# IMPAIRED DRIVING IN RURAL JURISDICTIONS: PROBLEMS AND SOLUTIONS

## Working Group on DWI System Improvements

## The Traffic Injury Research Foundation

The mission of the Traffic Injury Research Foundation (TIRF) is to reduce traffic-related deaths and injuries. TIRF is an independent, charitable road safety research institute. Since its inception in 1964, TIRF has become internationally recognized for its accomplishments in identifying the causes of road crashes and developing program and policies to address them effectively.



Anheuser-Busch

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# PROLOGUE

## About the Working Group

The Working Group on DWI System Improvements is a prestigious coalition of senior leaders of organizations representing frontline professionals in all segments of the criminal DWI system (law enforcement, prosecution, judiciary, supervision, and treatment). This coalition was formed in 2003 to advance the recommendations stemming from the DWI[1] System Improvements report series, previously funded by Anheuser Busch.

During its ten-year tenure, this distinguished consortium has shaped the focus on and development of drunk driving initiatives in the United States with its unique perspective on knowledge transfer of critical research findings, as well as the translation of legislation, policies, and programs into operational practices. The Working Group is a recognized source of institutional knowledge and expertise that has become a valuable resource to practitioners, agency administrators, and policymakers across the country.

The efforts of the Working Group on DWI System Improvements have served to identify critical system needs, to make needed educational materials available, to articulate the complex issues associated with program and policy implementation embedded within broader systems, and to give voice to the concerns of practitioners in the DWI system. It has a strong focus on achievable solutions.

Since 2004, the Working Group has met annually to produce much-needed educational primers, policy documents and guides for justice professionals to help strengthen the efficiency and effectiveness of the DWI system for dealing with persistent impaired driving offenders. These documents are briefly described below and are can be accessed at www. dwiwg.tirf.ca.

> **2004** – A complete inventory of current activities and available resources in priority areas was produced by the Working Group. It also proposed needed enhancements in conjunction with principles to guide future initiatives. (See: Working Group on DWI System Improvements: Proceedings of the Inaugural Meeting).

> **2005** – The Working Group showcased model programs and explored opportunities to expand such programs in both urban and rural jurisdictions.

> **2006** – The Working Group produced two influential reports highlighting the experiences of practitioners with interlock programs and the challenges they face, as well as a guidebook for policymakers to assist them with leading a review of the DWI system. (See: A Criminal Justice Perspective on Ignition Interlocks; 10 Steps to a Strategic Review of the DWI System: A Guidebook for Policymakers).

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[1] The abbreviation DWI (driving while intoxicated or impaired) is used throughout this report as a convenient descriptive label, even though some states use other terms such as OUI (operating under the influence) or DUI (driving under the influence), and in some states they refer to different levels of severity of the offense. We have used DWI not only to maintain consistency throughout the report but also because it is more descriptive of the offense usually associated with drunk drivers.

> **2007** – The Working Group developed a comprehensive and much needed resource for practitioners on screening, assessment, and treatment. A second tool that was developed helped agencies gauge and improve communication and the coordination of activities. (See: Screening, Assessment, and Treatment: A Primer for Criminal Justice Practitioners; Improving Communication and Cooperation).

> **2008** – The Working Group created an agenda of impaired driving priorities based on a practitioner perspective to inform discussion regarding the re-authorization of the Federal Highway Bill. (See: Impaired Driving Priorities: A Criminal Justice Perspective).

> **2009** – The Working Group produced a series of brief documents that highlighted critical data gaps in impaired driving systems and available funding sources. (See: Impaired Driving Data: A Key to Solving the Problem; Funding Impaired Driving Initiatives; Understanding Drunk Driving).

> **2010** – The Working Group produced a brochure series on proven strategies to reduce impaired driving that combined research evidence with implementation strategies to inform decision-makers about what it takes to make these strategies work. (See: Effective Strategies to Reduce Drunk Driving).

> **2011** – The Working Group focused its attention on the importance of performance measures in the criminal impaired driving system and identified opportunities to strengthen these measures in all segments of the DWI system. (See: Performance Measures in the DWI System).

> **2012** – The Working Group focused its attention on the magnitude and characteristics of the impaired driving problem in rural jurisdictions across the United States. (See Impaired Driving in Rural Jurisdictions: Problems and Solutions).

> **2013** – The Working Group discussed the ability of U.S. jurisdictions to regularly monitor their progress in reducing impaired driving and developed a monitoring tool: the DWI Dashboard. An emphasis was placed on identifying indicators that collectively could provide a more complete understanding of a jurisdictional progress, or insight into why progress is or is not occurring. (See: DWI Dashboard Report: A Tool to Monitor Impaired Driving Progress).

> **2014** – The Working Group focused on developing the key components of a strategic plan to address each of the DWI system gaps identified by the Dashboard, which was created in 2013.

# 1. INTRODUCTION

Impaired driving has remained a dominant road safety priority and focus of concern in the United States during the past three decades. Strategies to reduce this problem have emerged along a continuum that has spanned prevention and education; legislation and enforcement; and penalties, supervision and rehabilitation for offenders. As a consequence, a 23% decline in impaired driving deaths in the past decade has been achieved and a new low of 10,076 deaths was reached in 2013.

It must be underscored that the progress that has been achieved has not been uniform across or even within jurisdictions. Reductions in impaired driving fatalities have been more pronounced in urban centers as opposed to rural areas, although the magnitude of the problem in terms of sheer numbers remains considerable. A closer examination of impaired driving laws, programs and policies in the United States reveals that urban centers tend to be better equipped to implement proven strategies to reduce impaired driving as compared to their rural counterparts for a whole host of reasons. As such, while there is a tendency to focus on differences between individual states, the differences between rural and urban areas should not be overlooked as jurisdictions seek to achieve progress in tackling this problem.

## 1.1 Objectives and scope

The objective of this report is to provide a comprehensive overview of the current status of impaired driving in rural jurisdictions-- not only to raise awareness about it, but also to provide a foundation for informed discussion. It is essential that this facet of the impaired driving problem becomes part of every conversation in which strategies to reduce impaired driving are proposed, developed and implemented.

This report describes the context and features of the impaired driving problem in rural areas and highlights some of the barriers to progress. It also contains a summary of some of the diverse strategies that have been implemented by jurisdictions. Finally, this report provides practical guidance in relation to operational practices that can enhance impaired driving programs in rural areas, and describes some of the most salient research issues that need to be addressed in the next decade. In particular, the following questions are addressed:

> How serious is the impaired driving problem in rural jurisdictions?

> What are the characteristics and features of rural jurisdictions that must be considered during the implementation of impaired driving strategies?

> What are examples of impaired driving strategies that have been developed for rural jurisdictions?

> What lessons have been learned from existing impaired driving strategies?

> What research is needed to inform future practice?

## 1.2 Defining the problem

A main challenge inhibiting the discussion of impaired driving in rural jurisdictions has been the inability to adequately define the term "rural jurisdiction." The generally accepted definition of this term in fact describes what a rural jurisdiction is not. According to the U.S. Census Bureau, a rural area is defined as an area that "encompasses all population, housing, and territory not included within an urban area" (U.S. Census Bureau 2013). In other words, a rural area is any area that is not considered an urban area or that consists of "densely settled territory that contains 50,000 or more people, and at least 35,000 people in an urban area must live in an area that is not part of a military reservation". As a consequence, the challenge associated with this definition has had important implications for our ability to define rural jurisdictions generally, and the magnitude of impaired driving in rural jurisdictions specifically.

Results of the American Community Survey reveal that approximately 75 million Americans, or almost 25% of the population in the US, reside in rural areas. In this instance, "urban" is defined as urban areas and/or groups of urbanized areas having 50,000 or more people and urban clusters having at least 2,500 people but less than 50,000 people. Moreover, both of these areas should have a core area with a density of at least 1,000 people per square mile. Areas that do not fulfill these requirements are defined as rural, similar to the definition used by the US Census Bureau.

At present, the Fatality Analysis Reporting Systems (FARS) made available by the National Highway Traffic Safety Administration (NHTSA) uses this US Census Bureau definition of "rural jurisdiction" for the purposes of analyzing impaired driving fatality data, as described in more detail in the next section. These jurisdictions can be modified by states or counties based on their local alignments. Thus boundaries can be determined by state and local officials in cooperation with each other and approved by the Federal Highway Administration, leading to potential inconsistencies in how rural areas are defined by different states.

# 2. UNDERSTANDING THE ISSUE

Addressing impaired driving in rural jurisdictions requires a better understanding of the conditions that shape these jurisdictions. Increased awareness and knowledge of why impaired driving fatalities more often occur in rural jurisdictions is necessary to develop appropriate and targeted solutions. The resulting practical strategies can assist rural areas by acknowledging existing constraints that often limit their ability to achieve progress in reducing impaired driving.

> Increased awareness and knowledge is key to understanding why impaired driving fatalities more often occur in rural jurisdictions.

This section aims to describe the demographic characteristics of rural jurisdictions, and the features and characteristics of roadways and travel practices in rural areas generally. It also highlights the qualities that distinguish these areas from their urban counterparts. It further describes the magnitude of overall road fatalities, including a more detailed examination of impaired driving fatalities, and explores the characteristics of impaired driving offenders in rural areas.

