly or the evaluation will have to be

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Turn and Stop

This section provides the criteria to evaluate the driver's ability to turn and stop in a prescribed space.

Section	Maneuver	Item Scored	Criteria
Turn and Stop	Entering and Exiting	Traffic check E/X	Driver is observing traffic (vehicle and pedestrian) ahead and to the left and right while entering (E) space.
			Driver is observing traffic (vehicle and pedestrian) to rear and to the left and right while exiting (X) from space.
			Looks over appropriate shoulder while backing.
			Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Reacts safely to traffic situations.
		Speed E/X	Enters and exits space at a safe speed and in control of the vehicle.
		Braking E/X	Brings vehicle to a smooth stop (does not jerk vehicle).
			Depresses brake pedal without depressing the accelerator at the same time.
		Vehicle position E/X	Enters and exits space without touching the stanchions.
			Stops vehicle between the stanchions without touching any curb or stanchion(s)
			Performs maneuver with no more than one correction.
			Stops vehicle without impeding traffic.

Page 13

SCORING CRITERIA FOR DPE, continued

Parking lot driving evaluation

This section provides the criteria to evaluate the driver's ability to drive through a parking lot.

Section	Maneuver	Item Scored	Criteria
Parking Lot Driving	N/A	Traffic check	Driver is observing traffic (vehicle and pedestrian) ahead and to the left, right, and rear. Indicated by head and/or eye movement to the left and right and use of mirrors.
			Yields right-of-way to pedestrians and vehicles when appropriate.
			Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Reacts safely to traffic situations.
		Speed	Drives through the parking lot at a safe speed and in control of the vehicle.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Street park evaluation

This section provides the criteria to evaluate the driver's ability to park a vehicle along a curb and pull back out into traffic.

Section	Maneuver	Item Scored	Criteria
Street Park	Entering and Exiting (E/X)	Traffic check E/X	While entering, driver is observing traffic ahead, to the right, and rear. Indicated by head and/or eye movement to the left and right and use of mirrors.
			While exiting, driver is observing traffic ahead, to the right, and rear. Indicated by head and/or eye movement to the left and right and use of mirrors.
			Checks appropriate blind spot.
			Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Reacts safely to traffic situations.
		Signal E/X	 Activates signal prior to entering and exiting the parking space.
			Cancels signal after entering and exiting the parking space.
		Speed E/X	Enters and exits parking space at a safe speed and in control of the vehicle.

Page 15

SCORING CRITERIA FOR DPE, continued

Street park evaluation continued

Section	Maneuver	Item Scored	Criteria
Street Park,	Entering	Parking E/X	Sets parking brake.
continued	and Exiting		Releases parking brake.
	(E/X), continued		If parked on a hill:
	commuca		Turns wheel in correct direction to prevent rolling.
			Vehicle does not roll. (OK to block wheels against curb.)
		Parallel	Vehicle is parallel to, and within 18 inches of curb without hitting the curb.
			Performs maneuver with no more than one correction.
			Does not block driveway, fire hydrant, etc.

Intersection evaluation This section provides details on how to evaluate the driver's performance at intersections.

Section	Maneuver	Item Scored	Criteria
Intersections	Through	Traffic check	Driver is observing traffic (vehicle and pedestrian) ahead, to the left, and right. Indicated by head and/or eye movement to the left and right and use of mirrors.
			Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Yields to vehicles or pedestrians in the intersection.
			Reacts safely to traffic situations.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Intersection evaluation, continued

Section	Maneuver	Item Scored	Criteria
Intersections, continued	Through, continued	Speed	Maintains speed without exceeding the posted speed limit.
			Maintains appropriate speed for traffic conditions (basic speed law).
		Unnecessary stop	Stops on yellow light when should have gone through.
			Stops vehicle when not necessary.
	Stop	Traffic check	Driver is observing traffic (vehicle and pedestrian) ahead, to the left, right, and rear. Indicated by head and/or eye movement to the left and right and use of mirrors.
			Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Reacts safely to traffic situations.
		Speed	Decelerates and brakes smoothly.
			Depresses brake pedal without depressing the accelerator at the same time.
			For manual-transmission vehicle, keeps gear engaged.

