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STATEWIDE IGNITION INTERLOCK PILOT PROJECT



This document presents the results of Minnesota's statewide ignition interlock pilot. This report – an update of a September 2010 interim document -- is submitted to the chairs and ranking minority members of the Senate and House of Representatives committees that have jurisdiction over criminal justice policy and funding.

To assist in understanding the report, critical terminology and technical definitions regarding the ignition interlock device are defined in Appendix A.

For more information on Minnesota's current statewide ignition interlock program, see

https://dps.mn.gov/divisions/dvs/programs/mn-ignition-interlock/Pages/.

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EXECUTIVE SUMMARY

Impaired driving is a serious problem in Minnesota. On average, alcohol-related crashes accounted for 170 deaths and 400 injuries during each of the last five years (DPS, 2011a). In 2010, 131 people died, nearly 2,500 were injured, and costs amounted to more than \$238.9 million due to crashes identified as alcohol-related (DPS, 2011b). Ignition interlock programs (II) are an increasingly important tool being used nationally to reduce impaired driving. II is a breath-testing system installed on a motor vehicle that prevents the vehicle from operating when a set level of blood alcohol is detected. In 2009, the legislature authorized a two-year statewide II pilot program, effective July 1, 2009 through June 30, 2011. This document is the final report of the pilot program.

The primary motivation for participating in an II program is that a person's driving privileges are restored sooner after a Driving While Impaired (DWI) incident (implied consent or DWI conviction) than they would be if s/he did not participate in the program. The II system monitors the vehicle's operations and records drinking violations that are later reported to the Department of Public Safety's Driver and Vehicle Services division (DPS-DVS). The pilot was administered by the DPS-DVS, in collaboration with the Office of Traffic Safety (OTS), based on statute and guidelines developed with stakeholders. Individuals were eligible for the pilot program if their licenses were revoked or cancelled and they met other program requirements, which varied depending on the level of violation (i.e. first, second or third time offense, or license cancellation).

Results of the two year pilot program include:

- DVS enrolled 2,490 individuals in the program, with at least one enrollee in 80 of Minnesota's 87 counties. Eighty-four percent of enrollees were male, with an average participant age of 43. Participants had one to 14 DWI incidents on their record upon program enrollment. Sixty percent drove on a restricted license while enrolled, while 40 percent drove on a limited license.²
- As of June 30, 2011, 79 percent (1,962 individuals) of the program's original enrollees continued to participate in the program. Eleven percent (269 individuals) successfully completed the program with no new offenses. Three people completed the program and later reoffended. Ten percent of enrollees were terminated from the program either voluntarily or involuntarily because of violations or other reasons.
- Results of a survey conducted on program participants indicated that 84% of respondents believe that ignition interlock improved their quality of life.
- Challenges with implementing the program included managing the growing number
 of interested potential participants, making sure adequate staff was provided for
 monitoring those in the program and assuring that participants clearly understood the
 consequences for program violations.

¹ For the definition of a "DWI incident", see Appendix A (Ignition Interlock Terminology and Technical Definitions).

For the definition of restricted and limited driver license, see Appendix A (Ignition Interlock Terminology and Technical Definitions).

 Year two brought expanded promotion of the program through partnerships and outreach to many groups throughout the state.

The statewide pilot project was an expansion of an earlier two-county pilot program (July 1, 2007 through June 30, 2009). Lessons learned from both pilot programs along with recommendations from a Driver's License Sanctions Initiative (a multi-disciplinary group formed to thoroughly review driver license administrative sanctions) were used as the foundation of a Governor's legislative proposal. A new law (Laws of Minnesota 2010, Ch. 366) that strengthens DWI sanctions became effective July 1, 2011 and strongly encourages—and in certain situations mandates—the use of II.

States, researchers and other stakeholders are working to improve II research and program effectiveness. II program evaluation is complicated because state programs are structured and operated differently from one another, due to being intertwined with each state's unique DWI laws. To improve effectiveness, a 2011 systemic review of 15 recent studies recommended key features of an ignition interlock program:

- Increasing the time period during which the interlock is installed or making the removal contingent on appropriate behaviors.
- Using the interlock in conjunction with alcohol rehabilitation programs.
- Increasing the number of participants.
- Improving protections again circumvention of the interlocks (Elder et al, 2011).

Minnesota has used the available research and best practices to create a strong ignition program. It will be important to continuously evaluate the program's effectiveness and make adjustments based on program analysis and future findings.

I. INTRODUCTION

This document reports on the results of the two-year Minnesota Statewide Ignition Interlock (II) Pilot Project. II is both a device and a program designed to reduce traffic deaths and fatalities by preventing an impaired driver from operating a motor vehicle. The statewide pilot program was administered by the Minnesota Department of Public Safety (DPS). The two-year pilot program became effective July 1, 2009 and ended on June 30, 2011. This report is required by MN Statutes, Section 171.306. It follows an interim report completed in September 2010.

The purpose of this document is to:

- 1. Summarize why and how the II pilot program was developed.
- 2. Briefly describe program administration, eligibility and operations.
- 3. Provide a summary of findings related to II participation rates and participant/program outcomes.
- 4. Outline broad next steps for DPS implementation of the statewide program and recommendation for future consideration in administration of the program.

The pilot program and the new law that became effective on July 1, 2011 reflect the states' and nation's increased use of II as an important tool to help reduce drunk driving. II provides a DWI offender the ability to drive legally while maintaining the public's safety on the roadway, contributing to Minnesota's decreasing number of alcohol-related fatalities.

II. BACKGROUND

The Problem of Impaired Driving

Alcohol-impaired driving takes an enormous toll in the United States, killing approximately one person every 48 minutes (National Highway Traffic Safety Administration (NHTSA, 2010)). Almost 11,000 people were killed in alcohol-impaired driving crashes in 2009 (NHTSA, 2011a), and more than 1.4 million drivers were arrested for driving while impaired due to alcohol or narcotics (CDC, 2011)). This is less than one percent of the 147 million self-reported episodes of alcohol-impaired driving among U.S. adults each year (Beck et al in CDC, 2011). In addition, "the annual cost of alcohol-related crashes totals more than \$51 billion" (NHSTA in CDC, 2011). Given the severity of the problem and the multiple contributing factors, the NHTSA recommends use of II as part of a comprehensive sanctions program to reduce death and injury associated with impaired driving (NHTSA, 2011b).

Minnesota is not exempt from this national epidemic. Minnesota crash data indicates that on average during each of the last five years, alcohol-related crashes accounted for 170 deaths and 400 serious injuries (DPS, 2011a). In 2010, 131 people died, nearly 2,500 were injured, and costs of more than \$238.9 million resulted from crashes identified as alcohol-related. This included medical costs, lost productivity and property damage (DPS, 2011b). Minnesota has enacted an increasing number of laws, strategies and programs to reduce the number of individuals who drive impaired. These efforts are associated with an overall decrease in the number of alcohol-related deaths and injuries. Between 1978 and 1989, the number of annual alcohol-related fatalities in Minnesota dropped from approximately 500 to 275. Since then, alcohol-related fatalities in Minnesota have ranged from a high of 273 in 1998 to a low of 131 in 2010 (DPS, OTS, 2009a; DPS, 2011b).

Additional efforts, such as the use of technology that effectively reduces impaired driving and increases legal driving, are clearly needed. In 2010, the number of DWI incidents (implied consent or DWI conviction) exceeded 30,000. More than 500,000 (one in seven) Minnesotans with a driver license have a DWI on their record. While alcohol fatalities have slowly declined over the past few years, the percentage of traffic fatalities that are alcohol-related remains relatively constant at 30 to 40 percent. During 2008-2010, there were 1,287 traffic deaths, and of those, 435 (34 percent) were impaired driving related (DPS, 2011a). Recidivism rates are high, contributing to additional injuries and deaths. Approximately 41 percent of all first time DWI offenders recidivate and the likelihood of reoffending increase with each new offense (DPS, 2009a). Personal, societal and monetary costs of alcohol-impaired driving continue to be a significant problem for individuals, the driving public, and the state as a whole.

Ignition Interlock Device and Programs

Ignition Interlock Description

II is a breath-testing system installed on a motor vehicle. It is connected to the starter and designed to prevent an individual from driving while impaired. To start the vehicle, a driver is required to blow into a tube that measures the alcohol concentration level in the driver's

blood. If the device detects alcohol at or above a set level, the vehicle will not start. Minnesota has determined that a 0.02 set level prevents impaired driving, but still allows for a margin of error for the device and minimizes system violations. The device also requires random "running retests" in which a driver blows into the II so that their alcohol concentration (AC) can be measured periodically while driving to their destination. There are numerous protections in place to help assure that the device is not tampered with and that only the driver of the vehicle is providing breath samples into the device. ⁴

DPS is responsible for monitoring participants for alcohol violations. The participant is required to take the vehicle to a service provider monthly to have the information recorded in the system downloaded. This process is referred to as a monthly calibration of the II device. Reports from the download are sent to DPS for review. The vehicle may be recalled to the service provider early if violations are detected over the number allowed by the Minnesota Performance Standards (Appendix G). The device will alert the participant that they have exceeded the number of allowable violations and require the participant to bring the vehicle in for calibration within 120 hours. Information from the device is sent to DPS for review and provides an opportunity for DPS to encourage behavior change by the participant.

Incentives for Participation

The strongest incentive for program participation is a shortened driver's license hard revocation period and in many situations elimination of the limited driver's license, ⁵ specifically for first and second time DWI offenders. When an individual has a DWI incident his or her license is revoked and/or cancelled, and the individual is prohibited from driving until driving privileges are reinstated. Participation in the II program provides the restoration of driving privileges within 30 days and significantly reduces the use of a limited license.

National Ignition Interlock Use

All 50 states have some type of ignition interlock law, and 14 states have mandatory II provisions for all offenders (NCSL, 2011). Nationwide, the General Services Administration reports that approximately 212,300 devices had been installed on vehicles as of early 2010 (GSA, 2011). This represents "a small percentage of the 1.4 million impaired driving offenders arrested that year, many of whom are eligible for ignition interlocks." Some states mandate II use; in others, judges, state administrators or offenders decide whether to participate. Fourteen states mandate the use of IIs for all first-time offenders, and fifteen states require it for first-time offenders identified as having an alcohol concentration of 0.15 or above (MADD, 2011).

³ For the definition of running retest, see Appendix A (Ignition Interlock Terminology and Technical Definitions).

⁴ For more information about this and other frequently-asked-questions, see http://www.dps.state.mn.us/ots/topic_areas/alcohol/IgnitionInterlock/2009_Ignition_Interlock/Frequently_Asked_Q uestions.doc.

⁵ For the definition of hard revocation and limited driver license, see Appendix A (Ignition Interlock Terminology and Technical Definitions).

Research on Ignition Interlock Benefits and Effectiveness⁶

Highlights of the benefits of II programs include:

Reduced Recidivism

Research indicates that while the device is installed, II reduces recidivism among all groups of DWI offenders, including first time offenders, repeat offenders, and hard-core offenders (Tippetts and Voas, 1997; Wienrtath, 1997; Popkin et al, 1992). Early evaluations of II use reported reductions in recidivism ranging from 35–90 percent (Voas and Marques 2003; Vezina 2002; Coben and Larkin 1999) with an average reduction among 10 studies of 64 percent (Willis et al. 2005). An extensive, updated review of II studies reports a 67 percent drop in recidivism. As the Centers for Disease Control and Prevention concluded:

"Research shows that ignition interlocks can reduce the rate of re-arrest among drivers convicted of DWI by a median of 67 percent, making them more effective than other prevention methods" (CDC, 2011).

Overall Cost-effectiveness

Ignition interlock is reported to reduce the economic impact of drunk driving by \$3 to \$7 for every \$1 in cost (Roth et al, 2007). A recent overview of cost-benefit analyses of II and other new motor vehicle safety features indicates that II is one of the most cost-effective measures in improving safety and contributes to the largest reductions in the number of fatalities (European Road Safety Observatory 2006).

Enhanced Public Safety and Reduced Administrative/Criminal Justice System Costs

The II program can promote safety and reduce costs by providing individuals an additional option for driving legally after a DWI. It is estimated that at least 70 percent of people continue driving even after their license has been revoked or cancelled (Griffin II and De La Zerda, 2000). When people have a viable option to drive legally and chose to do so, the state reaps the public safety benefit; and state agencies and the criminal justice system save the costs associated with violations and sanctions for illegal and impaired driving. For example, when an impaired driving violation is prevented, the public sector saves the money associated with court, jail or prison time.

Benefits to Families

Families often experience significant benefits when a member participates in an II program. These benefits include a greater peace of mind that the offender is not driving while impaired, and a reduced need to drive offenders to appointments and employment (Beirness et al, 2007).

⁶ This section provides research highlights; see Appendix B for more detail on benefits and limitations of II programs.

⁷ For the definition of "hard-core offenders", see Appendix A (Ignition Interlock Terminology and Technical Definitions).

General Deterrence and Support of Education and Treatment Programs

Ignition interlock programs can provide a general deterrence to members of the public who hope to avoid sanctions and reinforce the message to offenders that drinking and driving is unacceptable and consequences will occur. II can also create a 'window of opportunity' to motivate offenders to change their behavior and participate in other education and treatment programs, and, at the same time, provide a safety net to protect the public in the event of relapse (Voas and Marques, 2003; Beirness et al. 1998; Beirness et al. 2007).

Ignition Interlock Program Limitations

Noted program limitations include:

Long-term Recidivism

Although II has proven effective in preventing impaired driving while the device is installed, research indicates that II is not effective in reducing long-term recidivism – once the device is removed, the lowered recidivism rates increase to the level of those that did not use the device (Rausch (2002)). Chronic DWI offenders are often chemically dependent. To achieve long-term behavior change interventions, such as treatment, are needed to address the person's drinking behavior. Minnesota has developed II as part of a broader sanctions program, as recommended by the National Highway Traffic Safety Administration, to address both short-term and long-term recidivism.

Participation and Usage Rates

A potential limitation of national II programs is low rates of participation. "After more than two decades, participation and usage rates for interlock devices are still less than 10 percent in many jurisdictions," reports Robertson et al in a 2007 report of Traffic Injury Research Foundation (TIRF). The report recommended consistent and uniform education of professionals in enforcement, prosecution, adjudication, and driver licensing to ensure greater understanding of the application of II programs.

In Minnesota's early II pilot projects, staff worked to boost initially low participation rates by creating more incentives for participating.

Costs Associated with License Reinstatement and Driving

A challenge with II programs are the costs associated with obtaining and using the device. Although individuals may save money because they drive their own car rather than obtaining other means of transportation, they must also pay license reinstatement and other fees to enroll in the program (fees that any driver wanting his/her license back would need to pay). Enrollees must also pay II installation and maintenance fees.