## 2.1 Key characteristics of rural populations

According to the summary results of the American Community Survey from a three-year period (2009-2011), a comparison of the demographic characteristics of rural versus urban residents indicates that there are some distinct differences between them as illustrated in Table 1.

Collectively these data reveal some important differences between rural and urban populations. In particular, residents of rural areas are more likely to drive, to own multiple vehicles, and to retain their driving license as they age, and are less likely to move. Although slightly more rural residents possess an advanced degree, a smaller proportion has a Bachelor's degree. As well, fewer residents in rural areas live below the poverty line.

**Table 1: Demographic characteristics of rural versus urban populations**

| | Rural | Urban |
|---|---|---|
| **Age** | **median age is 40** | **median age is 36** |
| Age 65+ | 14% | 13% |
| Age 85+ | 1.4% | 1.9% |
| Bachelor's degree | 23% | 30% |
| Advanced degree | 11% | 8% |
| Persons with disabilities | 13% | 12% |
| Foreign born residents | 5% | 15% |
| Moved in past year | 11% | 17% |
| Household with no vehicle | 4% | 11% |
| Household with 2+ vehicles | 71% | 53% |
| Available mass transit | 13% | 57% |
| Source: American Community Survey 2009-2011 | | |

## 2.2 Key features of rural jurisdictions

From a geographical perspective, rural areas contain 80% of the total road mileage in the continental United States and account for 33% of all vehicle miles traveled (VMT) (NHTSA 2013). Results of the American Community Survey reveal that approximately 75 million Americans, or almost 25% of the population in the US, reside in rural areas (Mattson 2013). According to the 2013 U.S. Census, approximately 19% of the American population lived in rural areas.

The characteristics of travel on rural roadways contrast starkly to those of urbanized areas. Many of these characteristics influence the types of collisions that occur and also influence the types of enforcement strategies that are practicable and feasible. Table 2 provides a comparison of the general features of road travel in rural and urban areas.

The presence of large geographical areas containing much smaller and fragmented population centers create additional challenges for controlling DWI in rural areas. These challenges often shape the ability of licensing, criminal justice and health practitioners to deliver basic services as well as implement impaired driving programs and policies with fidelity to evidence-based practices. Some important challenges are briefly described below.

**Table 2: Key features of rural versus urban travel**

| Rural | Urban |
|---|---|
| > Long distances; winding roadways. | > Shorter distances; straight highways and residential side streets. |
| > Low traffic volumes. | > Moderate to high traffic volumes. |
| > Lack of traffic congestion. | > Traffic congestion, especially during peak hours in the morning and late afternoon. |
| > Rugged terrain (e.g., gravel or dirt roads) and older infrastructure characterized by lack of shoulders and less frequent maintenance. | > Paved highways, newer infrastructure, and consistent road maintenance. |
| > Few townships spread out over large geographic areas. | > Dense population centers surrounded by larger suburban areas. |
| > Increased potential to encounter large wildlife on roadways (e.g., deer, bears). | > Smaller wildlife (e.g., raccoons, foxes, squirrels) are more likely to be encountered by motorists. |

> **Fewer economic resources and higher costs to deliver services to communities.** The delivery of affordable services is more challenging in rural areas because communities are spread across larger geographical areas, and have a smaller tax base which limits access to government funding for subsidized services. In other words, achieving economies of scale is difficult and often increases the cost of delivering services, especially specialized services. The costs can even become prohibitive. This is often the case in relation to health and addiction services, employment or vocational training, and housing services, to name a few. As a consequence, wait times for service may be much longer, and case loads may be larger.

> **Lower income residents.** As of 2012, 46.5 million or 15% of the total American population lived in poverty. The rural poverty statistics were higher than the national rate, as 17.7% of individuals in these areas lived below the poverty line (US Census Bureau 2013). This value represents the highest rate of poverty since 1986. The higher incidence of poverty and lower socioeconomic status in rural communities has implications for the delivery of programs and services across sectors, including criminal justice.

> **Fewer transportation options which make driving more essential.** Alternatives to driving in rural jurisdictions are typically limited or non-existent. Thus the need for a driver's license is much more pronounced. Even when alternative transportation exists, it may be too inconvenient, infrequent, time-consuming or expensive for many people.

Regarding impaired driving specifically, the lack of public transportation is particularly problematic. Bars are often a hub for community interaction, and those who go out to socialize and drink may not have the option of taking a bus or taxi home. Furthermore,

the distances between bars and residential properties tend to be longer. Thus people are more likely to drive impaired due to a lack of alternatives.

At the same time, people lacking a driver's license may be unable to maintain employment, obtain food and necessities, access whatever health services are available, or maintain contact with family and support networks. In this regard, a driver's license is more often perceived to be a right, and decisions to suspend or revoke this license in rural communities are weighed with a different set of considerations in mind. Moreover, it is well-known that offenders continue to drive on suspended or revoked licenses, leading to growing concern over the escalating size of the unlicensed driver population.

> **Local relationships.** Generally speaking, relationships and communications among agencies and individuals in rural areas are more tightly knit. This increased reliance on partnerships and cooperation to accomplish tasks helps to compensate for the inadequacy of resources. Stronger social bonds and traditions that are evident in smaller communities can also lead to more ingrained local attitudes and practices. This can make it more challenging to effect change or implement new strategies. For example, the strength of these social bonds may be reinforced by low levels of staff turnover. In other words officials and leaders may retain their positions within the community for long periods and be reluctant to adopt new solutions. Similarly, local relationships also mean that offenders are unlikely to be anonymous and may experience negative consequences as a result of the details of their behavior being well-known in local communities. This can also be a barrier to offenders seeking services such as treatment or self-help/support groups.

> **Fewer staff and resources to implement best practices or proven strategies to address road safety issues.** Many strategies are developed in urban centers where more resources, staff, training opportunities, and the ability to specialize are typically available. For example, the delivery of strategies may require intensive training of staff or the addition of dedicated staff, the purchase of new equipment or data management systems, and increases in existing workload without additional resources. However, rural jurisdictions typically have fewer staff and resources, likely making it much more challenging for staff to obtain training, implement, let alone develop, these strategies. Moreover, urban programs generally have greater ability to offer subsidized programs to indigent offenders, or those with lower socio-economic status. This may be more challenging in rural jurisdictions where communities are often less able to absorb program fees or costs.

> **Fewer alternative sanctions.** Supervision and rehabilitation services that are also more common in urban areas (e.g., probation supervision for first offenders, intensive supervision probation, alcohol interlock service centers, DWI courts) are not as widely available in rural areas. Of particular concern, there is a distinct lack of robust treatment options, particularly those that include mental health services, gender-sensitive or culturally-sensitive services.

Collectively these characteristics pose unique challenges to the implementation of proven strategies. To date, little work has been done to determine ways that evidence-based approaches can be adapted for use in rural areas so that they can be delivered with fewer resources without undermining their effectiveness.

## 2.3 Road fatalities in rural jurisdictions

While it may be widely believed that the majority of traffic fatalities occur in population centers, research reveals that the opposite to be true. In fact, rural jurisdictions have a higher fatality rate compared to urban and metropolitan areas, with rural fatalities accounting for 54% of all traffic fatalities in 2013 (NHTSA 2015). To put this into perspective, there were 17,696 road fatalities that occurred in rural areas. In fact, the fatality rate per 100 million vehicle miles traveled (VMT) was 2.6 times higher in rural areas (1.88) than in urban areas (0.73) in 2013 (NHTSA 2015). The probability of a wildlife-vehicle collision also increases, as rural areas are more likely to have an abundance of wildlife, particularly larger animals, as compared to urban and suburban communities. Some of the key characteristics that can contribute to road fatalities in rural jurisdictions are described below.

**Infrastructure.** Attention to road design and regular maintenance in rural areas pales in comparison to that of urban centers. Less money is invested in the rural transportation infrastructure and, as a result, the roadways often lack many of the design features that are common in cities. For example, instead of paved roadways and shoulders, rural areas may have dirt or gravel roads, small or no shoulders, the absence of guard rails and/or rumble strips, and less signage. Moreover, tight turns, windy roads, and sharp drop-offs are likely to be characteristic of rural roadways. In inclement weather, these roads become more treacherous to drive and there may be fewer resources (e.g., ability to salt/sand icy roads or remove snow) to handle environmental dangers. Collectively, these features have the potential to increase crash severity and the likelihood of fatalities.

Equally concerning, large stretches of roadways in rural areas are frequently isolated, meaning that crashes are less easily detected. The low traffic volumes that are characteristic of rural roadways reduce the likelihood of a crash being reported immediately by passing vehicles, Limited cell phone coverage in many of these areas is another barrier to reporting crashes.

Greater distances from hospitals often increases travel time for emergency vehicles to and from crash sites. Lastly, fewer road markings and an absence of GPS in older vehicles can make it exceptionally challenging for emergency personnel to identify the exact location of a wrecked vehicle. In sum, these factors ultimately increase emergency response time, increasing the probability of death for crash victims either at the scene of the crash or during transit to a medical facility. As evidence of this, in 2013 approximately 65% of rural drivers died while in route to a hospital, in sharp contrast to only 35% of urban drivers (NHTSA 2015). An analysis of emergency response times also reveals that the time between notification to EMS and arrival at the scene of a crash is almost double that of urban areas (12.57 minutes compared to 7.31 minutes; NHTSA 2014).