Page 17

SCORING CRITERIA FOR DPE, continued

Intersection evaluation, continued

Section	Maneuver	Item Scored	Criteria
Intersections, continued	Stop, continued	Full stop	Brings vehicle to a full stop without jerking.
			When necessary, brakes to stop for yellow light.
			 For manual-transmission vehicle, keeps gear engaged. Once stopped, applicant can place the vehicle in neutral.
			No movement forward or roll backward.
		Gap or Limit line	Able to see rear wheels of vehicle in front or has enough room to maneuver around vehicle without backing up.
			• Stops within 6 feet (about a half a car length) from the limit line.
			If no limit line, stops within 6 feet (about a half a car length) from the corner of the intersection.
			 Stops without the front most part of the vehicle being: In intersection. Over limit line. Beyond sidewalk or stop sign.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Intersection evaluation, continued

Section	Maneuver	Item Scored	Criteria
Intersections, continued	Start	Traffic Check	 Driver is observing traffic (vehicle and pedestrian) ahead, to the left, and right. Indicate by head and/or eye movement to the left and right.
			 Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			• Reacts safely to traffic situations.
		Yield	Yields to vehicles or pedestrians already at or in the intersection.
			 Accepts right-of-way without causing confusion or impeding traffic flow.
			 Accepts right of way within 4 seconds from when it is safe to start.
			• Reacts safely to traffic situations.
		Speed	Accelerates smoothly. (Includes proper gear and clutch usage by the applicant if the vehicle has a manual transmission.

Page 19

SCORING CRITERIA FOR DPE, continued

Turns evaluation

This section provides details on how to evaluate the driver's performance in turning.

Section	Maneuver	Item Scored	Criteria
Turns	Approach	Traffic Check	Driver is observing traffic (vehicle and pedestrian) ahead, to the left, right, and rear. Indicate by head and/or eye movement to the left and right and use of mirrors.
			Checks blind spot before merging into bike lane or center left-turn lane.
			Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Reacts safely to traffic situations.
		Signal	Activates turn signal approximately 100ft. prior to turn, but not so early as to mislead other drivers as to intention.
		Speed	Decelerates and brakes smoothly.
			Presses brake pedal without pressing the accelerator at the same time.
			 For manual-transmission: Changes gears as necessary to maintain power. Keeps gear engaged.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Turning evaluation, continued

Section	Maneuver	Item Scored	Criteria
Turns,	Approach,	Lane	Uses designated lane for turn.
continued	continued		 For right turns Enters bike lane where line is broken. Enters right turn pocket lane at opening. Uses the right-most part of right lane.
			 For left turns Enters two-way left-turn lane within 200 feet of turn and does not violate the right-of-way of any vehicle already in the lane. Enter left-turn pocket lane at opening. Uses the left-most part of left lane. Stays within lane markings
		Unnecessary stop	There was no vehicle or pedestrian traffic, signal light or traffic sign requiring a stop.
	Stop	Traffic check	Driver is observing traffic (vehicle and pedestrian) ahead, to the left, right, and rear. Indicated by head and/or eye movement to the left and right and use of mirrors.
			 Looks toward and/or makes eye contact with other drivers and pedestrians when necessary. Reacts safely to traffic situations.

Page 21

SCORING CRITERIA FOR DPE, continued

Turns evaluation, continued

Maneuver	Item Scored	Criteria
Stop,	Speed	Decelerates and brakes smoothly.
continued		Depresses brake pedal without depressing the accelerator at the same time.
		• For manual-transmission vehicle, keeps gear engaged.
	Full stop	Brings vehicle to a full stop without jerking.
		When necessary, brakes to stop for yellow light.
		For manual-transmission vehicle, keeps gear engaged. Once stopped, applicant can place the vehicle in neutral.
		No movement forward or roll backward.
	Gap or Limit line	Able to see rear wheels of vehicle in front or has enough room to maneuver around vehicle without backing up.
		• Stops within 6 feet (about a half a car length) from the limit line.
		• If no limit line, stops within 6 feet (about a half a car length) from the corner of the intersection.
		 Stops without the front most part of the vehicle being: In intersection. Over limit line. Beyond sidewalk or stop sign.
		Stop, continued Full stop Gap or Limit

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Turning evaluation, continued

