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Evaluation of the Oregon DMV Driver Improvement Program

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EVALUATION OF THE OREGON DMV DRIVER IMPROVEMENT PROGRAM

Final Report

SPR 634

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16. Abstract

This report provides an evaluation of the Oregon Department of Transportation-Driver and Motor Vehicle (DMV) Services Driver Improvement Program (DIP), which was substantially changed in 2002. Prior to 2002, the DIP was organized around four progressive steps involving advisory letters, warning letters, probation, and suspension. The current program is organized around two steps: restriction and suspension. The timeline to the steps in the current program have also been shortened. To evaluate the current program, driver records of persons suspended between January and July of 2004 were examined in relation to a sample of Oregon's driving population. The incidence of crashes and traffic offense convictions of DIP subjects in the 18-month period prior to suspension was compared to the incidence of these events among the driving population. A similar comparison was also made for the 18-month period following suspension. A substantial reduction in the relative incidence of crashes and convictions among DIP subjects following suspension was observed. This finding is subject to the effects of regression-to-the-mean. An approximation of regression-to-the-mean effects was made based on prior evaluations of Oregon's DIP that employed a true experimental design. A regression analysis was also undertaken using driver record information from the period prior to suspension to estimate the likelihood of post-suspension crash and traffic offense conviction involvement. The estimated likelihood of post-suspension crash involvement was significantly affected by the frequency of pre-suspension crashes, but not by the frequency of pre-suspension convictions. Conversely, the estimated likelihood of post-suspension convictions was significantly affected by the frequency of pre-suspension convictions, but not by the frequency of pre-suspension crashes. Two changes in the DIP are suggested in the concluding section of the report. The first change involves re-instituting warning letters, given their demonstrated cost effectiveness in the driver improvement literature. The second change involves the assignment of greater weight to crashes in triggering license actions, based on the regression findings.

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APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
		LENGTH		
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
		AREA		
in^2	square inches	645.2	millimeters squared	mm^2
ft^2	square feet	0.093	meters squared	m^2
yd^2	square yards	0.836	meters squared	m^2
ac	acres	0.405	hectares	ha
mi^2	square miles	2.59	kilometers squared	km^2
		VOLUME		
fl oz	fluid ounces	29.57	milliliters	ml
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.028	meters cubed	m^3
yd^3	cubic yards	0.765	meters cubed	m^3
NOTE: Volumes greater than 1000 L shall be shown in m^3.				
		MASS		
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams	Mg
		TEMPERATURE (exact)		
°F	Fahrenheit	(F-32)/1.8	Celsius	°C

APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
		LENGTH		
mm	millimeters	0.039	inches	in
m	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
		AREA		
mm^2	millimeters squared	0.0016	square inches	in^2
m^2	meters squared	10.764	square feet	ft^2
m^2	meters squared	1.196	square yards	yd^2
ha	hectares	2.47	acres	ac
km^2	kilometers squared	0.386	square miles	mi^2
		VOLUME		
ml	milliliters	0.034	fluid ounces	fl oz
L	liters	0.264	gallons	gal
m^3	meters cubed	35.315	cubic feet	ft^3
m^3	meters cubed	1.308	cubic yards	yd^3
		MASS		
g	grams	0.035	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams	1.102	short tons (2000 lb)	T
		TEMPERATURE (exact)		
°C	Celsius	1.8C+32	Fahrenheit	°F

*SI is the symbol for the International System of Measurement

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June Ross, Oregon DOT Research Program, served effectively as the project manager in supervising the work of the research team, assembling a highly capable TAC and coordinating its input, and ensuring timely completion of the project.

Overall, the authors' work benefited greatly from the time and effort these individuals devoted to the project.

DISCLAIMER

EVALUATION OF THE OREGON DMV DRIVER IMPROVEMENT PROGRAM

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PROJECT SUMMARY

The purpose of the Oregon Department of Transportation's Driver and Motor Vehicle (DMV) Services Driver Improvement Program (DIP) is to improve traffic safety by temporarily restricting unsafe drivers or removing them from Oregon's highways through the suspension process. Between January 2002 and September 2003, 35,400 restrictions and 83,600 suspensions were issued to adult drivers.

The program was significantly changed in January 2002. Changes include the following: elimination of advisory and warning letters; elimination of interviews; automatic issuance of license restrictions; reduction in the number of convictions/accidents before imposition of a suspension; and the treatment of multiple convictions from a given incident. Drivers under 18 are subject to somewhat different restrictions than adult drivers and are not included in the scope of this study.

There are no measures currently in place to gauge the effectiveness of the new DIP in improving the safety of adult drivers who enter the program. Structured evaluation frameworks associated with the program prior to 2002 cannot be employed, given subsequent changes in procedures that prevent a control group from being formed. Recognizing this procedural change, evaluation of the current program focuses on adult drivers in the DIP, evaluating their safety records prior to and following DIP license actions.

Several of the changes in the DIP can be fairly directly linked to research reported in the driver improvement literature. First, the more expedited and certain path to intervention in the current DIP is consistent with the general conclusion in the literature that it is important to interrupt an unsafe driving career as early as is legally possible. Second, elimination of interviews also resulted in the elimination of diversion to driver safety courses as an alternative to immediate suspension. The literature examining the consequences of attending such courses has generally found no safety improvement following attendance. Third, elimination of advisory and warning letters was in conflict with findings in the literature (including studies focusing directly on the Oregon experience) that such letters are the most cost effective measure for improving safety among the sanctions typically employed in DIPs.

The violations covered in the risk analysis include crashes, traffic offense convictions, and major convictions. Traffic offense convictions fall into two general categories. The first category primarily includes moving violations, defined in OAR 735-064-0220. A conviction for any violation in this category accounts for one point toward restriction and suspension in the DIP. The second category primarily includes equipment and procedural violations, as defined in OAR 735-072-0035. Five convictions of violations in this category account for one point toward restriction and suspension in the DIP. In the remainder of the report we refer to convictions in the first category as Type A convictions, and convictions in the second category as Type B convictions. Appendix D provides a list of Type A and B offenses included in the DIP.

A statistical analysis was undertaken to assess the safety risk of drivers in the DIP in comparison to the general driving public in Oregon. The analysis involved samples of 13,885 persons involved in the DIP and 42,335 persons selected from the state's driving population. The violations covered in the risk analysis included crashes, traffic offense convictions, and major convictions. Traffic offense convictions fell into two general categories. The first category (known as Type A) included moving violations and the second category (known as Type B) primarily included equipment and procedural violations. Five convictions for Type B violations counted as one conviction for a Type A violation.

At the point of suspension, the incidence of crashes during the previous 18 months of persons involved in the DIP was six times greater than the crash incidence experienced among the driving public. The relative incidence of conviction of Type A traffic offenses among DIP subjects was much larger at 33 times the incidence among the driving public. Although major convictions are treated in other DMV driver programs that are distinct from the DIP, analysis indicated that their incidence was more than fifteen times greater among DIP subjects than it was among the driving public. Closer examination of the spacing of traffic offenses over the 18 months prior to suspension revealed that crashes and Type A convictions were fairly evenly spread over the period, indicating that unsafe driving behavior among DIP subjects reflects a chronic rather than acute condition. However, major convictions were found to be more concentrated in the period just prior to suspension, indicating an acute condition.

The incidence of crashes, Type A convictions and major convictions occurring in the 18-month period following completion of license suspension under the DIP was examined. The incidence of crashes among DIP subjects relative to the driving population declined 55.9% from the pre-suspension level, while declines in the relative incidence of Type A and major convictions were 68.0% and 20.7%, respectively. In the absence of a true control group, these declines are subject to regression-to-the-mean effects and therefore overstate the effect of license suspension. Previous evaluations of the Oregon DIP, which did employ control groups, suggest that regression-to-the-mean effects could account for approximately 80% of the observed reductions in convictions. If regression-to-the-mean effects in the present study are of similar magnitude, this would indicate that an approximate decline of 11% in crashes and 13% in Type A convictions can be attributed to the effect of license suspension.

A multivariate analysis was undertaken to investigate two basic issues related to the structure of the point system associated with the Oregon DIP. The first issue relates to the relative treatment of crashes and Type A convictions in the current point system. Each qualifying crash and Type A offense is currently assigned a single point toward the four-point total resulting in suspension. The implicit assumption in this point assignment is that crashes and convictions are equivalent leading indicators of drivers' future safety risk. The second issue relates to the treatment of multiple convictions associated with singular events. In the current system, each Type A conviction is assigned a point toward license action, and the implicit assumption is that multiple convictions from single events are equivalent to single convictions associated with multiple events as leading indicators of drivers' future safety risk.

The multivariate analysis directly tested these assumptions. It found that future crash risk was significantly influenced by the frequency of crashes that occurred prior to license suspension, while the frequency of prior Type A convictions had no effect on future crash risk.

Alternatively, the frequency of prior Type A convictions was found to have a significant effect on future conviction risk, while the frequency of prior crashes had no effect on future conviction risk. Thus, decisions on the relative treatment of crashes and Type A convictions in the DIP point system depend on policy judgments of the relative importance of minimizing crashes and minimizing Type A convictions as the principal objective of the program.

Implications of the findings of the multivariate analysis with respect to the concentration of Type A convictions are more direct. The future risk of both crashes and Type A convictions were found to be significantly reduced when prior convictions were concentrated in fewer events. This finding suggests that lower point weights be given to each conviction that is "bunched" with other convictions in single events.

Recommendations that arise from the analysis conducted in this project are summarized as follows:

Warning Letters: Consideration should be given to reinstating warning letters in the Oregon DIP. There is compelling evidence in the driver improvement literature that warning letters are the most cost effective means of reducing safety risk among the sanctions typically found in driver improvement programs. The driver improvement literature views warning letters as safety countermeasures on par with other driver control actions that are employed to reduce safety risk associated with problem drivers.

In addition, warning letters may enhance the overall fairness of the Oregon DIP. Few problem drivers are likely to be aware of the Oregon DIP until they receive a license restriction or suspension notice. A warning letter alerts problem drivers to the existence of the DIP and the growing likelihood of sanction, and gives them an opportunity to correct their behavior. The driver improvement literature indicates that a significant share of problem drivers heed this warning. Moreover, those that continue on their high-risk path will be doing so fully informed of the consequences that will follow their actions. The logical placement of warning letters in the Oregon DIP would be upon receipt of the second conviction toward license action.

Crashes: Consideration should be given to assigning greater weight to crashes in the DIP point system. A general view in the driver improvement literature is that reducing crash risk should be a primary objective of a DIP. The multivariate analysis in this project found that future crash risk is significantly related to prior crashes, but not significantly influenced by prior Type A convictions.

Multiple Convictions: Consideration should be given to reducing the point weight associated with multiple Type A convictions linked to singular events. The multivariate analysis in this project found that both future crash and conviction risks are significantly lower when prior convictions are bunched in fewer events than when they are spread over more numerous events.

1.0 INTRODUCTION

The Oregon Department of Transportation (ODOT) Driver and Motor Vehicle (DMV) Services Division manages a Driver Improvement Program. The purpose of the Driver Improvement Program (DIP) is to improve traffic safety by temporarily restricting unsafe drivers or removing them from Oregon's highways through the suspension process. Between January 2002 and September 2003, 35,400 restrictions and 83,600 suspensions were issued to adult drivers.

The program was significantly changed in January 2002. Changes include the following: elimination of advisory and warning letters; elimination of interviews; automatic issuance of license restrictions; reduction in the number of convictions/accidents before imposition of a suspension; and the treatment of multiple convictions from a given incident. Following these changes there has been a substantial increase in the number of drivers who have been restricted or suspended in the program.

Drivers under 18 are subject to somewhat different restrictions than adult drivers and are not included in the scope of this study.

There are no measures currently in place to gauge the effectiveness of the new DIP in improving the safety of adult drivers who enter the program. Structured evaluation frameworks associated with the program prior to 2002 cannot be employed, given subsequent changes in procedures that prevent a control group from being formed. Recognizing this procedural change, evaluation of the current program will focus on adult drivers in the DIP, evaluating their safety records prior to and following DIP license actions. The safety records of drivers involved in the DIP will also be compared to the corresponding records of a representative cross section of adult Oregon drivers.

The current DIP does not withhold license actions from selected individuals in order to create experimental control groups. Thus, while it is not possible to statistically evaluate the effect of driver improvement sanctions in the context of a classical experimental design, an analysis of safety records leading to and following driver improvement sanctions can document differential safety risk across a range of varied subgroups comprising the subject population. Subgroups can be defined by characteristics that are generally known to distinguish the safety records of drivers following driver improvement sanctions, including 1) age; 2) sex; 3) residence (i.e., urban v. rural); and 4) number and types of traffic offenses leading to sanctions.

1.1 ORGANIZATION OF THE REPORT

This report provides an assessment of the ODOT DMV Services Division adult DIP. Chapter 2 of the report describes the main features of the previous and current programs, and includes information from staff interviews. Chapter 2 also presents information on DIPs in other states in order to situate Oregon's program in a national context.

Chapter 3 provides a literature review focusing on empirical studies of the crash and traffic offense consequences of sanctions commonly employed by DIPs. The review also covers important research design issues that have a bearing on evaluations of the effectiveness of DIP sanctions.

Chapter 4 presents a statistical analysis examining the incidence of crashes and convictions among persons whose licenses were suspended in the program. The analysis distinguishes between the period leading up to license suspension and the period following completion of the suspension. To provide a sense of the relative risks associated with persons whose licenses have been suspended, the crash and conviction incidence of DIP subjects is compared to the incidence of these violations among the general population of Oregon drivers. The final aspect of the analysis employs multivariate estimation methods to assess the connections between DIP subjects' history of traffic offenses prior to license suspension and their record of offenses following completion of suspension. The strength of these connections is also assessed with respect to subjects' demographic characteristics and their locational status.

Chapter 5 presents the report's conclusions and recommendations.

2.0 PROGRAM DESCRIPTION

2.1 GENERAL CHARACTERISTICS OF THE DIP

The ODOT DMV Services Division's Driver Improvement Program (DIP) targets drivers who have been convicted of multiple traffic offenses and/or have been involved in preventable accidents over a stated period of time. The statutory purpose of the DIP is "the reduction of traffic convictions and especially accidents." (ORS 809.480 (1)). The DIP seeks to achieve this purpose by improving the safety of a person's driving or by removing the person from Oregon's highways by restricting or suspending his or her driving privileges.

Prior to 2002, under the previous DIP, persons with multiple convictions generally would first be sent letters advising and encouraging them to drive more safely and, following subsequent convictions, warning them of future sanctions. Additional convictions during set time periods led to mandated driver improvement counseling. Driver improvement counselors could require drivers to participate in a driver improvement course, take and pass a driver license examination, or go to a social service agency for additional counseling, and could restrict a person's driving privileges. A person's failure to attend the interview, or comply with any requirements set by the counselor, or an additional conviction or accident within the subsequent year could lead to suspension of driving privileges.

In January 2002, significant changes in the DIP were implemented after the Oregon Attorney General determined that Oregon Highway Funds could not be used to send the advisory and warning letters or to conduct driver interviews. The current DIP automatically imposes driving restrictions and license suspensions based on the number of convictions and/or preventable accidents within set time periods. The list of convictions covered in the program was expanded and the time frames over which convictions are counted toward driver actions were shortened.

2.1.1 Other sources of suspensions

The DIP is only one source of driving privilege restrictions and suspensions. Driving restrictions and suspensions from other sources may also affect driver behavior. In addition to the DIP, driving privileges may be suspended or revoked through a court order, for failure to pay child support, for failure to maintain insurance, for a conviction of Driving while Under the Influence of Intoxicants (DUII), or for conviction of three or more major offenses within five years under the DMV Habitual Offender Program. DIP suspensions run concurrently with suspensions imposed by other programs. The DIP, DUII, and Habitual Offender programs are all linked to driving behavior, while failure to pay child support is not.

Court Order: Courts usually suspend driving privileges if a person fails to appear or "fails to pay a traffic fine for a traffic conviction or a traffic crime in Oregon or Washington." The suspension will remain in effect until "DMV receives proof that the case has been cleared with

the court or until five-years has elapsed from the date the suspension begins, whichever comes first."[1]

Failure to Pay Child Support: A person may also have his or her driving privileges suspended for failure to pay child support. The suspension may be requested by the Oregon Department of Justice, Division of Child Support or a District Attorney. The suspension remains in effect until the Support Enforcement Division or District Attorney authorizes DMV to reinstate the person's driving privileges and the person has paid a reinstatement fee.[2]

Failure to Maintain Insurance: A person who is convicted of driving without insurance is suspended until he complies with financial responsibility laws. Uninsured drivers who are involved in a crash are suspended for one year.

DUII: A person who is arrested for driving under the influence of intoxicants may have his or her license confiscated and driving privileges suspended. The length of the suspension can vary. The citing officer confiscates the driver's license and issues a 30-day temporary driving permit. After 30 days, the suspension is in effect. Suspension lengths vary from 90 days to three years, depending on formal criteria and whether the person has any prior alcohol-related convictions on their record within the past five years.

Habitual Offender Program: A person's driving privileges are suspended for five years if he or she is convicted of three or more of the following major offenses within a five-year period:

- Any degree of murder, manslaughter, criminally negligent homicide, assault, recklessly endangering another person, menacing or criminal mischief resulting from the operation of a motor vehicle;
- Driving while under the influence of intoxicants;
- Driving while driving privileges are suspended or revoked;
- Reckless driving;
- Failure to perform the duties of a driver after a collision;
- Fleeing or attempting to elude a police officer.[3]

DMV also will suspend a person's driving privileges for five years if he receives 20 or more convictions within five years.

[1] DMV Website: http://www.oregon.gov/ODOT/DMV/driverid/suspreasons.shtml#appear.
[2] Ibid.
[3] http://www.oregon.gov/ODOT/DMV/driverid/suspreasons.shtml

2.2 PRE-2002 DIP

This section describes the progression of sanctions and triggers in DMV's pre-2002 DIP, and discusses elements and issues associated with this program. (See Appendices B and C for a section-by-section comparison of the provisions in the Oregon Revised Statutes (ORS) and Oregon Administrative Rules (OAR) of the current DIP with the pre-2002 program.)

2.2.1 Pre-2002 DIP sanctions

OAR 735-072-0030 (1999) describes four steps in the DIP:

Step 1: Advisory Letter: The OAR authorized, but did not require DMV to mail an "advisory" letter to a driver if the driver was:

- Convicted of two traffic offenses occurring within a 12-month period; or
- Involved in two preventable accidents occurring within a 12-month period; or
- Convicted of one traffic offense and was involved in one preventable accident, both within a 12-month period.

Step 2: Warning Letter: The OAR authorized, but did not require DMV to mail a "warning" letter to a driver if the driver was:

- Convicted of one traffic offense or was involved in one preventable accident within six months of the mailing date of the advisory letter;
- Convicted of two traffic offenses or was involved in two preventable accidents or one of each within 12 months of the mailing date of the advisory letter; or
- Convicted of three traffic offenses or was involved in three preventable accidents or a combination of the two within an 18-month period, regardless of whether DMV had sent an advisory letter.

Step 3: Driver Improvement Interview: The OAR defined "driver improvement interview" as a "face-to-face meeting with a counselor to explain the program, to discuss the person's driving record and remedies to the driving problems, and to determine required action for improvements." (OAR 735-072-0020 (5)). The OAR allowed, but did not require DMV to require a person to participate in a driver improvement interview if the person was:

- Convicted of one traffic offense or was involved in one preventable accident within six months of the mailing date of the warning letter; or
- Convicted of two traffic offenses or was involved in two preventable accidents or one of each within 12 months or the mailing date of the warning letter; or

- Convicted of four or more traffic offenses or was involved in four preventable accidents or a combination of both within any 18-month period, regardless of whether DMV had sent an advisory letter.

A small staff of driver improvement counselors was available to conduct interviews around the state. OAR 735-072-0030 (1999) gave counselors the authority to place drivers on probation for one year from the date of the interview. The OAR defined "probation" as "the one-year period, beginning upon completion of the driver improvement interview." A person was no longer involved in the DIP after the one year probation ended, unless they were convicted of another traffic offense or involved in a preventable accident during that time, or if they failed to complete any requirement set during the interview (OAR 735-072-0070 (1999)).

The OAR gave counselors the discretion to require a person to comply with one or more of the following actions:

- Restrictions of driving times, days, and routes.

- Requirement to complete a driver improvement course and notify DMV of the course completion within 90 days from the date of the notice directing the person to take the course.

- Requirement to complete and pass the driver license examination.

- Referral to a social service agency for further counseling in cases in which personal problems such as alcoholism, marital, financial, or work-related problems have contributed to the person's driving problems.

Driver improvement courses were approved by DMV and provided by private organizations approved by DMV. Drivers paid the course fees directly to the organization providing the course. DMV also provided driver improvement course referral forms to courts.[4]

OAR (735-072-0030 (4) gave DMV the discretion not to require a person whose driving privileges had been suspended, revoked, or canceled for any reason to attend a driver improvement interview until the person's driving privileges were reinstated. The OAR required that the interview only take place "if entries on the person's driving record indicate the person has continued to drive."

Step 4: Suspension of Driving Privileges: OAR 735-072-0030 (1999) required DMV to send a notice of suspension of driving privileges to a person who:

- Was convicted of one traffic offense or was involved in one preventable accident if the incident occurred within the one-year probationary period. DMV was required to issue a 30-day suspension for each conviction or preventable accident.

[4] DOJ Determination: Program – Driver Improvement Program, January 31, 2001.

- Failed to attend the driver improvement interview. The suspension remained in effect until the person completed the interview, or one year passed without any indication on the individual's driving record that they continued to drive during that time.

- Failed to complete any requirement imposed by the counselor at the interview. The suspension would remain in effect until the person complied with the requirement, or for a maximum of five years.

2.2.2 Pre-2002 program elements and issues

DMV staff report that Oregon's DIP originated in the late 1940s. The program was modeled after a similar program in California. Throughout the program's history – until the changes in 2002 – the DIP sought to improve driver behavior with a progression of actions including: advisory letters, warning letters, driver improvement interviews, driver safety courses, and license restrictions and suspensions.

Qualifying Convictions and Accidents: Convictions that counted toward the sanction trigger thresholds included those listed in OAR 735-064-0220.[5] The DMV Driver License Policy & Procedure Manual (effective date 06-14-01) stated that "Convictions used in this chapter include traffic violations listed in OAR 735-064-0220 and traffic crimes." A "preventable accident" was defined by OAR 735-072-0020 (7) as "a traffic accident reported by a police officer that indicates a driver failed to do everything a driver reasonably could have done to prevent the accident." Equipment violations, as opposed to moving violations, did not count toward the trigger amounts.

Multiple Convictions from a Single Incident: In some cases, a driver involved in a single incident may receive a number of separate convictions. The DMV Driver License Policy & Procedure Manual (effective date 06-14-01) stated that if a driver were convicted of multiple offenses on the same date, the offenses were counted individually—rather than as one—toward the trigger thresholds.[6] Counting multiple convictions from a single incident as separate driver improvement convictions would advance a driver more quickly through the DIP steps. Staff reported that prior to 2002, DMV sometimes counted multiple convictions from one incident as a single driver improvement violation. This resulted in drivers having multiple convictions, but remaining in the first step of the program.

Driver Improvement Interviews: A person's driving privileges could not be suspended without the person first being required to participate in a driver improvement interview. Drivers often had to wait a long time to schedule and attend an interview. Prior to 1989, only three counselors were available statewide to conduct interviews. The number increased to four in 1989, and by 1998 six were available. Counselors were not stationed throughout the state. In many parts of the state, a counselor would have to schedule a special trip to interview a driver. By 1998, a backlog of several thousand drivers needing to complete their interviews had built up. In 1998, two additional counselors were brought out of retirement to help reduce the backlog.

[5] DMV "Driver License Policy & Procedure Manual – The Driver Improvement Program", Effective Date: 06-14-01.
[6] Ibid.

Drivers often did not show up, even after the long wait to schedule the interview. The person's driving privileges would then be suspended until they rescheduled and participated in a subsequent interview. Drivers were often irritated by the difficulty of scheduling an interview and having to take time off work to participate. It is questionable whether the interviews had much effect on driving behavior, given the long lag time between the conviction or accident and the interview.

Good Record Exemption: OAR 735-072-0000 (1999) provided that a person would only become involved in the DIP or be advanced in the program "if at least one of the traffic offenses or preventable accidents entered to the person's driving record occurred within one year of the date the driving record [was] identified for review." A person with no convictions for one year would be exempted from the program.

Review: OAR 735-072-0050 (1999) gave persons the right to request a hearing or administrative review before suspension of their driving privileges (as provided for under OAR 809.44 (1) (2) and (5) (1999). The hearing would be conducted by an officer assigned from the Hearing Officer Panel. Under certain circumstances, a person could request an administrative review, which would consist of "an informal process to assure prompt and careful review by the department of the documents upon which an action is based."

DMV staff interviewed for this report reported that the pre-2002 program was complex and cumbersome to administer. Elements of the program, such as the interviews, appeared to have minimal effect on driving behavior. Large backlogs in scheduling and completing driver improvement interviews created long lag times between convictions and the interview; and the interviews themselves often did not result in serious sanctions. Staff noted that driver improvement counselors had wide discretion and sometimes delved deeply into a driver's life circumstances (e.g., reviewing a person's prescribed medications). Staff suggested that such discretion led to inconsistencies in actions taken by the counselors.[7] Generally, the structure of the program ensured that the path to license suspension was a very long one, and was structured in a way that resulted in relatively few suspensions.

Given the complexity and delays of the program, DMV sought to streamline and strengthen the DIP. A key goal was to create a program that included fair, progressive, and certain sanctions. As part of this effort, DMV requested that the Oregon Attorney General review the existing program.