**Risky driving behaviors.** A variety of risky driving behaviors appear to be more pronounced in rural areas as compared to urban centers. For example, an analysis of fatal crashes in rural jurisdictions revealed that drivers killed in rural areas are less likely to wear their seatbelts (51%) and more likely to speed (30%), in comparison to rural drivers in urban areas (46% and 28% respectively). One challenge associated with seatbelt enforcement in rural areas is that the speed of traffic can make it more difficult for officers to spot belt violations. Research has shown that being unbelted at the time of a crash increases the likelihood of ejection from the vehicle, especially during roll-overs. As a result, the injuries sustained by unrestrained occupants are often of greater severity than those of occupants who wear seatbelts. In addition, vehicle rollovers are more likely to occur in rural areas (39% vs 24%) (NHTSA 2015).

**Impaired driving.** With respect to alcohol-impaired driving, among the 10,076 fatalities in 2013, a larger proportion (54% or 5,473 fatalities) occurred in rural jurisdictions, as compared to urban jurisdictions, which accounted for 46% or 4,590 fatalities (NHTSA 2015).

It is important to note the progress that has been achieved in reducing alcohol-impaired fatalities in rural jurisdictions in recent years, according to FARS data. To illustrate, during the ten-year period from 2004 to 2013, impaired driving fatalities decreased by 23% nationwide (NHTSA 2015), with a reduction of 29% in rural areas as compared to 15% in urban areas. However, it must be acknowledged that in sheer numbers, there are still more impaired driving fatalities in rural areas (5,473) compared to urban centers (4,590) and that rural jurisdictions still account for a majority of impaired driving fatalities (NHTSA 2015). As such, attention should be devoted to the development and implementation of impaired driving strategies that accommodate the characteristics and features of these jurisdictions.

## 2.4 Impaired driving offenders in rural areas

A review of the demographics and characteristics of alcohol-impaired drivers in rural jurisdictions provides additional insight into the types of strategies that may be most relevant to prevent impaired driving as well as manage offenders. To develop a better understanding of those that drive while impaired on rural roads as opposed to urban roads, NHTSA undertook an analysis of impaired driving offender characteristics using FARS data, summarized here.

**Sex.** An examination of the sex of drivers involved in fatal crashes in 2012 revealed that both males and females were more likely to have a blood alcohol concentration (BAC) at or above the illegal per se limit (.08) in rural areas. Among male drivers in 2012, 24% of those involved in fatal crashes were alcohol-impaired. In a jurisdictional breakdown, it was found that 25% of male drivers in rural areas were alcohol-impaired in comparison to 22% in urban areas. This trend was similar among female drivers involved in fatal crashes. While overall, 14% of female drivers involved in fatal crashes were alcohol-impaired, the percentage was again higher in rural areas compared to urban areas (15 and 13% respectively) (FARS 2012).

**Age.** In fatal crashes in 2013, the highest percentages of drivers with BAC levels of .08 or higher were recorded for drivers ages 21 to 24 (33%), followed by the groups aged 25 to 34

(29%), and 35 to 44 (24%). This trend was found in both rural and urban jurisdictions with minor differences in terms of age distribution:

> Drivers ages 21 to 24 – 35% rural vs. 31% urban;

> Drivers ages 25 to 34 – 30% rural vs. 29% urban;

> Drivers ages 35 to 44 – 26% rural vs. 22% urban (NHTSA 2015).

**Seatbelt use.** With respect to seatbelt usage, there are slight differences between rural and urban jurisdictions. As the following 2012 data reveals, there is an inverse relationship between restraint usage and driver BAC in fatal crashes (i.e., seatbelt use decreases as BAC increases). Overall, drivers killed in crashes in rural jurisdictions are more likely to be unbelted (FARS 2014).

> Among drivers who had not been drinking, 41% were unrestrained. (43% rural and 37% urban).

> Among drivers with a BAC of .01 to .07, 57% were unrestrained (57% rural and 55% urban).

> Among drivers with a BAC of .08 or higher, 70% were unrestrained (72% rural and 66% urban).

Of note, rural pickup truck occupants (i.e., drivers and passengers) represent the group with the highest unrestrained fatality rate as more than 64% of those killed are unbelted at the time of the crash (NHTSA 2015).

**BAC level.** According to NHTSA's analysis of FARS data, in rural jurisdictions, the most frequently recorded BAC of drivers involved in fatal crashes was .17 (NHTSA 2015). This is slightly higher than in urban jurisdictions where the most commonly recorded BAC of drivers involved in fatal crashes was slightly lower at .15 (NHTSA 2015).

**Prior convictions.** Data show that drivers with previous DWI convictions in rural jurisdictions are more likely to be involved in subsequent alcohol-impaired fatal crashes. More specifically, among drivers with at least one prior conviction for DWI, 59% of those in rural areas involved in fatal crashes were alcohol-impaired (NHTSA 2015). In urban jurisdictions, 52% of drivers with a previous DWI conviction involved in fatal crashes were found to be alcohol-impaired. Of importance, these data are from the Fatality Analysis Reporting System that uses a three-year period to track convictions.

> Drivers with previous DWI convictions in rural juisdictions are more likely to be involved in subsequent alcohol-impaired fatal crashes.

## 2.5 Summary

In summary, an analysis of demographic characteristics of residents in rural versus urban areas reveals that there are some important differences between these populations. In particular, in rural areas residents are more likely to have an advanced degree but less likely to have a Bachelor's degree, and fewer residents are below the poverty line. They also have more vehicles, are licensed longer, and are less likely to move. In addition, rural roads and jurisdictions represent a rather substantial portion of the road network, and a larger percentage of crashes occur on these roads. The features and characteristics of these roadways have important implications for travel practices, and the sheer geographical size of these areas makes it more challenging to improve infrastructure as well as change driver behavior. In addition, in these jurisdictions there are a variety of factors that can make it more challenging to deliver affordable programs and services at the same level that is found in urban areas.

There are a variety of risky behaviours that are more pronounced in rural areas such as speeding, non-use of seatbelts and drinking and driving.

In terms of road safety habits, there are a variety of risky behaviors that are more pronounced in rural areas affecting the number and severity of crashes, including speeding, non-use of seatbelts, and drinking and driving. The characteristics of road users who engage in these behaviors in rural areas are also different from road users in urban areas. As such, road safety programs and policies must be developed and implemented with this context in mind.

# 3. IMPLEMENTATION CHALLENGES

Rural jurisdictions, by virtue of their unique characteristics described in the previous section, may encounter a wider array of challenges than urban areas in the successful implementation of impaired driving strategies. Again, unlike metropolitan or suburban areas, rural counties and communities do not have the same level of resources or availability of services. Variations in organizational structures and points of decision-making are also distinct across rural agencies, and these jurisdictions are not always a focal point of consideration in relation to the development, passage and implementation of legislation and programs. In sum, these challenges must be acknowledged and addressed as part of efforts by jurisdictions to reduce impaired driving in rural communities.

## 3.1 Low public awareness and/or concern regarding impaired driving

In many instances, levels of public awareness and concern about impaired driving are lower in rural jurisdictions. This may occur for a variety of reasons including the heavy emphasis on campaign messages tailored to urban environments, strong social norms and traditions that reinforce the acceptability of driving after drinking, practical reasons such as the lack of public transportation options. There may also be misperceptions about the risks associated with driving after drinking, particularly when longer distances require driving and the likelihood of encountering other vehicles is much smaller.

The presence or lack of advocacy groups focused on this issue can also be a factor. Advocacy groups play a dual role by influencing public perceptions of the problem as well as encouraging policy makers and government agencies to pursue strategies proven to reduce impaired driving (O'Neill 2001). It can be more challenging to organize and sustain advocacy groups in rural jurisdictions as a result of limited resources, demanding schedules and/or higher workload. There are also more difficulties in reaching audiences spread out within larger geographical areas, and limited opportunites to organize meetings or events to build visibility.

## 3.2 Lack of political or agency leadership to support implementation

Capacity is also a pressing concern in rural jurisdictions. Agency staff is often faced with a multitude of competing priorities that must be addressed regardless of lower staffing levels, longer distances, greater costs and fewer resources to support the acquisition of tools, training and equipment. Hence, impaired driving may receive inadequate attention in the face of more pressing issues that affect a larger proportion of the population, such as health care, education, or other types of crime.

In addition, garnering strong leadership to support impaired driving strategies can be more challenging in rural jurisdictions as a result of the strong community ties and the strength of personal relationships. This can be an especially difficult issue where political officials are elected, and longstanding agency leadership is less willing to institute change. For these reasons, there may often be greater reluctance to impose penalties such as license suspension, probation supervision, or treatment programs on community members. This is especially a problem where offenders hold positions of influence within the community, or when concerns about costs and affordability are present. In rural jurisdictions, political and agency officials may also be able to operate with greater independence and less oversight simply due to the lack of processes or resources within states to monitor activities in rural areas on an ongoing basis.