Section	Maneuver	Item Scored	Criteria
Turn,	Stop,	Wheels straight	Wheels straight ahead when
continued	continued	(left turns only.)	stopped.
	Turn/	Traffic check	Driver is observing traffic
	Complete		(vehicle and pedestrian) ahead, to the left and right. Indicated by head and/or eye movement to the left and right and use of mirrors.
			Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Yields to other traffic.
			Accepts right-of-way within 4 seconds from when it is safe to start.
			• Reacts safely to traffic situations.
		Steering control	 Turns steering wheel smoothly and with full control of vehicle. (No palming.)
			Turns vehicle only the amount necessary (does not over-steer or under-steer).
		Too wide/short	Does not allow vehicle to touch the lane markings or curb.
		Correct lane	Ends turn in the proper lane.

Page 23

SCORING CRITERIA FOR DPE, continued

Turns evaluation, continued

Section	Maneuver	Item Scored	Criteria
Turns,	Turn/	Speed	Maintains smooth, safe speed and
continued	Complete,		keeps control of the vehicle.
	continued		 For manual-transmission: Changes gears as necessary to maintain power. Keeps gear engaged.
			Makes no unnecessary stops during turn.
			Accelerates smoothly after turn.
		Single	Cancels signal upon completion of turn.

Straight Business/ Residential evaluation

This section provides details on how to evaluate the driver's performance in a straight section of a business district or residential area.

Section	Maneuver	Item Scored	Criteria
Straight Business /Residential	N/A	Traffic check	Watches ahead, to the left and right for hazards. Indicated by heard and/or eye movement to the left and right and use of mirrors.
			 Searches 10 to 15 seconds ahead as indicated by: Speed adjustments. Lane positioning.
			 Reacts safely to traffic situations: Traffic at entrances to roadway. Pedestrians. Vehicles parking.
		Lane position	Keeps in center of lane

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Straight Business/ Residential evaluation, continued

Section	Maneuver	Item Scored	Criteria
Straight Business/ Residential,	N/A, continued	Speed	 Maintains without exceeding the posted speed limit. Slows for hazards or
continued			obstruction.
			Brakes to stop for yellow light when necessary
			 Maintains appropriate speed for traffic conditions (basic speed law).
		Spacing	Leaves space cushion to front and sides.

Lane Changes evaluation

This section provides details on how to evaluate the driver's performance in making a lane change.

Section	Maneuver	Item Scored	Criteria
Lane Changes	Lane Change	Traffic check	• Left lane change: Driver is observing traffic (vehicle and pedestrian) ahead, to the left, and rear. Indicated by heard and/or eye movement to the left and proper use of mirrors.
			 Right lane change: Driver is observing traffic (vehicle and pedestrian) ahead, the right, and rear. Indicated by heard and/or eye movement to the right and proper use of mirrors. Checks blind spot. Reacts safely to traffic situations.

Page 25

SCORING CRITERIA FOR DPE, continued

Lane Changes evaluation, continued

Section	Maneuver	Item Scored	Criteria
Lane Changes, continued	<u> </u>	Signal	Activates signal prior to lane change.Cancels signal after lane change.
		Speed	Uses appropriate speed to change lanes without exceeding the posted speed limit.
			Uses appropriate speed for traffic conditions (basic speed law).
		Spacing	Waits for adequate gap.
			Leaves space cushion to front and sides.
			Maintains space cushion in front and rear of vehicle after lane change.
		Steering control	Changes lanes by turning the steering wheel smoothly.
			Moves to the center of lane.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Freeway evaluation

This section provides details on how to evaluate the driver's performance in freeway driving.

Section	Maneuver	Item Scored	Criteria
Freeway	Entering (On ramp or access way to freeway)	Traffic check	 Driver is observing traffic (vehicle and pedestrian) ahead, to the left, and/or right. Indicated by head and/or eye movement to the left and/or right and use of mirrors. Looks toward and/or makes eye contact with other drivers and pedestrians when necessary.
			Reacts safely to traffic situations.
		Signal	Activates turn signal approximately 100 ft. prior to entering, but not so early as to mislead other drivers as to intention.
			Cancels signal.
		Speed	Uses appropriate speed for traffic conditions (basic speed law).
		Spacing	Waits for adequate gap.
			• Leaves space cushion to front and sides.
		Lane position	Keeps in center of lane.
	Merge	Traffic check	While merging onto freeway, driver is observing traffic ahead, to the left, and/or rear. Indicated by head and eye movement to the left and/or right and use of mirrors.
			Checks blind spot.
			Reacts safely to traffic situations.