2.2.3 Oregon Attorney General's opinion

In January 2001, the Oregon Attorney General (AG) issued a determination that affected 25 ODOT programs, including the DIP. DMV had requested the AG's review prior to the 2001 legislative session.[8] The AG determined that DMV could not continue to use state Highway Funds to administer the DIP advisory and warning letters and the driver improvement course

[7] Notes of interview by Paul Leistner with DMV staff members. March 23, 2006. Staff interviewed included: Bill Merrill, Manager, Driver Control Unit, Driver and Motor Vehicle Services (DMV), ODOT; Rod Rosenkranz, Manager, Driver Programs, DMV, ODOT; Mary L. Grosso, DIP Program Coordinator, DMV, ODOT, and Julie Kammer, Data Processing Coordinator, DMV, ODOT.

[8] DMV press release. "Teen drivers get a break on one rule of the road." June 21, 2002.

referral form. The reasoning associated with this determination was that DIP advisory and warning letters did not restrict driving privileges and therefore did not "primarily and directly facilitate motorized vehicle travel."[9]

The AG determined that DMV could use Highway Funds to administer the driver improvement interviews if, "as a condition of the probation, driving privileges are restricted or a stayed suspension of driving privileges is imposed." Driver improvement counselors did not impose suspensions as part of the interview process. The OAR allowed counselors to restrict driving privileges, require participation in a driver improvement course, require completion and passage of the driver license examination, or require participation in further counseling with a social service agency. All interviews would have had to result in restrictions to meet the AG's interpretation.

The AG affirmed that DMV could use Highway Funds in suspending driving privileges.

The AG determined that DMV could use Highway Funds to provide a court with a form that refers persons to driver improvement courses only if the form is "both a referral to the driver improvement course and a notice of suspension or license restriction." The AG determined that DMV could not use Highway Funds to "supply the court with a form that is only a referral to the driver improvement course…."[10]

2.3 CURRENT DIP

DMV's current DIP was implemented in January 2002. The current program has been substantially altered and streamlined from its pre-2002 form. The changes in the program were made in response to the passage of SB 298 by the Oregon Legislative Assembly in 2001 and to respond to the AG's opinion, which advised significant changes in the program.[11] (See Appendices B and C for a section-by-section comparison of the provisions in the Oregon Revised Statutes (ORS) and Oregon Administrative Rules (OAR) of the current DIP with the pre-2002 program.)

2.3.1 ORS changes

In the 2001 Session, the Oregon Legislative Assembly passed SB 298. The primary effect of the bill was to repeal ORS 809.405 – the Provisional Driver Improvement Statute – and to give ODOT the authority to establish the Provisional DIP by rule.

SB 298 changed the language of ORS 809.480 to shift the coverage of the DIP from "drivers granted driving privileges in this state" to "persons who drive in this state." The effect was to allow unlicensed drivers to be eligible for the DIP.

No other substantive changes in the Adult DIP were made through SB 298. Additional minor changes were passed in the 2003 Session (see Appendix B).

[9] DOJ Determination: Program – Driver Improvement Program, January 31, 2001.
[10] DOJ Determination: Program – Driver Improvement Program, January 31, 2001.
[11] DMV, Driver Program Issue Paper, Issue Number PS-D0077, July 30, 2001, prepared by Liz Woods.

2.3.2 OAR changes

Changes to OAR 735.072 included the following: elimination of advisory letters, warning letters, and driver improvement interviews; expansion of the number of qualifying convictions; introduction of automatic restrictions and suspensions; and a reduction in time frames and the number of convictions and/or preventable accidents needed to qualify for restriction or suspension of driving privileges. A review of documents from the period indicates that DMV staff participated in a number of discussions that contributed to the development of the OAR changes.[12]

2.3.3 License actions

Restriction: A person is automatically sent a letter notifying him that his driving privileges are restricted for 30 days when, within an 18-month period prior to DMV review of the driver's record, the driver has:

- Three driver improvement violations (explained in Section 2.3.4 below);
- Three preventable accidents; or
- A combination of driver improvement violations and preventable accidents that total three.

The restriction prohibits driving from 12:00 midnight to 5:00 a.m., unless driving between home and work or driving for purposes of employment. The restriction takes effect 30 days from the date of the notice letter. DMV will delay imposing a restriction if a person's driving privileges already are cancelled, suspended or revoked until the driver's driving privileges are reinstated, or if a driver has not been granted a valid drivers license (OAR 735-072-0027).

Suspension: A person is automatically sent a letter notifying him that his driving privileges are suspended for 30 days when, within a 24-month period prior to the review of the driver's record, the person has:

- Four driver improvement violations;
- Four preventable accidents; or
- A combination of driver improvement violations and preventable accidents that totals four.

Additional suspensions are imposed when a driver has additional driver improvement violations or accidents that again results in four points within 24 months. Suspensions run concurrently with any other suspensions, revocations, or cancellations in effect at the time the suspension begins (OAR 735-072-0027).

[12] DMV, "Driver Program Issue Paper," Issue Number PS-D0077, July 30, 2001, prepared by Liz Woods; "Drive Program Issue Paper," Issue Number PS-D0080, August 27, 2001, prepared by Melody Sheffield; and "Driver Policy Core Group Meeting Minutes, CR. 123, August 14, 2001.

2.3.4 Additional changes

Expansion of Qualifying Convictions: In the previous program, convictions that counted toward DIP actions included convictions for traffic offenses in OAR 735-064-0220. Under the current program, each qualifying "driver improvement violation" is defined as a conviction for an offense listed in OAR 735-064-0220 (typically violations of Rules of the Road), or five convictions for an offense listed in OAR 735-072-0035 (typically equipment violations, violations in off-road vehicles, or other non-moving offenses). Also, a number of additional violations have been added to OAR 735-064-0220 in recent years.

Retention of Multiple Convictions from a Single Incident: The definition of "conviction" was amended in OAR 735-072-0020 (2) to explicitly state that "each separate offense arising from a single traffic stop or preventable accident, for which the person receives a conviction, constitutes a separate conviction for purposes of these rules."

Changes to Review: Only suspensions based solely on convictions are eligible for administrative review. Under the previous program all suspensions were eligible for administrative review. A person receiving a suspension based solely or partially on preventable accidents is eligible for a hearing. No appeal process is provided for a restriction.

Elimination of Exemption for Good Driving Record: Current DIP administrative rules no longer exempt drivers from the DIP if they have no qualifying convictions or accidents for twelve consecutive months.

Table 2.1 summarizes the principal features of the previous and current programs. Figure 2.1 compares the sequence of steps, time frames, and conviction and accident triggers for sanctions under the previous and the current DIP. As is evident in Figure 2.1, there has been a substantial streamlining of the process, resulting in fewer pathways to license restriction and suspension, a reduction in points leading to license actions, and a shortening of timelines to suspension. Also, the elimination of interviews has removed a discretionary element in the process, making suspension a certainty.

Table 2.1: Comparison of previous and current DIP features

DIP	Condition	Action
Previous DIP OAR 735-072-030	Step 1: Has **2** convictions or accidents within **12** months.	DMV *may* send advisory letter.
	Step 2: Has **3** convictions or accidents within **18** months.	DMV *may* send warning letter.
	Step 3: Has conviction within 6 months of warning letter (**4** in **24** mo), or has 2 convictions within 12 months of warning letter (**5** in **30** mo), or has **4** convictions within **18** months.	DMV *may* interview. Driver placed on probation. DMV *may* elect to not interview while driver is suspended, revoked or canceled.
	Step 4: Has **1** conviction during **1-year** probation period, or fails to attend interview.	DMV sends notice of suspension under ORS 809.480. Suspension is 30 days for each conviction. Suspension remains in effect until interview is held or there's no record of driving within the past year. Suspension not to exceed 5 years.
Current DIP OAR 735-072-027	Has **3** DI violations or accidents within **18** months.	DMV sends letter, restricting License or Instructional Permit. Restriction starts 30 days from letter and lasts for 30 days. No driving from 12 a.m. to 5 a.m. (exception to/from work). Restriction is delayed (and a pending restriction code is placed on driving record) while: license is canceled, suspended or revoked; or while denied driving privileges. Exception: a 4th violation occurs within the 24 months, license is suspended, restriction code removed. A pending restriction code is removed: after five years elapses from date of pending restriction; and no violations occurred in last 18 months.
	Has **4** DI violations or accidents within **24** months.	DMV suspends driving privilege (or right to apply) for 30 days.
	Has **5** DI violations or accidents within **24** months.	For each subsequent violation, DMV suspends driving privilege (or right to apply) for an additional 30 days regardless of previous/current DIP suspensions (time runs concurrently with any other suspension, revocation or cancellation in effect at the time).

Source: Based on table prepared by ODOT DMV Services Division staff

PREVIOUS DRIVER IMPROVEMENT PROGRAM SANCTIONS

YEAR ONE	YEAR TWO	YEAR THREE	YEAR FOUR	Points Req'd for Suspension
12 months 2 viol./accidents = Advisory Letter	6 months 1 = Warning Letter	6 months 1 = INTERVIEW	12 months 1 = **SUSPENSION**	**5**
12 months 2 viol./accidents = Advisory Letter	6 months 1 = Warning Letter	12 months 2 = INTERVIEW*	12 months 1 = **SUSPENSION****	**6**
12 months 2 viol./accidents = Advisory Letter	12 months 2 = Warning Letter	6 months 1 = INTERVIEW*	12 months 1 = **SUSPENSION****	**6**
12 months 2 viol./accidents = Advisory Letter	12 months 2 = Warning Letter	12 months 2 = INTERVIEW*	12 months 1 = **SUSPENSION****	**7**
18 months 3 viol./accidents = Warning Letter		6 months 1 = INTERVIEW*	12 months 1 = **SUSPENSION****	**5**
18 months 3 viol./accidents = Warning Letter		12 months 2 = INTERVIEW*	12 months 1 = **SUSPENSION****	**6**
18 months 4 viol./accidents = INTERVIEW*		12 months 1 = **SUSPENSION****		**5**

*RESTRICTION of driving privileges was only one of the possible outcomes of the INTERVIEW.

**SUSPENSION was imposed only if the driver had a violation or accident during the one-year probation, or failed to attend the INTERVIEW, or failed to complete any requirement set during the INTERVIEW.

CURRENT DRIVER IMPROVEMENT PROGRAM SANCTIONS (2006)

YEAR ONE	YEAR TWO	YEAR THREE	YEAR FOUR	Points Req'd for Suspension
18 months 3 viol./accidents = RESTRICTION				
24 months 4 viol./accidents = **SUSPENSION**				**4**

Figure 2.1: Timelines for previous and current DIP

2.3.5 Changes in the number of restrictions and suspensions

Following the transition to the current DIP, the number of suspensions issued by DMV increased substantially (see Table 2.2). For example, between 1999 and 2001, annual suspensions averaged 3,870 in the previous program. Between 2002 and 2004, annual suspensions averaged 48,557 in the current program, which represents more than a 12-fold increase. One point of approximate comparison between the previous and current DIP is the issuance of warning letters (in the previous DIP) and the issuance of restrictions (in the current DIP). Both actions are triggered by the accumulation of three driver improvement violations and crashes within 18 months. In this comparison, the number of annual actions occurring between 1999 and 2001, and 2002-2004 is roughly equivalent. However, at the next step, involving the accumulation of a fourth violation in 24 months, the number of resulting actions diverges substantially between the previous and current DIP. The large increase in the number of suspensions issued in the current DIP can be attributed to the redefinition and compression of the timeline to suspension, as shown in Figure 2.1.

Table 2.2: DIP actions, 1995-2005

	Advisory Letter	Warning Letter	Interviews	Restrictions	Suspensions
1995	24,867	8,196	987		756
1996	37,418	12,003	1,153		1,690
1997	42,083	14,078	1,653		2,188
1998	47,432	16,144	1,188		3,070
1999	53,573	15,800	2,622		3,747
2000	52,994	17,951	2,151		3,897
2001	58,790	18,961			3,967
2002				10,384	44,222
2003				21,418	51,385
2004				19,035	50,063
2005				16,822	44,907

Source: ODOT DMV Services Division, Driver Improvement Program

2.4 ISSUES

DMV staff report that the current DIP is much more straightforward to administer.[13] Questions have arisen about the fairness of suspending a person's driving privileges without previous warning. A key question is how effective the new program is at achieving the program goals: improving driver safety or removing unsafe drivers from Oregon's highways. Selected issues associated with the current program are discussed below.

[13] Effectiveness of the DIP, Research Project Status Meeting Notes, Nov. 2, 2005

2.4.1 Counting multiple violations from one incident

Apparently, despite the language in the OAR, in some cases, multiple violations from a single incident were counted as a single violation in the previous DIP. Changes to the OAR clarified that multiple violations from a single incident are to be counted as separate violations toward a restriction or suspension.

The following advantages and disadvantages of counting multiple violations separately were discussed in a DMV staff document:

- Advantages: "…(B)rings drivers demonstrating dangerous or illegal behavior into a driver improvement program more quickly…." And allows DMV to "positively influence their driving behavior."

- Disadvantages: A driver could be restricted or suspended from convictions and/or an accident from a single incident.[14] The implication is that an otherwise good driver would suffer a punishment out of proportion to the danger they pose to others.

DMV staff stated that this policy is important because "[a] driver committing multiple offenses in a single incident, possibly with the addition of a preventable accident, is more likely to have created a dangerous, more severe, situation than a driver committing one offense and being cited/convicted. Drivers cited for multiple offenses in a single driving incident negatively impact public safety."[15]

2.4.2 Fairness

The number of suspensions has increased sharply in the current program. In the previous program, a suspension usually occurred only after prior letters or at least a notification to appear at a driver improvement interview. DMV staff report that some drivers have raised questions about the fairness of their having received a restriction or suspension with no prior notice. This raises the question of the relative merits of swift and strong corrective action versus a more graduated approach.

In August 2004, DMV staff responded to a request for information from a state senator who had heard from a constituent who received a 30-day suspension, apparently after receiving three traffic violations in a short period of time. The constituent was concerned that she could possibly receive further suspensions if she had any further violations within 24 months.[16]

A person could qualify for a restriction but not receive notice of the restriction if his "driving privileges are already suspended, revoked or cancelled." The restriction remains in a 'pending' status. The restriction becomes effective, and a notice is sent, when the person's status changes to 'Valid Operator License." However, if a 4th conviction is received while a person's privileges are suspended, the pending restriction is removed and a suspension is placed on the driving

[14] DMV, Driver Program Issue Paper: SB 298: counting Multiple Convictions/Accident Arising from Single Incident. August 27, 2001.
[15] E-mail message from Melody d. Sheffield to William B. Merrill, August 11, 2004.
[16] E-mail message: from Rebecca L. Thoreson to Juanita T. Sanchez, August 06, 2004.

record. The person will never receive the restriction notice (See OAR 735-72-0023 and 0027)."[17]

This raises a question about whether sending a notice to a person telling them that they have a pending restriction might help improve the person's subsequent driving.

2.4.3 Time lags in posting convictions

DMV staff report that there is considerable variation in the time between when a driver commits a violation and when the record of a subsequent conviction is sent to DMV and posted in the DMV computer system. The determination of the 18-month and 24-month qualification windows for restrictions and suspensions is calculated from the date DMV posts the conviction in the DMV computer system—not from the actual dates of the incidents. Under this system, it is possible for a court to delay sending a notice of conviction for so long that the 18- or 24-month windows would no longer include the actual dates of the convictions. The time lag appears to be longer for courts in rural jurisdictions. This lag may lead to a disconnect in the minds of drivers between the actual occurrence of a traffic offense and the administration of the consequences. It also leads to inconsistencies in the administration of restrictions and suspensions in the DIP program.

DMV staff also described a scenario in which a judge could tell a person that their driving privileges would be restricted or suspended, and the person might assume that he/she should stop driving immediately, while in fact, the actual restriction/suspension would not take effect until much later when DMV posts the court action. The person could think they have complied with the restriction/suspension and begin driving again after a set time period, only to be pulled over and charged with driving while restricted/suspended.

2.4.4 Elimination of advisory and warning letters

Studies of the use of advisory and warning letters in Oregon (in the previous DIP) and in other states show that the letters do lead to a modest reduction in traffic violations and accidents. Letters represent an early intervention in unsafe driving careers. They also contribute positively to perceptions of fairness. A warning letter is likely to be a person's first reference to the actual existence of program with license actions, giving them an opportunity to take corrective action. Letters have also been shown to be among the most cost-effective sanctions when compared to the cost of avoided accidents. Thus it would appear that, contrary to the Attorney General's 2001 determination, advisory and warning letters are a proven mechanism for "directly facilitating motorized vehicle travel," as required for the use of state Highway Funds.

2.4.5 Do license action letters reach drivers?

Behavior modification under the DIP requires that drivers know that they are subject to a restriction or suspension under the program. DMV staff report that a number of letters informing drivers that they have a restriction or suspension are returned to DMV undelivered because of bad addresses. Staff report that many of the people who receive restrictions and suspensions

[17] E-mail message: from William B. Merrill to Lorna C. Youngs, August 26, 2004.

change addresses frequently and are hard to track down. In April 2005, 1,475 license suspension notices covering all DMV driver programs were color coded to determine the percentage of notices that are returned as undeliverable. The number of returned notices was 295, or 20% of the notices mailed. It was not determined whether the return rate varied by driver program.

2.5 OREGON DIP COMPARED TO OTHER STATES

Where does the current Oregon DIP fit in the spectrum of state driver improvement programs? Comparative information from logical clearinghouse sources, such as the American Association of Motor Vehicle Administrators, is lacking. Thus, DMV staff began to assemble program information from other states in 2006. The information assembled served as a point of departure in this project. We contacted state program administrators to collect or confirm information on 1) the basic structure of their program; 2) point or violation limit thresholds triggering license suspension; 3) length of suspension; and 4) the existence of a diversion option to suspension.

2.5.1 Program structure

States use a variety of terms to describe their programs. Common terms include "Driver Improvement", "Negligent Operator/Driver," and "Point System." Table 2.3 characterizes states with respect to both the existence of a driver improvement-type program and the treatment of moving violations and at-fault crashes within a program. Five states do not have programs in which driving privileges are suspended following the accumulation of a given number of moving violations or at-fault crashes. Thirty-five states have programs that are structured around a point system, in which points are assigned to qualifying offenses in such a way as to distinguish the degree of severity or hazard associated with the offenses. Two states (Texas and Michigan) also use a point system, but use the points to impose a surcharge. These states will suspend a license if a driver does not pay the surcharge, or until the surcharge is paid. Another eight states (including Oregon) use defined violation limits to trigger license suspension. Violation limits represent a special case of point systems that do not distinguish among qualifying offenses by setting points in correspondence to the severity of moving violations.

Table 2.3: Structure of state driver improvement programs

Program Structure	State
Point System	Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Kentucky, Maine, Maryland, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, West Virginia, Wisconsin
Surcharge	Michigan (points and surcharge), Texas (surcharge)
Violation Limits	Illinois, Indiana, Iowa, Massachusetts, Minnesota, **OREGON**, Washington, Wyoming
No system for suspending licenses based on moving violations	Hawaii, Kansas, Louisiana, Mississippi, and Rhode Island.

2.5.2 Suspension threshold

How strict is Oregon's DIP compared to other states with respect to its threshold for license suspension? General comparisons are complicated by variations in the definition of qualifying offenses and in rules employed in determining whether crashes were avoidable. A possible basis for comparison would be to determine the incidence of suspension by relating the number of drivers suspended in a given year to the number of licensed drivers in a state. However, many of the states contacted were unable to break out DIP suspensions from the totals associated with their full roster of driver programs.

Given that speeding is the most common moving violation leading to license suspension, we compared the number of speeding violations required to trigger a license suspension across 43 states. Compared to the incidence measure, it should be noted that in addition to being less comprehensive, this focus leaves actual enforcement out of the picture. Even within this limited context, direct comparison is challenging, given variations in the ways that states:

- define levels of speeding violations and assign varying points to these levels;
- define the threshold number of points or violations that trigger a suspension;
- define the time period within which the threshold applies; and
- define the length of the resulting suspension.

Distinguishing Among Speeding Violations: Fourteen states, including Oregon, do not differentiate between different rates of speed in the way they count speeding violations toward a license suspension. Most states with point systems assign fewer points to lesser speeding violations and a larger number of points to more extreme violations. States vary in the number of speeding violation categories to which they assign different points; the number of categories ranges from 2 to 8 among these states. The category of lowest level speeding violation ranges from 1 to 12.4 mph over the posted speed. On average, the highest speeding categories represent violations of 26.8 mph over the speed limit. Some states designate a high speeding violation category based on driving in excess of a defined speed (e.g., over 75 mph in Ohio; over 86 mph in Alabama; over 100 mph in California). Ohio increases points for subsequent speeding violations within a single year (e.g., second offense – one point for each full 5 mph increment, excluding the first 5 mph over the posted speed limit; third and subsequent offenses – two points for each full 5 mph increment, excluding the first 5 mph over the posted speed limit).

Timeframe: The threshold for suspension is also influenced by variations in the defined time period over which qualifying points or violations are accumulated. The time periods within which points are counted vary across states and include the following durations: 12 months, 18 months, 24 months, 36 months, and 5 years. Most states use a 12 month period (40%) or a 24-month period (49%). Some states use more than one time period. For example, in Alaska, a suspension is triggered by 12 points within 12 months **or** 18 points within 24 months.

Length of Suspension: Among states with point or violation limit programs, specifically-defined suspension periods were identified for 41 states. Some states impose suspension periods of increasing length as the number of points or violations increase, or for subsequent suspensions. Most states impose license suspensions of 1, 2, or 3 months. North Dakota and Vermont are at the low end with initial suspensions of 7 and 10 days, respectively. At the high end, Georgia,

Montana, and New Mexico start their suspensions at 1 year. Table 2.4 shows the distribution of initial suspension periods. Oregon's 30-day suspension term places the state at about the 35th percentile rank with respect to length of suspension.

Table 2.4: State DIP initial suspension periods

Suspension Length	No. of States	%
7 and 10 days	2	5%
30 days	13	32%
60 days	6	15%
90 days	10	24%
120 days	1	2%
180 days	6	15%
1 year	3	7%
Total	41	100%

To facilitate comparison, we standardized the state information relating to the severity of speeding violations and the timeframe over which violations were counted toward suspension. Two speeding violation categories – low speed and high speed – were defined. The low speed category was defined to include violations up to 12.4 mph in excess of posted speeds, while the high speed category was defined to include violations of 12.5 mph and greater. The timeframe was defined as a 24-month period. Thus, if a state's program suspended drivers for accumulating four speeding violations in a 12-month period, the value was converted to eight violations in a 24-month period.

Figure 2.2 presents the resulting comparison of the number of low- and high-speed violations required to trigger a suspension among 43 states. On average, a suspension is triggered by 6.1 low speed violations and 4.1 high speed violations. In 14 states, including Oregon, suspension is triggered by the same number of low and high speed violations. Because Oregon's DIP does not distinguish between high and low speed violations, its suspension trigger of four speeding violations is comparable to the high speed average suspension rate of 4.1 for all states and about 35% lower than the low speed average suspension trigger of 6.1. This difference reflects Oregon's violation-based rather than point-based system.

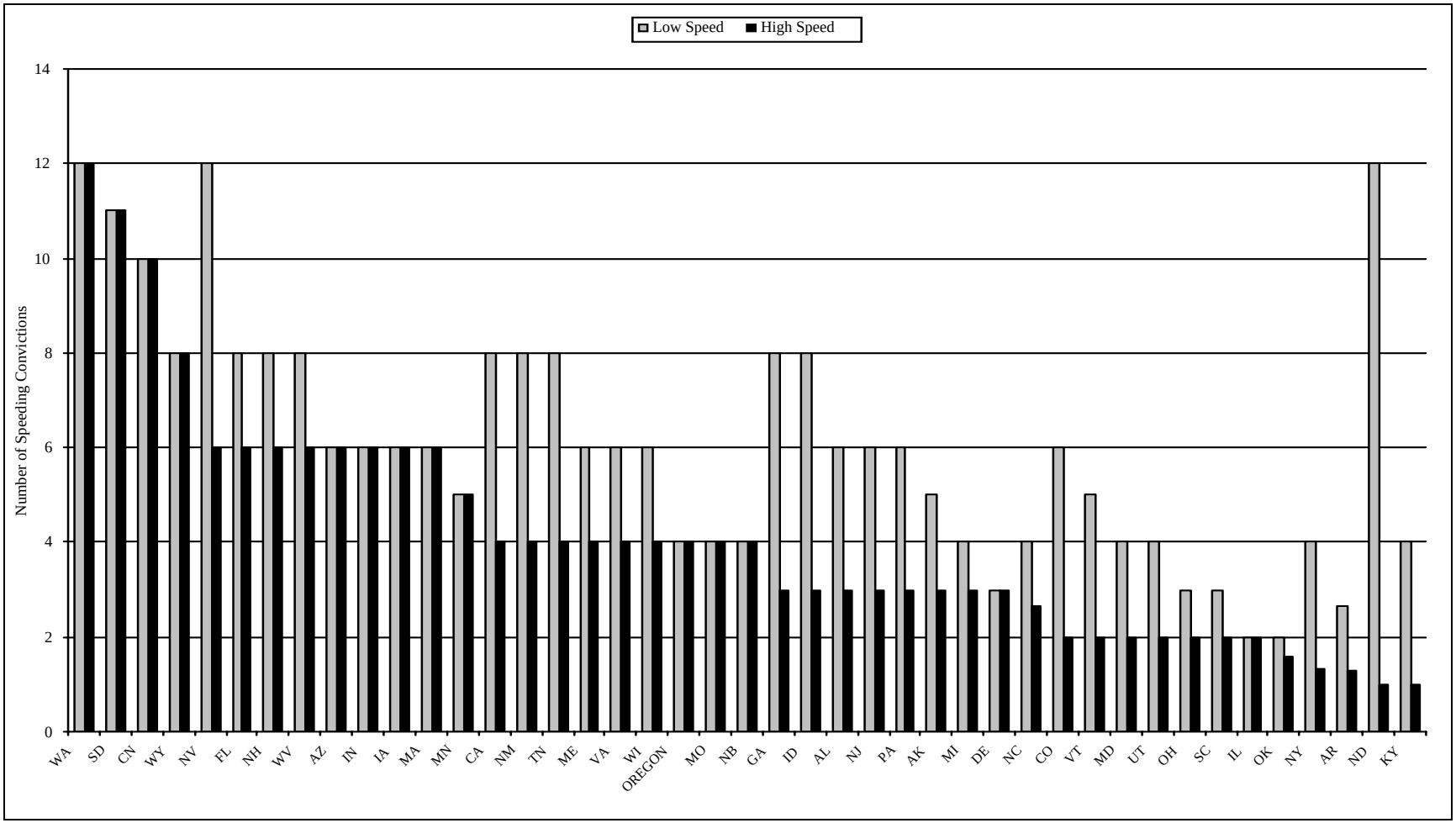

Figure 2.2: State speeding conviction thresholds for license suspension (number of convictions within 24 months)

2.5.3 Diversion option

Information collected indicates that 27 of 44 states offer some type of diversion program as an alternative to suspension. These programs generally require a person to successfully complete a driver education or defensive driving course. The diversion option is generally limited to first suspension cases. Successful course completion leads to a reduction in point totals or violation counts on a person's driving record, thus allowing them to avoid suspension.