In Minnesota's 2007-2009 pilot in Beltrami County and Hennepin County, costs were a reported enrollment barrier. The program provided funding to offset the cost of the II device, but other required costs such as insurance and reinstatement fees prohibited greater participation.

Continuous Ignition Interlock Program Improvements

States, researchers and other stakeholders are working to improve II research and effectiveness. II program evaluation is complicated because state programs are structured and operated differently from one another. There are many areas for further research, such as better understanding the economic efficiency of II programs and the extent to which II deter alcoholimpaired driving (Elder et al, 2011).

To improve effectiveness, a 2011 systemic review of 15 recent studies recommended key features of an ignition interlock program:

- Increasing the time period during which the interlock is installed or making the removal contingent on appropriate behaviors.
- Using the interlock in conjunction with alcohol rehabilitation programs.
- Increasing the number of participants.
- Improving protections again circumvention of the interlocks (Elder et al, 2011).

Presenters and groups at the 2010 National Ignition Interlock Summit, hosted by the Governors Highway Safety Association, NHTSA and CDC, also provided insight on program improvement priorities. Summit participants highlighted the following possible target areas:

- Incentivizing installation for DWI offenders.
- Developing a well-structured program that includes oversight of manufacturer performance and minimum vendor criteria.
- Provide training and education for an extensive list of stakeholders (e.g., offenders, judges, law enforcement, probation professionals, legislators, legal community).
- Increase "the collaborative and partnership efforts that were critical in the formative stages of interlock program development" (GHSA et al, 2011).

Another recent source of program improvement information comes from the Traffic Injury Research Foundation (TIRF, 2010). TIRF identifies "persistent barriers" to implementation, including laws that make device use voluntary or that enable offenders to "opt out," insufficient education and training of criminal justice professionals, and misperceptions about the affordability of the device.

TIRF suggests that elements of a "good implementation and development strategy" include:

- Good laws that are created with input from frontline practitioners and that are consistent with existing drunk driving legislation.
- Adequate resources, staff, and time to implement and administer the initiative.
- Clear understanding and communication among practitioners of the respective roles and responsibilities of each of the agencies involved in device delivery.
- A user-friendly (and, ideally, integrated with agency systems) Web-based data system to monitor, report and manage data, and streamline workload.

• Reinforcement of offender accountability using a framework of graduated sanctions and reinforcements to respond to specific events or behavior.

History of Ignition Interlock in Minnesota

Minnesota has implemented increasingly large pilot programs to test and develop a statewide program (see also Table 1, pg11). These efforts provided the state the opportunity to gain significant knowledge on how to effectively implement an II program.

First II Pilot (2002)

The state's first II pilot was established when DPS and Anoka County Community Corrections enrolled nine participants in a voluntary program to test how II could be administered under DWI laws and licensing operational procedures. Participants were eligible for a limited-use license after certain conditions were met. Only people that were "cancelled as inimical to public safety" were eligible to enroll in the program, and the device was installed for an average of four months. Results indicated that, "In no instance has any participant had the vehicle 'lock-out' for registered alcohol usage. No major malfunctions occurred in which a participant was unable to operate the vehicle when necessary. Overall, participants were satisfied with the program and indicated it was useful for their individual situation" (DPS, 2002).

Two-county Pilot (July 1, 2007 through June 30, 2009)

In 2007, the legislature authorized DPS to conduct a two-year II pilot in one rural and one metropolitan county (MN Statutes, Section 171.306). DPS selected Hennepin and Beltrami counties, and DPS-OTS administered the project in collaboration with DVS and county probation service offices. Probation officers oversaw daily administration. The pilot targeted DWI offenders with two or more offenses. DPS and court representatives developed program guidelines and II device performance standards. Guidelines supported a participant's ability to obtain a limited license to drive to work and treatment using II while ensuring public safety.

One hundred people participated in the pilot. DPS modified the program in its initial months of operation to boost low participation rates.

- Hennepin County's program enrolled 96 participants, who tended to be white/non-Hispanic and well-educated. Participants' top reasons for enrolling were to keep their job and to get their license back quickly.
- Beltrami County's program enrolled only four participants. Beltrami concluded that a
 major barrier for participation was the prospective enrollees' inability to afford the
 requirements for license reinstatement (e.g., driver's license exam and license
 reinstatement fees) median incomes in Beltrami and Hennepin counties were
 \$35,547 and \$54,471, respectively, in 2009.

⁸ For the definition of "cancelled as inimical to public safety", see Appendix A (Ignition Interlock Terminology and Technical Definitions).

 No person using the device reoffended while enrolled in either Hennepin or Beltrami Counties.

Statewide pilot (July 1, 2009 through June 30, 2011)

In 2009, the legislature expanded the two-county pilot to be a statewide pilot program. DPS changed some of the program's basic elements to increase the program's effectiveness and efficiency. For example, DPS simplified enrollment processes, reduced the "hard revocation" time-period, reduced the use of a limited license, changed day-to-day administration of the program from county probation officers to DVS, and created a website to support information needed for enrollment. See Table 2, pg12, for more information on operational and policy changes as the pilot project moved statewide.

Statewide program (effective July 1, 2011)

On May 18, 2010, Governor Tim Pawlenty signed legislation to strengthen DWI sanctions and significantly encourage the use of II devices by DWI offenders that want to drive. In specific situations, II is a requirement for license reinstatement. At the signing, Governor Pawlenty said that:

This legislation demonstrates Minnesota is serious about preventing impaired driving and the tragedies that result from the deadly decision to get behind the wheel after drinking too much. Strong sanctions and employing smarter tools such as interlock devices are necessary to step up the fight against this illegal and dangerous behavior.

Highlights of the legislation (provided in Appendix C) include:

- First time DWI offenders with a 0.16 and above alcohol-concentration level and all repeat offenders will be required to have II devices installed on vehicles they drive.
- First time DWI offenders with a 0.16 and above alcohol-concentration level and all second-time offenders who choose not to use II will not have driving privileges for periods ranging from one year to two years, depending on offense level. Offenders with three or more DWIs in a 10-year period will be required to use interlocks to demonstrate abstinence for three to six years.
- Interlock users will regain full or limited driving privileges immediately after the
 offense, ensuring they are driving with a valid license and not a threat on the
 roadway.
- Interlocks will be used to monitor chemical use by chronic DWI offenders (three or more DWIs in a 10-year period).

Review of Administrative Sanctions (2008-2010)

A Driver's License Administrative Sanctions (DLAS) Workgroup was formed to conduct a thorough review of administrative sanctions imposed on a person for driving impaired. The initiative represented a partnership between DPS and more than 50 individuals representing key stakeholder groups, agencies and perspectives such as the Departments of Human

⁹ For definition of "hard revocation", see Appendix A (Ignition Interlock Terminology and Technical Definitions).

Services and Corrections, community corrections, the Judicial Branch, the Attorney General's Office, state, county and municipal law enforcement, public defense counsel, treatment and assessment professionals, prosecutors and advocacy groups.

The comprehensive review was designed to address a number of long-standing problems associated with the DLAS system, including the continuing social and economic costs of alcohol-related crashes; the removal of driver's licenses as a sanction causing unintended negative consequences; continued high recidivism rates among DWI offenders; and stresses on increasing caseloads in the courts and related agencies. In addition, the emergence of ignition interlock technology prompted a study of how to incorporate its use into the sanctions system.

Major findings, which provided the foundation for the recommendations and subsequent legislation, included:

- The DLA system is complex and not well-understood by DWI offenders and even those who work in the system.
- First- and second-time DWI offenders presents the greatest opportunity for reducing alcohol-related fatalities and increasing legal driving, since 80 percent of drinking drivers involved in a fatal crash had no or one previous DWI.
- An AC of 0.15 or more among first-time DWI offenders is associated with higher recidivism and increased fatalities and injuries.
- Nearly three-quarters of DWI offenders continue to drive after their licenses are revoked.
- Minnesota's assessment and treatment practices are inconsistent and sometimes outdated, which decreases the effectiveness of these tools for chemically-dependent and high risk DWI offenders.

The review – the first in over 30 years – integrated the results of the two-county pilot program and other research, technology and best practices information. The final six recommendations were evidence-based, and were broadly supported by the range of stakeholders involved in the research, analysis, and decision-making processes. The recommendations were:

- Reduce the alcohol concentration level that triggers enhanced DLAS from 0.20 to 0.15.
- Lengthen the revocation time for first- and second-time DWI offenders and provide the option to obtain full driving privileges if they drive a vehicle with an ignition interlock installed.
- Update sanctions for people that are cancelled as "inimical to public safety" (three offenses in 10 years or four in a lifetime).
- Provide effective chemical health screens and assessments.
- Focus enhanced consequences on people who continue to drive after their driving privileges have been withdrawn due to risky driving behavior.

• Determine effective programs that achieve long-term behavior change and assure statewide access and usage.

This review resulted in a Governor's legislative proposal that was passed almost unanimously into law, effective July 1, 2011.

The process DPS used in the sanctions review initiative is aligned with recent findings from the National Ignition Interlock Summit:

Forming a cohesive ignition interlock steering committee to research and assemble interlock best practices as well as to craft enabling legislation is critical in achieving workable and effective interlock laws. By assembling a set of diverse stakeholders to participate in the interlock planning process, understanding can be increased and challenges can be addressed, increasing the probability of both legislative and programmatic success (GHSA et al, 2010).

Table 1: Milestones in Minnesota's Ignition Interlock History

2002

The first pilot program

The program was implemented in Anoka County, with nine participants. Low participation limited DPS's ability to learn how an II program could be administered under Minnesota's DWI laws and licensing operational procedures.

2007-2009

Two-county pilot (July 1, 2007 through June 30, 2009)

Minnesota passed legislation during the 2007 legislative session requiring DPS to conduct a two-year pilot II program in one rural and one metropolitan county (MN Statutes, Section 171.306). Beltrami and Hennepin counties were selected to participate in the study. None of the 100 participants reoffended while in the program.

2008-2010

Broad DPS and stakeholder review of administrative sanctions

DPS, along with a group of multi-disciplinary stakeholders, conducted a thorough review of impaired driving administrative driver license sanctions. This review was known as the Driver's License Administrative Sanctions Initiative. The committee met for nearly two years to develop multiple recommendations that were based on research, national best practices and lessons learned from the two county II pilot projects.

2009-2010

Statewide Pilot (July 1, 2009 through June 30, 2010)

Based on the results of the two-county pilot and the Administrative Sanctions Committee recommendations, DPS implemented a statewide pilot. Some program elements changed as the pilot moved statewide (See Table 2). For example, DPS simplified enrollment processes, administered the program through DVS (rather than probation officers), and created a website to encourage enrollment and provide needed information.

2010

Statewide Ignition Interlock Program (Effective July 1, 2011)

On May 18, 2010, Governor Tim Pawlenty signed legislation to strengthen DWI sanctions and encourage the use of II to increase public safety on the roadway and promote legal driving.

2011

Statewide Ignition Interlock Program begins.

Table 2: Highlights of Changes Implemented in the Statewide Pilot Project

	Two County Pilot Project 2007 - 2009	Statewide Pilot Project 2009-2010	Why the Change?
Target population	Individuals living in Beltrami and Hennepin Counties with two or more DWI incidents.	Individuals living in Minnesota with one or more DWI incidents.	The effectiveness of the two-county pilot program convinced the legislature to implement the program on a statewide basis and not limit the program to repeat DWI offenders.
Operations	DPS oversight, with probation officers in each county administering day-to-day operations.	DVS statewide oversight and responsible for day-to-day operations.	Since DVS is the sole licensing authority, it was more efficient and appropriate to administer a statewide licensing process through DVS.
Guidelines	DPS created and adjusted guidelines to encourage participation. There were basic parameters guiding the pilot that included maintaining some hard revocation time and requiring installation of II for a minimum of one-year.	DPS adjusted guidelines to further encourage II use by providing full driving privileges and reducing the use of a limited license.	DPS adjusted parameters and policies when the eligibility and enrollment could be simplified without negative consequences. A multidisciplinary committee was convened that recommended many program guideline changes based on research and best practices.
Enrollment	Enrollment was a one-on- one process with probation officers guiding participation.	DPS simplified enrollment processes and developed a user-friendly website for current and prospective enrollees. DVS staff enrolled the participants and monitored device reports.	Since the program expanded statewide it was important to provide information about the enrolment process to a much broader audience and increase enrollment process efficiency.

III. ADMINISTRATION, ELIGIBILITY AND OPERATIONS

This section describes the operation of the statewide pilot program. Except where noted, this information is also generally descriptive of the program that became effective on July 1, 2011.

This section also highlights pilot program year two enhancements. The enhancements indicate DPS "lessons learned" which may be useful for other projects and states. Program two enhancements also provided a foundation for implementation of the July 1, 2011 program. That program is expected to annually enroll potentially about 17,000 participants.

Administration and Staffing

The II pilot program was cooperatively administered by DPS-Driver and Vehicle Services (DVS) and Office of Traffic Safety (OTS). Together they developed and refined policies to assure efficient and effective program operation. DVS managed the enrollment process, oversaw device use, and implemented sanctions for participants who violated program requirements. OTS provided financial support, program communication and program monitoring. OTS also managed the ignition interlock website which facilitated program enrollment, education and partnerships.

Policies and Program Standards

Program standards for the statewide pilot project were developed using lessons learned from the two-county pilot program, best practices learned from other states, research, and recommendations from a committee that was established to thoroughly review current administrative license sanctions. In 2008, DPS established a Driver's License Sanctions Initiative to reduce impaired driving fatalities and severe injuries and to increase legal driving. Over a two year period, DPS worked closely with a diverse set of stakeholder groups and experts to find new strategies to improve the effectiveness of driving while impaired (DWI) administrative sanctions. Recommendations that did not need legislative authority to implement were incorporated into the pilot program standards (Appendix D).

Eligibility and Enrollment

Individuals were eligible for the pilot program if their license was revoked or cancelled and they met all other program requirements for reinstatement. Requirements varied depending on whether the violation was a: first time offense; second or third time offense (not within 10 years); or third (within 10 years) or more.

The pilot program's enrollment qualifications and requirements can be found in Appendix E. In general, the II statewide pilot program required that individuals complete the following eligibility/enrollment processes before using the device:

1. Serve the designated hard revocation time (no driving allowed under any circumstance).

- 2. Complete the requirements for license reinstatement. These are the same requirements anyone must fulfill to get their license back after a DWI. Requirements include:
 - Pass a DWI driver's license exam
 - Apply and pay for a new driver's license
 - Pay a reinstatement fee (\$680.00)
 - Apply and pay for specialized license plates (first time offender with an AC level of 0.20 or above or repeat offenders only)
 - If treatment is required, present proof of enrollment in a treatment program
- 3. Complete the II enrollment requirements. This includes signing the II Program Participant Agreement. A copy of the Participant Agreement is provided in Appendix F.
- 4. Arrange to have the II device installed.