## 3.3 Inconsistent consideration of rural jurisdictions during the development of laws, programs and policies

Another issue that can pose a challenge to the implementation of impaired driving strategies is that rural jurisdictions may not always be well-represented on state task forces, committees, or workgroups that are involved in the development of such strategies. Researchers and policy makers may give little consideration to the capacity and ability of rural jurisdictions to fully enforce or implement strategies. In particular, the challenges associated with the delivery of focused enforcement strategies, intensive supervision probation, ignition interlock programs, DWI courts, and specific treatment services for impaired driving offenders in rural jurisdictions have been long recognized. However, there is little guidance and few examples of practice designed to specifically assist rural jurisdictions in implementing such strategies. As a result, these communities become even less equipped to address the problem. This has created an important gap in impaired driving systems and negatively affected the ability of states to achieve overall progress in reducing impaired driving.

## 3.4 Fragmented authority across agencies and varying levels of Independence

The structure and authority of agencies within rural jurisdictions also tends to be more fragmented and variable. In these instances, it can be difficult to coordinate activities, share information, and form partnerships with others, although strong community relationships

may help to minimize these challenges. For instance, within rural jurisdictions, some agencies may still be responsible to a centralized state agency and require its approval to institute programs and partnerships. Or they may be subject to higher levels of quality control and oversight. These factors can make change difficult to achieve. Conversely, other agencies may have fewer bureaucratic barriers and answer to regional or even local levels of government. These features may enable them to effect change much more easily and respond to requests, change processes, or adopt effective initiatives. As a result, the formation of partnerships and coordinated action often relies on managing these differences across agencies without losing their individual support for initiatives along the way.

The fragmented authority in some rural jurisdictions (i.e., either among agencies within a single community, or across neighboring communities) can also mean that it is necessary to gain buy-in from more individual agencies to deliver a new program. For example, treatment services in rural jurisdictions are more often privatized and do not come under the authority of the state, and, thus, are not held to the same requirements. In this regard, it may require partnerships with several agencies in multiple jurisdictions to make quality treatment available, which can take more time and require more negotiation to achieve.

Finally, this issue can also make it more challenging for line staff to implement programs, pursue new initiatives, or partner to support them. Jurisdictional boundaries of agencies may impede their staff from participating in initiatives. For example, police enforcement strategies in rural jurisdictions can often be enhanced when police agencies can partner with those of neighboring jurisdictions on enforcement strategies. However, this can be challenging in instances where police agencies are constrained by jurisdictional boundaries.

## 3.5 Staff workload and staff safety in rural areas

The large geographical areas and long distances characteristic of rural jurisdictions have important implications for workload and case management. For example, response times and home visits require much more time as a result of travel. A police officer responding to a crash may be the only officer on duty, meaning that other calls for service will be unanswered. Similarly, whereas a probation officer in an urban center may be able to complete four home visits of offenders in an afternoon, it may take an officer in a rural jurisdiction a full day to complete the same four home visits.

> Agencies in rural areas are less likely to have specialized staff to complete tasks.

Safety is also a pressing concern for staff in rural areas. Agencies are less likely to have specialized staff to complete tasks. This means that they are often responsible for responding to incidents posing all levels of risk. In rural areas, a small number of troopers or officers are typically responsible for thousands of square miles of roadways. If a police officer were to encounter a violent offender (impaired driving or otherwise) or become involved in a collision, backup could take much longer to arrive. Similarly, a probation officer's caseload may

include offenders posing different risk levels. This means that officer safety may be more of a concern.

Given the time it may take for backup to arrive, officers may be required to manage dangerous situations alone. This issue is potentially compounded in jurisdictions where officers are not permitted to use firearms or other measures for protection. Thus the larger geographic areas and longer travel distances in rural areas create difficulties for rural DWI programs, sometimes even imperiling the safety of officers and probation and parole staff.

## 3.6 Indian Country and Tribal Lands

It is estimated that there were 566 tribal entities in the US eligible for funding and services from the Bureau of Indian Affairs in 2015. Each tribe has different governance, resources, population, geography, and cultural issues (Myers 2014). Some 334 federally and state-recognized American Indian reservations exist (Perry 2015), but only about 180 tribes have court systems comparable to those of the U.S. or the states. In addition, just 82 tribes have a detention center.

In addition, alcohol misuse, abuse and dependence are well-documented with American Indian and Alaskan Native communities. As a result, among American Indians and Alaska Natives, motor vehicle crashes are a leading cause of death for those aged 1 to 44 years (CDC 2015). Tragically, these individuals have the highest rates of alcohol-related motor vehicle death rates as compared to all racial groups (Naimi et al. 2008). "According to the BJS (2015) report on Tribal statistics, the proportion of Indian inmates held in jails[2] for alcohol and drug offenses has declined". In particular, inmates held in jail for driving while intoxicated or under the influence of drugs or alcohol decreased between 2000 and mid-year 2013 from 17% of the total inmate population to just 8% (Perry 2015).

It is essential that jurisdictions with significant populations at risk of alcoholism and DWI implement effective strategies to reduce impaired driving. However, strategies to address impaired driving in rural jurisdictions may also be more complex due to issues associated with the presence of Indian Country and Tribal Lands . Most often, within states that include Indian land, there is confusion regarding where authority rests and to what extent state or local agencies are able to perform functions in these jurisdictions, and vice versa. Moreover, in some instances, the relationships between agencies managed by the state or local governments and those under the authority of Tribal entities may be frayed, often for historical reasons.

Other barriers include frequent turnover among tribal leadership and employees which can result in the loss of knowledge and awareness about the impaired driving issue. This can delay the implementation of strategies or make it more difficult to gain support for or participation in them. Gaps in technological and reporting capabilities also may pose a barrier

[2] Tribal authority to imprison American Indian offenders had been limited to 1 year per offense by statute (25 U.S.C. §1302), a $5,000 fine, or both. On July 29, 2010, the Tribal Law and Order Act of 2010 (TLOA) was signed into law, expanding tribal court sentencing authority. As a result, offenders may serve potentially lengthier sentences (up to 3 years) in Indian country correctional facilities (P.L. 111-211, H.R. 725, 124 Stat. 2258)" (Minton 2014; p.8).

to the collection and sharing of important data sources such as arrests, crashes and fatalities between state and tribal agencies.

## 3.7 Indigency and unaffordability

The impact of indigency, particularly in rural communities, on impaired driving sanctions and programs is frequently raised at a political level. The costs associated with an impaired driving offense are substantial and cumulative, including attorney fees, increased insurance costs, court fines, driver licensing fees, probation service fees, and fees for alcohol assessments, education classes, and treatment. Other specialized services also associated with fees include ignition interlocks and DWI courts. As a result, there are frequently concerns associated with equality and the ability of impaired driving offenders to fulfill sentencing requirements, or avail themselves of treatment and alternative sentencing.

Indigency is generally defined in a criminal justice context by the inability to afford counsel. However, this standard, or variations of it, is frequently transferred to the ability of offenders to afford various criminal justice interventions and/or sanctions. Jurisdictions struggle with this problem, particularly given the modern economic climate where budget cutbacks and fiscal restraints are increasingly common. Moreover, the magnitude of this problem is difficult even to measure. So the extent to which it poses a barrier for offenders is challenging to gauge.

More recently, some jurisdictions have begun to adopt unaffordability provisions in lieu of indigency provisions in an attempt to gain a more holistic picture of offenders' finances and monthly expenses. The impact of this approach, particularly in relation to rural jurisdictions, is as yet unknown, although at a state level there is evidence to suggest that the proportion of the offenders who are unable to afford services is small.

## 3.8 Summary

The implementation of impaired driving strategies is certainly more complex in rural jurisdictions for a number of practical reasons. Increased awareness of these unique features is essential to ensure that these characteristics are not overlooked or dismissed at a state level during discussion of impaired driving strategies. In particular, participation by representatives of rural jurisdictions in state level discussions about impaired driving should be strongly encouraged.

# 4. EXAMPLES OF PRACTICE IN RURAL JURISDICTIONS

Rural jurisdictions frequently have to adopt creative approaches and programs that meet their unique needs. The primary challenge that stakeholders encounter is taking evidence-based practice and applying it with limited resource levels and support. Adaptability is key. This section provides an overview of examples of successful practices, including adapted strategies, programs, and/or interventions, applied by rural jurisdictions for various facets of the DWI justice system.

## 4.1 Local or regional impaired driving task force

Some communities have established a local impaired driving task force comprising community leaders, to develop a comprehensive, achievable strategy to reduce impaired driving within their jurisdictions. Two examples of these task forces are described below and a full report on local impaired driving task forces can be accessed at www.nhtsa.gov/staticfiles/nti/pdf/811460b.pdf.

> **Pikes Peak Region, Colorado.** This regional task force was formed in September 2005 in response to a high proportion of fatal crashes (73%) involving alcohol or drugs. The task force began with Colorado Springs law enforcement agencies, the local District Attorney, and a non-profit community group (DRIVE SMART) that was previously formed by the City Council to address issues related to safe driving. As of 2011, there were approximately 20 agencies participating in the task force. This task force facilitates the sharing of resources with smaller counties, including personnel, materials, and equipment. Through this initiative, the task force created a pool of resources for law enforcement agencies and strengthened traffic safety, impaired driving enforcement and education. In particular, the larger law enforcement agencies were able to assist smaller agencies to conduct events such a checkpoints; funding was secured to purchase a mobile unit for breath and blood tests; the policy with regard to blood draws was successfully changed; trainings have been delivered, and some agencies have been able to increase staffing levels (Fell et al. 2011).