Page 27

SCORING CRITERIA FOR DPE, continued

Freeway evaluation, continued

Section	Maneuver	Item Scored	Criteria
Freeway, continued	Merge, continued	Signal	Activates signal prior to lane change.
			Cancels signal after lane change.
		Speed	Merges at appropriate speed for traffic conditions (basic speed law).
		Spacing	Waits for and accepts first available adequate gap.
			Leaves space cushion to front and sides.
		Lane position	Moves to the center of driving lane.
		Steering control	Merges onto freeway without going over solid boundary lines.
			Merges by turning the steering wheel smoothly.
	Lane Use	Traffic Check	Driver is observing traffic ahead, to the left, right, and rear. Indicated by head and/or eye movement to the left and right and use of mirrors.
			Reacts safely to traffic situations.
		Speed	Maintains traffic flow speed without exceeding the posted speed limit.
			Uses appropriate speed for traffic conditions (basic speed law).
		Spacing	Maintains space cushion in front of vehicle.
		Lane position	Keeps in center of lane.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Freeway evaluation, continued

Section	Maneuver	Item Scored	Criteria
Freeway, continued	Exiting	Traffic check	Driver is observing traffic ahead, to the left, right and rear. Indicated by head and/or eye movement to the left and/or right and use of mirrors.
			Checks blind spot.
			• Reacts safely to traffic situations.
		Signal	 Activates turn signal prior to entering, exit lane.
			Cancels signal after entering exit lane.
		Speed	• Decelerates in exit lane.
			 Exits at appropriate speed for traffic conditions (basic speed law).
		Spacing	Waits for adequate gap.
			 Leaves space cushion to front and sides.
		Lane position	Keeps in center of lane.
		Steering control	 Exits freeway without going over solid boundary lines.
			Exits by turning the steering wheel smoothly.

Page 29

SCORING CRITERIA FOR DPE, continued

Curve evaluation

This section provides details on how to evaluate the driver's performance in negotiation of a curve.

Section	Maneuver	Item Scored	Criteria
Curve	N/A	Entering speed	Reduces to a safe speed to enter curve.
			 For manual-transmission: Changes gears as necessary to maintain power. Keeps gear engaged.
		Through speed	Does not brake unnecessarily while in curve.
			Maintains safe speed during curve.
			 For manual-transmission: Changes gears as necessary to maintain power. Keeps gear engaged.
			Pressed brake pedal without pressing the accelerator at the same time.
		Lane position	Keeps vehicle in lane.

Automatic Disqualification evaluation This section provides details on action or inaction by an applicant that constitutes an automatic disqualification.

Section	Maneuver	Item Scored	Criteria
Automatic	N/A	Intervention by	Any driver action or inaction
Disqualificatio		examiner	requiring physical or verbal
n			intervention by the examiner.
			• Turn and Stop: Makes four corrections to enter the space.
			• Turn and Stop: Makes four corrections to exit the space.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Automatic Disqualification evaluation, continued

Section	Maneuver	Item Scored	Criteria
Automatic Disqualification , continued	N/A, continued	Strikes object	Comes in contact with another vehicle, object, pedestrian, or animal when it could have been safely avoided.
			Strikes any stanchion during the Turn and Stop maneuver.
		Up and over curb or sidewalk	Drives over the curb or on the sidewalk.
		Drivers in oncoming traffic lane	Anytime the vehicle is in the oncoming traffic lane.
		Disobeys traffic sign, signal, or safety personnel	 At or exceeding a brisk walking speed (4 mph) goes through a: Stop sign. Flashing red light. Right turn on a red light.
			Disobeys any safety personnel e.g., law enforcement officer or fire fighter.
			 Disobeys other traffic signs and/or lane markings: Lane drop. Painted arrows. Stanchions, etc.
		Dangerous maneuver	Any driver action or inaction that could have or did cause another driver or pedestrian to take evasive action.
			 Neither looks in mirror(s) nor blind spot (over shoulder[s]) during: Lane change. Merge. Backing. Pulling from curb or side of road.