Program Promotion

Prospective enrollees learn about the II program from a variety of sources, including the court, probation, their attorneys and contact with DPS. DVS includes information on the II program with driver's license revocation notices that were sent to DWI offenders. Handouts were created that explained the program and benefits for enrolling. To educate stakeholders on the program, the OTS presented at a multitude of conferences and meetings throughout Minnesota. In contacts with DPS and DVS, enrollees were instructed to use the II website section to find the information, documents and rationale for enrollment. DPS also had enrollment packets on hand that were mailed or picked up by potential participants.

OTS created the II website (http://MinnesotaIgnitionInterlock.org) to provide complete program information to participants. The website included the Program Guidelines, step-by-step instructions on how to apply, application forms, a list of certified vendors, and contact information. The website also includes criteria for enrollment, Frequently Asked Questions, and benefits to encourage enrollment (Table 3). For specific questions, enrollees were advised to contact DVS by phone or email.

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Table 3: Benefits to Individual Participation as Noted on the II Website

- Start Driving Sooner: After a DWI, your driving privileges are cancelled for a period of time ranging from 90 days to more than six years. When you participate in the program, this period of time is greatly reduced.
- Drive Where You Need to Go: The type of driver's license you receive upon participating in the program will depend on your offense. With a restricted license, you may drive anywhere as long as the device is installed in your vehicle. With a limited license, you will be allowed to drive to work, school, and treatment and abstinence-based support programs, to court and probation appointments.
- Drive Legally and Avoid Future DWIs and Consequences: An installed interlock device will help you to drive safely and legally. In turn, you can avoid future DWIs and the consequences—such as further license revocations and cancellations, additional fines and jail time.
- You May Save Money: It does cost money to participate in the Minnesota II Program about \$4 to \$5 per day. However, many fees must be paid to get your license reinstated whether you participate in the program or not and the cost of II may be far less than the alternatives of cab fares, bus fares or getting others to drive you.

Certified Ignition Interlock Manufactures

Five II devices and four manufacturers were certified for use by DPS over the two year period of the statewide program. The vendors were:

- Consumer Safety Technologies
- Draeger
- Guardian Interlock Systems
- Smart Start

IV. SUMMARY OF FINDING

Participation Rates and General Participant Characteristics

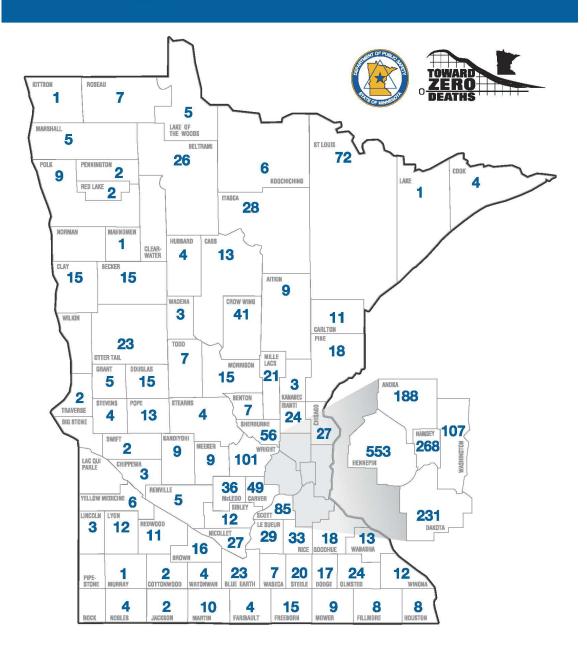
DVS enrolled 2,494 participants over the length of the pilot program. Eighty-four percent of enrollees were male. The age of participants ranged from 19 to 80, with an average age of 43 (Table 4). The program enrolled at least one person in 80 of Minnesota's 87 counties. A majority (54 percent) of enrollees were concentrated in the seven county metro-area. Figure 1 shows the number and location of enrollees by county.

Table 4: Participants' Gender and Age7-1-09 through 6-30-11

Gender			
Male	2094 (84%)		
Female	396 (15%)		
Total	2490		
Age			
Youngest	19		
Oldest	80		
Average age	43		

Figure 1: Ignition Interlock Participants by County

Ignition Interlock Participants July 1, 2009 – June 30, 2011



Participant's Number of DWI Incidents

Participants had from one to 14 DWI incidents on their Minnesota driving record upon enrolling in the II program (Table 5). A large majority of participants (70 percent) had 3 to 5 DWI incidents at the time of program enrollment. Participants with three or more DWI incidents had a greater incentive to participate in the program, since these offenders had no other option if they wanted to drive.

Table 5: Number of Participants by Number of DWI Incidents at Enrollment

Number of DWI Incidents at Enrollment	Number of Participants	Percentage of Participants
1	35	1%
2	286	11%
3	599	24%
4	733	29%
5	420	17%
6	203	8%
7	101	4%
8	51	2%
9	26	1%
10	13	<1%
11	8	<1%
12	7	<1%
13	5	<1%
14	3	<1%
Total	2490	100%

Participant's License Type

Participants drove under a limited or restricted license while enrolled in the program (Table 6). Sixty percent had a restricted license, which provided full driving privileges restricted to driving a vehicle with an ignition interlock installed. The other 40 percent, in addition to being restricted to driving a vehicle with ignition interlock, were limited to driving specific hours and for specific reasons, (e.g., work).

Table 6:
Type of License Used While Enrolled

Type of License	Number	Percent
Limited license	1002	40%
Restricted license	1488	60%
Total	2490	100%

Participant's Program Outcomes

As of June 30, 2011, 79 percent (1,962 individuals) of the program's original enrollees continued to participate in the program (Table 7). Eleven percent (269 individuals) successfully completed the program with no new offenses. Three people completed the program and later reoffended. Nine percent (221) enrollees were cancelled (disqualified) from the program due to many reasons, while 35 (one percent) voluntarily withdrew. Reasons participants withdrew or cancelled while on the program are listed below.

- Failed to install the device
- Incurred a new offense or other violation
- Went to jail
- Violated their abstinence requirement
- Lost vehicle while on the program
- Circumvented the device
- Moved out of state
- Left the program without giving reason
- Died

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Table 7: Participant's Status as of June 30, 2011

Status	Number	Percent
Completed the Programwith no new offenses after "graduation"	269	11%
Completed the Programwith one new offense after graduation	3	<1%
Cancelled due to program violations	221	9%
Withdrew from the program	35	1%
Continued in the pilot program	1962	79%
TOTAL	2490	100%

Implementation Challenges

Year One Challenges

At the end of year one, DPS reported several challenges to the implementation process, such as the need to improve business processes and provide additional information to participants. Many of these challenges were addressed through year two enhancements previously discussed. Noted challenges reported in year one includes:

- Growing interest in the II program resulted in set-backs in the timely processing of applications. DVS maintained service to participants, but did not have time to fully analyze the data and develop business process improvements.
- Providing sufficient information for participants to enroll in the program and making sure participants had a full understanding of requirements (e.g., length of participation and consequences of program failures).

Year Two Challenges

Year two challenges were many of the same as year one. The ability to monitor in a timely manner proved challenging due to the growing number of participants. All monitoring reports had to be done manually and often staffing to support the program was limited. Other challenges included managing vendor issues. The program did not have a position responsible for overseeing vendors/service providers and serve as a liaison that would provide a clear line of communication between DP and the providers.

Commitment and Buy-In from Staff

Prior to 2009, DWI administrative sanctions did not significantly change for nearly 30 years. A Driver's License Administrative Sanctions Workgroup spent two years reviewing and analyzing research and best practices and recommended significant

changes to administrative sanctions imposed on DWI offenders that would enhance public safety. The pilot program represented many of the recommendations. This represented a major change for staff in how they administered drive licenses. In retrospect, it would have been helpful to more thoroughly brief staff on why procedures had changed, the reasoning behind the recommendations, and why II is a useful tool.

Participant Survey

DPS surveyed ignition interlock program participants to determine program improvement needs and the level of user acceptance. At the time of the survey there were approximately 1500 participants in the ignition interlock program from which 377 were surveyed. Participants were sorted by vendor and approximately 25% of each group was chosen randomly for the survey. This processed was used to determine if a problem was prevalent to a certain vendor. The survey included people currently on ignition interlock as well as people who have graduated from the program.

	Ignition Interlock Participants By Vendor	Ignition Interlock Participants Surveyed Per Vendor
Vendor A	323	82
Vendor B	226	56
Vendor C	406	102
Vendor D	544	138
Not yet Installed	72	
Total	1571	377

Survey Results

Twenty-eight percent (106) of surveyed participants responded. The results of the survey are as follows:

- 84% respondents believe the program has improved their quality of life
- 8.5% respondents switched ignition interlock companies
- 39% respondents had a problem operating the ignition interlock device
- 12% respondents had a problem with the ignition interlock service provider
- 8.5 % respondents believe the orientation/training was not sufficient
- The overall average monthly calibration cost is \$93.16

The survey results clearly indicate that participants appreciate the ability to obtain their driving privileges by participating in the ignition interlock program. They also indicate a need for additional training on how to properly operate the ignition interlock device.

V. NEXT STEPS

The statewide pilot program was successful in allowing the state to develop the policies, rules and procedures to enable a successful statewide program. The pilot program demonstrated that ignition interlock does reduce DWI recidivism and provides a mechanism for safe and legal driving for those arrested for DWI. The statewide pilots also demonstrated that the program could effectively be administered throughout all Minnesota's counties by DPS.

The II pilot was undertaken as part of the state's overall review and improvement of DWI administration sanctions. This review occurred as a large, multi-year effort involving more than 50 participants representing the full range of DWI stakeholders. Many of the recommendations of the DLAS Initiative were included in the Governor's initiative. The new law strongly encourages the statewide use of ignition interlock for first-and second-time offenders and mandates its use for those "cancelled as inimical to public safety." Table 9 shows the original recommendations of the DLAS Initiative and the legislative outcomes that resulted. The full report can be found at: http://archive.leg.state.mn.us/docs/2011/other/110591.pdf.

Results of the administrative review and the II pilot program, along with related refinements in policy and procedures, led to DPS's successful launch of the statewide program July 1, 2011.

Recommendations for Future Consideration

Ignition interlock programs nationally are relatively new and states are struggling to increase participation in their programs. New research and best practices to increase participation and program effectiveness are continuously being identified. Below are recommendations to consider for future efforts.

- Identify process and program improvement that will increase efficiencies in program administration
- Maintain strong communication between the criminal justice stakeholders and DPS.
- Identify and implement legislative, program or system changes needed to increase program participation.
- Closely monitor ignition interlock program participants to assure proper sanctions are imposed on those that violate the program.
- Monitor vendors, service providers and ignition devices so the integrity of the program is maintained.

Ignition interlock programs effectively reduce impaired driving and make roads safer. While at the same time, interlocks benefit those arrested so they can continue to function in their lives, and most importantly, drive safely and sober. It will be important to continuously evaluate the program's effectiveness and make adjustments based on program analysis and future findings.

Table 9: Proposed DLAS Initiative System Changes & Legislative Outcomes

Proposed DLAS Initiative System Changes & Legislative Outcomes Proposed Recommendation ¹⁰ Legislative Outcome (2010 legislation			
Froposed Recommendation	Legislative Outcome (2010 legislation effective on July 1, 2011)		
Recommendation 1	• • • • • • • • • • • • • • • • • • • •		
 Reduce the AC level that triggers enhanced administrative sanctions from 0.20 to 0.15. Simplify DLAS by eliminating the use of enhanced administrative sanctions for repeat offenders. 	 The AC level that triggers enhanced administrative sanctions was reduced from 0.20 to 0.16 (instead of 0.15 as recommended). The tiered system of enhancing sanctions for high AC levels of 2nd-time offenders remained. 		
Recommendation 2			
 Lengthen revocation periods for DWI offenders and provide the option of full driving privileges with the restriction of driving only a vehicle with II installed. Provide for a short period of no driving privileges (hard revocation). Eliminate the use of a limited license. 	 Revocations were lengthened for all DWI offenders except first-time offenders with an AC level less than 0.16. A short period of no driving privileges was eliminated. The use of limited licenses was eliminated with the exception of first-time DWI offenders with an AC level of less than 0.16. 		
Recommendation 3			
• Update administrative sanctions for people who are cancelled as "inimical to public safety" (three offenses in 10 years or four in a lifetime).	 Legislation was passed that updated many of the proposed recommendations into law and provided the ability to write into rule other recommendations. 		
Recommendation 4			
 Provide effective chemical health screens and assessments. 	• These recommendations were not included in the 2010 legislation.		
Recommendation 5			
• Focus enhanced consequence on those who continued to drive after their driving privileges were withdrawn due to risky driving behavior.	• These recommendations were not included in the 2010 legislation.		
Recommendation 6			
Determine effective programs that achieve long-term behavior change and assure statewide access.	No action has been taken at this time.		

 $^{10}\ Summarized; see\ full\ proposals\ at:\ http://archive.leg.state.mn.us/docs/2011/other/110591.pdf$

Ignition Interlock Terminology and Technical Definitions

AC – alcohol content – The number of grams of alcohol per 210 liters of breath.

Cancelled as inimical to public safety – If the Commissioner of Public Safety has good cause to believe that the operation of a motor vehicle on the highways by a person would be inimical to public safety or welfare, the Commissioner has the authority to cancel driving privileges. A person is defined as inimical to public safety for three or more impaired driving arrests in ten years or four impaired driving arrests in a life time.

DWI Incident – An alcohol-related offense associated with an implied consent and/or a DWI conviction. A person may have an implied consent incident on their driving record with no associated DWI conviction or a DWI conviction with no associated implied consent revocation. Either situation is considered a DWI incident. If a person has an implied consent violation and a conviction from the same incident, it is considered one incident.

Early recall – A condition, signaled by a visual and or audible indication on the device, that requires the participant to return the vehicle to the service provider for an unscheduled monitoring check.

Failed tests – A test result indicating that alcohol concentration equals or exceeds the startup set point value of 0.02 AC.

Hard Core Offenders – Refers to first time DWI offenders that are arrested with an alcohol concentration level of 0.15 and above and a DWI offender with two or more offenses.

Hard revocation – Revocation of driving privileges for which a limited license is not issued.

Ignition interlock device – A breath alcohol analyzer that is connected to a motor vehicle ignition. In order to start the motor vehicle engine, a driver must blow an alveolar breath sample into the analyzer which measures the alcohol concentration. If the alcohol concentration exceeds the startup set point on the interlock device, the motor vehicle engine will not start.