Regulations in most states require defensive driving or driver improvement courses to meet national standards, such as those established by the National Safety Council. Many states allow private vendors to provide the courses, subject to certification or approval. It also appears that fifteen states allow drivers to complete traffic safety courses online.

The four-hour "Defensive Driving Course 4," 5th edition, developed by the National Safety Council (NSC), serves as the most widely adopted course among diversion programs. The NSC course covers the following topics:

- Aggressive driving and road rage
- Fatigue and drowsy driving
- How driver behavior and mental conditions affect driving
- Defensive driving techniques
- The crash impact on passengers
- How to avoid a collision and case study scenarios
- Personal driving style evaluation
- Hazard recognition and collision avoidance
- Emotional impairment, common driving irritation and "Pet Peeves"
- The "Fatal Four" causes of a crash
- Driving skills inventory and assessment
- Occupant protection laws and graduate driver's licensing
- Vehicle malfunctions and maintenance

The online course, "I Drive Safely," has been approved in 16 states. The course content covers the following topics:

- The responsibility of driving
- Defensive driving strategies
- Traffic signs, signals, and roadway markings
- Safe driving practices
- Turning and passing
- Driving in the city
- Driving on the freeway
- Driving in varied environments
- Challenges of driving (weather, road conditions, etc.)
- Driving under the influence of drugs and/or alcohol
- Sharing the road

- Vehicle safety and maintenance

None of representatives of the states contacted were aware of evaluations of their state's driver safety courses. The effectiveness of online courses versus in-classroom instruction would clearly be worth investigating. Studies of the effectiveness of safe driving courses are reviewed in the following chapter of this report.

3.0 LITERATURE REVIEW

3.1 OVERVIEW

Driver behavior is widely considered to be the most important determinant of traffic safety (*Evans 1991; 2004*). In his assessment of factors contributing to vehicle accidents, Rumar (*1985*) concluded that driver behavior was the primary contributing factor in 57% of all crashes, while the interaction of driver behavior and highway environmental factors (i.e., design, operating conditions, etc.) accounted for an additional 27%. Thus, efforts to improve traffic safety logically focus on promoting safe driving behavior.

State licensing and vehicle insurance requirements establish "gateway" thresholds for ensuring safe driving and risk accountability. Beyond these measures, additional programs progressively focus on interventions intended to reduce the hazards posed by problem drivers. Driver improvement programs (DIPs) represent the lowest level of intervention, but address the largest number of problem drivers. The objective of DIPs is to intervene at the earliest possible point in a problem driver's career by imposing sanctions intended to correct his (her) unsafe driving behavior. DIP sanctions are commonly structured according to a point system, where points are associated with traffic offense convictions and crashes. As points accumulate, a series of progressively restrictive sanctions are imposed, commonly including the following actions:

- advisory and warning letters;
- interviews/counseling;
- license restriction; and
- license suspension.

Advisory and warning letters communicate to problem drivers that their behavior has come to the attention of the licensing authority, and that if the pattern of behavior continues, their driving privileges will be affected. At the next level, problem drivers are called in and counseled in an effort to improve their driving practices. At the final levels, the licenses of problem drivers are restricted (usually, prohibiting driving from midnight to dawn) and, finally, suspended (usually for 30 days).

DIP subjects have generally been viewed as a population characterized by deviant behavior, and there has been a substantial effort to draw on knowledge from the behavioral sciences in crafting letters and in training interviewers to maximize the likelihood that these interventions lead to the intended outcome. There is no consensus, however, on what "styles" work best. The "deviance" of problem drivers has come to be recognized as being quite heterogeneous, both across the population and over time.

Driver improvement programs have been in place for over 60 years in the U.S., and there have been many studies evaluating their effectiveness in reducing convictions and crashes. An

important consideration in the design of evaluation studies is the establishment of proper controls, recognizing that DIP subjects' performance over time may exhibit regression-to-the mean effects, resulting in improvements that might be mistakenly attributed to the actions of the program. To account for this phenomenon, properly designed evaluations create control groups of qualifying subjects who are not treated by the program. The performance of such control groups serve as a reference point for drivers who are subject to DIP actions.

3.2 ESTIMATED EFFECTS OF SANCTIONS

There have been three generally recognized assessments of DIP evaluation studies: Kaestner (*1968*), Struckman-Johnson, et al. (*1989*), and Masten and Peck (*2004*). Kaestner limited his attention to the effectiveness of interviews in his evaluation of seven DIP studies. All of the studies in his analysis found significant reductions in subsequent convictions, while only two of the seven found significant reductions in crashes. Kaestner noted that the two studies showing crash reductions were distinguished by the respective states' use of one-on-one interviews (as opposed to group sessions) with staff that had been carefully trained to "diagnose the specific nature of the problem and to provide counsel accordingly" (p. 514).

Struckman-Johnson, et al. (*1989*) were more comprehensive in their evaluation of DIP studies. Their evaluation covered 19 studies involving 59 driver improvement actions. They found that convictions declined significantly in 24 of 59 cases, while crashes declined significantly in only 10 of 59 cases. In two instances they found that convictions increased significantly, and that crashes increased significantly in another three instances. Significant declines in both crashes and convictions were found to occur in only 5 of 59 instances. These outcomes led the authors to conclude: "…the effect of driver improvement programs on violations provides minimal predictive information about the effects of these same programs on crashes" (p. 209).

The review of DIP evaluation studies by Masten and Peck (*2004*) is the most comprehensive and rigorous of the three efforts cited here. Their analysis encompassed 35 "methodologically sound" studies involving 106 driver improvement actions. They noted that the Struckman-Johnson, et al. (*1989*) reliance on unstandardized percentage changes in convictions and crashes precluded direct comparisons across studies. Masten and Peck's use of weights derived from the size of treatment groups allowed them to construct composite estimates of the conviction and crash effects resulting from various program actions. Their estimates of the effects of various program actions are summarized in Table 3.1.

Table 3.1: Effects of DIP actions on subsequent crashes and traffic convictions

DIP Action	Crashes (%)	Traffic Convictions (%)
Educational Materials	1.17	-0.90
Warning Letters	-4.34	-5.70
Group Meetings	-4.97	-8.02
Individual Meetings	-7.72	-9.70
Probation	7.05	-13.35
Suspension/Revocation	-17.19	-21.37
Overall	-6.49	-8.28

Source: Masten and Peck 2004

Across all DIP actions evaluated in the 35 studies, Masten and Peck (*2004*) found a composite reduction in crashes of 6.49% and a reduction in convictions of 8.28%. Generally, the magnitude of the reductions in crashes and convictions increased as DIP actions became more punitive. Thus, while mailing educational materials to the lowest level offenders was found to have little effect, license suspension or revocation was found to result in a 17% reduction in crashes and a 21% reduction in convictions. An anomaly in the Masten and Peck (*2004*) findings is their estimated 7% composite increase in crashes following probation, for which they have no explanation.

Although their meta-analysis estimates of crash and conviction reductions were generally significant, Masten and Peck (*2004*) also found considerable within-treatment heterogeneity among the findings of the studies in their analysis. Additional analysis by the authors pointed to several contributing factors. First, studies that employed quasi-experimental designs estimated crash and conviction reductions that were five times larger than studies that employed true experimental designs. Second, DIP actions that were triggered by crashes were found to have a larger impact than actions that were triggered by convictions. Third, DMV-initiated actions were found to have twice the impact of court-initiated actions.

Given their finding that license suspension represents the most effective crash countermeasure, Masten and Peck (*2004*) recommended that this action be employed "…as soon as is legally feasible" (p. 415). However, they noted that their California DIP studies had found that warning letters produced the largest net benefit, given their low cost and high volume. They also suggested that warning letters enhance fairness by alerting drivers to the fact that they are at risk of losing their privileges.

The sanctions listed in Table 3.1 represent progressive levels of intervention in response to instances of unsafe driving behavior. Alternatively, a number of states provide a diversionary option involving driving safety courses in lieu of license suspension. Kaestner (*1968*) rationalizes the value of such educational efforts as follows: "Current policy typically suspends driving privileges for given intervals and rather automatically returns the license without evidence of improved driving capability at the termination of the suspension interval. The assumption that time alone will improve the behind-the-wheel performance is open to question (p. 517)."

Evidence of the effects of diversion programs is, at best, mixed. In a study of diverted Oregon drivers, Kaestner and Speight (*1974*) compared the records of persons who enrolled in a defensive driving course with the records of persons who had been suspended. In the year-long period following treatment, they found a significantly greater share of accident- and conviction-free drivers among those who completed the driving course than among those who were suspended. However, more recent evaluations have produced fairly consistent evidence indicating that safe driving courses have little, if any, effect. Two studies of California's traffic violator school program (*Peck, et al. 1979; Gebers 1995*) found no significant effect on subsequent convictions and crashes, as did a recent study of Arizona drivers (*Michael 2004*). An interesting finding by Michael (*2004*) was that about one-half of the male and one-third of the female offenders opted to let their licenses be suspended rather than attend the safe driving course and have the subject traffic offense removed from their driving record.

Another study by Kloeden and Hutchinson (*2006*) studied the subsequent crash and conviction incidence of problem drivers in Adelaide, Australia, comparing those who attended a 90-minute safety workshop with others who opted to pay a fee rather than attend. They found no difference in subsequent crash involvement between the two groups, but did find that the workshop attendees had fewer subsequent moving and administrative violations than those who had opted out. However, they noted that differences in the age and gender composition of the two groups prevented them from concluding that the difference in convictions was attributable to the safety workshop.

Programs focused on DUI offenders appear to hold more promise than programs dealing with less serious offenses. Wells-Parker, et al. (*1995*) conducted a meta-analysis of 215 evaluation studies of programs for drinking/driving offenders, finding an 8-9% lower rate of recidivism among subjects who attended remediation programs compared to subjects who did not attend such programs.

Driver behavior analysts often observe that the intended effect of license suspension is mitigated by the fact that many people continue to drive following suspension. DeYoung (*1999*) stated that as many as 75% of suspended Californians continued to drive. There is evidence that persons who drive while suspended reduce their exposure and drive more carefully (*Malenfant, et al. 2002; Ross and Gonzales 1988*). Nevertheless, the incidence of suspended driver involvement in crashes remains disproportionately large. Harrison (*1997*) found that the extent of suspended driver over-involvement grew with the level of crash severity, while DeYoung, et al. (*1997*) found that suspended, revoked and unlicensed drivers were four times more likely to be involved in a fatal crash than the average California motorist.

Driver disregard for DIP suspensions has led to increased interest in the use of additional vehicle-based sanctions, which has traditionally been reserved for the most serious safety offenders. Vehicle sanctions cover the following progressively punitive options:

- Tagging the license plate to provide a visual cue for enforcement;
- Confiscating the license plate;
- Immobilizing the vehicle;
- Impounding the vehicle; and
- Forfeiting the vehicle.

In 1994 the California legislature authorized impoundment of vehicles for 30 days following a first conviction for driving while suspended or driving without a license. Vehicle forfeiture was also authorized following a second conviction. In 1995, about 100,000 vehicles were impounded under the new program. DeYoung (*1999*) analyzed the effectiveness of the California impoundment program, comparing the 1-year post-conviction records of drivers whose vehicles were impounded with the records of a similar group from 1994, just before the program was implemented. His findings are summarized in Table 3.2.

Table 3.2: Estimated effects of California's vehicle impoundment program

Indicator	First Offense Subjects	Repeat Offense Subjects
Driving While Suspended/Revoked/Unlicensed	-23.8%	-34.2%
Total Traffic Convictions	-18.1	-22.3
Crashes	-24.7	-37.6

Source: DeYoung 1999

Among drivers whose vehicles were impounded following a first offense, DeYoung (*1999*) estimated reductions in total convictions, license-related convictions and crashes of 18, 24, and 25 percent, respectively. The corresponding reductions estimated for repeat offense drivers were substantially greater.

Although the effects of California's vehicle impoundment program are fairly substantial, it is worth noting that DeYoung's estimated reductions in total traffic convictions and crashes do not differ as much as one might expect from the composite reductions associated with license suspension and revocation reported by Masten and Peck (*2004*). One possible explanation is that the economic underpinnings of the deterrent effect of impoundment may not be that great. Peck and Voas (*2002*) report that half of the vehicles impounded in California were not reclaimed, implying that their value to owners was less than the cost of reclamation. Some of these subjects were likely to have purchased another vehicle in the interim. Other subjects likely gained access to other vehicles. Thus, while vehicle impoundment may have reduced exposure, its most notable consequence may have been its effect on drivers' decisions to retire their vehicles somewhat sooner than would have otherwise occurred.

The vehicle forfeiture provision of the California program was rarely exercised. Peck and Voas (*2002*) surveyed 18 jurisdictions that were actively implementing vehicle impoundment and found that only five were pursuing forfeiture, all at a very limited scale. They estimated that about 500 vehicle forfeitures had occurred, far less than the 23,000 forfeiture candidates identified in California DMV driver records. The authors found a variety of reasons for the low incidence of forfeiture, including a) a lack of support from district attorneys in pursuing forfeiture cases; b) cumbersome administrative procedures within police departments; c) high net cost of administration; and d) the large proportion of third-party owners, whose vehicles are exempted (in the first instance) from forfeiture.

3.3 EVALUATION AND PROGRAM DESIGN ISSUES

Masten and Peck's (*2004*) meta-analysis of DIP studies revealed an important consequence associated with the research design component of DIP evaluations. Even among studies that had been judged to be methodologically sound, they found that reductions in convictions and crashes following DIP actions were five times larger in studies using quasi-experimental designs than they were in studies using true experimental designs with random assignment of subjects. This finding raises serious questions about the integrity of quasi-experimental approaches, even when these approaches take care to include a variety of statistical controls to address sample selection bias. The magnitude of the differences obtained between true and quasi-experimental designs indicates that the regression-to-the-mean phenomenon is a very real problem in DIP evaluations.

As explained by Campbell and Stanley (*1963*), regression-to-the-mean effects are a common threat to validity in evaluations of extreme populations. Using the present study as an example of this phenomenon, the 26,551 Oregon drivers suspended in the DIP in 2004 are extreme in the sense that their driving records over the prior 24 months place them among the 1% of the most crash and conviction prone of the state's 2.8 million drivers. Some of the drivers in this pool have likely exhibited a sustained and consistent record of unsafe behavior over their driving careers. For others, however, their record over the prior 24 months represents an aberration in their driving careers, a result of a series of essentially random negative events in which they happened to be "in the wrong place at the wrong time." In other words, their driving behavior is generally safer than the 24-month record indicates. If one were to follow the 26,551 drivers forward in time, it is very likely that their collective driving records would show an improvement (even without suspension), considering that the series of previous random negative events that placed some drivers in the program is not very likely to be sustained.

With extreme populations, a proper research design is needed to control for regression-to-the-mean effects. In the present case, given an interest in determining the effect of suspension, a proper research design would require random selection of a portion of the DIP population to serve as a control group for which no suspension action is taken. The remaining subjects, who would be suspended, would represent a treatment group. While one would still expect to see an improvement in the driving records of those who were not suspended, the records of those who were suspended would be expected to improve even more if that treatment serves as an effective deterrent. The size of the deterrent effect of suspension can then be determined as the difference in driving records between those who were suspended and those who were not.

While such designs provide an unambiguous advantage in evaluating suspensions, they also pose a liability risk. Although control group members qualify for sanctions, they are "excused" for the purpose of program evaluation. It appears that there may be increasing concern about institutional exposure to liability in connection with incidents involving control group drivers. For example, California discontinued this long-standing practice in 1994 after the "… DMV and State Legislature concluded that the effectiveness of the negligent driver program had been sufficiently demonstrated through 20 years of intensive evaluation such that it was no longer desirable to withhold interventions from a small percentage of eligible offenders" (*Peck 1999: 28*). Oregon discontinued use of control groups when it revised its DIP in 2002. In Oregon's

case, safety hazard and risk exposure were previously reduced by removing drivers from control groups when they accumulated two additional convictions or crashes (*Jones 1997*).

With the practice of forming control groups apparently in decline, it will become more difficult to undertake DIP evaluations that will stand up to the scrutiny of the traffic safety community. Without a control group to provide a basis for comparison, a recent California study limited its attention to a characterization of the relative safety risks posed by drivers in the state's negligent operator treatment system (NOTS), but did not attempt to assess whether NOTS actions had any effect on those risks (*Gebers and Roberts 2004*).

Most state DIPs are structured around a point system associated with crashes and traffic offense convictions, with progressive sanctions being triggered by the accumulation of points. Given that the ultimate object of the programs is to improve safety or reduce the likelihood of future crashes, several questions about program structure have been investigated. The first deals with the extent to which previous convictions and crashes serve as good predictors of their future occurrences. The second deals with the point setting process and questions whether point values defined for specific convictions are consistent with the relative potential hazard of those convictions.

Hauer, et al. (*1991*) addressed both questions in their study of Ontario, Canada drivers. They used data on crashes, convictions, and driver characteristics over a two-year period to predict crash likelihood in a subsequent two-year period. Generally, they found that their predictions of high crash potential out-performed predictions based on the point system used to administer license control actions in the province. More specifically, they found that distinguishing convictions by type added little improvement to predictions of crash potential, and that a driver's crash history was much more important than his (her) conviction history in predicting crash potential. Personal characteristics such as age and gender also contributed to improved predictability. An interesting observation made in this study was that convictions for some traffic offenses that are generally considered to represent a greater safety risk (e.g., speeding) were found to be associated with fewer subsequent crashes than convictions for lower-risk offenses (e.g., minor vehicle neglect). The authors attributed this apparent paradox to differences in enforcement intensity. If so, this would suggest that *de facto* and nominal point values differ, a distinction that is unlikely to have been addressed in the design of the program.

Chen, et al. (*1995*) conducted a similar analysis of crash potential, focusing on drivers in British Columbia. Like the Hauer, et al. findings, the authors found that crashes were the best predictors of subsequent crashes. However, in contrast with Hauer, et al. (*1991*), Chen, et al. (*1995*) found substantial differentiation among convictions in their relative predictive contributions to future crashes. Their analysis produced the following ranking of convictions (in order of diminishing importance):

- Failure to yield;
- Major signal violation;
- Minor signal violation;
- Criminal code conviction;
- 24-hour roadside suspension (impaired driver);
- Speeding.

The findings by Hauer, et al. (*1991*) and Chen, et al. (*1995*) that prior crashes are better predictors of subsequent crashes than are prior convictions is somewhat at odds with previous research. Peck, et al. (*1971*), for example, estimated separate equations to predict convictions and crashes, and found that the conviction equation out-performed the crash equation in predicting crashes. This may be explained by the relative rarity of crash occurrences versus convictions, coupled with the knowledge that drivers' crash and conviction frequencies are correlated. Gebers and Peck (*2003*) exploited this knowledge, employing canonical correlation methods to predict crashes from a sample of California drivers. With information on predicted convictions, they obtained better crash predictions than what could be obtained from a standard crash prediction equation.

Efforts to determine the relative contribution of convictions and crashes in predictions of future crashes have important implications for the design of point systems that underlie DIPs. As Gebers and Peck (*2003*) note, in most point-based programs, convictions weigh more heavily than crashes in triggering license control actions. To the extent that the affected drivers represent the subpopulation with the highest potential crash risk, the actions imposed should have a greater effect.

3.4 CHARACTERIZATION OF DIP SUBJECTS AND DIFFERENTIAL PROGRAM EFFECTS

Persons who are the subjects of DIP actions are a distinct group in relation to the general population of licensed drivers. In addition, DIP actions lead to differing consequences within this sub-population. These two themes represent the focus of a number of studies.

The California DMV administers the state's negligent operator treatment system (NOTS), the nation's largest DIP. The structure of the NOTS is similar to Oregon's pre-2002 DIP, consisting of a graduated series of actions ranging from warning letters through suspensions (following hearings). Gebers and Roberts (*2004*) compared the characteristics of NOTS subjects at the point of suspension to those of a random sample of the general driving population of the state. They also examined the relative risks of NOTS subjects associated with their three-year driving histories prior to suspension. With respect to demographic characteristics, NOTS subjects were disproportionately male and young (see Table 3.3). Men made up 84% of the NOTS population at the point of suspension, while they represented only about 52% of the state's driving population. The distinctions were even more dramatic when considering age distribution. Persons age 18 through 24 constituted over 45% of NOTS subjects, but just over 12% of the driving population. In contrast, persons age 60 and over made up less than 1% of NOTS subjects, compared to their near 17% share of the state's driving population.

Table 3.3: Demographic profile of NOTS suspension-level subjects and California drivers

Characteristic	NOTS	Driving Population
Male	84.0%	51.7%
Age 18 through 24	45.2	12.4
Age 60 and older	0.8	16.7

Source: Gebers and Roberts 2004

The relative safety risks represented by NOTS suspension-level subjects were substantial (see Table 3.4). These subjects were nearly five times more likely to have been involved in a crash in the prior three years than average California drivers. Their relative likelihood of involvement increased to six in fatality injury crashes, and to more than eleven in at-fault crashes. Unsafe driving practices were also strongly evident among NOTS suspension-level subjects. Their conviction rate for program-related traffic offenses was nearly ten times the conviction rate observed among the average driving population.

Table 3.4: Three-year prior risk levels of NOTS suspension-level subjects relative to California's driving population

Incident Type	NOTS Relative Risk
All Crashes	4.72
At-Fault Crashes	11.20
Fatality/Injury Crashes	6.01
Qualifying Traffic Convictions	9.58

Source: Gebers and Roberts 2004

In another study, DeYoung and Gebers (*2004*) used the same NOTS dataset to estimate models of crashes that occurred three years prior to suspension. They hypothesized that estimated crash frequencies would be sensitive to different types of convictions, which were organized into nine categories. As one might expect, they estimated that marginal crash risk was smallest for convictions in a category related to non-driving offenses (e.g., failure to pay child support). Convictions in several categories containing offenses that are more common among elderly drivers (e.g., related to physical and mental impairments) were estimated to have a relatively modest effect on crash risk. Convictions with the greatest marginal effect on crash risk were from categories that covered serious offenses (e.g., reckless driving and road rage) and failure to provide proof of insurance. Given these findings, the authors suggested that harsher sanctions, such as vehicle impoundment, might be reserved for persons whose suspensions were triggered by convictions associated with the greatest estimated crash risk.

Studies of the effectiveness of license control actions generally focus on changes in convictions and crashes observed at-large among a treatment group, without probing for differential outcomes across specific cohorts of the treatment group. Given that the composition of the DIP population is disproportionately weighted toward young males, singular actions designed to maximally influence this group can be expected to produce the greatest effect. However, given the diversity of the DIP population and the possibility that given actions can lead to differing outcomes across subgroups, analysts have explored the alternative of tailoring actions to produce the greatest effect for each subgroup.

A great deal of attention has been devoted to differential outcomes across DIP subgroups with respect to the tone of advisory and warning letters (*Jones 1991; 1993; 1997a; 1997b; Kaestner and Speight 1974*). Jones (*1997a*), for example, found that the effectiveness of "high-threat" and "soft sell" advisory letters used in the Oregon DMV's DIP varied by driver age and gender. Overall, a high-threat letter tended to be more effective in reducing crashes, and it was also more effective among younger drivers. But a soft-sell letter proved to be more effective for older (over age 45) drivers. A high-threat letter was also found to be more effective in reducing

crashes among men, while neither letter type was found to be effective in reducing crashes among women. For moving violations, no gender or age differentials were found with respect to letter type, although both letters proved to be increasingly effective with respect to age. These findings provide an interesting contrast to work reported by Kaestner and Speight (*1974*). Thirty years earlier, an evaluation of advisory letters used by the Oregon DMV found soft-sell letters to be more effective among younger drivers in reducing both crashes and convictions. Taken together, these works suggest that attitudes and mores change over time, and that DIP interventions need to adapt to these changes to maintain their effectiveness.

Perhaps the most fundamental distinction can be drawn between those subjects who are formally aware that a sanction has been imposed on their driving privileges and those who are not. A tacit assumption in the driver improvement literature is that persons who continue to drive while their license is suspended or revoked are knowingly disregarding the sanction. However, in a study of Oregon's habitual offender program, Jones (*1987*) found that more than half of the license revocation notices mailed to program subjects could not be delivered. Although he found evidence of a modest safety improvement among those who were supposedly unaware of their revocation action, the change was substantially less than that observed among those who had received their revocation notice. A spot-check by the Oregon DMV in April 2005 found that a larger percentage (about 80%) of mailed suspension notices are successfully delivered.