> **Gallatin County, Montana.** An impaired driving task force was formed in Gallatin County, Montana following a drunk driving fatality in 1978. It was established with a

focus on public education and enforcement efforts to reduce impaired driving crashes. To accomplish this it used a collaborative approach, building partnerships and engaging community members in strategies to reduce the problem. The task force is led by a paid coordinator and includes representatives of law enforcement, prosecution, health, the Montana State University student body, and Alcohol and Drug services, as well as community members. It is funded from license reinstatement fees for impaired drivers, and has been effective in raising visibility about the issue, securing additional funds to increase enforcement, and initiating prevention activities. Two important initiatives involved working with tavern owners to reduce impaired driving and underage drinking, and working with a legislator to reinstate task force funding after it was halted. While proposed legislative changes have met with more resistance due to the emphasis on personal freedoms in Montana, the task force has observed changes in social norms which are increasingly likely to reinforce the unacceptability of drinking and driving. In addition, support for the task force by community members has grown and media has engaged to provide support for their efforts (Fell et al. 2011).

## 4.2 San Carlos Apache Tribal Motor Vehicle Injury Prevention Program

An analysis of data captured by the National Vital Statistics System between 2003 and 2007 investigated rates of deaths resulting from motor vehicle crashes according to race and ethnicity. It revealed that American Indians and Alaska Natives had death rates that were two to four times those reported for other races and ethnicities (West & Naumann 2014). Similarly, according to NHTSA (2009), in 2006, data showed that alcohol-impaired driving crashes represented 48% of road crash fatalities among American Indians/Alaska Natives, higher than any other race/ethnicity. To address this disparity, the Centers for Disease Control and Prevention (CDC) provided funding to four American Indian tribes between 2004 and 2009 to undertake road safety projects. These involved developing, implementing and evaluating evidence-based road safety interventions that were identified in the CDC Guide to Community Preventive Services.

The specific study conducted as part of the San Carlos Apache Tribal Motor Vehicle Injury Prevention Program emphasized reducing alcohol-impaired driving and increasing use of seat belts and child safety seats among tribal members. The program included several different tools, including diverse and far-reaching media campaigns, educational tools, and enforcement efforts including sobriety checkpoints and enhanced police enforcement. Several local events were used to increase awareness of this issue. The objectives were two-fold: to decrease alcohol-impaired driving and increase restraint use (Piland et al. 2010).

During the course of this study, the Tribe conducted 39 sobriety checkpoints and stopped approximately 18,000 vehicles between 2004 and 2008. As a result, the total number of impaired driving arrests increased 52%. The Tribe also adopted enacted new resolutions that lowered the legal limit for presumptive impairment from .10 to .08 BAC, and that put in

place a primary seat belt law. A cost-benefit evaluation showed that during the project period the Tribe saved $2,710,000 (USD), and the lifetime cost-benefit ratio for the program was substantial. In particular, for every $1 spent, a lifetime benefit of almost $10 was saved due to reductions in road crashes, injuries per crash and injury severity (West & Naumann 2014).

Important lessons that emerged from this project included the importance of strong partnerships including police, tribal leaders, a full-time tribal program coordinator and evaluation consultants. In addition, local Indian Health Service and tribal environmental health professionals helped to provide onsite technical assistance. The project also proved the value of a multi-faceted, comprehensive strategy comprising media, education, and enforcement. However, it was underscored that these lessons may not be directly transferable in light of distinct cultural, environmental, social, and political characteristics that may vary substantially across different American Indian and Alaska Native tribes (West & Naumann 2014).

## 4.3 Low-manpower sobriety checkpoints

Sobriety checkpoints are an effective and proven approach to deter impaired driving (Lacey et al. 1999; Shults et al. 2001). Although checkpoints are a common law enforcement tool, they are perceived as being less feasible in rural jurisdictions due to the staff and resources needed to execute them. A typical checkpoint may employ 15 or more officers at an estimated cost of $5,000 to $7,000 (USD). Low-manpower checkpoints that can be conducted by as few as 3 to 5 officers can be more feasible in jurisdictions with fewer staff and resources (Lacey et al. 2006). Studies have indicated that low-manpower checkpoints are just as effective as larger ones and can help strengthen impaired driving enforcement in rural areas (Fell et al. 2004).

> Multiple law enforcement agencies can share resources to conduct joint enforcement activities.

Multi-jurisdictional checkpoints are another alternative that may be more viable. Multiple law enforcement agencies from several townships or communities can share resources to conduct joint enforcement activities, reducing the burden on individual agencies. Planning is an important element of these checkpoints, to ensure that all officers have jurisdictional authority to enforce laws at checkpoint locations.

## 4.4 State-Tribal Collaboration Act (New Mexico)

In New Mexico, a primary and ongoing concern of the Department of Public Safety (DPS) and the courts was improving the coordination of law enforcement efforts across state and tribal jurisdictions, both within New Mexico's Native American communities and the areas surrounding these communities. To address this concern, on December 31st, 2009, New Mexico Senate Bill 196, the State-Tribal Collaboration Act, came into effect (legislation is accessible at http://www.nmlegis.gov/lcs/legislation.aspx?Chamber=S&LegType=B&LegNo= 196&year=09). This legislation was enacted to strengthen law enforcement activities across

the State of New Mexico, with a specific focus on impaired driving and drug-related crimes, domestic violence, violence against children and other violent crimes. At the same time, it underscored the vital importance of respecting tribal sovereignty, traditions, and customs.

As a first step, a key contact was designated in each of the six districts of DPS to facilitate and streamline work with tribal officers. In addition, designated key contacts within the senior leadership of DPS were also identified. DPS further implemented training and certification opportunities for department employees, and relevant training was provided to officers in the Law Enforcement Academy. This included:

> 3 hours cultural diversity;

> 3 hours Indian law; and,

> combined 46+ hours other multi-cultural and disability/mental health issues.

One important initiative has been building partnerships with the governments of New Mexico's tribal nations by commissioning tribal officers as New Mexico Peace Officers under Statute 29-1-11. DPS maintains contact with tribal officers and officials during incidents involving tribal jurisdiction. Under federal law Indian officers only have jurisdiction over Indians within Indian country boundaries. Thus the deputization of tribal police by state authorities has enabled officers to both respond to and handle incidents and police services that involve both Indians and non-Indians within their sovereign jurisdiction. This means that tribal officers can apply the State criminal and traffic statutes, since they are now recognized as peace officers in New Mexico (DPS 2011).

In addition, officers participate in cultural events and forums to discuss state-tribal issues. In 2011, State Police officers attended law enforcement summits with the Navajo Nation and the Mescalero Apache Nation, and they formalized resolutions and agreements with the Ramah Navajo Agency, and the BIA Justice Services that enabled them to train and commission New Mexico State Police officers with Special Law Enforcement Commissions (SLEC). This initiative permitted DPS officers to act as federal officers when called upon by the Ramah Navajo Agency to perform law enforcement duties within their sovereign jurisdiction (DPS 2011).

The Special Investigations Division (SID) of DPS served as a resource to tribal entities focused on reducing alcohol-related issues on tribal lands. Two examples of initiatives (La Vision Del Valle Prevention Advisory Council and Hands Across Cultures program) involved partnerships between the SID and communities, drug courts, impaired driving programs, and participating pueblos to tackle community problems associated with alcohol. In addition, SID officers delivered server training for tribal-owned and operated businesses to reinforce alcohol service laws and to train servers to recognize the signs of intoxication to prevent over-service. Valid ID checks were also a component of the training (DPS 2011).

Some other important activities that have emerged from this important Act include:

> DPS District 1 met regularly with Tribal officials in San Felipe, Santo Domingo, San Ildefonso, Cochiti, Tesuque, and Pojoaque Pueblo. The purpose of these meetings

was to learn about current issues in these communities and traffic issues pertaining to state roads. DPS also responded to requests for training in areas within state police expertise, and provided police support to the Pueblos of San Felipe, Santo Domingo, Cochiti, Tesuque, and Pojoaque for Annual Feast Day celebrations. In particular, District 1 continuously worked with the State – Native American DWI Coalition Committee to tackle impaired driving issues in sovereign jurisdictions.

> District 5 responded to incidents involving non-native suspects and provided back-up to tribal officers in isolated and remote areas. It also attended collaborative meetings between the Chief of Police at Laguna Pueblo to initiate discussions about collaborative law enforcement services at the Pueblo's Route 66 Casino. In addition, District 5 also provided additional manpower to smaller pueblos during festivals and feasts.

> In District 6 (Gallup) there are grant-funded projects underway that involved collaboration between District 6 officers of DPS and tribal agencies. One of these projects was the McKinley County DWI Task Force whose main focus was to address drinking and driving in the Gallup area and Eastern Agency of the Navajo Nation. While participation by the Navajo Nation has not been as consistent as had been hoped, overall this project has had positive outcomes and helped to increase enforcement and reduce impaired driving crashes. After three years of task force activity, McKinley County experienced a 61% reduction in alcohol-related fatal crashes between 2008 and 2010 (DPS 2011). In addition, as part of this project, all District 6 commissioned state police officers were cross-commissioned by the Navajo Nation and Zuni Pueblo to support basic law enforcement services to citizens when tribal police are unavailable. They also conducted random traffic enforcement in cooperation with tribal officers. Sobriety checkpoints were conducted quarterly with the Navajo Police Department and Zuni Pueblo during "super-blitz" periods.