Ignition Interlock Restricted License – A license that allows the driver unlimited driving privileges with the condition that they drive a vehicle only with an ignition interlock installed.

Limited license – A restricted license issued to a person while their driving privileges are under revocation or suspension. It provides the ability for a person to driver to work, school, and support programs such as Alcoholics Anonymous (AA).

MN Statutes, Section 171.305 – Minnesota statute that defines a statewide ignition interlock program for people that are cancelled as inimical to public safety, completed treatment, and completed half of their required sobriety time period.

MN Statutes, Section 171.306 – Minnesota statute that defines a pilot ignition interlock program for repeat DWI offenders in two counties, one metro and one rural.

Performance standards –Standards set that define the performance requirements for ignition interlock devices used in Minnesota.

Program standards – Standards set for defining the program policies and participation qualifications.

Recidivism – An act of a person re-offending for an offense of driving while impaired.

Revocation – Loss of driving privileges.

Running retest – After passing the test allowing the engine to start, the device requires follow-up testing within random intervals.

Service provider – The person or entity representing the manufacturer(s) of an approved device and responsible for the day-to-day operations of a service center.

Research on Program Effectiveness and Limitations

Effect on Public Safety and Recidivism

Generally, evaluations of ignition interlock use have reported reductions in recidivism ranging from 35–90 percent (Voas and Marques 2003; Vezina 2002; Tippetts and Voas 1997; Coben and Larkin 1999), with an average reduction among ten studies of 64 percent (Willis et al 2005). An extensive, updated review of II studies reports a 67 percent drop in recidivism. As the Centers for Disease Control and Prevention concluded:

"Research shows that ignition interlocks can reduce the rate of re-arrest among drivers convicted of DWI by a median of 67 percent, making them more effective than other prevention methods" (CDC, 2011).

Many studies have concluded that II is effective in reducing recidivism among first time offenders (EMT Group 1990; Morse and Elliot 1992; Tippets and Voas 1998; Voas et al. 1999; Voas et al. 2005). In a New Mexico evaluation study involving more than 12,000 first time offenders, the annual re-arrest rate for interlock participants was 3.51 percent, while the control group had a significantly higher rate of 7.09 percent (Voas et al. 2005). Likewise, an Alberta, Canada study comparing first offenders found an 89 percent lower recidivism rate among the II participants compared to reinstated and non-interlocked drivers, and a 95 percent lower recidivism compared to drivers who were ineligible for interlock (Voas et al. 1999).

Studies of repeat and chronic DWI offenders have also found that ignition interlocks are one of the most promising strategies to prevent a subsequent occurrence of DWI behavior (Popkin et al. 1992; Morse and Elliot 1992; Jones 1993; Weinrath 1997; EMT Group 1990). For instance, an evaluation of more than 1300 DWI offenders with multiple convictions in Maryland found that the alcohol traffic violation rate during the first year after the DWI was significantly less for participants in the interlock program (2.4 percent) than for those in the control group (6.7 percent). A large Illinois study examined the recidivism rates of drivers who had their licenses revoked for alcohol-impaired driving and received restricted driving permits. Participants in the experimental group had II devices installed in their vehicles. Researchers found that only 20 (1.3 percent) of an experimental group of 1,560 drivers who had II installed in their vehicles were rearrested compared to 94 (8.7 percent) of the 1,384 drivers in the control group. The authors noted, however, that once the alcohol interlock was removed, there was a rapid return to predevice recidivism (Raub et al. 2003).

In addition to reducing recidivism, II programs can enhance public safety by providing an additional option for driving legally after a DWI. It is estimated that at least 70 percent of people continue driving even after their license has been revoked or cancelled (Griffin II and De La Zerda 2000). This may be due in part to the lack of public transportation, particularly in rural communities. Even if these individuals are not driving while impaired, they are still violating an important measure put into place to protect public safety. II is an opportunity to allow a person to drive legally while protecting the public's safety on the road. Fewer instances of illegally

driving after a DWI violation also reduce the financial and human resource burden on the courts and the criminal justice systems.

Effect on Families

Families often experience significant benefits when a family member participates in an II program. Some families report that the interlock has had positive benefits for family life as a result of the offender's reduced drinking. In studies, families also mentioned that the use of ignition interlock provides reassurance and peace of mind that the offender is not driving while impaired. Further, relatives have noted that the inconvenience of using the interlock device is preferred to incarceration of the offender or having to "chauffeur" the offender to appointments/ employment. Overall, families have reported a positive attitude toward their experience with II and the beneficial impact it had on their loved ones and their family lives (Beirness et al. 2007).

Participant Employment and Productivity

II supports participants' efforts to be productive members of society and the workforce, with benefits to taxpayers, families and the individual. II encourages responsibility and productivity by giving the offender a legal option for driving to work, court, treatment and meeting other individual and family obligations. As the NHTSA notes:

The inability to drive legally can be a serious barrier to maintain employment and completing substance abuse treatment, especially in areas lacking public transportation alternatives. Ignition interlocks [also] allow offenders to take care of family and court-ordered responsibilities. (Sprattler, 2009)

Other Reported Benefits

The most obvious benefit achieved by II programs is that an individual's vehicle will not start if s/he is impaired and tries to operate the vehicle. Beyond this, however, DPS and others note other potential or documented II benefits:

- **Deterrence.** The use of II programs can provide a *general* deterrence to the population at large—seeing or knowing that other individuals are subject to the punitive aspects of II and other consequences can be expected to deter the general public from drinking and driving.
- Message. The interlock device sends an ongoing message to the offender, reminding him or her that drinking and driving is unacceptable. As one II program participant noted, "speaking from an impaired driving offender's standpoint, it's a constant reminder that you made a bad choice, and it's not OK and there are consequences that come with that choice" (MPR, 2007). II use assures that offenders experience the consequences of their actions.
- **Rehabilitation.** Ignition interlock can create a "window of opportunity" to motivate offenders to change their behavior, while providing a safety net to protect the public in the event of relapse. Researchers have noted the importance of using II in combination with treatment and with other sanctions as appropriate (Voas and Marques, 2003). While offenders are using ignition interlock, they can participate in cognitive-based education and

treatment to address underlying issues. Information provided by the device can enable treatment providers to work with offenders to overcome denial about their drinking and recognize its impact. II acknowledges that treatment for alcohol addiction and abuse can be a lengthy process with setbacks and relapses – the ignition interlock option provides a safety net to greatly reduce the likelihood that such relapses do not result in impaired driving (Beirness et al. 1998).

A recent study in the United Kingdom indicates the impact of II programs in both reducing impaired driving and changing drinking behavior. Participants reported that, in addition to reducing drunk driving, II use evoked serious thoughts about their drinking habits and assisted them in changing their drinking patterns. Families have also reported that II use by a family member promotes a positive change in his/her drinking behavior (Beirness et al. 2007).

Effect on Costs

Researchers in the US and other countries are in the process of compiling data on the cost-effectiveness of II. One of the most thorough cost-benefit analyses was a 2006 study recently conducted by the European Road Safety Observatory (ERSO, 2008). Researchers examined 45 safety measures in the areas of road and vehicle safety. In assessing whether the advantages of ignition interlock and other safety measures outweighed the costs, the study found that ignition interlock was one of only three measures with a cost-benefit ratio above 5.0—for every dollar spent on ignition interlock, more than \$5 were estimated to be saved. Another European study reported a cost-benefit ratio of 8.75 (Elvik 1999 in ERSO, 2006).

In New Mexico, a state with a large number of ignition interlocks, Roth reported that "the effectiveness and cost-effectiveness of interlock was supported by data from Santa Fe Courts and the entire state" (Roth, 2008b). A year earlier, at the 2007 II Symposium, Roth and others reported that "II reduces the economic impact of drinking driving by \$3 to \$7 for every \$1 in cost" (Roth et al, 2007).

Program Limitations

Long-term recidivism

While II research is generally supportive of the development and implementation of II programs, some studies are mixed, especially regarding the effectiveness of II in reducing recidivism rates in the long term. This may or may not be a primary goal of a state's II program, but in any case it would be beneficial. Several studies indicate that II devices reduce recidivism while in place, but the benefits do not extend after the device is removed. For example, a statewide randomized II longitudinal trial in Maryland looked at 1,387 drivers who were eligible for license reinstatement after participating in a variety of treatment programs (American Journal of Public Health in Rauch, 2002). When II devices were in place during the first year, 3.8 percent of people using an II device committed an alcohol-related traffic violation, compared to 9.0 percent of those in the control group. However, in four years following device removal, recidivism rate differences between the groups were not statistically significant.

This research supports the NHTSA recommendation that II be part of a broader sanctions program, a recommendation that the state of Minnesota has strongly supported. Also, a state may view an II program as a means to changing behavior (e.g., see above research on "other benefits,") or II might be seen as a means of promoting public safety only while it is in use. For example, the Traffic Injury Research Foundation (TIRF) concluded in a 2007 report: "Interlocks at this point in time and, in particular, in the absence of supporting case management or treatment, are not intended to change behavior. However the safety benefits while the device is installed are significant and more than justify its use (Robertson et al, 2007).

Participation and usage rates

Another potential limitation of national II programs is low rates of participation. As Robertson et al wrote in a 2007 TIRF report that "despite compelling research, sophisticated technology, and enabling legislation, interlocks are used irregularly. After more than two decades, participation and usage rates for interlock devices are still less than 10 percent in many jurisdictions" (Robertson et al, 2007). The report highlighted two critical gaps that contribute to the "apparent reluctance" of criminal justice system professionals to promote and/or apply the use of ignition interlock devices: 1) limited knowledge of II technology capabilities, corresponding research, and program applications in their own jurisdictions, and 2) challenges associated with due process, statutory obligations or legal requirements of the system (e.g., proof that a high AC reading is due to alcohol rather than food). The authors concluded that professionals are unlikely to rely on II as a sanctioning tool if they are unfamiliar with II research, devices and applications. The authors recommended consistent and uniform education of professionals in enforcement, prosecution, adjudication and sanctioning, monitoring and driver licensing to ensure more understanding and application of II programs.

GOVERNOR PAWLENTY SIGNS LEGISLATION FOR STRONGER DWI SANCTIONS; REQUIRES USE OF IGNITION INTERLOCKS -- May 18, 2010

Saint Paul – Governor Tim Pawlenty today signed legislation to strengthen sanctions against DWI offenders and require certain offenders to use ignition interlock devices. The legislation becomes effective July 1, 2011, and aims to enhance road safety to prevent alcohol-related crashes which account for one-third of all Minnesota traffic deaths annually. The legislation gives DWI offenders a chance to regain driving privileges by ensuring safe and legal driving through the use of interlocks.

Interlock devices are installed in a vehicle and require a driver to provide a breath sample in order for the vehicle to start. The vehicle will not start if the device detects an alcohol-concentration level of 0.02 or above after the driver blows into its tube. Interlocks require rolling re-tests after the initial test, and have features to deter others from starting the vehicle for the intended user.

"This legislation demonstrates Minnesota is serious about preventing impaired driving and the tragedies that result from the deadly decision to get behind the wheel after drinking too much," Governor Pawlenty said. "Stronger sanctions and employing smarter tools such as interlock devices are necessary to step up the fight against this illegal and dangerous behavior. With this law, if you don't breathe, you don't leave."

Highlights of the legislation include:

- DWI offenders with a 0.16 and above alcohol-concentration level will be required to have ignition interlock devices installed on any vehicle they drive.
- DWI offenders with a 0.16 and above alcohol-concentration level that choose not to use ignition interlocks will not have driving privileges ranging from one year to six years depending on offense level. Offenders with three or more DWIs in a 10-year period will be required to use interlocks.
- Interlock users will regain full driving privileges immediately after the offense, ensuring they are driving with a valid license and not a threat on the roadway.
- Interlocks will be used to monitor chronic DWI offenders (three or more DWIs in 10 year period) to verify chemical use.

In the United States, 46 states have implemented interlock requirements for DWI offenders. Research from the leading ignition interlock institution, Pacific Institute for Research and Evaluation, reports interlocks can reduce repeat DWI offenses by 45 percent to 90 percent.

Minnesota Department of Public Safety (DPS) Commissioner Michael Campion says the increased sanctions and use of interlocks will help to deter motorists from driving impaired, and therefore reduce alcohol-related fatalities.

"Minnesota cannot continue to allow these preventable deaths and injuries on our roads due to drinking and driving," says Campion. "This law is about saving lives, keeping motorists safe, and sending a message to motorists that impaired driving is a serious crime with serious consequences."

Campion says the benefits of the new legislation will include safer roads and reduced costs through the use of ignition interlock on high-risk drivers. He adds the law creates a method for all offenders to obtain a valid driver's license to address the epidemic of DWI offenders driving without a valid license. Campion says the use of interlocks also encourages behavior modification and rehabilitation, and

diminishes the probability and possibility of repeat DWI.

"Minnesota has made progress in limiting alcohol-related traffic deaths in recent years," says Campion, citing enhanced, targeted enforcement and education outreach efforts. "To continue this trend, it's important that legislators and the governor took action to embrace interlock technology to prevent impaired driving crimes."

The interlock legislation is one of many traffic safety legislative pieces in recent years — felony DWI (2004); 0.08 legal alcohol-concentration limit (2005); ban on cell phone use for new teen drivers (2006); stronger teen graduated driver's licensing laws (2008); ban on texting, emailing and web access (2008); primary seat belt law (2009); and booster seat law requirement for children (2009).

A current Minnesota ignition interlock pilot program began in July 2009 and more than 1,000 DWI offenders have enrolled to regain their driver's licenses sooner and are legally driving with interlocks.

Back

Escalating the Fight Against Impaired Driving in Minnesota

Overview of Strengthened DWI Sanctions Law

The Impaired Driving Epidemic

Impaired driving remains a serious threat on Minnesota roads, accounting for one-third of all traffic deaths annually. One in eight Minnesota drivers has a DWI on record, and 40 percent of those will offend again. 40,000 Minnesotans are convicted driving with an invalid license annually.

Strengthened Sanctions

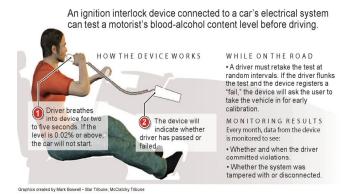
- First time DWI offenders with a 0.16 and above alcohol concentration level and repeat DWI offenders will be required to have ignition interlock devices installed on any vehicle they drive.
- First time DWI offenders with a 0.16 and above alcohol concentration level and repeat DWI offenders
 that choose not to use ignition interlocks will not have driving privileges ranging from one year to six
 years depending on offense level.
- Interlock users will regain full driving privileges immediately after the offense, ensuring they are driving with a valid license and not a threat on the roadway.
- Interlock will be used to monitor chronic DWI offenders to verify reinstatement requirements.