3.5 SUMMARY OBSERVATIONS

This literature review has identified a substantial body of research addressing the effects of driver improvement programs. Generally, the research indicates that these programs do contribute to significant improvements in traffic safety. However, given that substantial social costs continue to be associated with the unsafe driving behavior of persons who have received program sanctions, there has been ongoing policy interest in achieving even greater safety improvements than has been demonstrated. Selected observations from the literature review include the following:

- As DIP sanctions become more punitive, they produce greater safety improvements. The strongest conventional sanction, license suspension, can be expected to yield an approximate 20% reduction in subsequent crashes and traffic offenses.

- A majority of those who are suspended continue to drive. Although they act to reduce their exposure, suspended drivers nevertheless continue to be over-represented in the incidence of crashes and traffic offense convictions. However, considering that DIP suspensions are typically shorter in duration than suspensions issued in other driver programs, suspended DIP subjects may be less likely to continue to drive than subjects suspended in other programs. Perhaps in response to this phenomenon, there has been an increasing interest in actions targeting vehicles. California's vehicle impoundment program was found to produce safety improvements that exceed what can be attained by license suspension, but it also involved substantially larger administrative costs.

- DIP offenders are disproportionately young and male. Elderly drivers represent a very small share of those who receive suspensions.

- Given the circumstances associated with the subject population, the best DIP evaluation studies have been necessarily grounded in rigorous research designs involving control groups. However, the use of control group-based designs appears to be in decline, possibly due to liability concerns, and this represents a threat to the field's tradition of research integrity.

- The structure of the point system associated with typical DIPs is only weakly validated by empirical research that relates the incidence of past crashes and traffic offenses to future occurrences. Thus there is uncertainty about the relative importance that should be given to traffic offenses versus crashes in determining program actions, as well as to the relative importance of different types of traffic offenses.

- However a DIP is structured, interventions should be initiated as early as is legally possible. Also, it is generally believed that programs with initial warnings of future action are perceived by the driving public as being fairer. Fairness aside, among the sanctions commonly employed in DIPs, warning letters have proved to be the most cost effective means of improving traffic safety.

4.0 STATISTICAL ANALYSIS

In this chapter we analyze characteristics of DIP subjects and their records of crashes and convictions in relation to the general population of drivers in Oregon. An initial purpose of the analysis is to identify demographic and locational characteristics that distinguish DIP subjects from the state's driving public. A second purpose is to document the relative risk or hazard associated with DIP subjects, as reflected in their pre and post-suspension records of crashes and convictions. The final purpose of the analysis is to estimate the likelihood of subsequent crashes and convictions following completion of suspensions.

4.1 TIMEFRAME AND SAMPLE

The current adult DIP has been in effect since January 2002, providing over four full calendar years of experience. In order to analyze driving records leading up to and following DIP suspensions, a window in time must be defined to draw samples of drivers suspended in the program and drivers from the general population. The period extending from January 1 through June 30, 2004 represents an approximate mid-point in the history of the current program, and was thus defined as the sampling timeframe. This leaves a 1.5 year (540 day) period on either side to recover crash and conviction information prior to and following DIP suspension.

For the DIP sample, all persons suspended in the program over the six-month period were selected for analysis. For the general driver population sample, approximately 2% of the state's adult drivers of record at the mid-point of the sampling timeframe were randomly selected. Data from both samples were then "cleaned" to eliminate subject records that were missing important information (i.e., gender) or included disqualifying information (i.e., a non-Oregon residence ZIP code and age under 18 or over 99). The final DIP and general population samples included 13,885 and 42,335 persons, respectively.

4.2 DRIVER CHARACTERISTICS

A demographic and locational profile of the DIP and general driving population samples is presented in Table 4.1. With respect to age, younger cohorts account for a substantially greater share of DIP subjects than they do for the driving population. For example, persons age 18-24 account for about 38% of the DIP sample, but for only about 11 percent of the general driving population sample. In other words, the likelihood of a driver in this age group being suspended in the DIP is about 3.5 times greater than proportionate assignment would predict. The 25-34 age cohort is also over-represented in the DIP sample, with a relative likelihood of about 1.5. All other age cohorts are under-represented in the DIP sample. Thus, over age 34, the relative likelihood of a person being in the DIP is less than one, and this relative likelihood progressively decreases with driver age. For drivers age 75 and over, the relative likelihood of their inclusion in the DIP population falls to about 1/33.

Table 4.1: Characteristics of the Oregon DIP and general driver population samples

Characteristic	DIP Sample	Driver Population Sample	DIP Relative Likelihood
Age Group			
18-24	37.92%	10.62%	3.57
25-34	32.40	21.80	1.49
35-44	18.35	20.20	0.91
45-54	8.06	18.60	0.43
55-64	2.41	12.47	0.19
65-74	0.59	7.19	0.08
75 and Older	0.27	9.11	0.03
Gender			
Female	21.94	46.25	0.47
Male	78.06	53.75	1.45
Residence			
Rural	33.29	37.14	0.90
Urban	66.71	62.86	1.06
Sample Size	13,885	42,335	--

With respect to gender, males make up a substantially greater share of the DIP sample than the driver population sample, with a relative likelihood approaching 1.5. Finally, drivers residing in urban areas are marginally over-represented in the DIP sample. In this study, persons are defined to be urban residents if their residence ZIP code area intersects a Census-designated urban area.

4.3 RISK ANALYSIS OF DIP SUBJECTS

4.3.1 Risk prior to suspension

A DIP suspension signals that a person's record of crashes and convictions poses an unacceptable safety risk to themselves and to others. In this section we document the incidence of convictions prior to suspension from the records of sampled DIP subjects, and compare the conviction rates of DIP subjects to the conviction rates observed among the state's driving population. This comparison provides a sense of the relative safety risk of persons whose licenses are suspended in the DIP. In calculating conviction rates, we focus on the 540-day period prior to the DIP suspension date of each subject. To ensure comparability, the conviction rates for the driving population sample were calculated over 540-day periods that closely corresponded to the temporal distribution of DIP suspension dates in the 6-month study period.

The violations covered in the risk analysis include crashes, traffic offense convictions, and major convictions. Traffic offense convictions fall into two general categories. The first category primarily includes moving violations, defined in OAR 735-064-0220. A conviction for any violation in this category accounts for one point toward restriction and suspension in the DIP. The second category primarily includes equipment and procedural violations, as defined in OAR

735-072-0035. Five convictions of violations in this category account for one point toward restriction and suspension in the DIP. In the remainder of the report we refer to convictions in the first category as Type A convictions, and convictions in the second category as Type B convictions. Appendix D provides a list of Type A and B offenses included in the DIP.

It should be noted that other DMV programs have been established under state law to deal with major convictions. They are included in this study to assess the extent to which risks associated with other DMV driver programs correspond to DIP-related risks. Major convictions include offenses such as felony assault, driving under the influence (supplemented by implied consent suspensions and diversion agreements), driving while suspended or revoked, reckless driving and endangerment, and manslaughter (see Appendix C for a complete listing).

Table 4.2 presents crash, Type A conviction, and major conviction rates for the DIP and general driver population samples. The rates are differentiated with respect to age group, gender, and urban/rural residential location.

4.3.1.1 Crashes

Overall, DIP subjects experienced 24.75 crashes per 100 drivers during the 540-day period prior to suspension, compared to 4.15 crashes per 100 drivers among the general driving population. Thus, DIP subjects represented a relative crash risk that was 5.96 times greater that the risk posed among Oregon's driving population. With respect to age group, DIP crash incidence was relatively greater for subjects under age 24 and over age 65. The crash incidence was particularly high among DIP subjects age 75 and older. In contrast, crash incidence generally declined with respect to age in the general driving population. In this sample, persons age 75 and older experienced a crash incidence of 2.10 per 100 drivers, or roughly half the overall average.

It can be expected that groups that are over-represented in the DIP sample would reflect a relatively lower risk compared to their peers, while groups that are under-represented in the DIP sample would reflect a relatively higher risk compared to their peers. By definition, all groups in the DIP have passed the same threshold for suspension. Thus there will be relatively fewer DIP subjects from groups with a lower incidence of crashes in the general driving population and relatively more DIP subjects from groups with a higher general incidence of crashes. As a result, the relatively few DIP subjects drawn from groups with a low general incidence of crashes will be more different from their counterparts in the general driving population, while the relatively greater number of DIP subjects drawn from groups with a high general incidence of crashes will be more like their counterparts in the general driving population. This pattern is borne out in the relative crash incidence, which increases with respect to age. For example, the relative crash risk of DIP subjects age 18-24 is 4.38 times greater than the crash risk of their peers in the general driving population, while the relative crash risk of DIP subjects age 75 and older is 30.89 times greater than their peers. Considering both absolute and relative crash incidence, DIP subjects age 75 and older, although under-represented and fairly small in number, experience a crash incidence that is notably higher than other DIP age categories and substantially greater than the general driving public.

Table 4.2: Rates of prior crashes, Type A convictions, and major convictions for DIP subjects and Oregon drivers* (incidence per 100 drivers)

	Crashes			Type A Convictions			Major Convictions		
Characteristic	**DIP**	**OR**	**DIP/OR**	**DIP**	**OR**	**DIP/OR**	**DIP**	**OR**	**DIP/OR**
Age Group									
18-24	30.60	6.98	4.38	431.17	26.48	16.28	9.44	1.18	8.00
25-34	21.32	4.07	5.24	420.54	16.07	26.17	9.11	1.30	7.01
35-44	19.58	4.26	4.60	416.21	13.38	31.11	10.75	0.82	13.11
45-54	21.27	3.91	5.44	400.09	11.03	36.27	7.24	0.55	13.16
55-64	24.48	4.03	6.07	357.01	9.00	39.67	8.36	0.15	55.73
65-74	28.05	3.25	8.63	346.34	4.63	74.80	8.54	0.10	85.40
75 and Older	64.86	2.10	30.89	300.00	2.41	124.48	0.00	0.00	--
All Ages	24.75	4.15	5.96	419.83	12.75	32.93	9.34	0.61	15.31
Gender									
Female	30.16	3.93	7.67	401.31	9.59	41.85	4.76	0.26	18.31
Male	23.22	4.33	5.36	425.04	15.46	27.49	10.63	0.91	11.68
Residence									
Rural	24.25	3.71	6.54	408.63	11.33	36.07	10.08	0.79	12.76
Urban	24.99	4.40	5.68	425.42	13.58	31.33	8.97	0.50	17.94

* Rates of Type B convictions are not reported in the table. The Type B conviction rate for the DIP sample is 20.72 per thousand drivers, or about 5% of the Type A rate. Given that five Type B convictions are equated to one Type A conviction in the accumulation of points toward suspension, they have a fairly inconsequential effect.

With respect to gender, the crash incidence of female DIP subjects is about 30% greater than the incidence of male DIP subjects. Among the sample of Oregon drivers, the reverse is true: here, the crash incidence of males is about 10% greater than females. This reversal contributes to a larger differential in the relative risks of female and male DIP subjects compared to their peers in the general driving population. The crash rate of female DIP subjects is 7.67 times greater than the crash rate of females in the driving population, and it is also about 43% greater than the relative crash rate of male DIP subjects.

The crash incidence of urban and rural DIP subjects is very similar. In contrast, among the sample of the general driving population the crash incidence is about 18% greater for urban residents. Thus, the relative crash incidence of rural DIP subjects, at 6.54 times their rural peers, is about 15% larger than the relative incidence of urban DIP subjects.

4.3.1.2 Type A convictions

Turning to Type A convictions, DIP subjects averaged nearly 420 convictions per 100 drivers during the 540-day period preceding their suspensions. This rate exceeds the 4-conviction threshold for DIP suspension, despite the fact that the period from which the rate is calculated is six months less than the period used to determine suspensions. This indicates that Type A convictions are the primary pathway to suspension for many DIP subjects.

Table 4.3 provides a breakdown of the ten most frequent types of Type A convictions received prior to suspension. These ten conviction types account for nearly 94% of the total convictions received by the subject population. Convictions related to failure to maintain license privileges (i.e., driving while suspended and operating a vehicle without driving privileges) account for nearly 41% of all convictions. Speeding-related convictions, accounting for nearly 31% of the total, are the second most common conviction type. Convictions relating to traffic control device violations and unsafe turning movements, which commonly occur at intersections, account for over 9% of all convictions. Safety belt related infractions account for over 7% of all convictions. Finally, convictions related to unsafe operation of a vehicle (i.e., careless driving, lane violations, and following too closely), account for nearly 5% of all convictions.

Type A conviction rates do not vary as much across age groups as do crash rates. For example, the conviction rate for persons age 18-24 is only about 3% higher than the average for all DIP subjects. However, one noteworthy distinction is that older DIP subjects have substantially lower than average conviction rates (e.g., nearly 29% lower for persons age 75 and older), in contrast to their higher than average crash rates. Thus, older drivers are relatively more likely than younger drivers to be suspended as a result of crashes.

Table 4.3: Top 10 conviction types pre-DIP suspensions (January through June 2004)

Rank	Conviction Type	Number	Percentage
1	Driving while suspended	20,688	35.5%
2	Speeding (all)	18,044	31.0%
3	Failure to obey traffic control device	4,196	7.2%
4	Failure to use/maintain safety belts	3,719	6.4%
5	Operating a vehicle without driving privileges	3,461	5.9%
6	Unlawful, improper, dangerous turns	1,316	2.3%
7	Careless driving	1,269	2.2%
8	Failure to stay within lane,/unsafe lane movement	817	1.4%
9	Following too closely	631	1.1%
10	Endangering child passenger/failure to use safety belts	540	0.9%
Subtotal	Top 10 conviction types	54,681	93.8%
Total	All convictions	58,294	100.0%

The Type A conviction rate for DIP subjects is nearly 33 times greater than the conviction rate from the sample of the state's driving public. Both the DIP and general driving samples show declines in conviction rates with respect to age, but the rate of decline is greater among the driving public than it is among DIP subjects. Thus, there is an upward trend in relative incidence with respect to age. For example, the Type A conviction rate for DIP subjects age 18-24 is about 16 times greater than the conviction rate for the driving public, while the rate for DIP subjects age 75 and older is nearly 125 times greater than their peer group rate.

With respect to gender, the Type A conviction rate is about 6% higher for male DIP subjects. In the sample of the driving public, the conviction rate for males is more than 60% higher than the conviction rate for females. As a result, the relative incidence of Type A convictions among female DIP subjects (41.85) is over 60% greater than the relative incidence among male DIP subjects (27.29). The conviction rate is somewhat higher for urban residents in both samples, and the relative incidence for rural DIP subjects is about 15% greater than the relative incidence for urban DIP subjects.

4.3.1.3 Major convictions

Major convictions are less common among DIP subjects and the driving public than are crashes and Type A convictions. Overall, DIP subjects incurred 9.34 major convictions per 100 drivers during the 540-day period prior to suspension. In contrast, among the driving public the major conviction rate was 0.61. Thus the incidence of major convictions for DIP subjects is over 15 times greater than the incidence for the state's driving public.

The rate of major convictions does not vary substantially across age categories of DIP subjects. It is marginally larger for younger drivers, peaking in the 35-44 age group. In the sample of Oregon drivers, the major conviction rate is substantially

greater among drivers under age 35, and it drops to a very low rate over age 55. There was no incidence of major convictions for drivers 75 and older in either sample.

Major conviction rates for males in the DIP sample are more than twice the rates for females, while in the general driving population the rate for males is more than three times the rate for females. Thus, of the three types of violations covered in the table, gender differentials are greatest for major convictions. The rate of major convictions is also higher among rural drivers in both samples, representing the only instance among the three violation types in which such an outcome prevails.

4.3.1.4 Distribution over time

While it is readily apparent that the crash, Type A conviction, and major conviction risks of DIP subjects at the time of suspension are very substantial in relation to the general population of drivers in Oregon, it is not clear how these risks are distributed over the 18-month period prior to suspension. In this regard, two alternative possibilities exist. In the first, we might observe that offenses are fairly evenly spread over the period, which would indicate that DIP subjects' unsafe driving behavior is a chronic condition. In the second, we might observe that the offenses are clustered in time, likely nearer to the date of suspension, which would suggest that subjects' unsafe driving behavior is more of an acute condition arising in the course of an otherwise normal driving career.

To assess this issue, the 18-month period prior to suspension was divided into two 9-month segments. The incidence of crashes, Type A convictions, and major convictions was then determined for each time segment. The results are presented in Table 4.4.

Among all DIP subjects, 53.3% of the crashes that occurred in the 18-month period are concentrated in the 9 months prior to suspension. The concentration of crashes is somewhat greater among older drivers and drivers residing in rural areas. The overall concentration of Type A convictions, at 57.9%, is greater than the concentration of crashes, and does not exhibit any appreciable differentiation across age groups, gender, or location of residence. The concentration of major convictions, at 65.7%, is the most substantial of the three types of offenses. With the general incidence of major convictions being fairly small (less than 40% of the incidence of crashes), the limited differentiation in concentration of major convictions across characteristics of DIP subjects is not noteworthy.

Table 4.4: Rates of prior crashes, Type A convictions, and major convictions for DIP subjects during the 9-month and 9-18-month periods prior to suspension (incidence per 100 drivers)

	Crashes			Type A Convictions			Major Convictions		
Characteristic	**< 9 Mo.**	**9-18 Mo.**	**< 9 Mo. (%)**	**< 9 Mo.**	**9-18 Mo.**	**< 9 Mo. (%)**	**< 9 Mo.**	**9-18 Mo.**	**< 9 Mo. (%)**
Age Group									
18-24	15.97	14.63	52.2	253.20	177.76	58.8	6.20	3.18	66.1
25-34	11.62	9.70	54.5	241.40	179.06	57.4	5.90	3.27	64.3
35-44	10.44	9.03	53.3	238.34	178.18	57.2	7.14	3.61	66.4
45-54	11.38	9.95	53.5	231.00	169.62	57.7	5.02	2.24	69.1
55-64	13.60	11.18	55.6	206.34	149.55	58.0	5.14	3.32	60.8
65-74	15.48	11.90	55.2	196.43	151.19	56.5	5.95	2.38	71.4
75 and Older	40.00	28.57	61.7	180.00	114.29	61.2	0.00	0.00	--
All Ages	13.18	11.57	53.3	243.23	176.61	57.9	6.14	3.20	65.7
Gender									
Female	15.65	14.51	51.9	232.16	169.15	57.9	3.18	1.58	66.8
Male	12.48	10.74	53.7	246.34	178.70	58.0	6.97	3.66	65.6
Residence									
Rural	13.72	10.54	56.6	237.88	170.75	58.2	6.75	3.33	67.0
Urban	12.91	12.08	51.7	245.89	179.53	57.8	5.83	3.14	65.0

Some concentration of offenses near the date of suspension can be expected, given that an offense must have occurred to trigger each DIP subject's suspension. Thus the concentration statistics for crashes and, to a lesser degree, Type A convictions indicate a pattern of behavior that appears to be more chronic than acute. However, the higher concentration of major convictions indicates a condition that at least borders on acute. This finding indicates that for a fairly small number of subjects there is an overlap of DIP actions and actions related to other programs dealing with more serious offenses. Moreover, work by Wilson (*1991*) involving persons suspended for DUI or DIP-related offenses found that, apart from the specific incidents that triggered the suspensions, there were no psychological or traffic offense characteristics that served to significantly differentiate persons who were suspended for DUI from persons who received DIP suspensions. This finding suggests that the DUI and DIP populations share a number of common traits. Such findings have been questioned by af Wahlberg (*2003*), however, who argues that methodological shortcomings plague many studies addressing the effects of behavior and personality factors.

4.3.2 Risk after suspension

We now turn to the 540-day period following completion of DIP suspension and examine the rates of crashes, Type A convictions, and major convictions of DIP subjects. Percentage changes in these rates are calculated in relation to the corresponding values for the period prior to suspension, as are changes in relative incidence involving the DIP subject sample and the sample of Oregon drivers (see Table 4.5)

During the 540-day period following completion of each subject's suspension, the crash rate for DIP subjects declined from 24.75 to 7.32 per thousand drivers, a reduction of 70.4%. The rate of Type A convictions declined from 419.83 to 120.95, or 71.2%. Lastly, the rate of major convictions declined from 9.34 to 6.19, a reduction of 33.7%. While the reductions are very substantial, DIP subjects nevertheless still posed a heightened risk relative to the general driving public. For example, their likelihood of crash involvement was 2.63 times that of the driving public, and their relative likelihoods of receiving Type A and major convictions were 10.53 and 12.14, respectively.

Reductions in the measures of relative incidence were not as substantial as reductions in the direct measures of crashes and convictions. This is due to the fact that the rates of crashes, Type A and major convictions for the sample of the driving public also declined during the follow-up period (-33.0%, -9.9% and –16.4%, respectively). Thus, the relative incidence of crashes declined from 5.96 to 2.63, or 55.9%. The relative incidence of Type A convictions declined from 32.93 to 10.53, or 68.0%. And the relative incidence of major convictions declined from 15.31 to 12.14, or 20.7%.

The substantial decline in the crash rate for the sample of Oregon drivers is noteworthy because it was during this period that DMV changed its crash reporting practices. It is thus likely that the reduction is more a consequence of the new reporting practice than an actual reduction in crash frequency. Other external factors that may have influenced changes in the rates of crashes, Type A convictions and major convictions among the sample of Oregon drivers include seasonal differences in pre and post periods and changes in the levels of enforcement. Given that these

external influences affect both the DIP and Oregon driver samples, the relative measures of incidence provide a better indication of the nominal changes in crashes, Type A convictions and major convictions among DIP subjects.

Table 4.5: Rates of crashes, Type A convictions, and major convictions following suspension for DIP subjects, and changes from corresponding rates prior to suspension (incidence per 100 drivers)

Crashes						
Characteristic	**DIP**	**OR**	**DIP/OR**	**Δ DIP (%)**	**Δ OR (%)**	**Δ DIP/OR (%)**
Age Group						
18-24	8.74	5.38	1.62	-71.4	-22.9	-63.0
25-34	6.73	2.57	2.62	-68.4	-36.9	-50.0
35-44	5.73	2.63	2.18	-70.7	-38.3	-52.6
45-54	6.88	2.83	2.43	-67.7	-27.6	-55.3
55-64	5.37	2.78	1.93	-78.1	-31.0	-68.2
65-74	10.98	2.10	5.23	-60.9	-35.4	-39.4
75 and Older	10.81	1.06	10.20	-83.3	-49.5	-67.0
All Ages	7.32	2.78	2.63	-70.4	-33.0	-55.9
Gender						
Female	7.35	2.76	2.66	-75.6	-29.8	-65.3
Male	7.32	2.80	2.61	-68.5	-35.3	-51.3
Residence						
Rural	7.14	2.23	3.20	-70.6	-39.9	-51.1
Urban	7.42	3.11	2.39	-70.3	-29.3	-57.9
Type A Convictions						
Characteristic	**DIP**	**OR**	**DIP/OR**	**Δ DIP (%)**	**Δ OR (%)**	**Δ DIP/OR (%)**
Age Group						
18-24	133.26	29.46	4.52	-69.1	11.3	-72.2
25-34	116.76	14.22	8.21	-72.2	-11.5	-68.6
35-44	121.11	11.46	10.57	-70.9	-14.3	-66.0
45-54	96.51	9.01	10.71	-75.9	-18.3	-70.5
55-64	80.90	6.69	12.09	-77.3	-25.7	-69.5
65-74	74.39	3.74	19.89	-78.5	-19.2	-73.4
75 and Older	72.97	1.76	41.46	-75.7	-27.0	-66.7
All Ages	120.95	11.49	10.53	-71.2	-9.9	-68.0
Gender						
Female	96.06	8.45	11.37	-76.1	-11.9	-72.8
Male	127.95	14.10	9.07	-69.9	-8.8	-67.0
Residence						
Rural	120.51	10.05	11.99	-70.5	-11.3	-66.8
Urban	121.17	12.34	9.82	-71.5	-9.1	-68.7

Table 4.5 (continued): Rates of crashes, Type A convictions, and major convictions following suspension for DIP subjects, and changes from corresponding rates prior to suspension (incidence per 100 drivers)

Major Convictions						
Characteristic	**DIP**	**OR**	**DIP/OR**	**Δ DIP (%)**	**Δ OR (%)**	**Δ DIP/OR (%)**
Age Group						
18-24	6.82	1.27	5.37	-27.8	7.6	-32.9
25-34	6.16	0.63	9.78	-32.4	-51.5	39.5
35-44	5.85	0.61	9.59	-45.6	-25.6	-26.8
45-54	5.27	0.42	12.55	-27.2	-23.6	-4.6
55-64	3.28	0.21	15.62	-60.8	40.0	-72.0
65-74	6.10	0.03	203.33	-28.6	-70.0	138.1
75 and Older	0.00	0.05	n.a.	--	n.a.	n.a.
All Ages	6.19	0.51	12.14	-33.7	-16.4	-20.7
Gender						
Female	2.76	0.21	13.14	-42.0	-19.2	-28.2
Male	7.16	0.76	9.42	-32.6	-16.5	-19.3
Residence						
Rural	6.34	0.43	14.74	-37.1	-44.3	15.5
Urban	6.12	0.55	11.13	-31.8	10.0	-38.0

Patterns of change with respect to age, gender and residence are not readily discernable in the table. Percentage reductions in the absolute and relative crash and conviction measures were generally greater for females than for males, and percentage reductions in the relative incidence measures were generally greater for urban than rural residents.