Page 31

SCORING CRITERIA FOR DPE, continued

Automatic Disqualification evaluation, continued

Section	Maneuver	Item Scored	Criteria
Automatic Disqualification , continued	N/A, continued	Dangerous maneuver, continued	Does not move head and eyes for traffic check at uncontrolled intersection.
			Kills engine in an intersection.
			Anytime the vehicle blocks an intersection so that it impedes cross traffic.
			Street Park: Parks vehicle so far away from the curb that it blocks or impedes traffic.
			Drives further than 200 feet in a bike lane or two-way center left turn lane.
			Drives straight from a designated turn lane.
		Reaction to school bus	Passes school bus with flashing red lights.
		Reaction to emergency vehicle	Fails to stop for an emergency vehicle.
		Speed	 Too Fast Drives 10 mph over the posted speed limit. Drives too fast for safety. Too Slow Drives 10 mph under the posted speed limit. Drives too slow for safety.
		Auxiliary equipment use	Fails to use windshield wipers, defroster, or headlights when inclement weather or darkness requires it.

CLASS C DRIVING PERFORMANCE EVALUATION

SCORING CRITERIA FOR DPE, continued

Automatic Disqualification evaluation, continued

Section	Maneuver	Item Scored	Criteria
Automatic	N/A,	Turning from	Makes turn from wrong lane.
Disqualification	continued	improper lane	
, continued			Exception: If improper turn is
			made without merging into bike
			lane, do not mark automatic
			disqualification as long as the
			blind spot is checked. Instead
			score under Turns , Approach ,
			Lane.

Skill evaluation for oversized Class C vehicles

When the applicant is driving an oversized class C vehicle (motor home, straight truck, etc.), replace the Turn and Stop with a Straight Line Backing test. The applicant is instructed to back the vehicle in a straight line for at least three (3) vehicle lengths. Begin with the vehicle 1 to 3 feet from the curb or stanchion.

The scoring for Parking Lot Driving and Street Park is the same as regular sized class C vehicle.

NOTE: Use Turn and Stop E column to score the Straight Line Backing items.

Section	Item Scored	Criteria
Straight Line Backing	Traffic check	Checks both sides and rear for traffic while backing three vehicle lengths in a straight line.
		Reacts safely to traffic situation.
	Speed	Backs vehicle in a straight line at safe speed and in control of the vehicle.
	Braking	Brings vehicle to a smooth stop (does not jerk vehicle).
		Depresses brake pedal without depressing the accelerator at the same time.
	Vehicle position	Vehicle backs within 3 feet weave to either side and without hitting curb.

Page 33

CONDUCT DURING DPE

Explaining DPE to applicant

Before starting the evaluation, explain to the applicant what will be occurring. Below are statements to use in explaining what is going to occur on the DPE. Always use statement number 1. The others are suggestions that can be used in your pre-drive instruction to applicant.

- 1. You will be evaluated on your ability to drive safely and skillfully in different driving situations including on the freeway.
- 2. The evaluation includes noting safe and unsafe driving practices and your ability to make decisions.
- **3.** You will be driving in situations that are typical throughout the state.
- **4.** I will be an observer, giving directions ahead of time, such as where to turn.
- 5. If I do not say anything you should follow the road and signs, unless I ask you to do otherwise.
- **6.** I will not try to trick you or ask you to do anythingillegal.
- 7. I will be marking the sheet while you drive, but this does not necessarily mean you have done something wrong.

Have them sign the Driving Performance Evaluation form and ask if they have any questions.

DPE

Giving directions during Always give the direction to the applicant at the designated point on the route. Use the scripted directions for the route when having the applicant perform a maneuver. Be sure to speak clearly and distinctly. Always state where to do a maneuver before you say what to do.

Examples:

- "At the first corner, turn right."
- "At the first street, make a right turn please."
- "The first (or next) intersection, left turn."
- "At the major intersection make a right turn please."

CLASS C DRIVING PERFORMANCE EVALUATION

CONDUCT DURING DPE, continued

Giving directions during DPE, continued

Do not use phrases or words that are instructional. "Light, signal, and stop sign." You are helping the driver by pointing these items out. "Make a right lane change. Next street right turn." Let the driver figure out what lane to be in to make a legal turn.