Benefits

- Safer roads and reduced costs through the use of ignition interlock on high-risk drivers.
- Creates a method for all offenders to obtain a valid driver's license addressing the epidemic of people driving without a valid license.
- Encourages behavior modification and rehabilitation.
- Diminishes the probability and possibility of repeat DWI.

Why Embrace Ignition Interlock Technology

- Ignition interlocks are a proven tool in the fight against impaired driving — interlocks stop DWI offenders from driving after drinking, prevent re-arrests and result in safer roads.
 - Up to 75 percent of DWI offenders continue to drive illegally and continue to put the public in danger on the roadway after their arrest and license suspension.



Offense	Current Law	Session's Enactment
First Time Offender	 3 month revocation of driving privileges 15 days no driving privileges and a limited license provided for remaining revocation period 	 3 month revocation of driving privileges Driver has a choice of the following: 15 days no driving privileges and a limited license provided for remaining revocation period Full driving privileges provided for the revocation period with the use of ignition interlock
First Time Offender Test Refusal	 1 year revocation of driving privileges 15 days no driving privileges and a limited license provided for remaining revocation period 	 1 year revocation of driving privileges Driver has a choice of the following: 15 days no driving privileges and a limited license provided for remaining revocation period Full driving privileges provided for the revocation period with the use of ignition interlock
First Time Offender High AC	O.20 alcohol concentration level output from 6 months revocation of driving privileges output and 30 days no driving privileges and a limited license provided for remaining revocation period	 0.16 alcohol concentration level 1 year revocation of driving privileges Full driving privileges provided with the use of ignition interlock
Second Time Offender	 6 months revocation of driving privileges 90 days no driving privileges Limited license provided for remaining revocation period 	 1 year revocation of driving privileges Full driving privileges provided for revocation period with the use of ignition interlock
Second Time Offender High AC or Test Refusal	0.20 alcohol concentration level 1 year revocation of driving privileges	O.16 alcohol concentration level 2 year revocation of driving privileges - Full driving privileges provided for revocation period with the use of ignition interlock
Third, Fourth Fifth and Subsequent Offenses (Length of time is dependent on the number of offenses)	 1, 3, or 6 years revocation /cancellation of driving privileges (based on number of times the person completed rehabilitation/reinstated a license)* No driving privileges Conditions of reinstatement 1, 3 or 6 years demonstration of no alcohol or controlled substances usage Completion of treatment Verified by 5 letters and AA attendance Life-long restriction of no alcohol or controlled substance usage 	 3, 4 or 6 years revocation /cancellation of driving privileges* 1 year limited license provided with the use of ignition interlock 2, 3 or 5 years full driving privileges with the use of ignition interlock Conditions of Reinstatement 3, 4 or 6 years demonstration of no alcohol or controlled substances usage Completion of treatment Verified by 3 years of ignition interlock 10 year restriction of no alcohol or controlled substance usage (may remove if compliant for 10 year period) *Time may be extended if alcohol use is detected

Minnesota Ignition Interlock Program Standards

1. Scope

The purpose of this document is to establish program standards pursuant to MN Statute, Section 171.306 subd. 3. (2009 supp)¹¹ for participant qualifications and licensing guidelines for the use of ignition interlock devices in the State of Minnesota. Individual county programs and procedures are not within the scope of these program standards and are documented in individual county program and procedure documents. The state reserves the right to change these standards as additional information is received.

2. Ignition Interlock Participant Requirements

- A. Individuals that have their driver's license revoked under MN Chapter 169A for an impaired driving incident or canceled under MN Statute, Section 171.04 subdivision 1, clause (10) (2008) may apply for an ignition interlock limited license if they meet the following requirements:
 - 1. Participant with a driver's license canceled must be enrolled in or completed a treatment program to obtain an ignition interlock with limited driving privileges. Treatment must be completed prior to obtaining full driving privileges.
 - 2. Participant and the ignition interlock device reports will be monitored for use of alcohol and/or drugs. Reports of alcohol and/or drug use detected by court monitoring authorities will be reported to the Department of Public Safety.
- B. Participants must agree to the licensing terms and conditions stated in the following chart.

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¹¹ Act of April 30, 2009, Chapter.29, Section 2 (2009) Minnesota laws Chapter Section

Ignition Interlock Program Time Period Statewide Pilot Program					
Offense	No License Allowed (Hard Revocation)	Limited license with Ignition Interlock	Full license with Ignition Interlock *	Total Ignition Interlock Program*	
1 st Offense Under 0.20	15 days	0	One (1) year	One (1) year	
1 st Offense 0.20 or over	15 days	0	One (1) year	One (1) year	
Test Refusal	15 days	0	One (1) year	One (1) year	
2 nd Offense under .20	30 days	0	One (1) year and (6) months – last three (3) months must have no failed tests recorded on the ignition interlock device.	One (1) year and six (6) months	
2 nd Offense 0.20 or over or test refused	30 days	0	One (1) year and (6) months – last three (3) months must have no failed tests recorded on the ignition interlock device.	One (1) year and six (6) months	
3 rd Offense if rehab not required under .20	30 days	0	One (1) year and (6) months – last three (3) months must have no failed tests recorded on the ignition interlock device.	One (1) year and six (6) months	
3 rd Offense if Rehab is not required 0.20 or over or test refused	30 days	0	One (1) year and (6) months - last three (3) months must have no failed tests recorded on the ignition interlock device.	One (1) year and six (6) months	
3 rd Offense or first rehab	30 days	1 year	One (1) year	Two (2) years	
Second Rehab	30 days	1 year	Three (3) years	Four (4) years	
Third Rehab	30 days	1 year	Five (5) years	Six (6) years	

- * Time periods are set based on immediate entry into the program upon eligibility. Time required on ignition interlock may be less if participant enters into the program at a later date. Time may be extended based on failed tests and last use date of alcohol or drugs.
 - 3. Additional Conditions for Participation in the Ignition Interlock Program
 - A. All participants shall provide to the Department or its designee a signed statement that they agree to all of the terms and conditions described in this document.
 - 1. Participant must drive only a motor vehicle equipped with a functioning and certified ignition interlock device during the entire program as specified above.
 - 2. Participant must not tamper with, circumvent or otherwise misuse the ignition interlock device. Any suspected violation will be evaluated by the Department and sanctions may be imposed. These sanctions could include removal from the program and non-credit for the revocation time period spent using the ignition interlock device.
 - 3. Participant is presumed to have provided all breath samples introduced into the ignition interlock device. Any indication of use of alcohol detected by the device will be considered use of alcohol by the participant and will be taken into consideration when the Department of Public Safety evaluates the participant's driving privileges.
 - 4. Participant who has a "no use of alcohol or drug restriction" on their driver license will be considered in violation of that restriction, if alcohol is detected by the ignition interlock device. The participant will be subject to a longer period of cancellation.
 - 5. Participant must have their vehicle's ignition interlock device calibrated by a licensed service provider and serviced every 30 days or as indicated by the interlock device.
 - 6. Participant is responsible for understanding how to use the ignition interlock device and will be responsible for any misuse of the device.
 - 7. Participant must provide proof of insurance for the vehicle equipped with the ignition interlock device.
 - 8. Participant must indemnify and hold harmless the State of Minnesota and any political subdivision, the Department and its officers, employees and agents from all claims, demands and actions as a result of property damage and or injury or death to persons which may arise, directly or indirectly, out of any act or omission by the participant during the use of an ignition interlock device.
 - 9. Sanctions may be imposed for any violation of this agreement. These sanctions may include removal from the program and/or non-credit for the revocation time period spent using the ignition interlock device.

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4. Miscellaneous

A. Funding

Fees - Participants are responsible for all costs incurred to participate in the ignition interlock program.

Checklist for First DWI Offense (or test refusal)				
No Driving		Ignition Interlock	Limited License	Restricted License
15 days (hard revocation)		1 year	Not required	1 year
	Don't dri	ive during the "no driving" time p	eriod listed above (hard	revocation).
	Learn more about II program. Review DVS materials (website, the Toolkit, revocation/cancellation notice); contact DVS Customer Contact Representative with questions 651-296-2948 talk to your probation agent (if applicable).			
	Own/driv	ve a vehicle with valid insurance		
	Meet all of the requirements to get your license reinstated. □ Pay outstanding court or child support fees (contact county social service office for child support questions.) □ Go to local DMV exam station: □ fill out application for new driver's license; pay \$680 reinstatement fee and keep receipt □ take and pass DWI drivers' license exam; pay fee (varies) and keep receipt			
		review the II Participation Agras a participant in the program. S		nt – it is what you
	Send the II Program Application materials to DVS by mail, fax, e-mail or by bringing it to DVS (see contact information below): ➤ Signed and dated Ignition Interlock Participation Agreement (link and page) ► If you are not the owner of the vehicle that the ignition interlock device will be installed on, the Vehicle Owner for Approval of Ignition Interlock (Attachment C) must be signed by the owner. ► Copy of license reinstatement fee receipt ► Copy of driver's license application fee receipt Mail: Department of Public Safety Driver and Vehicle Services 445 Minnesota St Suite 168 St Paul, MN 55101 Fax: 651-797-1299 E-mail: dvs.ignition-interlock@state.mn.us Drop-off: Department of Public Safety / Driver and Vehicle Services Office Town Square 445 Minnesota St, St Paul			
	Receive and review enrollment packet from DVS (e.g., approval letter, restricted license and vendor information).			al letter, restricted
		Go to Deputy Registrar (or county office) and purchase special registration plates. This is only required if plates have been impounded.		
	Select and call an II vendor to schedule an installation appointment with a service provider; get device installed and attend training session (see vendor information attachment B). You should bring anyone who will be driving the vehicle to the training session with you.			on (see vendor driving the vehicle to
		tion Interlock for required period for monthly maintenance visits.	d of time and bring vehicl	e to a service
	Congratulations! If you've followed all of the steps above, you'll get your full driving privileges reinstated and DVS will send you a new driver's license.			

Checklist for Second or Third DWI Offense (or test refusal)				
No Driving		Ignition Interlock	Limited License	Restricted License
30 days (hard revocation)		1 year and 6 months*	Not required	1 year and 6 months*
	Don't dr	ive during the "no driving" time p	eriod listed above (hard	revocation).
	Learn more about II program. Review DVS materials (website, the Toolkit, revocation/cancellation notice); contact DVS Customer Contact Representative with questions 651-296-2948 ; talk to your probation agent (if applicable).			
	Own/driv	ve a vehicle with valid insurance		
	Meet all of the requirements to get your license reinstated. □ Pay outstanding court or child support fees (contact county social service office for child support questions.) □ Go to local DMV exam station: □ fill out application for new driver's license; pay \$680 reinstatement fee and keep receipt □ take and pass DWI drivers' license exam; pay fee (varies) and keep receipt			
		y review the II Participation Agent in the program. See attachmen		nt – it is what you agree to as a
	Review, sign and/or notarize the underlined documents below; send all the items listed below to DVS (see contact information below): ➤ Signed and dated Ignition Interlock Participation Agreement ➤ Notarized and signed Special Review Form ➤ Copy of reinstatement fee receipt ➤ Copy of driver's license application fee receipt ➤ If you are not the owner of the vehicle that the ignition interlock device will be installed on, the Vehicle Owner for Approval of Ignition Interlock (Attachment C) must be signed by the owner. Mail: Department of Public Safety Driver and Vehicle Services 445 Minnesota St Suite 168 St Paul, MN 55101 Fax: 651-797-1299 E-mail: dvs.ignition-interlock@state.mn.us Drop-off: Department of Public Safety / Driver and Vehicle Services Office Town Square 445 Minnesota St, St Paul			
		and review enrollment packet nformation).	from DVS (e.g., approva	al letter, restricted license and
	Go to De	eputy Registrar (or county office) and purchase special re	egistration plates.
	Select and call an II vendor to schedule an installation appointment with a service provider; get device installed and attend training session (see vendor information attachment B). You should bring anyone who will be driving the vehicle to the training session with you.			mation attachment B). You should
	Use Ignition Interlock for required period of time (listed above) and bring vehicle to a service location for monthly maintenance visits.			nd bring vehicle to a service
		Congratulations! If you've followed all of the steps above, you'll get your full driving privileges reinstated and DVS will send you a new driver's license.		
	* One ye device.	ear and six months is the minimu	m time; last 3 months mu	ust have no failed tests recorded on

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Checklist for License Cancellations					
	Offense	No Driving	Ignition Interlock	Limited License	Restricted License
First cancellation		30 days	2 years	1 year (1 st year)	1year (2 nd year)
Second cancellation		30 days	4 years	1 year (1st year)	3 years (2 nd - 4 th years)
Third cancellation		30 days	6 years	1 year (1 st year)	5 years (2 nd -6 th year)
	Don't drive during the "no driving" time period listed above (hard revocation).			on).	
	Learn more about II program. Review DVS materials (website, the Toolkit, revocation/cancellation notice); contact DVS Customer Contact Representative with questions 651-296-2948 ; talk to your probation agent (if applicable).				
	Own/drive a vehicle with valid insurance.				
	Meet all of the requirements to get your license reinstated. □ Pay outstanding court or child support fees (contact county social service office for child support questions.) □ Go to local DMV exam station: □ fill out application for new driver's license; pay \$680 reinstatement fee and keep receipt □ take and pass DWI drivers' license exam; pay fee (varies) and keep receipt				
	Carefully review the II Participation Agreement. This is important – it is what you agree to as a participant in the program. See attachment A				
	Print, review, sign and/or notarize the underlined documents below; send all the items listed below to DVS (see contact information below): ➤ Signed and dated Ignition Interlock Participation Agreement ► Limited License Application ► If you are not the owner of the vehicle that the ignition interlock device will be installed on, the Vehicle Owner for Approval of Ignition Interlock (Attachment C) must be signed by the owner. ► Proof on enrollment in a treatment facility ► Copy of reinstatement fee receipt ► Copy of driver's license application fee receipt. (This is very important as it contains the batch number to access your picture for your Limited License.) Mail: Department of Public Safety Driver and Vehicle Services 445 Minnesota St Suite 168 St Paul, MN 55101 Fax: 651-797-1299 E-mail: dvs.ignition-interlock@state.mn.us Drop-off: Department of Public Safety / Driver and Vehicle Services Office Town Square 445 Minnesota St, St Paul				
		Included in the pa	cket is information		restricted license and in a restricted license with

Checklist License Cancellation [continued from previous page]
Go to Deputy Registrar (or county office) and purchase special registration plates.
Select and call an II vendor to schedule an installation appointment with a service provider; get device installed and attend training session (see vendor information attachment B). You should bring anyone who will be driving the vehicle to the training session with you.
Use Ignition Interlock for required period of time (listed above)
Submit the following documentation to DVS when you are eligible for reinstatement of your full driving privileges with an ignition interlock restriction: ➤ Documentation of weekly AA or other abstinence based support group attendance for 3 months prior to full reinstatement of your license. ➤ Discharge report from treatment facility with "last chemical use" clearly documented. ➤ Five support letters from non-relatives with the "last chemical use" date consistent with each other (as documented in the discharge summary from treatment facility).
Submit the following to have the ignition interlock restriction removed from your driver license: ► Notarized and signed Abstinence Verification Form.
Congratulations! If you've followed all of the steps above, you'll get your full driving privileges reinstated and DVS will send you a new driver's license.