As discussed earlier, the reduction in crashes, Type A convictions, and major convictions among DIP subjects following suspension are subject to regression-to-the-mean influences. In the absence of a true control group, it is impossible to know what part of the observed reductions in crashes and convictions can be attributed to regression-to-the-mean effects and what part can be attributed to suspension. However, Jones' (*1991*) earlier evaluation of the Oregon DIP did involve the use of a control group, and the post-suspension changes in their conviction rate relative to the change of those in the treatment group can provide a rough estimate of the size of regression-to-the-mean effects. In that study, the reduction in moving violations in the control group amounted to 80.7% of the nominal reduction observed in the treatment group. In other words, about four-fifths of the nominal change in moving violation convictions following suspension in the 1991 study could be associated with regression-to-the-mean effects, while about one-fifth of the change could be associated with the suspension.

Given the nominal relative reductions of Type A convictions and crashes observed in the present study (-68.0% and –55.9%, respectively), direct application of the apportionments from the Jones (*1991*) study yields the following approximation of DIP suspension effects: -13.1 % for Type A convictions and –10.8% for crashes. These are very crude approximations and should be interpreted with caution. However, it is interesting that they are roughly consistent with Masten and Peck's (*2004*) meta-analysis estimates of expected reductions in crashes and convictions following license suspension or revocation.

While this apportionment of regression-to-the-mean and program effects appears reasonable with respect to observed changes in Type A convictions and crashes, it would not likely apply to observed changes in major convictions. The pathologies associated with drivers who receive major convictions are more serious and more resistant to change, implying a different relationship between program and regression-to-the-mean effects.

4.4 DETERMINANTS OF CRASH AND CONVICTION INVOLVEMENT FOLLOWING SUSPENSION

After completing their suspensions, 93.3% of the DIP sample subjects had a crash-free driving record during the 540-day follow-up period, an 18.6% increase from the 78.7% of subjects who had a crash-free record during the 540-day period prior to suspension. Also, 50.4% of the subjects had no Type A convictions during the follow-up period, compared to just 0.2% during the period prior to suspension. In this section, we conduct a multivariate analysis to gain a better understanding of the demographic, location, and circumstantial factors that contributed to crash and conviction-free driving.

The analysis has several general purposes. First, we would like to know more about the populations for which license actions are less effective. These subjects represent target populations for which additional measures or treatments might be considered in an effort to further reduce safety risk. Second, access to fairly detailed information on traffic offenses that occurred prior to suspension allows us to use that information to estimate the likelihood of subsequent crash involvement and convictions. Such analysis may provide normative insights into the point structure that triggers DIP license actions. For example, in the current DIP point system, Type A convictions and crashes are treated equally. However, if persons' crash histories have a stronger influence on crash involvement after suspension than their Type A conviction histories, this would suggest that crashes be given greater weight in suspension actions, given that the stated goal of the DIP is "…the reduction of traffic convictions and especially accidents." (ORS 809.480; OAR 735-072-0010).

The approach to the multivariate analysis is similar to that employed by Chen, et al. (*1995*) and Hauer, et al. (*1991*). Chen and his colleagues analyzed the records of drivers in British Columbia between 1985 and 1990. With crash and conviction data from the first three years of the period, they used a logistic regression to estimate the likelihood of crash involvement during the latter two years of the period. Their results indicated that the frequency of prior crashes was a much stronger predictor of subsequent crash involvement than the frequency of prior convictions.

Although the general objective of the Hauer, et al. (*1991*) study of Ontario drivers was similar to that of Chen, et al. (*1995*), their study differed in several important ways. First, rather than focusing on predicting the likelihood of crash involvement, Hauer, et al (*1991*) used a Poisson regression to estimate the frequency of subsequent crashes in relation to prior crashes and convictions. Second, Hauer and his colleagues also drew on drivers' demographic and location characteristics in the estimation process. Like Chen, et al. (*1995*), their results indicated that prior crashes were stronger predictors of subsequent crash frequency than are prior convictions.

The addition of demographic and location measures was also found to significantly improve crash frequency estimates.

In the present study, several features of the Oregon DIP data suggest that the most appropriate approach to multivariate analysis would involve a blending of the Chen, et al. (*1995*) and Hauer, et al. (*1991*) approaches. First, of the 931 subjects who were involved in crashes following DIP suspension, 859 were involved in a single crash, while only 58 and 14 subjects were involved in two and three crashes, respectively. Such a limited number of multiple crash experiences in the DIP data suggest that the Chen, et al. (*1995*) binary treatment of post-suspension crash involvement is more consistent with the data structure. Second, the location, age, and gender-related differentials in crash and conviction risks that have been observed among the Oregon DIP subjects suggests that these characteristics may have a significant influence on the estimated likelihood of post-suspension crashes. Thus, as in the Hauer, et al. (*1991*) study, these characteristics will be included in the present analysis.

Both the Hauer, et al. (*1991*) and Chen, et al. (*1995*) studies focused on crash prediction and did not devote attention to predicting convictions. The implied logic of their approach is that minimizing crashes is, or should be, the primary objective of traffic safety programs and the basic yardstick against which driver improvement actions ought to be assessed. However, there are at least statistical, if not substantive, reasons to be interested in predicting convictions as well as crashes.

From a statistical standpoint, there is reason to be concerned about the extent to which convictions serve as a true indicator of unsafe driving behavior. Enforcement of traffic laws is certainly less than comprehensive, and convictions thus represent evidence of both unsafe driving behavior and drivers' misfortune of having been "in the wrong place at the wrong time" when they violated a given traffic law. Convictions are thus an incomplete measure of unsafe driving behavior. Put in another way, as an independent variable in a regression, convictions are subject to measurement error. As Maddala (*1979*) has shown, the effect of measurement error in independent variables in a regression is to bias the associated parameter estimate toward zero, with the extent of bias being proportionate to the extent of measurement error. This leads to a dilemma in interpreting findings such as those of Hauer, et al. (*1991*) and Chen, et al. (*1995*): does the weak estimated effect of convictions mean that unsafe driving behavior is less likely to eventually contribute to a crash, or is the parameter estimate understating the true effect of convictions on subsequent crashes? One way to distinguish between these two interpretations is to determine how well prior convictions serve as predictors of future convictions. If prior convictions were significant predictors of future convictions but not future crashes, this would indicate that measurement error effects on parameter bias are less serious.

From a substantive standpoint, driving behavior is the most fundamental and important determinant of traffic safety, according to Evans (*2004*). In evaluating the wide variation of traffic fatality rates across countries. Evans concluded that countries with the lowest fatality rates have achieved their status by making safe driving behavior a social norm. In considering issues of causality, Evans (*2004: 333*) concluded that "the degree of complexity inherently precludes quantitative analytical models that would effectively explain changes in traffic fatality rates …" However weakly representative, traffic law convictions are society's best available indicators of

common unsafe driving behavior, and they deserve attention alongside crashes in efforts to improve traffic safety.

4.4.1 Model specification

In order to analyze the likelihood of post-suspension crash involvement and conviction of traffic offenses, we define a logit model that relates the probability of the occurrence of these events to a set of determinants covering prior occurrences of these offenses, the temporal spacing of the offenses, and locational and demographic characteristics of the subjects. In general form, the model is specified as follows:

$$\log(P_i/1-P_i) = f(\text{Prior Crashes, Prior Convictions, Concentration, Location, Gender, Age Group}) \quad \textbf{(4-1)}$$

where

P_i = the probability of being involved in one or more crashes, or receiving one or more Type A convictions during the 540-day period following suspension;

Prior Crashes = the number of recorded crashes that occurred during the 540-day period preceding suspension;

Prior Convictions = the number of recorded Type A convictions received during the 540-day period preceding suspension;

Concentration = the number of crashes and Type A convictions that occurred during the 540-day period preceding suspension, divided by the number of unique dates on which those offenses occurred;

Location = a dummy variable equaling 1 if the subject's residence is located in an urban area, and 0 if the residence is located in a rural area;

Gender = a dummy variable equaling 1 if the subject is male, and 0 if the subject is female;

Age Group = a series of dummy variables identifying the following age categories: 25-34 years; 35-44 years; 45-54 years; 55-64 years; 65-74 years; 75 years and older (with the 18-24 year age group serving as the reference category).

Several of the variables in the specification warrant further discussion. The concentration measure is an indicator of the extent to which crash and/or conviction events are time-independent. In the Oregon DIP 4-violation system leading to suspension, the value of the concentration measure for most subjects would range from one (in which each violation occurs

on a separate date) to four (in which four driver improvement violations occur on a single date). Some of the subjects in the present study received multiple suspensions, making it possible for the concentration measure to exceed a value of four (as it did for seven subjects).

Including the concentration measure in the logit model allows us to assess whether the extent of time-independence of traffic offenses has an influence on the likelihood of post-suspension crashes and convictions. Controlling for the number of prior crashes and convictions, if increases in offense concentration are estimated to reduce the likelihood of subsequent crashes and convictions, this would suggest a system that assigns lesser point weight to offenses that are grouped in connection to singular incidents. For example, the American Association of Motor Vehicle Administrators (*AAMVA 1997*) recommends that multiple convictions from a single traffic stop be treated as a single "countable" conviction toward license action, suggesting that future safety risk is more closely associated with the traffic stop event than with the number of associated offenses. The specification developed here allows us to test the treatment of multiple convictions in the Oregon program against the treatment recommended by AAMVA.

The location variable provides a rough differentiating indicator of urban crash risk and traffic law enforcement. Controlling for the number of prior crashes and convictions, one would expect the "urban" parameter estimate in the crash involvement equation to be positive, recognizing that the greater density of traffic, intersections, and other factors contribute to higher crash risk in urban areas. The urban parameter estimate in the convictions equation might also be positive, considering that convictions are sometimes directly connected to crash events. However, effective differences in the enforcement intensity of traffic laws could either complement or offset the expected conviction differential "favoring" urban areas.

Controlling for prior crashes, convictions, and location, the parameter estimates for the gender and age category variables represent the inherent relative safety risk of these groups. Evans (*2004*) characterizes these risks in terms of driver experience and performance. For example, younger drivers tend to have a higher crash risk because they lack experience and, unfortunately, are gaining their driving knowledge through "trial-and-error." In contrast, older drivers benefit from substantial experience, but tend to suffer from performance deterioration. Thus, for quite different reasons, older and younger drivers exhibit similar levels of crash risk for a given level of exposure.

Expected age and gender-related effects are likely to be different in the case of the convictions equation. Experience generally contributes to the development of safe driving habits, and older drivers, even with their diminished performance skills, can be expected to be less likely to violate traffic laws. Regarding gender, as Evans (*2004*) has observed, our culture is embedded with a variety of cues that endorse aggressive driving, especially among men. Thus it would not be surprising to find that men are inherently more likely to violate traffic laws.

4.4.2 Estimation results

Parameter estimates and associated asymptotic t-statistics of the crash and conviction involvement equations are presented in Table 4.6. Values of the asymptotic t-statistics exceeding 1.96 are statistically significant at the $\alpha_{.05}$ level. The frequency of prior crashes is estimated to significantly increase the likelihood of crash involvement following suspension,

while prior convictions are estimated to have no influence on subsequent crashes. Controlling for the number of crashes and convictions, we also see that the concentration of prior crashes and convictions into a more limited number of incidents is estimated to result in a significantly lower likelihood of subsequent crash involvement. Crash likelihood is estimated to be unrelated to subjects' residence in urban versus rural locations, and no significant difference is found between men and women. In comparison to the age 18-24 referent group, subjects in the age 25-34 and 35-44 groups are estimated to have increasingly diminished inherent crash likelihood following suspension. The estimated crash likelihoods of the groups with subjects age 45 and older do not differ significantly from the crash likelihood of those in the age 18-24 group.

Table 4.6: Logit model parameter estimates of the likelihood of crash involvement and Type A conviction occurrence following DIP suspension (asymptotic t-statistics in parentheses)

Variable	Mean (S.D.)	Crash Involvement	Type A Conviction
Constant	**--**	**-2.223**	**-.224**
		(-13.47)	**(-2.75)**
Age Group			
18-24	--	--	--
25-34	.324	-.240	-.175
	(.47)	(-2.97)	(-4.24)
35-44	.184	-.377	-.085
	(.39)	(-3.69)	(-1.71)
45-54	.081	-.213	-.399
	(.27)	(-1.60)	(-5.93)
55-64	.024	-.459	-.338
	(.15)	(-1.80)	(-2.94)
65-74	.006	.208	-.563
	(.08)	(.55)	(-2.43)
75 and Older	.003	.298	-.642
	(.05)	(.56)	(-1.81)
Gender			
Female	--	--	--
Male	.781	-.004	.214
	(.41)	(-.05)	(5.11)
Location			
Urban	.667	.081	-.068
	(.47)	(1.11)	(-1.86)
Rural	--	--	--
No. of Prior Crashes	.247	.340	.032
	(.52)	(5.23)	(.87)
No. of Prior Type A. Convictions	4.20	.016	.143
	(2.09)	(1.02)	(15.85)
Prior Offense Concentration	1.33	-.351	-.301
	(.41)	(-3.38)	(-6.32)
Log-Likelihood (0)	--	-3414.9	-9623.5
Log-Likelihood at Convergence	--	-3387.1	-9423.3
Likelihood Ratio Statistic (11 d.f.)	--	55.61	401.29
Sample Size	13,885	13,885	13,885

Turning to the estimates for Type A convictions following suspension, we see that increases in the number of prior convictions are estimated to lead to an increase in the likelihood of subsequent convictions. In contrast, the frequency of prior crashes is estimated to have no significant effect on subsequent convictions. As in the crash equation, an increase in the concentration of prior crashes and convictions is estimated to reduce the likelihood of subsequent convictions. No significant distinction is estimated to exist with respect to urban and rural residence in the likelihood of subsequent convictions, while male subjects are estimated to be significantly more likely to receive a subsequent conviction than female subjects. Compared to the 18-24 age group, subjects in older age groups are estimated to be progressively less likely to be convicted of a Type A offense. The age 75 and older group is the only age group whose parameter estimate is not significant, a likely consequence of the small number of subjects in this category.

The logit model estimates reveal a paradox involving the effects of prior Type A convictions. While the frequency of prior convictions is estimated to positively influence the likelihood of subsequent conviction, it is found to have no effect on the likelihood of subsequent crash involvement. This finding is in conflict with the results of Hauer, et al. (*1991*) and Chen, et al. (*1995*), as well as other research on the effects of traffic law enforcement (*Evans 2004: 346*). We can only speculate with regard to two possible reasons for this outcome. First, given that limited resources require prioritization of enforcement activity, prior convictions can never fully represent the count of offenses that actually occur. If enforcement activity is concentrated on one area (e.g., speeding) while crash risk is more influenced by offenses in other areas (e.g., right-of-way violations), the correspondence between offenses and crash risk could be undermined. Second, research has shown that crash risk is temporarily (for about 3 months) reduced following a traffic offense conviction (*Redelmeier, et al. 2003*). If so, our follow-up period could be characterized by an initial period of low crash risk followed by a period of higher crash risk, with the overall relationship being confounded by offsetting influences.

The absence of prior crash effects on subsequent Type A convictions is less puzzling. Crashes are much rarer events than convictions, and their limited occurrence (and limited variance) makes it less likely that they will be estimated to influence convictions.

4.4.3 Marginal probabilities of subsequent crashes and convictions

Parameter estimates of the crash and conviction logit regressions can be used to derive the associated event probabilities as follows (*Pindyck and Rubinfeld 1981*):

$$\mathbf{P_i = 1/(1+e^{-(\alpha+\beta 1X1+ \ldots +\beta nXn)})} \qquad \textbf{(4-2)}$$

where

P_i	=	the probability of event i (i.e., post-suspension involvement in crashes or convictions);
α, β_i	=	the estimated logit regression parameters;
$X_1, \ldots X_n$	=	the logit regression variables.

By extension, the equation above can also be used to estimate the marginal probabilities associated with unit changes in the values of the logit regression variables. Marginal

probabilities were calculated for the variables in the crash and conviction equations whose associated parameter estimates were statistically significant. These probabilities are reported in Table 4.7.

Table 4.7: Estimated marginal crash and Type A conviction probabilities*

	Crash Likelihood		Conviction Likelihood	
Variable (marginal change)	**Marginal Probability**	**Percentage Change**	**Marginal Probability**	**Percentage Change**
Age Group				
18-24	--	--	--	--
25-34	-.021	-21.5%	-.044	-8.3%
35-44	-.036	-37.2	-.021	-4.0
45-54	--	--	-.099	-18.8
55-64	--	--	-.084	-16.0
65-74	--	--	-.139	-26.3
75 and Older	--	--	--	--
Gender				
Female	--	--	--	--
Male	--	--	.053	11.7
Location				
Urban	--	--	--	--
Rural	--	--	--	--
No. of Prior Crashes (zero to one)	.022	37.1	--	--
No. of Prior Type A. Convictions (four to five)	--	--	.036	6.8
Prior Offense Concentration (one to two)	-.021	-28.2	-.075	-14.4

* The mean state probabilities for crashes and Type A convictions following suspension are .067 and .496, respectively.

Considering the likelihood of post-suspension crash involvement first, we see that subjects in age groups 25-34 and 35-44 are 21.5% and 37.2% less likely to be involved in a crash than subjects in the 18-24 age group, after controlling for other determinants of crash involvement. Subjects that had been involved in a single crash prior to suspension are 37.1% more likely to be involved in a post-suspension crash than those who had no prior crash involvement. Lastly, compared to the hypothetical subjects who had accumulated their four points toward suspension in four separate incidents, subjects whose points were accumulated in two incidents were 28.2% less likely to be involved in a crash following suspension.

Turning to post-suspension convictions, we see a roughly progressive decline in the likelihood of conviction with respect to age. Subjects in the 25-34 age group are found to be 8.3% less likely to receive a conviction than subjects in the 18-24 age group, while the relative likelihood of subjects in the 65-74 age group is 26.3% lower. Men are also found to be 11.7% more likely than women to be convicted following suspension. The likelihood of post-suspension conviction is also found to increase by 6.8% per additional conviction received prior to suspension. The

effect of the concentration of crashes and convictions prior to suspension on post-suspension convictions is found to be about half the effect of such concentration on the likelihood of post-suspension crashes. Subjects whose pre-suspension points were accumulated in half the number of incidents are found to be 14.4% less likely to be convicted after suspension than those who had received each of their points in separate incidents.

There are a number of implications for the Oregon DIP that follow from the multivariate analyses. First, to the extent that minimizing crash hazard serves as the primary objective of the DIP, the analysis indicates that crashes should be assigned a relatively greater weight than Type A convictions in the DIP point system.

Second, given the finding that singular incidents resulting in multiple DIP points are associated with a lower likelihood of post-suspension crashes and convictions than an equivalent total of single-point incidents, suggests a modification of the point system to reduce the weight of points associated with multiple citation incidents.

Third, the 18-24 age group has been found to exhibit a relatively high inherent risk compared to older age groups, and their relative risk of post-suspension crash involvement is substantially greater than their relative risk of Type A conviction. While the Provisional DIP has not been addressed in this study, these results raise the question of whether drivers in the 18-24 age group exhibit inherent risks that are more similar to those in the Provisional program than to their counterparts in the Adult program. This would require extending the research design applied in the present project to subjects in the Provisional program, and testing for significant differences in safety risk between subjects in the Provisional program and 18-24 age group subjects in the Adult program.

Fourth, likely due to diminished performance, drivers in older age groups also exhibit relatively higher post-suspension crash risks that are indistinguishable statistically from the 18-24 age group, although their relative risk of post-suspension conviction is much lower. While this should be a concern, the much smaller number of older drivers who are involved in the DIP substantially mitigates the magnitude of the older driver crash risk problem. Nevertheless, this raises the question of whether the DIP includes a subset of drivers with functional impairments that would qualify them for treatment in other DMV driver programs. In this regard, we should emphasize that such impairments are not exclusive to older drivers, and that age is the only available variable in the present study that can serve to identify the potential existence of driving impairment.

5.0 CONCLUSIONS

This report has analyzed Oregon's DIP and changes in the program that were introduced in 2002. A major revision in the program involved the elimination of advisory and warning letters, interviews, and the option of diversion to safe driving courses. The time line to license restriction and suspension in current DIP has also been somewhat shortened and made more certain. Overall, the consequence of the program changes has been an approximate twelve-fold increase in the annual number of license suspensions issued in the DIP.

Several of the changes in the DIP can be fairly directly linked to research reported in the driver improvement literature. First, the more expedited and certain path to intervention in the current DIP is consistent with the general conclusion in the literature that it is important to interrupt an unsafe driving career as early as is legally possible. Second, elimination of interviews also resulted in the elimination of diversion to driver safety courses as an alternative to immediate suspension. The literature examining the consequences of attending such courses has generally found no safety improvement following attendance. Third, elimination of advisory and warning letters was in conflict with findings in the literature (including studies focusing directly on the Oregon experience) that such letters are the most cost effective measure for improving safety among the sanctions typically employed in DIPs.

A statistical analysis was undertaken to assess the safety risk of drivers in the DIP in comparison to the general driving public in Oregon. The analysis involved samples of 13,885 persons involved in the DIP and 42,335 persons selected from the state's driving population. At the point of suspension, the incidence of crashes during the previous 18 months of persons involved in the DIP was six times greater than the crash incidence experienced among the driving public. The relative incidence of conviction of Type A traffic offenses among DIP subjects was much larger, at 33 times the incidence among the driving public. Although major convictions are not directly tied to the DIP, analysis indicated that their incidence was more than fifteen times greater among DIP subjects than it was among the driving public.

Closer examination of the spacing of traffic offenses over the 18 months prior to suspension revealed that crashes and Type A convictions are fairly evenly spread over the period, indicating that unsafe driving behavior among DIP subjects reflects a chronic rather than acute condition. However, major convictions were found to be more concentrated in the period just prior to suspension, indicating an acute condition.

The incidence of crashes, Type A convictions and major convictions occurring in the 18-month period following completion of license suspension under the DIP was examined. The incidence of crashes among DIP subjects relative to the driving population declined 55.9% from the pre-suspension level, while declines in the relative incidence of Type A and major convictions were 68.0% and 20.7%, respectively. In the absence of a true control group, these declines are subject to regression-to-the-mean effects and therefore overstate the effect of license suspension. Previous evaluations of the Oregon DIP, which did employ control groups, suggest that

regression-to-the-mean effects could account for approximately 80% of the observed reductions in convictions. If regression-to-the-mean effects in the present study are of similar magnitude, this would indicate that an approximate decline of 11% in crashes and 13% in Type A convictions can be attributed to the effect of license suspension.

A multivariate analysis was undertaken to investigate two basic issues related to the structure of the point system associated with the Oregon DIP. The first issue relates to the relative treatment of crashes and Type A convictions in the current point system. Each qualifying crash and Type A offense is currently assigned a single point toward the four-point total resulting in suspension. The implicit assumption in this point assignment is that crashes and convictions are equivalent leading indicators of drivers' future safety risk. The second issue relates to the treatment of multiple convictions associated with singular events. In the current system, each Type A conviction is assigned a point toward license action, and the implicit assumption is that multiple convictions from single events are equivalent to single convictions associated with multiple events as leading indicators of drivers' future safety risk.

The multivariate analysis directly tested these assumptions. It found that future crash risk was significantly influenced by the frequency of crashes that occurred prior to license suspension, while the frequency of prior Type A convictions had no effect on future crash risk. Alternatively, the frequency of prior Type A convictions was found to have a significant effect on future conviction risk, while the frequency of prior crashes had no effect on future conviction risk. Thus, decisions on the relative treatment of crashes and Type A convictions in the DIP point system depend on policy judgments of the relative importance of minimizing crashes and minimizing Type A convictions as the principal objective of the program.

Implications of the findings of the multivariate analysis with respect to the concentration of Type A convictions are more direct. The future risk of both crashes and Type A convictions were found to be significantly reduced when prior convictions were concentrated in fewer events. This finding suggests that lower point weights be given to each conviction that is "bunched" with other convictions in single events.

Recommendations that arise from the analysis conducted in this study are summarized as follows:

Warning Letters: Consideration should be given to reinstating warning letters in the Oregon DIP. There is compelling evidence in the driver improvement literature that warning letters are the most cost effective means of reducing safety risk among the sanctions typically found in driver improvement programs. The driver improvement literature views warning letters as safety countermeasures on par with other driver control actions that are employed to reduce safety risk associated with problem drivers.

In addition, warning letters may enhance the perceived fairness of the Oregon DIP. Few problem drivers are likely to be aware of the Oregon DIP until they receive a license restriction or suspension notice. A warning letter alerts problem drivers to the existence of the DIP and the impending likelihood of sanction, and gives them an opportunity to correct their behavior. The driver improvement literature indicates that a modest but significant share of problem drivers heed this warning. Moreover, those who continue on their high-risk path will be doing so fully

aware of the consequences that will follow their actions. The logical placement of warning letters in the Oregon DIP would be upon receipt of the second point toward license action.

Crashes: Consideration should be given to assigning greater weight to crashes in the DIP point system. A general view in the driver improvement literature, and the stated statutory and administrative purpose of Oregon's program, is that reducing crash risk is a primary objective of a DIP. The multivariate analysis in this project found that future crash risk is significantly related to prior crashes, but not significantly influenced by prior Type A convictions.

Multiple Convictions: Consideration should be given to reducing the point weight associated with multiple Type A convictions linked to singular events. The multivariate analysis in this project found that both future crash and conviction risks are significantly lower when prior convictions are concentrated in fewer events than when they are spread over more events.

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APPENDICES

APPENDIX A: OREGON REVISED STATUTES 809.480 AND OREGON ADMINISTRATIVE RULES 735-072-0000 to -0050

ORS 809.480

809.480 Driver improvement programs; rules; purpose; suspension; fee. (1) The Department of Transportation may establish, by administrative rule, programs for the improvement of the driving behavior of persons who drive in this state. The programs shall have as their goal the reduction of traffic convictions and especially accidents. The programs may include, but need not be limited to, letters, interviews and classroom instruction.