If an applicant fails to follow directions, do not correct the applicant unless the action would result in a hazardous situation. Continue with the evaluation and give directions that will bring the applicant back to the route.

Suggested phrases for instruction during road element

The chart below gives suggested phrases to the road elements of the DPE.

Road Elements	Suggested Phrase
Signal light with other side	First major intersection
streets preceding it.	
Residential areas, stop, yield,	First street, or
or uncontrolled.	First corner
Business area, signal light, or	First (or next) intersection
stop signs.	
Short distance between	Three blocks
streets reinforce when you	
pass second street.	
"T" intersection	Cross street, or
	When road ends

Multiple directions

Use multiple directions **only** when necessary. When giving directions in advance, or multiple directions, reinforce when needed.

Examples:

When applicant will need to make an immediate lane change after the left turn or there isn't time to give another set of instructions before the right turn say, "next street, left turn, then a right turn at first intersection."

When there is a short distance to make one or more lane changes say, "at the first street, turn right and then make a left lane change."

Page 35

PROCESSING SUMMARY

Processing step for DPE

Using the following steps in administering the DPE from the time the applicant reports in the office until after administering the DPE

Office personnel

Step	Action	Detail
1	Key DLP transaction.	Retrieves record from the data base.
2	Applicant signs Test Results document.	Signature will be compared by the examiner to the applicant's signature on the DPE score sheet and instruction permit.
3	Verify accompanying driver.	Once the accompanying driver and insurance has been verified
4	Verify insurance	inside the office, do not ask for verification again (even by the examiner at the vehicle).
5	Hand applicant Your Driving Evaluation (DL 180 Pilot)	Inform the applicant that the form contains important information regarding the DPE.
6	Send applicant out to DPE line.	
7	Insert carbon paper under the top form of the evaluation sheet.	Be sure the carbon paper is inserted properly.
8	Check vehicle for license plate(s) and valid registration stickers.	California registered vehicle must have front and rear license plates. Out-of-state registered vehicles may have only a rear plate.
9	Fill in top of score	• Date.
	sheet.	Driver License Number.
		• Circle Route 1 or 2.
		• Field Office Number.
		• Examiner signature.
		Examiner identification number.

LRE

CLASS C DRIVING PERFORMANCE EVALUATION

PROCESSING SUMMARY, continued

Processing step for DPE, continued

Using the following steps in administering the DPE from the time the applicant reports in the office until after administering the DPE

LRE, continued

Step	Action	Detail
10	Have applicant sign score sheet	This is important to detect ringers. Compare the signature on the score sheet to the signature on the Test Results document and instruction permit.
11	Perform Pre-Drive Checklist.	Put the applicant at ease by giving directions in a calm,
12	Enter the vehicle.	courteous, yet deliberate
13	Buckle-up and adjust the seat belt.	manner.
14	Give preliminary directions.	
15	Begin the driving evaluation.	
16	Mark any errors.	
17	Calculate applicant's score.	If applicant passed, continue. If applicant is below standard, go to Step 24.
18	Tell applicant he/she has passed.	
19	Explain any restrictions that are to be imposed.	
20	Record the scores on the Test Results document and have the applicant sign it.	
21	Instruct the applicant to present the Test Results document at the appropriate workstation.	The employee who processes the photo must compare the signature on the Test Results document with the Signature Card (DL 620). This important final step will help prevent a fraudulent driver license from being issued.

Applicant passes

Page 37

PROCESSING SUMMARY, continue

Processing step for DPE, continued

Applicant passes, continued

Step	Action	Detail
22	Give the person the original evaluation sheet.	Inform the applicant that an interim license will be issued after the picture is taken.
23	Exit the vehicle.	Go to Step 28.
24	Tell applicant he/she has not passed.	Explain the errors briefly. Indicate that the errors appear correctable with further practice.
25	Give the person the original evaluation sheet.	
26	Return the instruction permit on temporary license, whichever is appropriate.	Applicants applying for renewal may be issued a temporary license in the same class rather than an instruction permit if the failure does not indicate a hazardous condition. If the driving skills are deemed hazardous, issue an instruction permit. If a Class C applicant from out-of-state or a foreign country fails the DPE, the out-of-state or foreign license should be returned to the applicant.
27	Exit the vehicle.	**
28	File office copy of score sheet.	Office retains duplicate copy.

LRE