Ignition Interlock Agreement

This is an a	greement between the Department of Public Safety, Driver and Vehicle Services and As part of this agreement the participant agrees to the following
terms and	
	Participant must drive only a motor vehicle equipped with a functioning and certified ignition interlock device during the entire program until notified by Driver and Vehicle Services that the are eligible to have the device removed.
	Participant must not tamper with, circumvent or otherwise misuse the device. Any suspected violation will be evaluated by the Department and sanctions may be imposed. These sanctions could include removal from the program and non-credit for the revocation time period spent using the ignition interlock device.
	Participant is responsible for all reports indicating use of alcohol by the ignition interlock device. Any indication of use of alcohol detected by the device will be considered use of alcohol by the participant and will be taken into consideration when the Department of Public Safety evaluates the participant's driving privileges.
	Participants who have a no use of alcohol or drug restriction on their driver license will be considered in violation of that restriction if alcohol is detected by the ignition interlock device and they will be subject to cancellation for a longer time period.
	Participant must have their vehicle calibrated by a licensed service provider and serviced ever 30 days or as indicated by the interlock device.
7. 8.	Participant is responsible for understanding how to use the ignition interlock device and will be responsible for any misuse of the device. Participant must provide proof of insurance for the vehicle equipped with the ignition interlock device. Participant must indemnify and hold harmless the State of Minnesota and any political subdivision, the Department and its officers, employees and agents from all claims, demands and actions as a result of property damage and or injury or death to persons which may arise, directly or indirectly, out of any act or omission by the participant during the use of an ignition interlock device. Participant is responsible for all cost incurred from the participant in the program.
conditions	the above the conditions and by signing this agreement understand that any violation of these may result in sanction being imposed. These sanctions may include removal from the program credit for the revocation time period spent using the ignition interlock device.
Signed	Date
Participant' Name	s: Address
Telephone	Number Email Address

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Minnesota Ignition Interlock Performance Standards

1. Scope

The purpose of this document is to establish performance standards pursuant to MN Statute, Section 171.306 subd. 3. (2008) for the approval, suspension and or revocation process and the installation, support, and removal of ignition interlock devices in the State of Minnesota. If the Department approves a device, the Department shall notify the manufacturer in writing. The state reserves the right to change these standards as additional information is received. The State of Minnesota or any political subdivision may not be held liable in any civil or criminal proceeding arising out of the use of a device approved under this document.

2. Definitions

A. The following terms have the meanings indicated.

B. Terms Defined.

- 1. "Alcohol": Ethyl alcohol, also called Ethanol.
- 2. "Alcohol concentration or AC" means the number of alcohol per 210 liters of breath.
- 3. "Alcohol Set Point" means a pre-set alcohol concentration setting that requires the ignition interlock device to perform a specific operation.
- 4. "Alveolar air" (also called "deep lung air" or "alveolar breath") means an air sample, which is the last portion of a prolonged, uninterrupted exhalation and which gives a quantitative measurement of the alcohol concentration in the breath that best represents the person's true alcohol concentration. "Alveolar" refers to the alveoli, which are the smallest air passages in the lungs, surrounded by capillary blood vessels and through which an interchange of gases occurs during respiration.
- 5. "Anti-circumvention feature(s)" means any feature or circuitry incorporated into the device that is designed to prevent human tampering which could cause the device not to operate as intended.
- 6. "Bogus breath sample" means any sample introduced into the ignition interlock device other than unaltered, undiluted and unfiltered alveolar breath delivered directly from the respiratory system of the driver of a vehicle equipped with an ignition interlock device.
- 8. "Breath alcohol analysis" means an analysis of a sample of a person's expired alveolar breath to determine the alcohol concentration
- 10. "Breath alcohol test" means the proper delivery and analysis of a person's expired alveolar breath to determine breath alcohol concentration.

- 11. "Calibrate" means to test and adjust an ignition interlock device so that it accurately measures breath alcohol concentration.
- 12. "Certification Tests" means tests performed to check the compliance of an ignition interlock device with these specifications.
- 13. "Circumvention" means an overt, conscious attempt to bypass the ignition interlock device whether providing samples other than the natural unfiltered breath of the driver, or by starting the car without using the ignition interlock device, or any other act intended to start the vehicle without first taking and passing a breath test, and thus permitting a driver with a AC in excess of the alcohol set point to start the vehicle.
- 14. "Data storage system" means an internal, computerized (battery backed) recording of all events monitored by the installed device, which may be reproduced in the form of required reports.
- 15. "Department" means the Minnesota Department of Public Safety.
- 16. "Device" means an ignition interlock device.
- 17. "Early recall" is a condition, signaled by a visual and or audible indication on the device that requires the participant to return the vehicle to the service provider for an unscheduled monitoring check.
- 18. "False Negative" means a breath alcohol concentration determination that incorrectly permits a vehicle to be started when the driver's AC is at or above the set point.
- 19. "Free restart" means ability to start the engine again, within three minutes, without completion of another breath alcohol analysis.
- 20. "Ignition interlock device" means a device that is a breath alcohol analyzer that is connected to a motor vehicle ignition. In order to start the motor vehicle engine, a driver must blow an alveolar breath sample into the analyzer which measures the alcohol concentration. If the alcohol concentration exceeds the startup set point on the interlock device, the motor vehicle engine will not start.
- 21. "Illegal start" is an event wherein the ignition interlock device-equipped vehicle is started without the requisite breath test having been taken and passed or is started when the device is in a lockout condition.
- 22. "Installation Service Center" See "Service Center."
- 23. "Installer" means an individual who has been trained by a manufacturer/service provider to install, calibrate, remove and service ignition interlock devices.
- 24. "Interlock" means the mechanism which prevents a motor vehicle from starting when the breath alcohol concentration exceeds a preset value.

- 25. "Lockout condition" is a temporary condition in which the device will not permit a breath test to be conducted and thereby prevents the participant from starting the motor vehicle.
- 26. "Manufacturer" means the actual producer of a device.
- 27. "Manufacturer's representative" means an individual and or entity designated by the manufacturer to act on behalf of or represent the manufacturer of a device.

 Manufacturer's representative is synonymous with vendor, and is synonymous with service provider.
- 28. "Mobile Service" See "Service Center."
- 29. "Motor Vehicle" means a passenger motor vehicle, including an automobile, pickup truck, truck, or van normally used for personal, family, business or household purposes that is owned or registered in the State of Minnesota. This does not include a motorcycle.
- 30. "Negative result" means a test result indicating that the alcohol concentration is less than the startup set point value.
- 31. "New device model" means an ignition interlock device that has never been approved by the Department. The new device model would be a technologically advanced device that determined by the Department has any or all of the following: a) new model name, number, and/or serial numbers; b) distinctive or different exterior casing in color, shape, size and dimension, and/or labeling; c) new, different, additional, enhanced and/or technologically advanced exterior and/or interior parts and/or components; d) new, different, additional and/or enhanced functions and capabilities related to technologically advanced performance; e) new, different, additional, enhanced, and/or technologically advanced software and/or f) new, different, additional, enhanced and/or technologically advanced software and/or firmware that directly affects, alters, enhances device functions and/or capabilities related to performance, function and capability. A device determined by the Department to be a new device model would be subject to the New Device Approval Testing process described herein.
- 32. "PBT" means a Portable Breath Tester as used by law enforcement agencies/Department of Corrections/Community Corrections.
- 33. "Permanent Lockout" is a condition in which the device will not permit a breath test to be conducted and thereby disables the operation of the vehicle until the service provider conducts an inspection and servicing of the device.
- 34. "Positive result" means a test result indicating that the alcohol concentration equals or exceeds the startup set point value.

- 35. "Purge" means any mechanism by which a device cleanses or removes a previous breath test sample from the device and specifically removes residual alcohol.
- 36. "Random retesting" See "Running retest."
- 37. "Reference sample device" is a device which simulates the alcohol concentration of an individual who has been drinking alcoholic beverages and whose alcohol concentration is reflected in an analysis of a breath sample.
- 38. "Retest set point" means a pre-set or pre-determined alcohol concentration setting, which is the same as the startup set point.
- 39. "Revocation" is the permanent removal of the approval of a manufacturer, service provider or both to install, maintain, calibrate or remove ignition interlock devices in Minnesota.
- 40. "Running retest" means after passing the test allowing the engine to start, the device shall require a second test within a randomly variable interval.
- 41. "Running retest violation" means an event, recorded in the data storage system when the running retest requirement is not met.
- 42. "Service center" or "Installation Service Center" means the physical location where service providers perform their services. Mobile service units are permitted.
- 43. "Service provider" means the person or entity representing the manufacturer(s) of an approved device and responsible for the day-to-day operations of a service center.
- 44. "Startup set point" means a pre-set or pre-determined alcohol concentration setting at which, or above, the device will prevent the ignition of a motor vehicle from operating.
- 45. "Suspension" is the temporary removal of the approval of a manufacturer, service provider or both to install, maintain, calibrate or remove an ignition interlock device in Minnesota.
- 46. "Tampering" means an overt or conscious attempt to physically disable or otherwise disconnect the device from its power source or bypass the interlock components of the device and thereby allow the operator to start the engine without taking and passing the requisite breath test.
- 47. "Upgraded device model" means an ignition interlock device that has been approved by the Department, but following such approval the manufacturer has changed, modified and/or altered any or all of the following:
 a) interior component layout and/or circuit board; b) actual wiring and/or circuitry; c) components (i.e. fuel cells, air flow sensors, microprocessors, valves, pumps, batteries, etc.); d) software and/or firmware programming that could affect the performance and function of the device (i.e. warm-up times, sampling rates, retest times, early recalls,

service warnings, etc.); e) data collection capabilities; f) service and/or maintenance programs of the device; and/or g)exterior components (i.e. dimensions, color mouthpieces, labels, wires, lights, etc.). A device determined by the Department to be an upgraded device model could be subject to any and/or all of the following processes as described herein: Device Approval/Re-Evaluation Testing; Quality Assurance Pre-Screening Testing; and Revocation/Denial of Approval of Ignition Interlock Devices.

- 48. "Violation" means any of several events including but not limited to such things as high alcohol, whether from a violation set point or from a retest set point, a running retest violation, tampering or an illegal start.
- 49. "Violation reset" means an unscheduled service of the device and download of the data storage system by the service center required due to an early recall condition.
- 50. "Violation set point" means a pre-set or pre-determined alcohol concentration setting at which, or above, the device will record the high alcohol result in the data storage system as a violation.

3. Ignition Interlock Technology Requirements

- A. Approved ignition interlock devices for use in Minnesota must have, but are not limited to, the following:
 - 1. The ignition interlock device shall have the ability to detect and record attempts to tamper, alter, or bypass the device and any violations such as an alcohol concentration equal to or above 0.020.
 - 2. The ignition interlock device shall have the ability to prevent normal operation of a motor vehicle by a participant who fails to retest or fails to appear at a scheduled monitoring appointment.
 - 3. The ignition interlock device shall issue a warning of an impending lockout.
 - 4. The ignition interlock device shall be able to analyze a specimen of alveolar breath for alcohol concentration.
 - 5. The ignition interlock device shall indicate when a sufficient sample of breath has been collected and shall indicate this by audible and/or visual means.
 - 6. The results of the test shall be noted through the use of pass/fail signals. There shall be no numerical AC level displayed.
 - 7. The ignition interlock device shall have an alcohol concentration set point of 0.020 or higher and when detected shall not permit a driver from starting their vehicle. If an alcohol level is detected which meets or exceeds the alcohol set point the device will

enter into a lockout mode. The initial lockout period shall be five minutes with subsequent lockout periods of thirty minutes.

8. The ignition interlock device must be capable of random re-testing. After passing the test and upon restarting the engine, the device shall require a second random test within 5 to 15 minutes. Third and subsequent retests shall be required at random intervals between 15 and 45 minutes from the previously requested test for the duration of travel. During the running retests, the retest set point shall be the same as the startup set point. In order to alert the driver that a retest is required a warning light, tone or both shall be activated inside the passenger compartment of the vehicle. The driver will then have 6 minutes to retest. If the engine is intentionally or accidentally shutdown after or during the warning but before retesting, the retest clock shall not be reset. The failure to take a retest shall be recorded in the data storage system as a violation and the failure to successfully complete a retest shall cause the device to prevent normal operation of the motor vehicle by activating an audible signal inside the passenger compartment of the vehicle. Three (3) of such failures will cause the vehicle to enter into an early recall condition.

Failure to take a random re-test or random re-tests resulting in ACs equal to or exceeding 0.020, must not sound the vehicle horn nor any type of siren, bell, whistle or any device emitting a similar sound or any unreasonably loud or harsh sound that is audible outside of the vehicle and must not cause the engine of the vehicle to shut off.

- 9. Three (3) failures to take a retest shall cause the device to enter into an early recall condition.
- 10. The startup set point value for the interlock device shall be an alcohol concentration of 0.020. The accuracy of the device shall be plus or minus 0.005 grams of alcohol/210 liters of breath. The accuracy will be determined by analysis of an external standard generated by a reference sample device.
- 11. The device must operate between -40 degrees Celsius and +70 degrees Celsius.
- 12. The ignition interlock device shall operate at altitudes up to 2.5 KM above sea level.
- 13. The ignition interlock device's operation shall not be significantly affected by humidity, dust, electromagnetic interference, radio frequency interference, or normal automobile vibration.
- 14. The ignition interlock device's operation shall not be affected by normal fluctuations of power source voltage.
- 15. The ignition interlock device, after successful completion of a breath alcohol test, shall enable the ignition relay. The ignition interlock device shall allow three (3) minutes from the time the ignition is enabled to start the vehicle. The ignition interlock device shall allow the vehicle to be restarted within three (3) minutes of a stall without requiring an additional test.