(2) The department may establish programs for persons who are under 18 years of age that are different from programs for adults. Differences may include, but need not be limited to, differences in criteria for entry into a program and differences in content.

(3) The department, under a program authorized by this section, may suspend driving privileges based on any of the following:

(a) A person's record of convictions or accidents.

(b) A person's failure or refusal to complete or comply with a requirement of a program established by the department under this section.

(4) The department may charge a reasonable fee to participants in a driver improvement program to cover costs of administration.

(5) Any suspension that the department stays under a driver improvement program in this section shall continue for the full term of the suspension if a person fails to complete the program. For purposes of reinstating driving privileges, the stay of a suspension under this section may not be used to determine the length of time a person's driving privileges have been suspended if the person does not successfully complete the program.

(6) A person is entitled to administrative review of a suspension imposed under this section if based on a conviction. [1983 c.338 §368; 1985 c.16 §190; 1991 c.702 §12; 2001 c.176 §2; 2003 c.402 §34]

DEPARTMENT OF TRANSPORTATION, DRIVER AND MOTOR VEHICLE SERVICES DIVISION

OREGON ADMINISTRATIVE RULES
DIVISION 72 *(selected sections)*

DRIVER IMPROVEMENT

735-072-0000 Application of the Driver Improvement Program

(1) All drivers in this state are subject to the provisions of one of the Driver Improvement Programs established by this division.

(2) The provisional driver improvement program applies to drivers who have reached 14 years of age but who have not yet reached 18 years of age.

(3) The adult driver improvement program applies to drivers 18 years of age or older.

Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480
Stats. Implemented: ORS 809.480
Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; MV 23-1986, f. 12-31-86, ef. 1-1-87; Administrative Renumbering 3-1988, Renumbered from 735-031-0300; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02

735-072-0010 Purpose of the Driver Improvement Program

This division establishes the Driver Improvement Programs as authorized by ORS 809.480. Both the Provisional and Adult Driver Improvement Programs have as their goal the reduction of traffic convictions and especially accidents.

Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480
Stats. Implemented: OR 809.480
Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0305; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02

735-072-0020 Driver Improvement Program Definitions

The following definitions apply to rules for both Driver Improvement Programs:

(1) "Adult Driver" is a driver 18 years of age or older.

(2) "Conviction" means a determination of guilt by a court of law upon a plea, verdict, finding, or unvacated bail forfeiture. Each separate offense arising from a single traffic stop or preventable accident, for which the person receives a conviction, constitutes a separate conviction for purposes of these rules.

(3) "DMV" means the Driver and Motor Vehicle Services Division of the Department of Transportation.

(4) "Driver Improvement Course" means a traffic safety, defensive driving, traffic violator, or similar program or course of instruction approved by DMV.

(5) "Driver Improvement Violation" means:

(a) One conviction for an offense listed in OAR 735-064-0220; or

(b) Five convictions for an offense listed in OAR 735-072-0035.

(6) "License" has the meaning specified in ORS 801.245.

(7) "Preventable Accident" is a traffic accident reported by a police officer that indicates a driver failed to do everything a driver reasonably could have done to prevent the accident. Factors used to determine preventability include but are not limited to:

(a) Violations of the law even if a citation is not issued;

(b) Failure to use defensive driving techniques;

(c) Road conditions existing at the time of the accident; or

(d) Speed of the driver's vehicle.

(8) "Provisional Driver" means a driver who has reached 14 years of age but has not yet reached 18 years of age.

(9) "Record Review Date" means:

(a) The date DMV records a driver improvement violation or preventable accident to a person's driving record; or

(b) The date DMV grants driving privileges or fully reinstates the driving privileges following a suspension or revocation.

Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480
Stats. Implemented: ORS 809.480
Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; MV 23-1986, f. 12-31-86, ef. 1-1-87; Administrative Renumbering 3-1988, Renumbered from 735-031-0310; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02

735-072-0023 Provisional Driver Improvement Program *(Omitted)*

735-072-0027 Adult Driver Improvement Program

(1) A driver whose record review date is on or after the person has reached 18 years of age is subject to the Adult Driver Improvement Program. DMV will look back from the record review date to the incident date that resulted in a conviction or the date of a preventable accident to determine if a person is subject to the Adult Driver Improvement Program.

(2) DMV will restrict the license or instruction permit of an adult driver who within the 18-month period immediately prior to the record review date has:

(a) Three driver improvement violations;

(b) Three preventable accidents; or

(c) A combination of driver improvement violations and preventable accidents that total three.

(3) The following apply to adult restrictions:

(a) DMV will restrict the license or instruction permit of an adult driver to no driving between the hours of 12 midnight and 5 a.m., unless driving between home and work or driving for purposes of employment;

(b) DMV will impose the restriction for a period of 30 days. DMV will notify the adult driver by letter that the restriction will begin 30 days from the date of the letter. During the restriction period, the adult driver must carry the restriction letter at all times the person is driving a motor vehicle; and

(c) DMV will delay imposition of a restriction to driving privileges and place a pending restriction code on the person's driving record of any adult driver:

(A) Whose driving privileges are cancelled, suspended or revoked until DMV grants driving privileges or fully reinstates driving privileges; or

(B) Who has not been granted driving privileges until DMV grants driving privileges in the form of a driver license or instruction permit;

(C) Unless that adult driver gets another driver improvement violation or preventable accident that would total four driver improvement violations or preventable accidents in a 24-month period prior to the record review date. In that case, DMV will suspend the driving privileges or right to apply for driving privileges. This suspension will supercede the pending restriction and the pending restriction code will be removed from the person's driving record.

(d) DMV will not impose a pending restriction to the driving privileges of an adult driver if:

(A) Five years have elapsed from the date the pending restriction was imposed; and

(B) The adult driver has no record of a driver improvement violation or preventable accident occurring in the last 18 months prior to the granting of driving privileges or full reinstatement of driving privileges.

(4) DMV will suspend the driving privileges or right to apply for driving privileges of an adult driver who within the 24-month period immediately prior to the record review date has:

(a) Four driver improvement violations;

(b) Four preventable accidents; or

(c) A combination of driver improvement violations and preventable accidents that total four.

(5) For each subsequent driver improvement violation or preventable accident, DMV will suspend the driving privileges or right to apply for driving privileges of an adult driver, regardless of a previous or current Driver Improvement Program suspension(s), who within the 24-month period immediately prior to the record review date has:

(a) Four or more driver improvement violations;

(b) Four or more preventable accidents;

(c) A combination of driver improvement violations and preventable accidents that total four or more.

(6) The suspension period under sections (3), (4) and (5) of this rule will be for 30 days. The suspension will run concurrently with any other suspension, revocations, or cancellations in effect at the time the suspension begins.

Stat. Auth.: ORS 184.616, 184.619 & 809.480
Stats. Implemented: ORS 809.480
Hist.: DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02; DMV 19-2004, f. & cert. ef. 8-20-04

735-072-0035 Driver Improvement Offenses *(Omitted. See OAR 735-072-0020 and Appendix D.)*

735-072-0050 Rights to a Hearing or Administrative Review

Hearing and administrative review procedures for suspensions under OAR 735-072-0023 and 735-072-0027 are as established by ORS 809.440(1), (2) and (5).

(1) A person whose suspension is based solely on conviction records received from a court is entitled to an administrative review.

(2) A person whose suspension is based, in any part, on a report of a preventable accident is entitled to a contested case hearing.

Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480
Stats Implemented: ORS 809.480
Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0325; MV 19-1991, f. & cert. ef. 9-18-91; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02

APPENDIX B: COMPARISON OF ORS 809.480 – DIP ENABLING STATUTES

ORS 1999	ORS 2005	CHANGES
DIP Enabling Legislation— Oregon Revised Statute 1999— Chapter 809 **809.480 Driver improvement program; purpose; suspension; fee.** (1) The Department of Transportation is authorized to establish, by administrative rule, a program for the improvement of drivers granted driving privileges in this state. The program shall have as its goal the reduction of traffic convictions and especially accidents. The program may include, but shall not be limited to letters, interviews and classroom instruction.	DIP Enabling Legislation— Oregon Revised Statute 2005— Chapter 809 **809.480 Driver improvement programs; rules; purpose; suspension; fee.** (1) The Department of Transportation may establish, by administrative rule, programs for the improvement of the driving behavior of persons who drive in this state. The programs shall have as their goal the reduction of traffic convictions and especially accidents. The programs may include, but need not be limited to, letters, interviews and classroom instruction.	Added "rules" in title'' Refers to "programs" vs. "program" Improvement of "driving behavior of persons" vs. "drivers" Target is "persons who drive in this state" vs. "drivers granted driving privileges in this state."—the effect is unlicensed drivers qualify for the DIP. Goal remains unchanged: "reduction of traffic convictions and especially accidents." Methods allowed are unchanged: "letters, interviews and classroom instruction." (despite Attorney General opinion).
	(2) The department may establish programs for persons who are under 18 years of age that are different from programs for adults. Differences may include, but need not be limited to, differences in criteria for entry into a program and differences in content.	New differentiation between adult and juvenile programs.

ORS 1999	ORS 2005	CHANGES
(2) The department, under the program authorized by this section, may suspend driving privileges based on any of the following: (a) A person's record of convictions or accidents. (b) A person's failure or refusal to complete or comply with a requirement of the program established by the department under this section.	(3) The department, under a program authorized by this section, may suspend driving privileges based on any of the following: (a) A person's record of convictions or accidents. (b) A person's failure or refusal to complete or comply with a requirement of a program established by the department under this section.	(no substantive change)
(3) The department is authorized to charge a reasonable fee to participants in the driver improvement program to cover costs of administration.	(4) The department may charge a reasonable fee to participants in a driver improvement program to cover costs of administration.	(no substantive change)
(4) Any suspension that the department stays under the driver improvement program in this section shall continue for the full term of the suspension if a person fails to complete the program. For purposes of ORS 809.410 and 813.400 and for purposes of reinstating driving privileges, the stay of a suspension under this section shall not be used to determine the length of time a person's driving privileges have been suspended if the person does not successfully complete the program.	(5) Any suspension that the department stays under a driver improvement program in this section shall continue for the full term of the suspension if a person fails to complete the program. For purposes of reinstating driving privileges, the stay of a suspension under this section may not be used to determine the length of time a person's driving privileges have been suspended if the person does not successfully complete the program.	[Changes resulting from SB 245, 2003 legislative session] Removed reference to ORS 809.410 and 813.400. Change "shall" to "may" in effect of "stay of suspension" on length of suspension
(5) A person is entitled to administrative review of a suspension imposed under this section if based on a conviction. [1983 c.338 §368; 1985 c.16 §190; 1991 c. 702 §12]	(6) A person is entitled to administrative review of a suspension imposed under this section if based on a conviction. [1983 c.338 §368; 1985 c.16 §190; 1991 c.702 §12; **2001 c.176 §2; 2003 c.402 §34]**	(no change)

APPENDIX C: COMPARISON OF OAR 735-072 DRIVER IMPROVEMENT PROGRAMS

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
735-072-0000 **Application of the Driver Improvement Program** (1) All drivers granted driving privileges in this state are subject to the provisions of the Driver Improvement Program established by OAR 735-072-0010 through 735-072-0070, except as provided by OAR 735-072-0090. (2) A person shall only become involved in the Driver Improvement Program or advanced in the program if at least one of the traffic offenses or preventable accidents entered to the person's driving record occurred within one year of the date the driving record is identified for review. Stat. Auth.: ORS 184.616, ORS 802.200 & ORS 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; MV 23-1986, f. 12-31-86, ef. 1-1-87; Administrative Renumbering 3-1988, Renumbered from 735-031-0300; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94	**735-072-0000** **Application of the Driver Improvement Program** (1) All drivers in this state are subject to the provisions of one of the Driver Improvement Programs established by this division. (2) The provisional driver improvement program applies to drivers who have reached 14 years of age but who have not yet reached 18 years of age. (3) The adult driver improvement program applies to drivers 18 years of age or older. Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; MV 23-1986, f. 12-31-86, ef. 1-1-87; Administrative Renumbering 3-1988, Renumbered from 735-031-0300; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02	ADDED description of age-eligibility for Adult and Provisional programs. DELETED provision that excluded drivers from participation or advancement in the DIP if they had no offenses or accidents in the year preceding review of the driver's record.
735-072-0010 **Purpose of the Driver Improvement Program** OAR 735-072-0000 through 735-072-0070 establish the Driver Improvement Program (Program) as authorized by ORS 809.480. The Program consists of four steps (remedial actions) identified in OAR 735-072-0030, increasing in severity, aimed at improving the driver's record, by reducing traffic convictions and accidents. Stat. Auth.: ORS 802.010 & 809.480	**735-072-0010** **Purpose of the Driver Improvement Program** This division establishes the Driver Improvement Programs as authorized by ORS 809.480. Both the Provisional and Adult Driver Improvement Programs have as their goal the reduction of traffic convictions and especially accidents. Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480 Stats. Implemented: OR 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-	DELETED reference to the four steps. ADDED reference to Provisional and Adult programs. Restated goal of reducing traffic

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0305	1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0305; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02	convictions. Added emphasis on reducing accidents.
735-072-0020 **Driver Improvement Program Definitions** The following definitions apply to the Drive Improvement Program rules, OAR 735-072-0010 through 735-072-0070.	**735-072-0020** **Driver Improvement Program Definitions** The following definitions apply to rules for both Driver Improvement Programs:	(no substantive change)
(1) “Advisory Letter” is a letter sent to a person to alert them of their driving problems and to inform them about the program.		DELETED definition of “Advisory Letter”
	(1) "Adult Driver" is a driver 18 years of age or older. (8) "Provisional Driver" means a driver who has reached 14 years of age but has not yet reached 18 years of age.	ADDED definitions of “Adult Driver” and “Provisional Driver”
(2) “Conviction” is as defined in ORS 802.540 and includes an unvacated forfeiture of bail.	(2) "Conviction" means a determination of guilt by a court of law upon a plea, verdict, finding, or unvacated bail forfeiture. Each separate offense arising from a single traffic stop or preventable accident, for which the person receives a conviction, constitutes a separate conviction for purposes of these rules.	DELETED reference to ORS 802.540. Expanded definition. ADDED clarification that each separate offense from single stop or accident will be counted separately.
(3) “DMV” means the Driver and Motor Vehicle Services Branch of the Department of Transportation.	(3) "DMV" means the Driver and Motor Vehicle Services Division of the Department of Transportation.	(no substantive change)

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
(4) “Driver Improvement Course” means any traffic safety, defensive driving, traffic violator, or similar program or course of instruction approved by DMV.	(4) "Driver Improvement Course" means a traffic safety, defensive driving, traffic violator, or similar program or course of instruction approved by DMV.	NO CHANGE
(5) “Driver improvement interview” is a face-to-face meeting with a counselor to explain the program, to discuss the person’s driving record and remedies to the driving problems, and to determine required action for improvement.		DELETED reference to “Driver improvement interview”
(10) “Traffic Offenses” include those listed in OAR 735-064-0220.	(5) "Driver Improvement Violation" means: (a) One conviction for an offense listed in OAR 735-064-0220; or (b) Five convictions for an offense listed in OAR 735-072-0035.	ADDED reference to OAR 735-072-0035.
(6) “License” has the meaning specified in ORS 801.245.	(6) "License" has the meaning specified in ORS 801.245.	NO CHANGE
(7) “Preventable Accident” is a traffic accident reported by a police officer that indicates a driver failed to do everything a drive reasonably could have done to prevent the accident. Factors used to determine preventability include but are not limited to: (a) Violations of the law even if a citation is not issued; (b) Failure to use defensive driving techniques; (c) Road conditions existing at the time of the accident; or (d) Speed of the driver’s vehicle.	(7) "Preventable Accident" is a traffic accident reported by a police officer that indicates a driver failed to do everything a driver reasonably could have done to prevent the accident. Factors used to determine preventability include but are not limited to: (a) Violations of the law even if a citation is not issued; (b) Failure to use defensive driving techniques; (c) Road conditions existing at the time of the accident; or (d) Speed of the driver's vehicle.	NO CHANGE
(8) “Probation” means the one-year period, beginning upon completion of the driver improvement interview.		DELETED definition of “Probation”
(9) “Program” means the Driver Improvement Program.		DELETED definition of “Program”
(11) “Warning Letter” is a letter sent to a person to warn them what can happen if convicted of more traffic		DELETED definition of “Warning

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
offenses or involve in more preventable accidents. Stat. Auth.: ORS 184.616, ORS 802.200 & 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; MV 23-1986, f. 12-31-86, ef. 1-1-87; Administrative Renumbering 3-1988, Renumbered from 735-031-0310; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94		Letter"
	(9) "Record Review Date" means: (a) The date DMV records a driver improvement violation or preventable accident to a person's driving record; or (b) The date DMV grants driving privileges or fully reinstates the driving privileges following a suspension or revocation. Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; MV 23-1986, f. 12-31-86, ef. 1-1-87; Administrative Renumbering 3-1988, Renumbered from 735-031-0310; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02	ADDED definition of "Record Review Date"
	735-072-0027 **Adult Driver Improvement Program** (1) A driver whose record review date is on or after the person has reached 18 years of age is subject to the Adult Driver Improvement Program. DMV will look back from the record review date to the incident date that resulted in a conviction or the date of a preventable accident to determine if a person is subject to the Adult Driver Improvement Program. (2) DMV will restrict the license or instruction permit of an adult driver	ADDED description of new, post-2002 program

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
	who within the 18-month period immediately prior to the record review date has: (a) Three driver improvement violations; (b) Three preventable accidents; or (c) A combination of driver improvement violations and preventable accidents that total three. (3) The following apply to adult restrictions: (a) DMV will restrict the license or instruction permit of an adult driver to no driving between the hours of 12 midnight and 5 a.m., unless driving between home and work or driving for purposes of employment; (b) DMV will impose the restriction for a period of 30 days. DMV will notify the adult driver by letter that the restriction will begin 30 days from the date of the letter. During the restriction period, the adult driver must carry the restriction letter at all times the person is driving a motor vehicle; and (c) DMV will delay imposition of a restriction to driving privileges and place a pending restriction code on the person's driving record of any adult driver: (A) Whose driving privileges are cancelled, suspended or revoked until DMV grants driving privileges or fully reinstates driving privileges; or (B) Who has not been granted driving privileges until DMV grants driving privileges in the form of a driver license or instruction permit; (C) Unless that adult driver gets another driver improvement violation or preventable accident that would total four driver improvement violations or preventable accidents in a 24-month period prior to the record	

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
	review date. In that case, DMV will suspend the driving privileges or right to apply for driving privileges. This suspension will supersede the pending restriction and the pending restriction code will be removed from the person's driving record. (d) DMV will not impose a pending restriction to the driving privileges of an adult driver if: (A) Five years have elapsed from the date the pending restriction was imposed; and (B) The adult driver has no record of a driver improvement violation or preventable accident occurring in the last 18 months prior to the granting of driving privileges or full reinstatement of driving privileges. (4) DMV will suspend the driving privileges or right to apply for driving privileges of an adult driver who within the 24-month period immediately prior to the record review date has: (a) Four driver improvement violations; (b) Four preventable accidents; or (c) A combination of driver improvement violations and preventable accidents that total four. (5) For each subsequent driver improvement violation or preventable accident, DMV will suspend the driving privileges or right to apply for driving privileges of an adult driver, regardless of a previous or current Driver Improvement Program suspension(s), who within the 24-month period immediately prior to the record review date has: (a) Four or more driver improvement violations; (b) Four or more preventable	

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
	accidents; (c) A combination of driver improvement violations and preventable accidents that total four or more. (6) The suspension period under sections (3), (4) and (5) of this rule will be for 30 days. The suspension will run concurrently with any other suspension, revocations, or cancellations in effect at the time the suspension begins. Stat. Auth.: ORS 184.616, 184.619 & 809.480 Stats. Implemented: ORS 809.480 Hist.: DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02; DMV 19-2004, f. & cert. ef. 8-20-04	
735-072-0030 **Steps in the Driver Improvement Program** (1) Step One: An advisory letter may be mailed when: (a) A person is convicted of two traffic offenses occurring within a 12-month period; (b) A person is involved in two preventable accidents occurring within a 12-month period; or (c) A person is convicted of one traffic offense and is involved in one preventable accident both occurring within a 12-month period. (2) Step Two: A warning letter may be mailed when: (a) A person is convicted of one traffic offense or is involved in one preventable accident occurring within six months from the date of the advisory letter; (b) A person is convicted of two traffic offenses or is involve din two preventable accidents or a combination		DELETED

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
of the two occurring within 12 months from the date of the advisory letter; or (c) A person is convicted of three traffic offenses or is involved in three preventable accidents or a combination of the two occurring within an 18-month period, regardless of whether an advisory letter has been sent. (3) Step Three: A driver improvement interview may be held by the DMV when: (a) A person is convicted of either one traffic offense or is involved in one preventable accident occurring within six months from the date of the warning letter; (b) A person is convicted of two traffic offenses or is involved in two preventable accidents or a combination of the two occurring within 12 months from the date of the warning letter; or (c) A person is convicted of four or more traffic offenses or is involved in four preventable accidents or a combination of these occurring within any 18-month period, whether an advisory or warning letter has been sent. (4) DMV may elect not to interview a person whose driving privilege is suspended, revoked or canceled. The interview may take place after the person clears the open actions and becomes eligible for reinstatement. An interview shall only take place if entries on the person's driving record indicate the person has continued to drive. (5) Step Four: A notice of suspension under ORS 809.480 shall be sent when any one of the following occurs: (a) A person is convicted of any traffic offense or is involved in any preventable accident occurring during		

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
the one-year probation period, even if the conviction or accident report is received after the end of the probationary period. There shall be a 30-day suspension for each accident or conviction; (b) A person fails to attend the driver improvement interview. The suspension shall remain in effect until: A. The interview is held; or B. The suspension has been in effect for at least one year and the person's driving record shows no entries indicating the driver has continued to drive within the last year. (c) A person fails to complete any requirement imposed by the counselor at the driver improvement interview. The suspension shall remain in effect until the requirement is completed, not to exceed five years. Stat. Auth.: ORS 184.616, ORS 802.200 & 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0315; MV 24-1991, f. & cert. ef. 10-31-91; DMV 10 -1994, f. 9-30-94, cert. ef. 10-1.94		
	735-072-0035 **Driver Improvement Offenses** (1) The conviction for an offense listed below counts toward both the Provisional and Adult Driver Improvement Programs. It takes five convictions from the following list to equal one driver improvement violation. All other convictions counting in the Driver Improvement Programs are outlined in OAR 735-064-0220. [List not included. See ED. NOTE] (2) Offenses from other states are posted to driver records using an	ADDED reference to list of additional offenses (in addition to those in OAR 735-064-0220), five of which count as one "Driver Improvement Violation".