> District 6 (Gallup) and District 10 (Farmington) in New Mexico share borders with Indian reservations and "checkerboard" (mixed ownership) lands. As such, annual training exercises are led by the Chief Prosecutor of the Navajo Nation Judicial Branch. This training emphasizes issues specific to Navajo Nation traffic and criminal laws, and includes immersion training for customs and traditions of the Navajo culture.

In sum, the State-Tribal Collaboration Act in New Mexico has provided coordination and cross-training opportunities to ensure that State Police officers are well-equipped to deliver essential police services throughout the entire state, including Indian lands. This formalized relationship has been mutually beneficial to both State and tribal police entities, and helped enhance public safety in New Mexico for all of its residents. More importantly, this agreement has created a strong foundation for partnerships between police agencies to become more structured and ingrained in operational processes and practices.

## 4.5 Regional DWI Courts (Michigan)

In 2010 several DWI courts in urban areas of Michigan initiated a pilot program (Regional DWI Court Program) that made DWI court participants eligible to obtain an ignition interlock across the state. Its objective was to provide monitored driving privileges to offenders whose record of impaired driving offenses would have been ineligible for any driving privilege.

Once the interlock program had been implemented, eligible participants from outside the main urban areas (Detroit and Grand Rapids) started demanding access. Michigan is a largely rural state. As a consequence, many rural jurisdictions simply did not have the resources or number of impaired driving offenders to enable them to staff a full-time DWI court.

Offenders in rural areas could obtain interlock restricted-licenses enabling them to drive to courts in other jurisdictions, where they could participate in court proceedings, testing and treatment. This pilot made it possible for rural jurisdictions to pool their resources and be better able to establish and maintain these programs. The DWI court staff would travel to designated locations and conduct DWI court proceedings on select days. In the first year of this expansion to create regional DWI courts, 18 counties participated in four regional programs; by year two there were nine additional courts included in four new regional programs. As of 2014, the pilot program was approaching statewide coverage (Hoffman 2014).

Figure 1 – Counties in Michigan currently using Regional DWI Courts (2014)
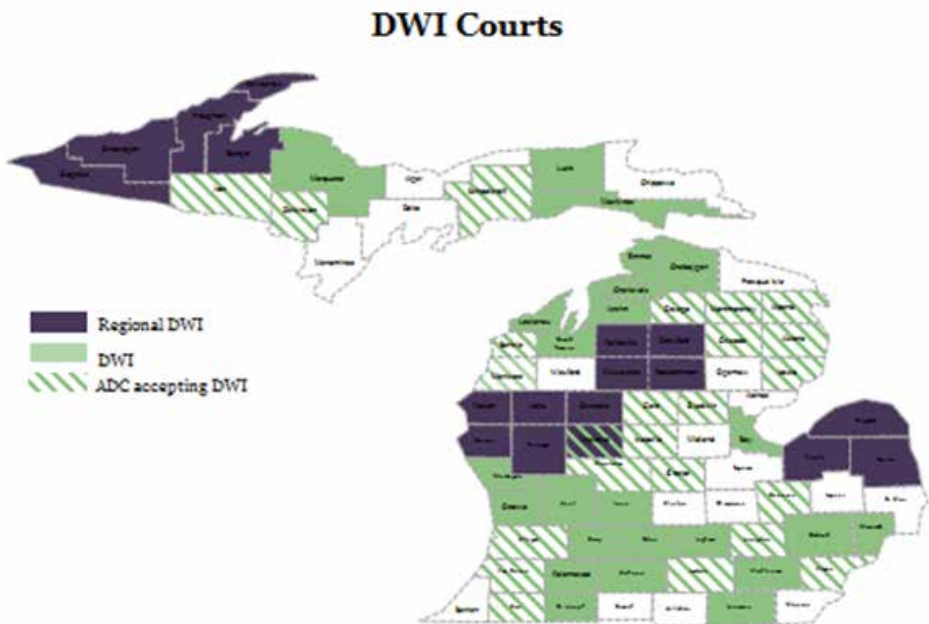


**DWI Courts**

* Source: State Court Administrators Office  ** ADC Adult Drug Courts that accept DWI offenders.

In summary, creating regional DWI courts to serve impaired driving offenders in rural jurisdictions was not the original objective of the DWI court ignition interlock program.

But as the pilot program evolved, program staff listened to the needs of communities and worked to address them through the rural DWI court program. This example underscores the importance of continuous feedback and dialogue with communities as impaired driving programs are developed, and illustrates that it is achievable to improve service delivery to include rural jurisdictions with some strategic planning and flexibility.

## 4.6 Intensive supervision programs

A wide variety of intensive supervision programs have been developed specifically for rural jurisdictions. Perhaps the two most recognized programs of this sort are the "staggered sentencing" program in Isanti County, Minnesota, and the "24/7 Program" in South Dakota. Persons who are interested in learning more about these and other intensive supervision programs can access an evaluation report from the RAND Corporation about 24/7 programs (available at http://www.rand.org/health/projects/24-7.html) and a report by NHTSA entitled "An Evaluation of Intensive Supervision Programs for Serious DWI Offenders" at www.nhtsa. gov/staticfiles/nti/pdf/811446.pdf. A few examples of such programs include:

> **DUI supervised probation program (Fremont County, WY).** The Fremont County program is designed for rural communities and serves a Native American population with services tailored to individual offenders. It handles serious impaired driving offenders who are not eligible for the Wyoming Drug Court program, and is both comprehensive and long-term. It is adaptable to a variety of settings, depending on which agencies are present in a community. For example, it can be delivered through a traditional court, a treatment court, a probation office, a treatment office or another social service agency. This program is designed for communities with high rates of impaired driving and limited resources (Wiliszowski et al. 2011).

This program is for 2nd offenders who have no violent offenses. It is an intermediate step between drug court and unsupervised probation and consists of three phases. Criteria for each of the phases of the program are presented in Table 3.

**Table 3: Elements of program phases or levels in Freemont County**

| Level | Duration | Program Components | Meet with DSP caseworker |
|-------|----------|--------------------|--------------------------|
| Level I | 3 months | ASI and ASAM; individualized Treatment; AA meetings, VIP; DUI education course | Weekly* |
| Level II | 6 months | Treatment continued as needed; AA meetings | Every 2 weeks** |
| Level III | up to 15 months | Treatment as needed; AA meetings | Monthly*** |
| *Level I – Offenders meet with their DUI Supervised Probation (DSP) caseworker at least weekly. | | | |
| **Level II – Visits reduced to twice a month (with telephone contact as needed between visits) if the offender is adequately complying with the conditions of probation. | | | |
| *** Level III – Visits reduced to monthly (with telephone contact as needed between visits) if the offender continues to comply with the conditions of probation. | | | |
| Source: Wiliszowski et al. 2011; p.106. | | | |

Features of the program include abstinence monitored through random breath tests, an individualized plan, treatment, an impaired driving education course, self-help group meetings, a victim impact panel and an ignition interlock. For offenders who are non-compliant, caseworkers can choose from a range of responses. For safety reasons, caseworkers do not make home visits, but they do meet regularly with offenders in public places (Wiliszowski et al. 2011).

The program is state-funded through a grant. In addition, offenders pay a monthly $25 supervision fee. While indigent funding is not provided, offenders who cannot pay can still participate in the program. As offenders gain employment and can afford the fee, it is collected by probation officers.

The Fremont County program contains many features that have proven to be effective in other intensive supervision probation programs. Recidivism rates among offenders in this program are much lower than those of offenders in an unsupervised probation program (25-37% versus 50% respectively). The most effective features of this program appear to be frequent contact with the caseworker, random testing, and full-time employment or community service to help offenders change their lifestyle and remain sober (Wiliszowski et al. 2011).

## 4.7 Alcohol interlock program delivery strategies

A critical gap in the delivery of interlock programs has been the availability of these services to offenders in rural areas. A much smaller population base in these areas has, in many cases, made it cost-prohibitive to offer such services. As a consequence, in many states impaired driving offenders in rural jurisdictions are able to "opt out" of the interlock program, but still obtain a hardship license and drive with no interlock requirement.

States are reluctant to require vendors to provide services throughout a state jurisdiction, particularly when programs are just getting underway, as this can discourage vendors from doing business in the state. At times requirements for vendors to provide service in specific areas may be mandated by states. More often, states have found it beneficial to work with vendors to ensure services are available in rural areas as demand for them increases until program growth makes these services more sustainable.

> States have found it beneficial to work with vendors to ensure services are available in rural areas.

Potential strategies to address the unavailability of interlock services in rural areas include:

> implementing service coverage minimums for vendors (e.g., a 50 or 65-mile radius as is done in Virginia or North Carolina);

> permitting vendors to share responsibility for rural territories (e.g., New Mexico); and,

> utilizing well-regulated mobile service centers (e.g., Maryland and Minnesota).