- 16. If the initial test results in a lockout, due to the operator's AC level, the device shall not allow an additional attempt for five minutes. If the operator's AC remains higher than the specified set point, the device shall lockout for an additional thirty (30) minutes.
- 17. If the result of the retest is higher than the fail point, the device shall prevent normal operation of the vehicle by activating an audible signal inside the passenger compartment of the vehicle and entering into an early recall condition.
- 18. The ignition interlock device must be capable of thwarting attempts at evasion or circumvention with the use of bogus or filtered breath.
- 19. A test of alcohol-free samples shall not yield a positive result. Endogenously produced substances capable of being present in the breath shall not yield or significantly contribute to positive results.
- 20. The ignition interlock device shall have the following operational features:
 - a. The device shall be designed to permit a free restart of a motor vehicle's ignition within three minutes after the ignition has been shut off, without requiring a further alcohol analysis. The free restart function shall be checked by the service provider during each service.
 - b. The device shall also automatically purge alcohol before allowing subsequent analyses.
 - c. In addition to the operational features of these specifications, the Department may impose additional requirements, as required by law or as needed, depending upon design and functional changes in device technology.
- 22. The device shall be designed so that anti-circumvention features will be difficult to bypass.
 - a. Anti-circumvention provisions shall include, but not be limited to, prevention or preservation of evidence of cheating by attempting to use bogus or filtered breath samples or bypassing the breath sampling requirements of the device electronically.
 - b. The device may use special seals or other methods that record attempts to bypass anticircumvention provisions.
 - c. The device shall be checked for evidence of tampering during each monitoring service.
 - d. When evidence of tampering is discovered, the manufacturer/service provider headquarters shall be notified in writing by the service center and the records shall be made available immediately to the Department or its designee(s).

- 23. A warning label containing the following language shall be affixed to each device: "Any individual tampering, circumventing, or otherwise misusing this device may be subject to a minimal sanction of removal from the program." The cost and supply of the warning labels to be affixed to the ignition interlock devices shall be borne by the manufacturer. The manufacturer shall submit to the department a prototype of the warning label for approval.
- 24. The device shall record any attempt to start the vehicle without first taking the breath test, such as the use of an electrical bypass.
- 25. The device shall warn the driver of upcoming routine service appointments for five days prior to the appointment. Should the participant fail to appear, the device shall enter into a permanent lockout condition after a five-day grace period and the vehicle shall not be operable until the service provider has reset the device.
- 26. The ignition interlock device must have a data storage system that does the following: (1) has sufficient capacity to facilitate the recording and maintaining of all daily driving activities and all monitoring requirements for the period of time elapsed from one maintenance and calibrating check up to the next 70 days; (2) records any attempt to start the vehicle without first taking a breath test, such as the use of an electrical bypass; (3) has an internal memory that can store a minimum of three thousand five hundred (3500) events and shall enter a service reminder if the memory reaches ninety percent (90 percent) of capacity or has the capacity of store a minimum of ten thousand (10,000) events; and (4) warns the driver of an upcoming routine service appointment and if the driver fails to appear, the device enters into a permanent lockout condition after a five-day grace period and disables the vehicle until a service provider resets the device.
- 27. The ignition interlock device alcohol detection sensor shall be based upon electrochemical fuel cell technology or other advanced technology approved by the Department.
- 28. The device must be capable of entering into an early recall condition. When the early recall condition is initiated, the participant will have five days to return to the service center. If the participant does not return within this time period, the device will enter into a permanent lockout condition. Violations resulting in an early recall include any of the following: a) two (2) lockouts due to alcohol readings above the startup set point; b) three (3) running retest violation of failure to take a test; c) one (1) running retest violation of a positive AC use; d) one (1) event of tampering; e) one (1) illegal start violation; f) any equipment malfunctioning and g) any other violation of restrictions placed upon the offender. The data storage system must record and store all violations, attempts to tamper with the system and all illegal starts.
- 29. Failure of the manufacturer, service provider or both to abide by the terms and conditions contained within this section may result in suspension or revocation of the approval of the device.

4. Ignition Interlock Approval

A. New Ignition Interlock Approval:

- 1. Manufacturers applying for approval on all new devices must follow the application process as described in the subsequent sections of these performance standards. Prior to final approval, the Department reserves the right to conduct actual device testing by a Department specified designee and either approve or reject an ignition interlock device based upon the results of the testing.
- 2. No device may be leased, sold, serviced, repaired, installed or used unless the device has been approved, tested or both by the Department in accordance with Minnesota's ignition interlock performance standards.

5. Manufacturer's Application Procedure

- A. The manufacturer shall provide to the Department a signed statement that the manufacturer and the manufacturer's service providers/installation service centers meet all of the specifications described in this document.
- B. The manufacturer shall provide to the Department for each device submitted for approval, a written precise set of specifications which describe the features of the device relevant to the evaluation of its performance, a written set of detailed operating instructions including installation and removal, a written copy of the program participants' reference and problem-solving guides, and the 24-hour toll-free emergency service telephone number.
- C. The manufacturer of the device shall carry product liability insurance with minimum liability limits of 1 million dollars per occurrence, with 3 million dollars aggregate total and provide proof of insurance to the Department at the time of application for approval of the device, or at any other time upon request by the Department, its designee or both. The liability covered shall include defects in product design and materials as well as in the work of manufacturing, calibrating, installing, and removing the devices. The proof of insurance shall include a statement from the insurance company that 30 days' notice will be given to the Department before cancellation of the insurance.
- D. The manufacturer shall provide a signed statement that the manufacturer will indemnify and hold harmless the State of Minnesota and any political subdivision, the Department and its officers, employees and agents from all claims, demands and actions as a result of property damage and or injury or death to persons which may arise, directly or indirectly, out of any act or omission by the manufacturer or their representative relating to the installation, service, repair, use and or removal of an ignition interlock device.
- E. The manufacturer shall provide to the Department, its designee or both and to program participants a Warranty of Performance to ensure responsibility of support for service within 48 hours after a report of a problem. This support shall be available for the duration of the

period during which the device is required to be installed in a program participant's vehicle(s).

- F. The manufacturer shall also provide to the Department, its designee or both a list of its vendors/installation service centers operating within the State of Minnesota, including the vendor's/installation service center's name, business address, phone number, fax number and e-mail address. If the manufacturer plans to utilize one or more mobile service centers they must explain in writing to the Department, its designee or both how the mobile service centers will be utilized and the locations that will be served in accordance with the definition of "service centers" or "installation service centers." The manufacturer shall immediately notify the Department, its designee or both of any changes made to this list. Failure to notify the Department, its designee or both in a timely manner, within 30 days, may result in suspension, revocation, or denial of certification or approval of the device in Minnesota.
- G. A manufacturer or manufacturer's representative must submit to the Department a written request for approval. The Department may decline to review requests for approval on ignition interlock devices that have been previously evaluated and found unacceptable. In the event of non-approval, subsequent and or additional requests for approval may be limited by the Department. The Department shall not be required to engage in research and development procedures involving interlock devices.
- H. Accompanying the request for approval for each device, there must be a notarized letter and or affidavit from an independent third party testing laboratory dated, subsequent to the release of these performance standards, specifically certifying that the submitted device by model and or class meets or exceeds all requirements set forth in these specifications, and must at a minimum meet the National Highway Traffic Safety Administration (NHTSA) guidelines/specifications as published in the Federal Register Volume 57, Number 67, Tuesday April 7, 1992, pages 11772-11787 or any subsequent revisions. This affidavit shall specifically and individually include each of the following:

- 1. The name and location of the independent testing laboratory.
- 2. The address and phone number of the testing laboratory.
- 3. The qualifications and experience of the testing laboratory and the names and qualifications of the individuals actually performing the tests.
- 4. A certified summary which demonstrates that all of the following tests have been performed on the device. For specific testing information refer to the Federal Register information as referenced in above paragraph H.
 - a. Accuracy Tests for Safety Specification-Unstressed
 - b. Accuracy Tests for Safety Specification-Stressed
 - c. Breath Sampling Tests
 - d. Calibration Stability Tests
 - e. Lockout Evaluation Tests
 - f. Power Tests
 - g. Temperature Ranges Tests
 - h. Temperature Extremes Tests
 - i. Vibration Tests
 - j. Post Shake Damage Inspection Tests
 - k. RFI/EMI Tests
 - 1. Tampering/Power Loss Tests
 - m. Tampering/Circuit Tests
 - n. Circumvention/Non-human Sample Tests
 - o. Circumvention/Filtered Sample Tests
 - p. Circumvention/Rolling Retest Tests
 - q. Sample Free Restart Tests
 - r. Data Recorder Tests

- s. Accuracy/Precision for Utility Specification-Unstressed Tests
- t. Stressed Utility Tests
- U. Clearance Rate Tests
- v. Warm Up Tests
- w. Display Readability Tests
- x. Display User Feedback Tests
- y. Display Warning Tests
- z. Low Temperature Provisions Tests
- aa. Altitude Tests
- bb. AC Readout Tests (Optional)
- cc. Sample Acceptability Tests (Optional)
- dd. Smoke Tests (Optional)
- ee. Dust Tests (Optional)
- ff. Alert Conditions Tests (Optional)
- 5. A detailed list of all equipment used during the testing process including the following information:
 - a. Name of Equipment or Apparatus
 - b. Manufacturer
 - c. Part Number
 - d. Serial Number
 - e. Calibration Date (when applicable)
- 6. Descriptions and explanations of the actual certified tests conducted and/or completed copies of the raw data from such tests and the results from such tests that verify the ignition interlock device accurately, regularly and reliably performs each of the device technology requirements stated above. (See performance standard number 3.)

- I. The manufacturer shall provide a serial number inventory of at least 50 devices from which the Department may select a minimum of two and as many as five for compliance testing conducted by the Department, its designee or both.
- J. If a device is submitted for approval by a party other than the manufacturer, the submitting party shall submit a notarized affidavit from the manufacturer of the device certifying that the submitting party is an authorized manufacturer's representative; and it is agreed and understood that any action taken by the Department or any cost incurred in accordance with the provisions of these specifications shall ultimately be the responsibility of the manufacturer.
- K. The manufacturer or its authorized representative assumes all costs and responsibilities for the Manufacturer Application Procedure, as described herein.
- L. Only after the Department has received all the documentation described herein, will the Department determine the suitability and reliability of the submitted device and consider it for approval. The Department also reserves the right to request additional documentation as required.
- M. Failure of the manufacturer to meet the requirements contained within this section may result in rejection of manufacturers' application by the Department. The Department reserves the right to limit or restrict future applications for device approval by manufacturers.

6. Manufacturer's Requirements Upon Device Approval

- A. The manufacturer shall notify the Department, its designee or both in writing if the certification and or approval of a device that is approved for use in Minnesota is or has ever been suspended, revoked or denied in another state, whether such action occurred before or after approval in Minnesota or if and when an appeal to the action(s) was made and the outcome of the appeal. This notification shall be made in a timely manner, not to exceed 30 days, after the manufacturer has received notice of the suspension, revocation, or denial of certification or approval of the device, whether or not the action is or has been appealed. Failure to notify the Department may result in suspension, revocation, or denial of approval of the device in Minnesota.
- B. The manufacturer shall be responsible for providing uninterrupted service of installed devices as defined by these specifications regardless of the circumstances which could cause such interruption. Should the manufacturer become unable to comply with any of these specifications or if certification is revoked for any other reason, the manufacturer shall notify the Department, its designee or both in writing. The manufacturer shall also be responsible for removing its devices from program participants' vehicles and shall bear the cost of having them replaced with an approved device from another manufacturer.
- C. All ignition interlock installation, service and removal must be performed at an installation service center. Mobile service units are permitted. However, the manufacturer

may provide only mobile service where the reduced number of eligible clients would place an undue financial burden on the manufacturer to maintain stationary service centers. Mobile service is permitted throughout the entire State of Minnesota in emergency situations or cases involving extenuating circumstances when it is not possible for a client to travel to a stationary service center for device maintenance. Mobile units will be held to the same security and procedural standards as stationary service centers. The Department may deny, suspend or revoke a manufacturer's/service centers permission to perform mobile service if the mobile units fail to meet required specifications.

- D. Manufacturers are not permitted to ship interlock equipment to the participants' residences under any circumstances.
- E. The manufacturer shall immediately notify and inform in writing the Department and its designee of any modifications or alterations to an approved device, its interior and exterior design, its parts, and or its operating firmware and or software.
- F. In the event that a manufacturer is introducing an upgrade or modification(s) to a currently approved device, the manufacturer must provide the Department, its designee or both with a comprehensive plan of action for the phasing out of the use of the older device. This plan of action must be approved by the Department prior to the deployment of the action plan.
- G. The manufacturer agrees to cooperate with the Department regarding its request for information relative to the approved device and to provide expert testimony as necessary at no costs to the State of Minnesota or any political subdivision, the Department or its officers, employees or agents.
- H. Failure of the manufacturer and or service provider to abide by the terms and conditions stated in paragraphs A through G above may result in suspension or revocation of the approval of the device.

7. Requirements of the Manufacturer's Service Provider

A. Installation Requirements:

- 1. The service provider/installation service center must install ignition interlock devices according to the following guidelines:
 - a. A service provider/installation service center must inspect all motor vehicles prior to installation to determine that mechanical and electrical parts of the motor vehicle that are and will be affected by the ignition interlock device are in acceptable condition and no device(s) shall be installed until the motor vehicle(s) is capable of such installation.