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
	AAMVAnet Code Dictionary (ACD) code. This section identifies the code that appears on the driver record, the type of code, a description of the offense and the ORS or administrative rule reference to the equivalent offense(s) in Oregon. The offenses listed below also count towards both the Provisional and Adult Driver Improvement Programs as described in section (1) of this rule. [List not included. See ED. NOTE] [ED. NOTE: Lists referenced in this rule appear in Appendix D.] Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480 Stat. Imp.: ORS 809.480 Hist.: DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02	ADDED definition of code to allow offenses from other states to be posted to drivers' records**.**
735-072-0040 **At the Driver Improvement Interview** (1) When a person is required to attend a driver improvement interview, the DMV driver improvement counselor shall place the person on probation for one year. The counselor may also take one or more of the actions specified in sections (2) through (5) of this rule. (2) The counselor may place restrictions of times, days and routes on the person's license when the counselor determines the person's driving problems occur at a certain time of day or place. The person shall obtain the restricted license within thirty (30) days of the date of the interview. (3) The counselor may require the person to attend and complete a driver improvement course under the direction of DMV or a DMV-approved		DELETED

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
organization. The person must complete the course and notify DMV of such completion within ninety (90) days from the date appearing on the notice directing the person to take the course. The following criteria shall be used by the counselor for referral: (a) National Safety Council's Defensive Driving Course (DDC): (A) Drivers whose records indicate stop light or stop sign convictions; (B) Driver over 21; (C) Drivers who have not taken the course within the past 18 months and fall into one of the above categories; (D) Drivers who do not fall into one of the above categories, but have taken National Traffic Safety Institute Level I within the last 18 months; and (E) Drivers with accidents on their driving record within the last year. (b) National Traffic Safety Institute (NTSI) Level I: (A) Drivers who have convictions for violation of the basic rule or other speed-related offenses; (B) Particularly young drivers, ages 16-20; (C) Drives who have not taken NTSI I within the past 18 months, but fall into one of the above categories; and (D) Drivers who do not fall within the above categories, but have taken DDC within the past 18 months. (c) National Traffic Safety Institute (NTSI) Level II: Drivers whose records indicate poor driving behavior, and at the interview, express an unwillingness to change poor driving habits, sarcasm, and lack of concern for others' safety and traffic laws; (d) Team Oregon Motorcycle Safety Program Basic Motorcycle Rider Course (MRC): Drivers who have not		

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
completed formal training on how to ride a motorcycle within the past eighteen months and who indicate in the interview their citations occurred while riding a motorcycle; (e) Team Oregon Motorcycle Safety Program Experienced Rider Course (ERC): (A) Motorcycle riders who have been riding a motorcycle for at least one year; (B) Motorcycle riders with current access to a motorcycle who have a current motorcycle endorsement; (C) Motorcycle riders who have completed a formal training program on how to ride a motorcycle within the past 18 months; and (D) Motorcycle riders who indicate in the interview that their citations occurred while riding a motorcycle. (4) The counselor may require the person to complete and pass DMV's driver license examination within sixty (60) days from the date of the notice directing the person to complete the examination and to notify the Driver Improvement Program of the completion. The counselor shall refer the person for a re-examination when the person's driving record indicates lack of knowledge of traffic laws or poor driving skills. (5) The counselor may refer the person to a social services agency for further counseling in cases where personal problems such as alcoholism, marital, financial, or work-related problems have contributed to the person's driving problems. The person shall contact the referral agency and notify the Driver Improvement Program of such contact by returning the agency-signed referral form within 30 days		

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
from the date of the interview. Stat. Auth.: ORS 184.616, ORS 802.200 & ORS 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0320; MV 23-1991, f. & cert. ef. 10-16-91; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94		
735-072-0050 **Rights to a Hearing or Administrative Review** Hearing and administrative review procedures for suspensions under OAR 735-072-0030 are as established by ORS 809.440(1), (2) and (5). Stat. Auth.: ORS 802.010, ORS 809.480 & Ch. 702, OL 1991 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0325; MV 19-1991, f. & cert. ef. 9-18-91	**735-072-0050** **Rights to a Hearing or Administrative Review** Hearing and administrative review procedures for suspensions under OAR 735-072-0023 and 735-072-0027 are as established by ORS 809.440(1), (2) and (5). (1) A person whose suspension is based solely on conviction records received from a court is entitled to an administrative review. (2) A person whose suspension is based, in any part, on a report of a preventable accident is entitled to a contested case hearing. Stat. Auth.: ORS 184.616, ORS 184.619 & ORS 809.480 Stats Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0325; MV 19-1991, f. & cert. ef. 9-18-91; DMV 29-2001(Temp), f. 12-14-01 cert. ef. 1-1-02 thru 6-29-02; DMV 12-2002, f. 6-24-02, cert. ef. 6-30-02	Changed reference from: ❖ 735-072-0030--Steps in the Driver Improvement Program, to ❖ 735-072-0023--Provisional Driver Improvement Program and ❖ 735-072-0027--Adult Driver Improvement Program Added clarification of circumstances of access to and administrative

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
		review vs. a hearing.
735-072-0060 **Exemptions from Driver Improvement Program Requirements** (1) DMV may excuse a person from completing a requirement of the program when the person provides DMV satisfactory evidence, in writing, when one of the following applies: (a) Out-of-state military service (longer than four months); (b)Out-of-state residency (longer than twelve months); (c) Out-of-state for school or business (longer than four months); (d) Serious of lengthy injury, or illness (longer than four months); or (e) Incarceration (longer than four months). (2) A person shall be placed on probation as explained in OAR 735-072-0040(1) when the person is excused from a requirement of the program. Stat. Auth.: ORS 184.616, ORS 802.200 & ORS 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0330; DMV 10-1994, f. 9-30-94r, cert. ef. 10-1-94	**735-072-0060** **Exemptions from Driver Improvement Program Requirements** (1) DMV may excuse a person from completing a requirement of the program when the person provides DMV satisfactory evidence, in writing, when one of the following applies: (a) Out-of-state military service (longer than four months); (b) Out-of-state residency (longer than twelve months); (c) Out-of-state for school or business (longer than four months); (d) Serious or lengthy injury, or illness (longer than four months); or (e) Incarceration (longer than four months). (2) A person shall be placed on probation as explained in OAR 735-072-0040(1) when the person is excused from a requirement of the program. Stat. Auth.: ORS 184.616, ORS 802.200 & ORS 809.480 Stats. Implemented: ORS 809.480 Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0330; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94	NO CHANGE
735-072-0070 **Person No Longer Subject to Driver Improvement Program** A person is no longer involved in the Driver Improvement Program when the one-year probation period ends, except as provided in OAR 735-072-0030(5)(a) or (c). Stat. Auth.: ORS 184.616, ORS 802.200 & 809.480 Stats. Implemented: ORS 809.480		DELETED provision that ended a driver's participation in the DIP after completion of the one-year probation.

PRE-2002 (OAR 2000)	CURRENT PROGRAM (OAR 2007)	CHANGES
Hist.: MV 24-1985, f. 12-31-85, ef. 1-1-86; Administrative Renumbering 3-1988, Renumbered from 735-031-0335; DMV 10-1994, f. 9-30-94, cert. ef. 10-1-94.		(Probation not part of current program).
Provisional Program [only headings included to show changes in organization of the rules]		
735-072-0090 **Application of Provisional License Driver Improvement Program** **735-072-0100** **Purpose of the Provisional License Driver Improvement Program** **735-072-0110** **Provisional License Driver Improvement Program Definitions** **735-072-0120** **Steps in the Provisional License Driver Improvement Program** **735-072-0130** **At the Provisional License Driver Improvement Interview** **735-072-0140** **Rights to an Administrative Review** **735-072-0150** **Exemptions from Provisional License Driver Improvement Program Requirements** **735-072-0160** **Persons No Longer Subject to Provisional License Driver Improvement Program**	**735-072-0023** **Provisional Driver Improvement Program**	

APPENDIX D: DIP TYPE A AND TYPE B OFFENSES AND MAJOR OFFENSES

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
S01	A	ACD: 01-05 > SPEED LIMIT (DETAIL OPTIONAL)
S06	A	ACD: 06-10 > SPEED LIMIT (DETAIL OPTIONAL)
S15	A	ACD: SPEEDING 15 MPH OR MORE ABOVE SPEED LIMIT (DETAIL OPTIONAL)
S16	A	ACD: 16-20 > SPEED LIMIT (DETAIL OPTIONAL)
S21	A	ACD: 21-25 > SPEED LIMIT (DETAIL OPTIONAL)
S26	A	ACD: 26-30 > SPEED LIMIT (DETAIL OPTIONAL)
S31	A	ACD: 31-35 > SPEED LIMIT (DETAIL OPTIONAL)
S36	A	ACD: 36-40 > SPEED LIMIT (DETAIL OPTIONAL)
S41	A	ACD: 41+ > SPEED LIMIT (DETAIL OPTIONAL)
S51	A	ACD: 01-10 > SPEED LIMIT (DETAIL OPTIONAL)
S71	A	ACD: 21-30 > SPEED LIMIT (DETAIL OPTIONAL)
S81	A	ACD: 31-40 > SPEED LIMIT (DETAIL OPTIONAL)
S91	A	ACD: 41+ > SPEED LIMIT (DETAIL OPTIONAL)
S92	A	ACD: SPEEDING - SPEED LIMIT AND ACTUAL SPEED (DETAIL REQUIRED)
S93	A	ACD: SPEEDING
S94	A	ACD: PRIMA FACIE SPEED VIOLATION OR DRIVING TOO FAST FOR CONDITIONS
S95	A	ACD: SPEED CONTEST (RACING) ON ROAD OPEN TO TRAFFIC
SP RACE	A	SPEED RACING ON A HIGHWAY OR ANY PREMISES OPEN TO THE PUBLIC
V BUS/TRK SP	A	VIOLATING MAXIMUM SPEED FOR MOTOR TRUCKS AND PASSENGER TRANSPORT VEHICLES
V DSG SPD	A	VIOLATING DESGINATED SPEED
V SP RI HWY	A	VIOLATING MAXIMUM SPEED LIMIT FOR RURAL INTERSTATE HIGHWAYS
V URB SP	A	VIOLATING MAXIMUM SPEED IN AN URBAN AREA
VBR	A	VIOLATING THE BASIC SPEED RULE
V SP SCH ZN	A	VIOLATING SPEED IN SCHOOL ZONE
A UNL OP VH	A	PERMITTING UNLAWFUL OPERATION OF A VEHICLE
A26	A	ACD: DRINKING ALCOHOL WHILE OPERATING A VEHICLE
A31	A	ACD: ILLEGAL POSSESSION OF ALCOHOL

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
A35	A	ACD: POSSESSION OF OPEN ALCOHOL CONTAINER
ATV N DL/P	A	ABANDONING A VEHICLE
B13	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
B21	A	ACD: DRIVING WHILE LICENSE BARRED
B22	A	ACD: DRIVING WHILE LICENSE CANCELLED
B23	A	ACD: DRIVING WHILE LICENSE DENIED
B24	A	ACD: DRIVING WHILE LICENSE DISQUALIFIED
B51	A	ACD: EXPIRED OR NO DRIVER LICENSE (DL, CDL, IP, ID)
B56	A	ACD: DRIVING A CMV WITHOUT OBTAINING A CDL
B91	A	ACD: IMPROPER CLASSIFICATION OR ENDORSEMENT ON DRIVER LICENSE (DL, CDL, IP,ID)
C CHD EXT VH	A	CARRYING A CHILD ON EXTERNAL PART OF VEHICLE
C DOG EXT VH	A	CARRYING A DOG ON EXTERNAL PART OF VEHICLE
C MNR EXT VH	A	CARRYING A MINOR ON EXTERNAL PART OF VEHICLE
CAR TFT 2	A	THEFT IN THE SECOND DEGREE
CARELESS DR	A	CARELESS DRIVING
COASTING	A	UNLAWFUL COASTING ON A DOWNGRADE
CRS CTR LINE	A	CROSSING THE CENTER LINE ON A TWO-WAY, FOUR-LANE ROAD
D29	A	ACD: VIOLATE RESTRICTIONS OF DRIVER LICENSE (DL, CDL, IP, ID)
D66	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D70	A	ACD: DRIVER'S VIEW OBSTRUCTED
D71	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D72	A	ACD: INABILITY TO CONTROL VEHICLE
D73	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D74	A	ACD: OPERATING A MOTOR VEHICLE IMPROPERLY BECAUSE OF DROWSINESS
D75	A	ACD: OPERATING A MOTOR VEHICLE IMPROPERLY DUE TO PHYSICAL OR MENTAL DISABILITY
DNG LFT TRN	A	DANGEROUS LEFT TURN
DNG MVMT VH	A	DANGEROUS MOVEMENT OF A STOPPED, STANDING OR PARKED VEHICLE
DNG OP A/S	A	DANGEROUS OPERATION OF A SNOWMOBILE OR AN ALL-TERRAIN VEHICLE
DNG OP LVSTK	A	DANGEROUS OPERATION AROUND LIVESTOCK

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
DR HWY DIV	A	DRIVING ON A HIGHWAY DIVIDER
DR ON LFT	A	DRIVING ON THE LEFT ON A CURVE OR GRADE OR AT AN INTERSECTION OR RAIL CROSSING
DR ON SW	A	DRIVING ON SIDEWALK
DR SFT ZONE	A	DRIVING THROUGH A SAFETY ZONE
DR V SFT CDE	A	DRIVER VIOLATION OF WORKER TRANSPORT VEHICLE SAFETY CODE
DR WW TF ISL	A	DRIVING THE WRONG WAY AROUND A TRAFFIC ISLAND
DSRPT FUPRO	A	DISRUPTING A FUNERAL PROCESSION
DWR-VC	A	DWR (811.182R) CRIMINAL DRIVING WHILE REVOKED - VIOLATION
DWR-VI	A	INFRACTION DRIVING WHILE REVOKED
DWS-VC	A	DWS (811.182) CRIMINAL DRIVING WHILE SUSPENDED - VIOLATION
DWS-VI	A	INFRACTION DRIVING WHILE SUSPENDED
E54	A	ACD: FAILURE TO USE HEADLIGHT DIMMER AS REQUIRED
E55	A	ACD: FAILURE TO USE LIGHTS AS REQUIRED
E57	A	ACD: FAILURE TO USE SNOW TIRES OR CHAINS AS REQUIRED
END CHD PAS	A	ENDANGERING CHILD PASSENGER; FAILURE TO USE SAFETY BELTS
END MS OP	A	ENDANGERING A MOTOR ASSISTED SCOOTER OPERATOR
EXC SP FUPRO	A	EXCEEDING THE MAXIMUM SPEED FOR A FUNERAL PROCESSION
F DR IN LN	A	FAILURE TO DRIVE WITHIN A LANE
F DR RT	A	FAILURE TO DRIVE ON THE RIGHT
F DR RT A/VH	A	FAILURE TO DRIVE ON THE RIGHT OF AN APPROACHING VEHICLE
F DR RT HWY	A	FAILURE TO DRIVE TO THE RIGHT ON A DIVIDED HIGHWAY
F DR RT LN	A	FAILURE TO KEEP CAMPER, TRAILER OR TRUCK IN THE RIGHT LANE
F DR Y RD	A	FAILURE OF DRIVER ENTERING ROADWAY TO YIELD RIGHT OF WAY
F FLW RR PRC	A	FAILURE TO FOLLOW RAIL CROSSING PROCEDURES FOR HIGH-RISK VEHICLES
F MAINT CTRL	A	REMOVED CODE NO LONGER USED PER ACD 093005
F MAINT S/BL	A	FAILURE TO MAINTAIN SEAT BELTS IN WORKING ORDER
F MNT SD EVA	A	FAIL TO MAINTAIN SAFE DISTANCE FROM EMERGENCY VEH OR AMBULANCE
F MRG DR Y	A	FAILURE OF MERGING DRIVER TO YIELD RIGHT OF WAY
F OBEY 1WAY	A	FAILURE TO OBEY A ONE-WAY DESIGNATION

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
F OBEY HOVL	A	FAIL TO OBEY TRAFFIC CONTROL DEVICE; EXCLUSIVE USE; HIGH OCCUPANCY VEHICLE LANE
F OBEY PLC	A	FAILING TO OBEY A POLICE OFFICER
F OBEY TCD	A	FAILURE TO OBEY TRAFFIC CONTROL DEVICE
F OBEY TF/PT	A	FAILURE TO OBEY A TRAFFIC PATROL MEMBER
F PFM INJ AN	A	FAILURE TO PERFORM THE DUTIES OF A DRIVER WHEN AN ANIMAL IS INJURED
F RM INJ SUB	A	TOW VEHICLE OPERATOR FAILURE TO REMOVE INJURIOUS SUBSTANCE
F S PED S/LT	A	FAILURE TO STOP FOR PEDESTRAIN WHEN MAKING TURN AT A STOP LIGHT
F S PED TCD	A	FAILURE TO STOP FOR PEDESTRIAN PROCEEDING UNDER TRAFFIC CONTROL DEVICES
F S/RS B PED	A	F STOP/REMAIN STOPED FOR BLIND PED
F S/RS PD CW	A	F STOP/REMAIN STOPED RD CROSSWALK
F S/RS TF/PT	A	FAIL TO STOP/REMAIN STOPED TRAFFIC PATROL
F SIG LT RQ	A	FAILURE TO SIGNAL WITH LIGHTS WHEN REQUIRED
F SIG MS	A	FAILURE TO SIGNAL FOR A MOTOR ASSISTED SCOOTER MANEUVER
F SLW DR RT	A	FAILURE OF SLOW DRIVER TO DRIVE ON RIGHT
F SLW DR Y	A	FAILURE OF A SLOW DRIVER TO YIELD TO OVERTAKING VEHICLE
F STP BUS	A	FAILURE TO STOP FOR BUS SAFETY LIGHTS
F STP DRVWY	A	FAILURE TO STOP WHEN EMERGING FROM AN ALLEY, DRIVEWAY OR BUILDING
F STP PAS LD	A	FAILURE TO STOP FOR PASSENGER LOADING OF PUBLIC TRANSIT VEHICLE
F STP RR	A	FAILURE TO STOP FOR A RAILROAD SIGNAL
F USE BYC LN	A	FAILURE OF A MOTOR ASSISTED SCOOTER TO USE A BICYCLE LANE OR PATH
F USE S/BL	A	FAILURE TO USE SAFETY BELTS
F USE SIG	A	FAILURE TO USE APPROPRIATE SIGNAL FOR TURN, LANE CHANGE, OR STOP
F USE TRACT	A	FAILURE TO USE VEHICLE TRACTION TIRES OR TRACTION DEVICES
F USE TRN LN	A	FAILURE TO USE SPECIAL LEFT TURN LANE
F Y A/EV	A	FAILURE TO YIELD TO AN EMERGENCY VEHICLE OR AMBULANCE
F Y BLND PED	A	FAILURE TO YIELD RIGHT OF WAY TO A BLIND PEDESTRIAN
F Y BYC LN	A	FAILURE TO YIELD TO A RIDER ON A BICYCLE LANE
F Y BYC SW	A	FAILURE TO YIELD RIGHT OF WAY TO BICYCLIST ON A SIDEWALK
F Y FUPRO	A	FAILURE TO YIELD THE RIGHT OF WAY TO A FUNERAL PROCESSION

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
F Y PED CRSW	A	FAILURE TO YIELD TO A PEDESTRIAN IN A CROSSWALK
F Y PED S/LT	A	FAILURE TO YIELD TO A PEDESTRAIN WHEN MAKING TURN AT A STOP LIGHT
F Y PED SW	A	FAILURE TO YIELD TO A PEDESTRIAN ON A SIDEWALK
F Y PED TCD	A	FAILURE TO YIELD TO A PEDESTRIAN PROCEEDING UNDER TRAFFIC CONTROL DEVICES
F Y RNDABOUT	A	FAILURE TO YEILD RIGHT OF WAY WITHIN A ROUNDABOUT
F Y TF PT	A	F Y TRAFFIC PATROL MEMBER
F Y UNC INTR	A	FAILURE TO YIELD RIGHT OF WAY AT AN UNCONTROLLED INTERSECTION
F YLD RW HWK	A	FAILURE TO YIELD THE RIGHT OF WAY TO A HIGHWAY WORKER WHO IS A PEDESTRIAN
F YLD TF PT	A	FAIL TO YIELD TO TRAFFIC PATROL MEMBER
F/D LT MP/MC	A	FAILURE TO DISPLAY LIGHTED HEADLIGHTS ON A MOPED OR MOTORCYCLE AT ALL TIMES
F/SLOW CK RR	A	FAILURE OF COMMERCIAL MOTOR VEHICLE OPERATOR TO SLOW AND CHECK TRACKS FOR TRAIN
F02	A	ACD: CHILD OR YOUTH RESTRAINT NOT USED PROPERLY AS REQUIRED
F04	A	ACD: SEAT BELT NOT USED PROPERLY AS REQUIRED
F05	A	ACD: CARRYING UNSECURED PASSENGERS IN OPEN AREA OF VEHICLE
F06	A	ACD: IMPROPER OPERATION OF OR RIDING ON A MOTORCYCLE
F14	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F23	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F34	A	ACD: STOPPING, STANDING, OR PARKING: OBSTRUCTING OR IMPEDING TRAFFIC
F64	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
FLW TOO CLS	A	FOLLOWING TOO CLOSELY
FTY RW TBUS	A	FAILURE TO YIELD THE RIGHT OF WAY TO A TRANSIT BUS
FY UNC T INT	A	FAIL TO YIELD AT UNCONTROLLED T INTERSECTION
I BCKG	A	ILLEGAL BACKING
I OP EV/AMB	A	ILLEGAL OPERATION OF AN EMERGENCY VEHICLE OR AN AMBULANCE
I U-TRN	A	ILLEGAL U-TURN
IMP CTR LN	A	IMPROPER USE OF CENTER LANE ON A THREE LANE ROAD
IMP LFT TRN	A	IMPROPERLY EXECUTING A LEFT TURN
IMP MVMT RR	A	IMPROPER MOVEMENT OF HEAVY EQUIPMENT ACROSS A RAIL CROSSING

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
IMP OP MS LN	A	IMPROPER OPERATION OF A MOTOR ASSISTED SCOOTER IN A LANE
IMP OPN DOOR	A	IMPROPER OPENING OR LEAVING OPEN A VEHICLE DOOR
IMP RT TRN	A	IMPROPERLY EXECUTED RIGHT TURN
IMP TRN S/LT	A	IMPROPER TURN AT A STOP LIGHT
IMPED TF	A	IMPEDING TRAFFIC
INTFR A/EV	A	INTERFERENCE WITH AN EMERGENCY VEHICLE OR AMBULANCE
INTFR STRCAR	A	INTERFERENCE WITH STREETCAR OPERATION
INTFR TCD/RR	A	UNLAWFUL INTERFERENCE WITH A TRAFFIC CONTROL DEVICE OR RAILROAD SIGN
M SP LTRN LN	A	MISUSE OF A SPECIAL LEFT TURN LANE
M02	A	ACD: FAILURE TO OBEY BARRIER
M03	A	ACD: FAILURE TO OBEY CONSTRUCTION OR MAINTENANCE ZONE MARKERS
M04	A	ACD: FAILURE TO OBEY FLAGGER
M05	A	ACD: FAILURE TO OBEY LANE MARKINGS OR SIGNAL
M07	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
M08	A	ACD: FAILURE TO OBEY POLICE OR PEACE OFFICER
M09	A	ACD: FAILURE TO OBEY RAILROAD CROSSING RESTRICTIONS
M10	A	ACD: FAILURE TO OBEY RAILROAD GATES, SIGNS OR SIGNALS
M11	A	ACD: FAILURE TO OBEY RESTRICTED LANE
M12	A	ACD: FAILURE TO OBEY SAFETY ZONE
M13	A	ACD: FAILURE TO OBEY SCHOOL CROSSING GUARD
M14	A	ACD: FAILURE TO OBEY SIGN OR TRAFFICE CONTROL DEVICE
M15	A	ACD: FAILURE TO OBEY STOP SIGN
M16	A	ACD: FAILURE TO OBEY TRAFFIC SIGNAL OR LIGHT
M17	A	ACD: FAILURE TO OBEY TRAFFIC SIGN
M18	A	ACD: FAILURE TO OBEY WARNING LIGHT OR FLASHER
M19	A	ACD: FAILURE TO OBEY YIELD SIGN
M20	A	ACD: FAILURE OF CDL OPERATOR TO SLOW AT CHECK TRACKS FOR TRAIN BEFORE CROSSING
M21	A	ACD: FAILURE TO STOP BEFORE REACHING TRACKS AT A RR CROSSING WHEN NOT CLEAR
M22	A	ACD: FAILURE TO FOLLOW RAIL CROSSING PROCEDURES FOR HIGH-RISK VEHICLES

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
M23	A	ACD: OBSTR XING-DRVNG ONTO XING WHEN SPACE ON OTHER SIDE NOT SUFFICIENT.
M24	A	ACD: OBSTR XING-FAIL TO NEGOTIATE DUE TO INSUFFICIENT UNDERCARRIAGE CLEARENCE
M25	A	ACD: FAILURE TO STOP-BASIC RULE/UNSIGN INTER OR ENTERING RDWY FROM DRVWY, ETC
M30	A	ACD: FOLLOWING IMPROPERLY
M31	A	ACD: FAILURE TO LEAVE SUFFICIENT DISTANCE FOR OVERTAKING BY OTHER VEHICLES
M32	A	ACD: FOLLOWING EMERGENCY VEHICLE UNLAWFULLY
M33	A	ACD: FOLLOWING FIRE EQUIPMENT UNLAWFULLY
M34	A	ACD: FOLLOWING TOO CLOSE
M40	A	ACD: IMPROPER LANE OR LOCATION
M41	A	ACD: FAILURE TO KEEP IN PROPER LANE
M42	A	ACD: IMPROPER OR ERRATIC (UNSAFE) LANE CHANGES
M43	A	ACD: RAN OFF ROAD
M44	A	ACD: IMPROPER LANE OR LOCATION - CROSSOVER
M45	A	ACD: IMPROPER LANE OR LOCATION - CROSSWALK
M46	A	ACD: IMPROPER LANE OR LOCATION - ENTRANCE/EXIT RAMP OR WAY
M47	A	ACD: IMPROPER LANE OR LOCATION - IN BICYCLE LANE
M49	A	ACD: IMPROPER LANE OR LOCATION - IN HOV OR RESTRICTED LANE
M51	A	ACD: IMPROPER LANE OR LOCATION - MEDIAN
M55	A	ACD: IMPROPER LANE OR LOCATION - ON RAIL OR STREETCAR TRACKS
M56	A	ACD: IMPROPER LANE OR LOCATION - ON FIRE HOSE
M57	A	ACD: IMPROPER LANE OR LOCATION - ONCOMING TRAFFIC LANE
M58	A	ACD: IMPROPER LANE OR LOCATION - ROAD SHOULDER, DITCH OR SIDEWALK
M60	A	ACD: IMPROPER LANE OR LOCATION - SLOWER VEHICLE LANE
M61	A	ACD: IMPROPER LANE OR LOCATION - STRADDLING CENTER LINE(S)
M62	A	ACD: IMPROPER LANE OR LOCATION - TRAVELLING IN TURN (OR CENTER) LANE
M70	A	ACD: IMPROPER PASSING
M71	A	ACD: PASSING IN VIOLATION OF POSTED SIGN OR PAVEMENT MARKING
M72	A	ACD: PASSING IN VIOLATION OF OPPOSITE DIRECTIONS RESTRICTION
M73	A	ACD: PASSING ON WRONG SIDE