## 4.8 Wright County's holistic approach

Wright County, Minnesota is one example of a rural jurisdiction that has taken a holistic or all-encompassing approach to addressing impaired driving. According to the 2010 U.S. Census, Wright County had a population of 124,700 within its 17 cities and 18 townships. A majority (70%) of the land within county lines was classified as agricultural. Wright County has been identified as sixth among the thirteen deadliest counties for impaired driving in 2009 in Minnesota. In 2011 alone, 299 misdemeanor impaired driving offenses, 370 gross misdemeanor impaired driving offenses, and 22 felony impaired driving offenses occurred within county lines. As a result, both criminal justice officials and the community undertook efforts to reduce impaired driving fatalities and arrests. These efforts involved three main activities:

> **Establishment of a Sober Cab Program**



Use your head. Take a cab.

Image retreived online, http://www. safecomm.org//sobercab/default. aspx<No intersecting link>

  » The Safe Communities non-profit organization (http:// www.safecomm.org) was established in 1997 with a primary focus on reducing traffic crashes in Wright County. The organization makes available free rides for impaired drivers at participating local establishments along the I-94 corridor. Partners of Safe Communities on this project include beer distributors, alcohol providers, and county government.

  » In 2010, Sober Cab offered 623 rides; this number increased to 1,750 rides in 2011.

  » Wright County has also established the Drive Wright diversion program for traffic offenders and adopted a social host ordinance.

> **An Intensive Supervision Probation program for high-risk offenders began it 2002. In involves:**

  » risk/needs assessment;

  » 4 step-down phases to reduce level of supervision based on compliance;

  » 9-month extended aftercare treatment group;

  » random testing and alcohol monitoring; and,

  » home, work, and community visits multiple times per week during the initial phase.

> **Alcohol-related education programs:**

  » The Awareness Panel for Impaired Drivers was started in 1996 with a focus on education. It was attended by 342 offenders in 2011.

  » Choices. This program began in 2011 and was designed for first offenders, with a focus on cognitive processes.

» Driving with Care began in 2011 and used tiered, evidence-based and cognitive skills-based education.

As of 2011, following the implementation of some of these countermeasures, Wright County's ranking on the State's deadliest counties list dropped from sixth to ninth. The lessons learned from Minnesota's experience show how partnerships between stakeholders representing the justice system and the community can help to reduce impaired driving both by strengthening prevention efforts and by increasing awareness and providing alternatives to help people make better choices.

### The importance of self-efficacy

One of the most critical features of the Wright County approach is that it provided an alternative choice and behavior to help people avoid driving after drinking. In particular, the creation and success of the Sober Cab program illustrates how important it is to not only tell people not to drink and drive, but to also provide people the power and opportunity to make better choices using strategies that are practical and achievable. In this instance, Wright County provided transportation options where there were previously none that were readily available.

Research examining theoretical models that underpin effective road safety campaigns suggest that self-efficacy, or the ability to adopt and execute a new, safer behavior to replace a prior, risky behavior, is essential to campaign effectiveness (Robertson & Pashley 2015). According to protection motivation theory, which argues people are motivated to protect their health, self-efficacy plays a very significant role in a person's decision to adopt the behavior; it is the determining factor that results in change or resistance to change (Cismaru et al. 2009). As part of this equation, it is important that the costs associated with the adaptive response are small (low costs), and that the person is confident in his or her abilities to complete successfully the adaptive response (high self-efficacy) (Rogers 1983). In other words, the protective behavior must be easily achieved, and oftentimes must be easier to execute than the risky behavior in order to successfully replace it. In terms of the Wright County program, residents merely had to dial a phone number that was readily available.

# 5. LESSONS LEARNED

Detailed exploration of the impaired driving problem in rural jurisdictions by the DWI Working Group has produced some important insights into opportunities for policymakers to improve the delivery of programs and services. In particular, our inquiry has shown how partnerships and collaborations at county and regional levels can help overcome the resource and infrastructure limitations common to rural jurisdictions. Policymakers are encouraged to:

1. **Consult with officials and advocates in rural jurisdictions to identify priority issues.** Perhaps the most efficient way to begin to address impaired driving in rural jurisdictions is to consult with rural elected officials, agency administrators and thought leaders to explore barriers to addressing impaired driving and opportunities to overcome them. The sharing of experiences and practical realities by agency leadership and local safe driving advocates in these jurisdictions can provide insight into common problems and strategies to address them. The State Office of Highway Safety may be well-positioned to bring together the key agencies and advocates who should play an active role in this discussion, and provide the leadership necessary to build partnerships.

2. **Emphasize proactive/preventive activities.** Prevention, education, and advocacy efforts are often the most easily achievable and affordable for rural jurisdictions. In particular, prevention activities are more positively received and often encounter less bureaucracy and pushback during efforts to get them underway because of the relative ease of implementation. Prevention and education activities also more frequently generate a higher level of buy-in and support from a broad cross-section of the community and are thereby perceived as less threatening or controversial. Finally, the success of these activities, and in particular advocacy efforts, can be amplified due to the strong relationships and social bonds within local communities. Social norms can be more easily leveraged and changed to reduce impaired driving by respected local figures.

Programs in schools were identified as providing an important opportunity for prevention messaging, since schools are often at the center of communities and an important contact point for both youth and parents. Media were considered to be an equally important partner to raise the visibility of impaired driving issues and to promote prevention strategies. To help these resources function, they need scripted materials and resources that can be easily tailored

to the local community. It was also suggested that health and human services programs may be able to play a role in disseminating prevention messaging, particularly among youth.

It was further noted that that proactive and preventative approaches should not be delivered through just one source or medium. Rather, a continuum of messages and services that target youth and drivers at multiple locations can increase the effectiveness of these strategies.

3. **Create targeted campaigns that link alcohol, seatbelt use, and speed.** Evidence reveals that alcohol-impaired driving, non-use of seatbelts and speeding are risky behaviors that are more prevalent in rural jurisdictions. To increase efficiency, some communities have begun tackling these road safety problems together to create more compelling messages encouraging behavioral changes. A collective focus on these three problems can make it more difficult for communities to dismiss the risks and consequences of these behaviors. At the same time, linking these issues, particularly in relation to educational and enforcement strategies, can create economies of scale that make the delivery of strategies more affordable and sustainable in the long-term. A NHTSA study to examine this combined campaign strategy for effectiveness is underway in Tennessee and Oklahoma and the report is anticipated to be released in 2016.

4. **Transition from local to regional approaches and build partnerships.** Some communities have reached out to neighboring communities to discuss impaired driving problems in their region. This has been motivated by the strong similarities among communities of the impacts of this issue, as well as concerns regarding the implementation of strategies, particularly in relation to capacity and resources. Collectively these factors have helped to inspire jurisdictions to find ways to coordinate efforts, share resources, and reduce bureaucracy. Of course these initiatives require navigation, negotiation and flexibility. But the seriousness of the issue has been the impetus for action.

Regional "Vision Zero" initiatives in Washington and Minnesota and the establishment of regional task forces provide good examples of what can be achieved through these partnerships. The influence of regional leaders may help to generate greater buy-in and cooperation from local agencies. One strategy that has been employed successfully in Minnesota has been to structure these partnerships through joint cooperation agreements. The creation of memoranda of understanding between agencies can also be considered.

Another benefit of these regional partnerships is that they can facilitate a more efficient use of limited resources. For example, it may be more cost-effective for agencies to organize regional training programs so agencies can spend fewer resources on travel and accommodate the attendance of more staff. Purchasing of evidence-based assessment tools for several agencies within a region may also make such tools more affordable. Cost-sharing agreements make it possible for agencies to secure better prices by purchasing in volume, and for more agencies to obtain and have access to such equipment.

5. **Use a systematic approach to create a continuum of messages and services.** Various segments of a community often rely upon different sources of information, or may have different points of contact with community services where they can receive information. For example, young persons are perhaps most easily reached through school and extra-curricular events such as athletic teams. Conversely, parents may be more easily accessed through contact with local government, advocacy groups and local businesses. Older persons may be more easily contacted through community centers or health facilities. This means that local communities aiming to reach their population with prevention messages about drinking and driving should consider several points of contact to consistently remind drivers that driving after drinking is unacceptable, and that there are alternatives to this behavior that are readily available. In particular, reaching drivers with messages in close proximity to their driving (e.g., at local bars from which people drive home) is the most effective time to target drivers with these messages (Philips et al. 2011).

   In addition, the use of a systematic approach to delivering prevention messages helps to reinforce social norms that driving after drinking is unacceptable. This approach increases visibility of the issue, by providing opportunities for people to express their opinions that the behavior is unacceptable. It also serves to draw attention to this issue, helping to increase perceptions about the likelihood of detection and arrest.

6. **Engage agencies in program development.** One of the important elements of program development is to ensure that strategies can be easily implemented by agency leadership and front line practitioners. In particular, operational practices should fit within day-to-day tasks and processes, as should reporting protocols and paperwork. The inclusion of local agency staff in the development and adoption of impaired driving strategies can help to ensure that programs and policies achieve their goals, and benefit from a high level of support from practitioners. Also, leadership can be encouraged by enabling agencies to adapt, within reason, program practices, and by providing them with options and alternatives so they can engage on their own terms.

7. **Provide practitioners with data to demonstrate intervention effectiveness**. Sharing data with frontline practitioners showing the effectiveness of various programs (i.e., what was done and what was achieved) is an important component of any strategy. It is essential that agency staff be motivated and committed to implement strategies, particularly when doing so will require changes in tasks, processes and workload. The presence of tools and strategies (e.g., media, memos, summary reports) to communicate successes to counties and organizations, and to demonstrate their value, are vital to ensure the sustainability of impaired driving strategies.