- b. Installations shall be made in a professional manner in accordance with acceptable industry standards. All electrical connections made between the device and the motor vehicle shall be made permanent, such as soldering or scotch locks.
- c. Each installation shall include all of the tamper resistant features required by the manufacturer/service provider and the Department which include, but which are not limited to the following:
 - (1) A unique and identifiable covering such as seal, epoxy or resin at all exposed electrical connections used to install the device, which are not inside a secured enclosure
 - (2) Connections to the motor vehicle shall be installed under the dash or in an inconspicuous area of the motor vehicle.
 - (3) A unique and easily identifiable tamper seal, epoxy, or resin at all openings (except the breath and exhaust openings) and on any portion of the hand-held unit, control and support units that can be disconnected, except in cases where the design of the device allows for the removal of the hand-held unit.
- 2. Upon completion of an installation of a device(s), the service provider/installation service center shall submit an installation certificate plus the participant's full name, date of birth, driver license number and any other required or appropriate information to the state.
- 3. The installation service center shall calibrate each device using a "reference sample device" at a threshold determined by the concentrations level of either the premixed alcohol reference solution or a dry gas standard before the device is installed into a vehicle. Calibration materials must be stored in such a manner that they are not exposed to excessive heat or cold conditions which may compromise the integrity of the calibration process.
- 4. Installations shall be conducted only by individuals trained by the manufacturer/service provider.
- 5. Manufacturers of approved devices shall disseminate to its service providers and or installation service centers copies of the ignition interlock performance standards established by the Minnesota Department of Public Safety.
- 6. Manufacturers of approved devices shall develop written instructions for the installation and removal of ignition interlock devices which service providers/installation service centers shall follow. A copy of these instructions shall be disseminated to and kept onsite by the service provider/installation service center(s).
- 7. Each device shall be provided with disposable mouthpieces. The manufacturer shall ensure the availability of additional mouthpieces, and the service provider/installation

- service center(s) must keep an adequate inventory, which will be made available to the program participant(s).
- 8. The device shall be installed in a manner that it does not interfere in the safe operation of the vehicle when starting the motor vehicle or while the vehicle is being driven.
- 9. Service providers must request specific written permission from the Department to lower the air volume for a breath sample on a device for participant(s) with diminished lung capacity. Permission is granted on a case-by-case basis. To be considered, the service provider must submit a written request to the Department, its designee or both which includes the following:
 - (a) Participant's name
 - (b) Participant's address
 - (c) Participant's driver's license number
 - (d) Documentation from a licensed physician verifying and explaining the extent of the participant's diminished lung capacity and the need for a lowered air volume for a breath sample on the device.
- B. User Orientation and Support The service provider must provide efficient and effective service to the participants of the program according to the following guidelines:
 - 1. An orientation on the use of the ignition interlock device shall be developed by the manufacturer/service provider for program participants and any other persons who will operate the motor vehicle(s).
 - 2. The service provider shall conduct such an orientation at the time of installation, and shall train participants and any other persons who will drive the motor vehicle(s) on the use of the ignition interlock device, as well as demonstrate and provide written instructions on how to clean and care for the ignition interlock device.
 - 3. A reference and problem solving guide shall be developed and given to participants at the time of installation. The guide shall include information on the location of service centers, servicing procedures, emergency procedures and a conspicuous warning that the device detects non-compliance. In addition, the guide should include the type of motor vehicle malfunctions or repairs that might affect the ignition interlock device and the procedures to follow when such repairs are necessary.
 - 4. The service provider shall be available to answer all questions and handle any mechanical problems relating to the device in the motor vehicle or repair or replace an inoperable or malfunctioning ignition interlock device during normal business hours.

- 5. The service provider shall provide a twenty-four (24) hour toll-free phone number to all participants for emergencies resulting from the operation or use of the ignition interlock device.
- 6. All service inquiries shall be responded to within twenty-four (24) hours of the initial contact. Within forty-eight (48) hours of initial contact, repair or replacement of the ignition interlock device shall be completed. Furthermore, any changes or alterations to the device shall be reported to the Department within forty-eight (48) hours of its occurrence.
- C. Service and Monitoring Requirements The service provider/installation service center must provide effective and efficient regularly scheduled maintenance to participant's motor vehicle(s) on which an ignition interlock system is installed and convey the necessary information from the ignition interlock device to the Department, its designee or both according to the following guidelines:
 - 1. Servicing, inspection and monitoring of each device shall occur within thirty (30) days after the initial installation and every thirty (30) days thereafter.
 - 2. The service provider/installation service center shall perform a calibration check of the device at each monitoring to verify that the device measures an approved reference sample within plus or minus .005 grams of alcohol/210 liters of the known concentration of the reference sample. Service provider/installation service centers that utilize a wet bath standard must store calibration solution(s) in an environment that protects the solution(s) from extremes in temperature. If the result of the calibration check is not within this tolerance range, the service provider/installation service center must recalibrate or replace the device at the time of monitoring.
 - 3. The service provider shall maintain records on every participant including results of every monitoring check. Records may be maintained electronically.
 - 4. Within one (1) business day of performing the monitoring check, the service provider shall report to the Department, its designee or both, any evidence of:
 - (a) Altering, tampering with, bypassing, or unauthorized removal of the device.
 - (b) Any failure to abide by the terms and conditions of the program, including failure to appear for the monitoring visit within the five-day grace period.
 - (c) Any indications of any non-compliance, such as failed or missed tests, or failure to comply with regularly scheduled maintenance.
 - 5. Within five (5) business days from performing the monitor check, the service provider will provide a full data log report to the state or its designee. This data will be provided electronically via email, web-browser, fax or mail.

- D. Facility and Personnel Requirements A manufacturer's vendor/service provider must establish installation service centers and employ personnel according to the following guidelines:
 - 1. Adequate security measures shall be taken by each manufacturer/service provider at its installation service center to ensure that unauthorized personnel cannot gain access to secured materials.
 - 2. Installation service centers shall be operated in such a manner that the program participant or any other unauthorized personnel cannot witness the installation and or servicing of the ignition interlock device.
 - 3. The service provider must take corrective action within 48 hours to eliminate reoccurrence, if an ignition interlock report is received that indicates alcohol use by installation personnel.
 - 4. A service provider/installer cannot provide service for more than one ignition interlock manufacturer.
 - 5. Personnel who work for the manufacturer/service provider at the installation service centers and who install, calibrate, perform tamper inspections or perform reporting duties may not have been convicted of a crime substantially related to the qualifications, functions, and duties related to the installation and inspection of the devices. This may include, but is not limited to, persons:
 - (a) Convicted of any alcohol or drug-related offense within the last 3 years or currently on probation for such conviction.
 - (b) Convicted of more than one alcohol or drug-related offense overall.
 - (c) Convicted of probation violation.
 - (d) Convicted of perjury, forgery, sworn or unsworn falsification.
 - (e) Convicted of tampering with an ignition interlock device.
 - 6. Manufacturers/service providers must conduct an annual criminal record check through the Minnesota Bureau of Criminal Apprehension and conduct a driver's license record check of all personnel (as described above) employed in Minnesota and make appropriate reports to the Department and/or its designee no later than the first day of July. Such checks for newly hired personnel shall be conducted within thirty (30) days of their start date. The Department, its designee or both reserves the right to spot check such records in the event of any discrepancies.
 - 7. In the event that a relevant criminal history is discovered, the manufacturer/service provider has 30 days to remove that employee from any device installation, calibration and/or removal and data storage system downloading duties. Failure on the part of the

- manufacturer/service provider to take this action may result in suspension or revocation of approval of a device in Minnesota.
- 8. Personnel shall be trained by the manufacturer/service provider to install, calibrate, monitor, upload data and remove the device.
- E. Evaluations, Reports and Information Dissemination The manufacturer or manufacturer's service provider will be responsible for providing information requested by the Department, its designee or both regarding the program's participants' usage of the device, device and/or service complaints or concerns, technical problems encountered with the device, or any other information that is available. In addition, the service provider has the responsibility of disseminating information about its device to the public.
 - 1. A written summary of all complaints received and corrective actions taken by the manufacturer/service provider shall be provided to the Department, its designee or both on a quarterly basis. The actual reporting forms and or reporting format will be provided by the Department or its designee. Generally, the complaints shall be categorized by:
 - (a) Customer error or operation.
 - (b) Faulty automotive equipment other than the device.
 - (c) Apparent misuse or attempts to circumvent the device.
 - (d) Device failure due to material defect, design defect, workmanship errors in construction, installation, or calibration.
 - 2. No later than the 15th day of each month, all manufacturers/service providers will provide a written report to the Department, its designee or both of all devices installed and/or removed at its installation service centers during the previous month. This report shall contain the program participant's name and address, date of birth, driver's license number, County of jurisdiction, date of device install and/or removal, and reason for removal, or any other pertinent information (i.e. the total number of active program participants, installations, participants that have completed the program, participants that have voluntarily removed the device, miles driven, number of breath tests, tests resulting in ACs equal to or higher than 0.020 percent, attempts to tamper and time of day when high ACs occur) as requested.
 - 3. The manufacturer/service provider shall inform the Department, its designee or both in writing of any modifications or adjustments to the ignition interlock device, including changes or modifications to firmware or software, undertaken by the manufacturer.
 - 4. The manufacturer/service provider shall provide to the Department, its designee or both proof of installation of the device in a participant's vehicle(s) and the results of servicing and monitoring of such devices.

- 5. The manufacturer/service provider shall provide public information to interested applicants concerning the device and costs of the program.
- 6. The manufacturer/service provider/installation service center shall immediately notify the Department, its designee or both if it becomes aware of a motor vehicle accident involving a vehicle equipped with an ignition interlock device. The manufacturer/installation service center shall provide the name of the program participant, the jurisdiction in which the incident occurred, the name of the investigating officer(s), whether there is evidence of tampering or circumvention of the device, whether or not there is suspicion or evidence of alcohol or other substances involved in the incident, whether there is evidence that a device malfunction occurred and was a factor in causing the accident, if there is pending litigation due to injuries or death resulting from the accident and any other relevant information. The manufacturer/service provider/installation service center shall cooperate with the Department, its designee or both, and provide either entity, in a timely manner, a written report of any and all circumstances of such incidents.

F. Removal of the device

- 1. All device removals must be done in an expedient manner and the vehicle(s) returned to normal operating condition. All scotch locks associated with the installation of the device must be removed and all severed wires must be permanently reconnected by soldering and insulated with heat shrink tubing.
- 2. No manufacturer/service provider/installation service center shall remove another manufacturer's device without the written consent of that manufacturer prior to the removal of the device.
- G. The service provider must have the manufacturer's approval for use of a particular approved device either through purchase, lease agreement or rental agreement. A service provider may not continue to install, maintain or remove ignition interlock devices if they have been so notified by the manufacturer.
- H. Failure of the manufacturer and or service provider to abide by the terms and conditions as stated in the preceding paragraphs A-G may result in suspension or revocation of the approval of the device.

8. Revocation/Denial of Approval of Ignition Interlock Devices

- A. The Department may deny, suspend or revoke approval of a device, and remove it from the list of acceptable devices, upon any of the following grounds:
 - 1. Evidence of repeated device failures due to defects in design, materials, or workmanship during manufacture.

- 2. Termination or cancellation of manufacturer's liability insurance along with failure of the manufacturer to carry the specified amount of liability insurance.
- 3. Request of the manufacturer to remove a device from the list of approved devices.
- 4. Any finding that the manufacturer, its service provider, or any one of its installation service centers is not in compliance with the provisions of these specifications, regulations or other applicable law.
- 5. Providing materially false or inaccurate information relating to a device's performance standards, by a manufacturer, service provider or installation service center representative.
- 6. Failure to submit reports to the Department, its designee or both.
- 7. Discontinuance in the business of manufacturing devices.
- 8. Any other reasonable cause to believe that the device was not accurately represented to meet performance standards.
- 9. Failure of the manufacturer/service provider to notify and inform in writing the Department, its designee or both of any device modifications or alterations (i.e. firmware and/or software changes or upgrades).
- 10. Failure of the manufacturer/service provider to notify and inform in writing the Department, its designee or both when an approved device has been denied approval, has been revoked, or has been suspended in any other state.
- B. The effective date of suspension or revocation shall be 30 days after notification is sent to the manufacturer via certified mail, except in cases where the Department determines immediate suspension or revocation is necessary for the safety and welfare of the citizens of the Minnesota.
- C. Manufacturers may request the Department to review a revocation of its participation in the Minnesota ignition interlock program. This request shall be submitted to the Department, in writing, within 30 days of the revocation.
- D. Upon suspension, revocation, or voluntary surrender of an approval to participate in the Minnesota ignition interlock program, a manufacturer shall notify each of its service providers/installation service centers to cease to install that model or class of device(s) in any and all program participant's motor vehicle(s) upon the effective date of the suspension, revocation, or voluntary surrender.
- E. Upon revocation or voluntary surrender of an approval, the manufacturer shall be responsible for removal of all affected like devices from program participant's motor vehicle(s). All reporting requirements concerning data recorded by each of the affected like devices must be met and appropriate records forwarded to the Department, its designee or both.

- F. The manufacturer shall be responsible for any costs connected with removal of its revoked device(s) from a program participant's motor vehicle(s) and the installation of a new device(s) from the Department's list of approved devices.
- G. Upon notice of suspension or revocation of approval, the manufacturer shall ensure minimal inconvenience to the affected customers by removing their device(s) during the customers' regularly scheduled monitoring appointments.
- H. Upon notice of immediate suspension or revocation that involves device malfunction, gross negligence or any other situation that could potentially place program participants, other citizens of Minnesota or both in danger, the manufacturer will notify all program participants in writing within 24 hours of receiving notice so that they may return to the service centers for device removal.
- I. In the event of revocation of a manufacturer's device, the Department has the right to deny or limit subsequent, additional and or new submissions for approval of any device from said manufacturer.

9. Other Provisions

- A. The Department, its designee or both reserves the right to observe the installation and service of any approved device(s).
- B. The Department, its designee or both reserves the right to periodically request statistical data regarding driver/equipment performance, with the guarantee that individual drivers' names and addresses will not be specifically identified.
- C. The Department reserves the right to modify these specifications based upon the needs of the Department.
- D. The Department reserves the right, at any time, to request additional information from Manufacturer, its service provider(s), or its installation service centers concerning an approved device which may lead to re-evaluation of the approval of the device.

10. Variance Procedures

- A. Request for a variance procedure A person or licensee who wants to obtain a variance from the Performance Standards pertaining to ignition interlock must submit a request to the Department of Public Safety in a format prescribed by the department. The request must contain, at a minimum, the following information and documents:
 - 1. The nature, extent, and reason why the variance is being requested.
 - 2. Any supporting documentation necessary to describe the proposed variance.

- 3. A statement addressing the criteria in subpart C of this provision.
- B. Procedure for Variance Requests The policy committee must approve or deny a variance request according to the following procedures:
 - 1. Upon receipt of a variance request, the policy committee must notify all persons who have requested the variance with the committee the time, date, and place of the policy committee meeting at which the variance will be considered. The policy committee must not act on the variance request until at least ten days after the person or licensee has received the notice. The policy committee will consider variance requests during a scheduled meeting.
 - 2. The policy committee may request the person or licensee to submit additional information regarding the variance request. This procedure is not a contested case hearing as defined in Minnesota Statutes, chapter 14.
 - 3. If the person or company requesting the variance fails to follow the procedures in this part the policy committee must deny the variance request.
 - 4. Within five days after the policy committee meeting at which the request was considered, the committee must notify the person or licensee in writing of the reasons why the request was approved or denied. The policy committee must also notify other persons who submitted written comments to support or oppose the request.
- C. Criteria for Approving and Denying Variance Requests -The policy committee may approve a variance from any of its rules if it finds that all of the following criteria have been met:
 - 1. Strict application of the rule would cause undue and substantial hardship to the person or company applying for the variance.
 - 2. Approving the variance does not confer a benefit on the person or licensee which is not enjoyed by other persons similarly situated.
 - 3. Approving the variance does not substantially impair the intent and purposes of the performance standards.
 - 4. The variance can be approved without impacting the integrity of ignition interlock program, or the public health, safety, or welfare.
 - 5. Approving the variance does not allow violation of Minnesota Statutes, chapter 171.305 or 171.306.
 - 6. The variance is for a onetime variance, not an ongoing variance of the performance standards.

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