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
M74	A	ACD: PASSING ON HILL OR CURVE
M75	A	ACD: PASSING SCHOOL BUS DISPLAYING WARNING NOT TO PASS
M76	A	ACD: PASSING WHERE PROHIBITED
M77	A	ACD: PASSING WITH INSUFFICIENT DISTANCE OR VISIBILITY
M81	A	ACD: CARELESS DRIVING
M82	A	ACD: INATTENTIVE DRIVING
M83	A	ACD: NEGLIGENT DRIVING
MC CLING	A	MOTORCYCLIST CLINGING TO ANOTHER VEHICLE
MIN OP BUS	A	MINOR OPERATING A SCHOOL VEHICLE
MIN OP PPVH	A	MINOR OPERATING A PUBLIC PASSENGER VEHICLE
MP/MC OP 2+	A	MOPED OR MOTORCYCLE OPERATING MORE THAN TWO ABREAST
MP/MC UNL PS	A	MOTORCYCLE OR MOPED UNLAWFUL PASSING IN A LANE WITH A VEHICLE
N LN MP/MC	A	DEPRIVING A MOTORCYCLE OR MOPED OF A FULL LANE
N01	A	ACD: FAILURE TO YIELD RIGHT OF WAY (FTY ROW)
N02	A	ACD: FTY ROW TO ANIMAL RIDER OR ANIMAL-DRAWN VEHICLE
N03	A	ACD: FTY ROW TO CYCLIST
N04	A	ACD: FTY ROW TO EMERGENCY VEHICLE (I.E. AMBULANCE, FIRE EQUIP, POLICE, ETC
N05	A	ACD: FTY ROW TO FUNERAL PROCESSION, PROCESSION, OR PARADE
N06	A	ACD: FTY ROW TO OTHER VEHICLE
N07	A	ACD: FTY ROW TO OVERTAKING VEHICLE
N08	A	ACD: FTY ROW TO PEDESTRIAN (INCLUDES HANDICAPPED OR BLIND)
N09	A	ACD: FTY ROW TO SCHOOL BUS
N20	A	ACD: FTY ROW AT CROSSWALK
N21	A	ACD: FTY ROW AT ROTARY
N22	A	ACD: FTY ROW AT STOP SIGN
N23	A	ACD: FTY ROW AT TRAFFIC SIGN
N24	A	ACD: FTY ROW AT TRAFFIC SIGNAL
N25	A	ACD: FTY ROW AT UNSIGNED INTERSECTION
N26	A	ACD: FTY ROW AT YIELD SIGN

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
N30	A	ACD: FTY ROW WHEN WARNING DISPLAYED ON OTHER VEHICLE
N31	A	ACD: FTY ROW WHEN TURNING
N40	A	ACD: FAILURE TO USE OR IMPROPER SIGNAL
N42	A	ACD: FAILURE TO SIGNAL INTENTION TO PASS
N43	A	ACD: FAILURE TO SIGNAL LANE CHANGES OR TURN
N44	A	ACD: GIVING WRONG SIGNAL
N50	A	ACD: IMPROPER TURN
N51	A	ACD: IMPROPER METHOD OF TURNING
N52	A	ACD: IMPROPER POSITION FOR TURNING
N53	A	ACD: MAKING IMPROPER LEFT TURN
N54	A	ACD: MAKING IMPROPER RIGHT TURN
N55	A	ACD: MAKING IMPROPER TURN AROUND (NOT U-TURN)
N56	A	ACD: MAKING IMPROPER U TURN
N60	A	ACD: DRIVING WRONG WAY
N61	A	ACD: DRIVING WRONG WAY AT ROTARY INTERSECTION
N62	A	ACD: DRIVING WRONG WAY ON DIVIDED HIGHWAY
N63	A	ACD: DRIVING WRONG WAY ON ONE WAY STREET OR ROAD
N70	A	ACD: DRIVING ON WRONG SIDE
N71	A	ACD: DRIVING ON WRONG SIDE OF DIVIDED HIGHWAY
N72	A	ACD: DRIVING ON WRONG SIDE OF UNDIVIDED STREET OR ROAD
N80	A	ACD: COASTING (OPERATING WITH GEARS DISENGAGED)
N81	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
N82	A	ACD: IMPROPER BACKING
N83	A	ACD: IMPROPER STARTING
N84	A	ACD: UNSAFE OPERATION
OBS CRS TF	A	OBSTRUCTING CROSS TRAFFIC
OBS RR/LW VH	A	OBSTRUCTING XING-FAIL TO NEGOTIATE DUE TO INSUFFICIENT UNDERCARRIAGE CLEARENCE
OBS RR/N SPC	A	OBSTR XING-DRVNG ONTO XING WHEN SPACE ON OTHER SIDE NOT SUFFICIENT
OBS VH WDW	A	OBSTRUCTION OF VEHICLE WINDOWS

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
OP A/S C WPN	A	OPERATING A SNOWMOBILE OR ALL-TERRAIN VEHICLE WHILE CARRYING A FIREARM OR BOW
OP MS UNL LD	A	OPERATING A MOTOR ASSISTED SCOOTER WITH AN UNLAWFUL LOAD
OP N ATV PRV	A	OPERATION OF A CLASS I ATV WITHOUT DRIVING PRIVILEGES
OP N MC ENDS	A	OPERATING A MOTORCYCLE WITHOUT THE PROPER ENDORSEMENT
OP N SN PRIV	A	OPERATION OF A SNOWMOBILE WITHOUT DRIVING PRIVILEGES
OP V GC REST	A	DRIVING ON A ROAD/STREET, OR IN AREA WITH A SPEED DESIGNATION GREATER THAN 25 M
OP V REST	A	OPERATING A VEHICLE IN VIOLATION OF LICENSE RESTRICTIONS
OP VH N DL	A	OPERATING A VEHICLE WITHOUT DRIVING PRIVILEGES
OW V SFT CDE	A	OWNER VIOLATION OF WORKER TRANSPORT VEHICLE SAFETY CODE
PAS IN TRLR	A	PASSENGER IN TRAILER
PAS OBS DR	A	DRIVER OPERATION WITH OBSTRUCTING PASSENGER
PROV CURFEW	A	PROVISIONAL VIOLATION OF CURFEW RESTRICTIONS
PROV PASS 1	A	PROVISIONAL VIOLATION OF PASSENGER RESTRICTIONS IN FIRST SIX MONTHS
PROV PASS 2	A	PROVISIONAL VIOLATION OF PASSENGER RESTRICTIONS IN SECOND SIX MONTHS
PROV SBLT	A	PROVISIONAL FAILURE TO USE SEAT BELT
PS N/PS ZONE	A	PASSING IN A NO PASSING ZONE
PS VH CRSWK	A	PASSING A STOPPED VEHICLE AT A CROSSWALK
PUC DR HRS	A	DRIVING AND ON-DUTY TIME
PUC UNSF LD	A	UNSAFE LOAD
R END H/WKR	A	RECKLESS ENDANGERMENT OF A HIGHWAY WORKER
R/OBEY FLGR	A	REFUSING TO OBEY FLAGGER IN A HIGHWAY WORK ZONE
REAS/PRUDE	A	REMOVED CODE NO LONGER USED PER ACD 093005
REFUSE B/T	A	REFUSE A BREATH TEST
S11	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
S50	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
S61	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
S97	A	ACD: OPERATING AT ERRATIC OR SUDDENLY CHANGING SPEEDS
S99	A	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
SPEEDING	A	REMOVED CODE NO LONGER USED PER ACD 093005

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
U21	A	ACD: ILLEGAL OPERATION OF EMERGENCY VEHICLE
UNL C PAS MC	A	UNLAWFULLY CARRYING A PASSENGER ON A MOTORCYCLE
UNL LT PS	A	UNLAWFUL USE OF LIGHTS TO SIGNAL FOR PASSING
UNL MP/MC OP	A	UNLAWFUL MOPED OR MOTORCYCLE OPERATION
UNL OP MS	A	UNLAWFUL OPERATION OF A MOTOR ASSISTED SCOOTER
UNL PAS MP	A	UNLAWFULLY CARRYING A PASSENGER ON A MOPED
UNL STP/DEC	A	UNLAWFUL STOP OR DECELERATION
UNL TRN	A	MAKING AN UNLAWFUL OR UNSIGNALED TURN
UNL USE TV	A	UNLAWFUL USE OF VEHICLE TELEVISION EQUIPMENT
UNL/F USE LT	A	UNLAWFUL USE OF OR FAILURE TO USE LIGHTS
UNL/U IMGD	A	UNLAWFUL USE OF VEHICLE IMAGE DISPLAY DEVICE
UNSF BUS OP	A	UNSAFE SCHOOL VEHICLE OPERATION
UNSF LN CH	A	UNSAFE MOVEMENT FROM LANE
UNSF MS B LN	A	UNSAFE OPERATION OF A MOTOR ASSISTED SCOOTER ON A BICYCLE LANE OR PATH
UNSF MS SW	A	UNSAFE OPERATION OF A MOTOR ASSISTED SCOOTER ON A SIDEWALK
UNSF PS LFT	A	UNSAFE PASSING ON THE LEFT
UNSF PS RT	A	UNSAFE PASSING ON THE RIGHT
UNSIG LN CH	A	UNSIGNALED CHANGE OF LANE
UNSIG TRN	A	MAKING AN UNLAWFUL OR UNSIGNALED TURN
V BEACH SP	A	VIOLATING THE MAXIMUM SPEED ON THE OCEAN SHORE
V OPEN CTNR	A	VIOLATION OF OPEN CONTAINER LAW
VH EQ OBS DR	A	VEHICLE LOADED OR EQUIPPED TO OBSTRUCT DRIVER
B26	A	ACD: DRIVING WHILE LICENSE SUSPENDED
A DNG OP A/S	B	PERMITTING DANGEROUS OPERATION OF A SNOWMOBILE OR AN ATV
ABAND VH	B	ABANDONING A VEHICLE
B30	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
B61	B	ACD: FAILED TO FILE ACCIDENT REPORT
B63	B	ACD: FAILED TO FILE FUTURE PROOF OF FINANCIAL RESPONSIBILITY
B64	B	ACD: FAILED TO FILE INSURANCE CERTIFICATION

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
B65	B	ACD: FAILED TO FILE MEDICAL CERTIFICATION/DISABILITY INFORMATION
B70	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
B75	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
B83	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
B87	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
BLK DISBL PK	B	BLOCKING A PARKING SPACE RESERVED FOR DISABLED PERSONS
C PAS MS	B	CARRYING A PASSENGER ON A MOTOR ASSISTED SCOOTER
CRS PP INTR	B	CROSSING PRIVATE PROPERTY TO AVOID AN INTERSECTION
CS UNR NS VH	B	CAUSING UNREASONABLE NOISE WITH A VEHICLE
CTRL SUB	B	CDL HOLDER COMMITTING AN OFFENSE INVOLVING THE MANUFACTUR OF DELIVER
D05	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D19	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D20	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D21	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D35	B	ACD: FAILURE TO COMPLY WITH FINANCIAL RESPONSIBILITY LAW
D65	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
D68	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
DR F RPT AC	B	DRIVER FAILURE TO REPORT AN ACCIDENT
DR ON BEACH	B	LOCAL ORDINANCE: DRIVING ON BEACH
E01	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
E02	B	ACD: OPERATING WITHOUT BRAKES AS REQUIRED BY LAW
E05	B	ACD: OPERATING WITHOUT LIGHTS AS REQUIRED BY LAW
E20	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
E21	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
E24	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
E30	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
E31	B	ACD: DEFECTIVE BRAKES
E34	B	ACD: DEFECTIVE LIGHTS
E35	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
E50	B	ACD: FAILURE TO USE EQUIPMENT AS REQUIRED
E52	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
E70	B	ACD: EQUIPMENT USED IMPROPERLY OR OBSTRUCTED
E73	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
E74	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
END ATV OP	B	ENDANGERING A CLASS III ATV OPERATOR
END ATV OP/P	B	ENDANGERING A CLASS I OR CLASS III ATV OPERATOR OR PASSENGER
END MC PAS	B	ENDANGERING A MOTORCYCLE PASSENGER
ENG BRK	B	UNMUFFLED ENGINE BRAKING
F C WARN DVC	B	FAILURE TO CARRY ROADSIDE VEHICLE WARNING DEVICES
F D MH PLT	B	FAILURE TO DISPLAY MOBILE HOME REGISTRATION PLATE
F D OS PLT	B	FAILURE TO DISPLAY, OR IMPROPER DISPLAY OF OUT OF STATE REGISTRATION PLATES
F D PLT	B	FAILURE TO DISPLAY REGISTRATION PLATES
F DES ASM VH	B	FAILURE TO DESIGNATE AN ASSEMBLED, SPECIALLY CONSTRUCTED VEHICLE
F EQ POL EQ	B	FAILURE TO BE EQUIPPED WITH REQUIRED POLLUTION CONTROL EQUIPMENT
F FL ACC	B	FAILURE TO FILE AFTER ACCIDENT
F FL F VER	B	FAILURE TO FILE AFTER FAILING VERIFICATION
F MK END LD	B	FAILURE TO MARK END OF LOAD WITH LIGHT OR FLAG WHEN REQUIRED
F PFM WIT	B	FAILURE TO PERFORM THE DUTIES OF A WITNESS TO AN ACCIDENT
F PST WARN	B	FAILURE TO POST WARNINGS FOR A DISABLED VEHICLE
F SEC VH	B	FAILURE TO SECURE A MOTOR VEHICLE
F VIOL FR FL	B	FAILURE OF A PREVIOUS VIOLATOR TO MAKE FUTURE RESPONSIBILITY FILING
F01	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F03	B	ACD: MOTORCYCLE SAFETY EQUIPMENT NOT USED PROPERLY AS REQUIRED
F11	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F22	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F30	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F31	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F35	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
F40	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F41	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F60	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F63	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
F66	B	ACD: UNSAFE CONDITION OF VEHICLE (NO SPECIFIED COMPONENT)
FLS EXMPT FR	B	FALSE CERTIFICATION OF EXEMPTION FROM FINANCIAL RESPONSIBILITY
FLS INFO INS	B	GIVING FALSE INFORMATION ABOUT LIABILITY INSURANCE TO A POLICE OFFICER
FU VH IMP LT	B	OPERATION OF A FUNERAL ESCORT VEHICLE WITH IMPROPER LIGHTS
HT/HR AN A/S	B	HUNTING OR HARASSING ANIMALS FROM A SNOWMOBILE OR AN ALL-TERRAIN VEHICLE
I A/EV SIREN	B	ILLEGAL AMBULANCE OR EMERGENCY VEHICLES SIRENS
I ALT MP	B	ILLEGAL ALTERATION OF A MOPED
I AMB LT EQ	B	ILLEGAL AMBULANCE LIGHTING EQUIPMENT
I D BUS MK	B	ILLEGAL DISPLAY OF SCHOOL BUS MARKINGS
I ODM TAMP	B	ILLEGAL ODOMETER TAMPERING
I SLV PRC	B	ILLEGAL SALVAGE PROCEDURES
I WDW TNT	B	ILLEGAL WINDOW TINTING
IL OP A/S	B	ILLEGAL OPERATION OF ATV/SNOWMOBILE
IMP D DE PLT	B	IMPROPER DISPLAY OF DEALER PLATES
IMP D P	B	IMPROPER DISPLAY OF PERMIT
IMP DE PLT	B	IMPROPER USE OF DEALER PLATES
IMP DIS HWAS	B	IMPROPERLY DISPOSING OF HUMAN WASTE
IMP EQ ATV	B	OPERATING AN IMPROPERLY EQUIPPED ALL-TERRAIN VEHICLE
IMP EQ SNOW	B	IMPROPERLY EQUIPPED SNOWMOBILE
IMP FNDR/MG	B	OPERATION WITHOUT PROPER FENDERS OR MUDGUARDS
IMP LT ATV	B	OPERATING AN ALL-TERRAIN VEHICLE WITHOUT PROPER LIGHTING EQUIPMENT
IMP OP MS HW	B	IMPROPER OPERATION OF A MOTOR ASSISTED SCOOTER ON A HIGHWAY
IMP TRNS PLT	B	IMPROPER USE OF VEHICLE TRANSPORTER PLATES
IMP USE TEMP	B	IMPROPER USE OF TEMPORARY REGISTRATION PERMIT
INV DISBL PK	B	USE OF AN INVALID DISABLED PERSON PARKING PERMIT

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
M54	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
MISUSE PLAC	B	MISUSE OF PROGRAM PLACARD
N HELMET ATV	B	FAILURE OF A CLASS I OR CLASS III ATV RIDER TO WEAR PROTECTIVE HEADGEAR
N HELMET MC	B	FAILURE OF A MOTORCYCLE OPERATOR TO WEAR PROTECTIVE HEADGEAR
N HELMET MP	B	FAILURE OF A MOPED RIDER TO WEAR PROTECTIVE HEADGEAR
N HELMET MS	B	FAILURE OF A MOTOR ASSISTED SCOOTER OPERATOR TO WEAR PROTECTIVE HEADGEAR
N PUC	B	OPERATING WITHOUT CERTIFICATE OR PERMIT FROM DEPT OF TRANSPORTATION
N RVW MIR	B	NO REARVIEW MIRROR, DEFECTIVE REARVIEW MIRROR
N/IMP BRK	B	DRIVING OR ALLOWING OPERATION OF A VEHICLE WITHOUT BRAKES THAT MEET REQUIREMENT
N/IMP WPR	B	FAILURE TO HAVE WINDSHIELD WIPERS; FAILURE TO MEET WINDSHIELD WIPER REQUIREMENT
OC F RPT AC	B	FAILURE OF A VEHICLE OCCUPANT TO MAKE AN ACCIDENT REPORT
OP ATV N P/D	B	OPERATING AN ATV WITHOUT A PERMIT AND A DECAL
OP ATV PR AR	B	OPERATING A CLASS II OR CLASS III ALL-TERRAIN VEHICLE IN A PROHIBITED SNOW AREA
OP ATV RS AR	B	ILLEGAL OPERATIO OF AN ATV IN A RESTRICTED AREA.
OP I WDW TNT	B	OPERATING A VEHICLE WITH ILLEGAL WINDOW TINTING
OP MP SW/TR	B	OPERATION OF A MOPED ON A SIDEWALK OR BICYCLE TRAIL
OP MS CRSW	B	OPERATION OF A MOTOR ASSISTED SCOOTER IN A CROSSWALK
OP MV BYC TR	B	OPERATION OF A MOTOR VEHICLE ON A BICYCLE TRAIL
OP N EXH SYS	B	OPERATION WITHOUT PROPER EXHAUST SYSTEM
OP N LT EQ	B	OPERATION WITHOUT REQUIRED LIGHTING EQUIPMENT
OP NST LT EQ	B	OPERATION WITH NONSTANDARD LIGHTING EQUIPMENT
OP ORVH N EQ	B	OPERATION OF OFF-ROAD VEHICLE WITHOUT REQUIRED EQUIPMENT
OP RV U/DISP	B	OPERATION OF A RECREATIONAL VEHICLE WITH UNSEALED DISPOSAL SYSTEM
OP SMVH PR A	B	OPERATION OF LOW SPEED VEHICLE IN PROHIBITED AREA
OP UNSF VH	B	OPERATION OF AN UNSAFE VEHICLE
OP V EQ OAR	B	OPERATION OF A VEHICLE THAT VIOLATES STATE EQUIPMENT ADMINISTRATIVE RULES
OP VH N WDW	B	OPERATION OF A VEHICLE WITHOUT APPROVED MATERIALS IN WINDOWS
OP VHH N SPM	B	OPERATION OF VEHICLE FOR HIRE WITHOUT SPEEDOMETER
OW F RPT AC	B	OWNER FAILURE TO REPORT AN ACCIDENT

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
POSS STLN VH	B	POSSESSION OF A STOLEN VEHICLE
PUC DEF EQ	B	DEFECTIVE EQUIPMENT
PUC EM EQ	B	EMERGENCY EQUIPMENT
PUC HAZ	B	AMIN. RULE ADOPTS NORTH AMER UNIFORM HAZARDOUS MATERIAL OUT-OF-SERVICE CRIT
PUC HAZ ATND	B	ATTENDANCE AND SURVEILLANCE OF MOTOR VEHICLES
PUC LOG BK	B	DRIVER'S RECORD OF DUTY STATUS
PUC MED CERT	B	MEDICAL CERTIFICATION
RM ODM RPR	B	UNLAWFULLY REMOVING AN ODOMETER REPAIR NOTICE
S96	A	ACD: SPEED LESS THAN MINIMUM
SWTCH PLT	B	DISPLAY OF PLATES THAT DO NOT ENTITLE HOLDER TO OPERATE VEHICLE
TFK ALT VIN	B	TRAFFICKING IN VEHICLES WITH DESTROYED OR ALTERED IDENTIFICATION NUMBERS
TFK STLN VH	B	TRAFFICKING IN STOLEN VEHICLES
TRNS N CERT	B	ACTING AS A VEHICLE TRANSPORTER WITHOUT A CERTIFICATE
TRSFR MSREP	B	TRANSFER OF DOCUMENTS FOR THE PURPOSES OF MISREPRESENTATION
U04	B	ACD: USING A MOTOR VHEICLE IN CONNECTION WITH A MISDEMEANOR (NOT TRAFF OFF)
U22	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
U23	B	ACD: REMOVED CODE NO LONGER USED PER ACD 093005
UNL DISBL PK	B	UNLAWFUL USE OF DISABLED PERSON PARKING PERMIT BY A NONDISABLED PERSON
UNL DMG A/S	B	UNLAWFUL DAMAGE WITH A SNOWMOBILE, CLASS I OR CLASS II ALL-TERRAIN VEHICLE
UNL DMG ATV	B	UNLAWFUL DAMAGE WITH CLASS III ALL-TERRAIN VEHICLE
UNL OP F-ATV	B	UNLAWFUL USE OF A CLASS I ATV USED FOR AGRICULTURAL PURPOSES
UNL OP LSP V	B	UNLAWFULLY OPERATING A LOW SPEED VEHICLE ON A HIGHWAY
UNR SND 3X	B	THREE OR MORE VIOLATIONS OF ORS 815.232, UNREASONABLE SOUND APPLICATION FROM A
UNR SND AMP	B	CAUSING UNREASONABLE SOUND AMPLIFICATION FROM A VEHICLE
USE PR LT EQ	B	USE OF PROHIBITED LIGHTING EQUIPMENT
USE TWAY PR	B	USE OF A THROUGHWAY WHEN PROHIBITED
V CL PAS VH	B	VIOLATION OF MINIMUM CLEARANCE REQUIREMENTS FOR PASSENGER VEHICLES
V MS EQ RQ	B	VIOLATION OF MOTOR ASSISTED SCOOTER EQUIPMENT REQUIREMENTS
V PK HWY	B	VIOLATION OF POSTED PARKING RESTRICTIONS ON STATE HIGHWAYS

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
V SMVH EMB	B	VIOLATION OF SLOW-MOVING VEHICLE EMBLEM REQUIREMENTS
V TEMP PRC	B	AGENT VIOLATION OF TEMPORARY REGISTRATION PERMIT PROCEDURES
V TRK RTE	B	VIOLATION OF POSTED TRUCK ROUTES
V USE HORN	B	VIOLATION OF USE LIMITS ON HORNS AND SOUND EQUIPMENT
V VH SND EQ	B	VIOLATION OF VEHICLE SOUND EQUIPMENT REQUIREMENTS
VH UNQ DR	B	EMPLOYING OR PROVIDING A VEHICLE TO AN UNQUALIFIED DRIVER
ASSAULT MV 1	Major	ASSAULT IN THE FIRST DEGREE
ASSAULT MV 2	Major	ASSAULT IN THE SECOND DEGREE
ASSAULT MV 3	Major	ASSAULT IN THE THIRD DEGREE
ASSAULT MV 4	Major	ASSAULT IN THE FOURTH DEGREE
ATT ASSAULT	Major	ATTEMPTED ASSAULT (136.460) AG OPINION 3/18/93
CRIM MIS MV1	Major	CRIMINAL MISCHIEF IN THE 1ST DEGREE
CRIM MIS MV2	Major	CRIMINAL MISCHIEF IN THE 2ND DEGREE
CRIM MIS MV3	Major	CRIMINAL MISCHIEF IN THE 3RD DEGREE
DUII	Major	DRIVING WHILE UNDER THE INFLUENCE OF INTOXICANTS
DUII BYC	Major	DRIVING WHILE UNDER THE INFLUENCE OF INTOXICANTS
DWR	Major	CRIMINAL DRIVING WHILE REVOKED
DWS	Major	CRIMINAL DRIVING WHILE SUSPENDED
F PFM DR	Major	FAILURE TO PERFORM THE DUTIES OF A DRIVER WHEN PROPERTY IS DAMAGED
F PFM DR INJ	Major	FAILURE TO PERFORM THE DUTIES OF A DRIVER TO INJURED PERSONS
F/P DUT A*	Major	FAILURE TO PERFORM DUTIES OF A DRIVER INVOLVED IN A FATAL ACCIDENT
FL/AT ELUDE	Major	FLEEING OR ATTEMPTING TO ELUDE A POLICE OFFICER (CHANGED FROM ELUDE)
MANSL 1	Major	MANSLAUGHTER, FIRST DEGREE
MANSL 2	Major	MANSLAUGHTER, SECOND DEGREE
MENACING MV	Major	BY WORD OR CONDUCT, PLACES ANOTHER IN FEAR OF IMMINENT SERIOUS INJURY
MURDER MV	Major	CRIMINAL NEGLIGENCE CAUSING DEATH
MV FELONY	Major	FELONY CONVICTION WITH PROOF OF A MATERIAL ELEMENT INVOLVING THE OPERATION OF A
NEG HOM	Major	WITH CRIMINAL NEGLIGENCE, CAUSES DEATH
R END H/WKR	Major	RECKLESS ENDANGERMENT OF A HIGHWAY WORKER

LITERAL[1]	TYPE[2]	DESCRIPTION[3]
RECK DR	Major	RECKLESS DRIVING
RECK END MV	Major	RECKLESSLY ENDANGERING ANOTHER PERSON
	Major	IMPLIED CONSENT SUSPENSIONS
	Major	DIVERSION AGREEMENTS

1. The terms in this column are the written abbreviations that appear on driver records.
2. Type A violations are primarily moving violations defined in OAR 735-064-0220. Type A violations count as one driver improvement violation. Type B violations are primarily equipment and procedural violations defined in OAR 735-072-0035. It takes five Type B violations to equal one driver improvement violation. Major violations are defined in OAR 735-070. Major violations do not count as driver improvement violations.
3. The terms in this column are the definitions of the terms in the first column, as reported in the DMV data dictionary "DD11 Inquiry Program, 2004-2005."