8. **Cross-train professionals.** Providing staff with opportunities to learn different types of tasks that are outside of their immediate areas of responsibility can serve three important functions. First, it makes staff more valuable, since their ability to perform a variety of functions can be immensely beneficial to increase efficiencies within local agencies. For example, probation officers who can deliver training to other officers, manage high-risk offenders, or who are

well-versed in agency policies and management practices are able to respond to and manage a broader range of conditions. This can be important when situations must be addressed quickly or when regular staff are unavailable or on leave.

A second important function of cross-training is to provide staff with some relief and diversity from the day-to-day intensity of their role, which can often lead to burnout, especially among practitioners working with offenders or victims. Finally, cross-training of practitioners outside of an agency can also be useful to provide line staff with a broader and different perspective of their role, and more importantly with a clearer understanding of how their duties have implications for other agencies within the system. This can help to build partnerships and relationships across agencies in local communities.

9. **Bring services to communities and offenders.** A decentralized approach to the delivery of programs and services can increase their accessibility and reduce the need for offenders to drive long distances. Examples of this practice can be found in the use of structured mobile service centers for interlock services to facilitate program participation, and the use of regional DWI courts in northern Michigan. It is important to note that such strategies often require modifications to standard practices, in turn requiring additional safeguards to protect the integrity of programs.

Civic organizations and churches may also be able to accommodate the delivery of services by providing volunteers facilitators or drivers and venues for meetings and creating opportunities for pro-social activities and role models. Such organizations may be more well-established within the community and be able to support the consistent delivery of services.

10. I**ncrease use of technologies and pharmacotherapies to overcome staffing, resource, and service delivery issues.** The costs of using new technologies and pharmacotherapies may appear to be prohibitive for rural communities. But in fact these new tools may provide solutions to challenges arising from the lack of regular services and generate sufficient resources to deliver them. For example, the use of ignition interlocks or continuous alcohol monitoring devices can help overcome limitations associated with direct supervision of probation conditions related to abstinence from alcohol, or driving restrictions associated with an impaired driving conviction. Pharmacotherapies such as Vivitrol (which is the 30-day injectable version of Naltrexone), can help offenders manage substance abuse problems in instances where dedicated treatment services are less frequently available. These new tools can help to provide the higher level of supervision that is necessary for repeat offenders and those who are deemed at high risk of recidivism, without requiring the same level of staffing or workload demands.

More experienced and established practitioners may sometimes be reluctant to use these tools due to a lack of knowledge or a resistance to change. But newer entrants to the ranks of criminal justice practitioners will likely have greater interest in the application of these tools, and can encourage support and adoption of them among their older counterparts.

# 6. AREAS OF FUTURE RESEARCH

Increasing our knowledge and understanding of the impaired driving problem in rural areas is essential to provide greater insight into potential ways to address it. Research is therefore needed in several areas including: the characteristics of rural jurisdictions and the situational context and dynamics that contribute to this problem; the demographic and behavioral characteristics of impaired drivers; and, the practices associated with the criminal justice systems in these areas. Collectively, this knowledge can help to guide and shape the development of laws and policies, the implementation of programs, and the delivery of services.

In addition, while several jurisdictions have implemented promising practices and approaches designed to accommodate the features of rural jurisdictions, more and rigorous evaluation of these approaches is needed to determine whether these interventions and countermeasures are effective in reducing impaired driving crashes and deaths within these geographic regions. These evaluations can help to determine the extent to which these strategies can be more easily and effectively adapted to diverse rural areas.

A list of more pressing research questions is provided below. Experienced practitioners have identified the answers to these questions as providing the most useful, practical knowledge to help improve the selection and delivery of impaired driving strategies.

## Research to investigate the context of impaired driving in rural jurisdictions

1. Is public concern about impaired driving lower in rural jurisdictions as compared to urban jurisdictions, and if so, why?

2. Is there a correlation between the distance that drivers must travel to get home after drinking, and their arrest for impaired driving?

3. What distance must exist between an urban or suburban center and a rural jurisdiction before local context and practices change in relation to beliefs and behaviors involving driving after drinking?

4. Do rural jurisdictions with more robust local alcohol ordinances, or better enforcement of ordinances, experience less impaired driving problems?

## Research to investigate the demographic and behavioral characteristics of impaired drivers in rural jurisdictions

1. Is the presence of passengers more prevalent among rural impaired driving crashes and arrests as compared to urban jurisdictions?

2. Do younger drivers have higher prevalence rates of marijuana use in rural jurisdictions as compared to urban centers?

3. Is poly-substance use among impaired driving offenders more prevalent in rural than urban jurisdictions?

4. What proportion of impaired driving offenders has other criminal history in rural jurisdictions compared to urban jurisdictions?

5. Can impaired driving offenses be used as a screener for a broader set of problem behaviors in rural jurisdictions?

## Research to investigate criminal justice system practices in rural jurisdictions

1. What proportion of police officers and sheriff deputies in rural jurisdictions receive specific impaired driving training?

2. How frequently is impaired driving enforcement and training conducted in rural jurisdictions?

3. Are plea agreements more common in rural jurisdictions as compared to urban jurisdictions? Are offenders in rural jurisdictions more likely to receive lenient sentences?

4. What percentage of courts in rural jurisdictions are courts of record?

5. What proportion of judges in rural jurisdictions is trained as lawyers?

6. Are recidivism rates higher in rural jurisdictions, and what types of strategies result in the lowest recidivism rates in rural jurisdictions?

7. What is the average response time to violations of supervision in rural jurisdictions and how does this compare to urban jurisdictions?

## Research to investigate the translation of proven practices to rural jurisdictions

1. How can evidence-based practices be best implemented in rural jurisdictions?

2. Which impaired driving strategies are most adaptable to rural areas?

3. What types of impaired driving awareness campaigns or messages resonate with rural communities?

4. How can technologies (such as alcohol monitoring technologies) be most efficiently implemented to overcome the lack of supervision services in rural areas?

## Important data indicators in rural jurisdictions

✓ Arrest data according to alcohol and drug-impaired driving offenses

✓ Presence of passenger(s) at time of crash or arrest

✓ Place of last drink or origin and intended destination of arrested impaired drivers

✓ Offender demographics and characteristics including: sex, age, BAC level, presence of other substances (e.g., prescription drugs and illicit substances), prior impaired driving convictions, prior criminal offenses, prior driving offenses, mental health diagnoses.

✓ Number of hours devoted quarterly to impaired driving enforcement such as saturation patrols and checkpoints.

✓ Level of impaired driving training among officers including standardized field sobriety tests, Advanced Roadside Impaired Driving Enforcement (ARIDE), drug recognition expert, or other post-certified refresher courses on impaired driving

✓ Impaired driving plea agreement, conviction, and disposition data

✓ Probation supervision caseload data

✓ Usage rates of alcohol monitoring technologies

✓ Number of referrals to treatment service

## Other Resources

National Center for Rural Road Safety www.ruralsafetycenter.org

# 7. CONCLUSIONS

The prevalence of impaired driving crashes and fatalities in rural jurisdictions is a pressing concern. While progress in reducing this problem has occurred, it must be underscored that impaired driving fatalities, whether measured by proportion or sheer numbers, are much more numerous in rural jurisdictions, despite the fact that these areas account for a much smaller population base in the U.S.

Available research suggests that the uniqueness of rural areas must be understood if effective strategies to reduce impaired driving are to be implemented. Most notably, rural jurisdictions do not have access to the same level of resources, staffing or services that are typically available in urban centers. These limitations create serious barriers to the delivery of proven and effective impaired driving programs, strategies and policies. One mechanism to address this problem is to regularly include individuals and agencies that represent rural jurisdictions in the development of state initiatives. Such efforts are already underway in the form of impaired driving task forces in some jurisdictions, but this approach must become more ingrained and consistent throughout more states to achieve progress on a larger scale.

More positively, county and local governments in several states have already undertaken the development of distinct community-based impaired driving initiatives that represent a blend of prevention, detection and sanctioning strategies. These efforts have been designed to leverage specific strengths and assets that exist within these communities, including strong social bonds and community and regional relationships, greater independence and flexibility in adapting practices to meet local needs, and well-supported community-based organizations to deliver services. These approaches should be encouraged.

An important question that has yet to be answered is whether it may be more practical to develop new, local, community-based impaired driving initiatives that are specific to rural jurisdictions, or to instead adapt proven, evidence-based measures from urban areas. Some of the strategies discussed in this report suggest that the latter is practical, including the use of alcohol interlocks and regional DWI courts. However, there is also some evidence to indicate that the former may also be possible. To illustrate, a recent report that investigated the use of intensive supervision strategies designed for rural jurisdictions (24/7 in particular), and their potential feasibility in more urban centers (see www.nhtsa.gov/staticfiles/nti/pdf/811861.pdf), revealed that features of some rural programs may be equally challenging to adapt to urban centers (Fisher et al.2013). In other words, the development of unique strategies for rural areas may be more viable than adapting proven ones from urban centers. More research is needed to increase understanding of this complex problem, and to inform activities moving forward.

> An important question that has yet to be answered is whether it may be more practical to develop initiatives that are sepecific to rural jurisdictions instead of adapting measures from urban areas.

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