



TRAFFIC INJURY RESEARCH FOUNDATION

54th ANNUAL REPORT

2016



The knowledge source for safe driving



The Traffic Injury Research Foundation (TIRF) develops and shares the knowledge that saves - preventing injuries and loss of life on the roads, reducing related social, health and insurance costs, and safeguarding productivity. We are the Canadian source for international research related to the human causes and effects of road crashes, providing objective and scientific information to support the development, implementation and evaluation of road safety programs, effective advocacy and consultation. Since 1964, TIRF has received international recognition and acclaim for its accomplishments related to identifying the causes of road crashes and developing programs and policies to effectively address them.

For Government

TIRF provides evidence-based knowledge that leads to smarter policies in preventing injuries and loss of life on roads and highways worldwide.

For Industry

TIRF is your partner in increasing your knowledge capital for safer, more efficient, and trustworthy road safety logistics, technology and products.

For the Public

TIRF is a centre for road safety knowledge to help you and your family be aware of what you need to do to have peace of mind on the road.

For NGOs

TIRF is an independent, objective and credible source for the science required for effective traffic safety advocacy.

Staff

The TIRF team includes leading research scientists and support staff, and administrative personnel. TIRF also collaborates with Canadian and U.S. universities and has strategic partnerships with international research agencies that greatly expand its scientific and technical expertise.

TIRF maintains its National Fatality Database which is a comprehensive, pan-Canadian, multi-decade set of core data for fatal motor vehicle crashes. It also possesses a contemporary specialized library on road safety with access to resources in other jurisdictions.

DRUNK DRIVING: IT'S A WOMEN'S ISSUE TOO

DRUNK DRIVING: *It's a* WOMEN'S ISSUE TOO

In 1986, women accounted for **1 in 13** impaired driving incidents in Canada. In 2015, it was

1 in 5



In 2013, **19%** of fatally injured drivers that tested positive for alcohol were **women**.

Traffic Injury Research Foundation asked Canadian women about their understanding of the risk factors:



Biological Differences

Some, but not all women, are aware they become **MORE IMPAIRED THAN MEN** when they consume the same amount of alcohol.



Peer Pressure

Many women report that they experience **PEER PRESSURE** from other **WOMEN** in social settings to **CONSUME MORE ALCOHOL** or to drive when they do not feel they should.



Lack of Transportation

Transportation alternatives (including **TAXIS** and **RIDE-SHARING**) are often **NOT AVAILABLE** where and **WHEN WOMEN DRINK**, leading them to **DRIVE WHILE IMPAIRED** or to accept a ride with someone who is.



Safety Concerns

Women are concerned that **IMPAIRMENT** makes them **VULNERABLE TO ASSAULT** and may avoid **STAYING OVER** at someone's home or taking **PUBLIC TRANSPORTATION**.



Stress and Loss

Break-ups, family deaths, and even parenthood can contribute to **INCREASED USE OF ALCOHOL TO COPE**, and result in **DRIVING AFTER DRINKING**. (These factors affect men too, of course!)



Lack of Women-Centred Education

Women aren't seeing their own experiences addressed in **CAMPAIGNS AGAINST DRINKING AND DRIVING**, which are primarily focused on men.

Want to learn women-centred, impaired driving prevention strategies?

Visit changetheconversation.ca!



MESSAGE FROM THE CHAIR

The road environment in Canada is evolving rapidly. This means that road safety strategies must also evolve to keep pace with this transformation. In 2016, TIRF embarked on a strategic planning exercise to review its organizational structure and practices, to identify opportunities to enhance its services, and to assess emerging issues. This process was designed to ensure that TIRF continues to meet the needs of the diverse road safety stakeholders that it serves.

A review of TIRF's organizational structure and practices revealed growing demand from funders and stakeholders to not only provide them with high-quality research products, but also to help them integrate research findings in existing policies and day-to-day practices to improve outcomes. In response to this growing demand for knowledge transfer initiatives that complement research services, TIRF is working to further develop staff skills so they are equipped to develop and lead these activities, and deliver initiatives designed to help organizations build capacity in these areas.

An analysis of information requests also revealed that demands for TIRF's charitable services are growing due to funding reductions that have been experienced by many organizations. In particular, communities are challenged to pursue evidence-based road safety programs. Few resources exist to help communities train new staff about current road safety priorities and often staff are not equipped to locate and synthesize current research on these topics. Of concern, training has become a critical need across the country as experienced road safety professionals retire in large numbers, and institutional memory is depleted. This is an important barrier to the pursuit of Vision Zero initiatives at the local level.

To fill this gap, TIRF began work to develop a series of community-based assessment tools that can be made available to local governments and non-profit organizations, at no cost, to help them improve local road safety programs. Notably, these assessment tools are being designed to help communities gauge local road safety priorities and increase their knowledge of the latest research. More importantly, these tools can help communities select the most appropriate strategies for their respective communities and guide their implementation. To ensure the usability of these tools, a pilot test is planned for 2017 to critically review the tools before they are launched.

The strategic review also revealed that there is growing recognition in the corporate sector that road crashes have an immense impact on employers in terms of absenteeism and costs, and that workplace safety policies related to driving are a critical gap. To better meet this need, at the end of 2016, Drop It And Drive™ (DIAD) began operating under the auspices of TIRF. The DIAD program delivers unique, reality-based, solution-focused seminars that incorporate the latest evidence. They also offer free school presentations in tandem with corporate seminars to reach the next generation of drivers. This approach represents that next logical step to enhance the delivery of TIRF's charitable educational programs and technical assistance services.

Finally, emerging research priorities were examined as part of the strategic review, including drug-impaired driving, automated vehicles, vulnerable road users and the intersection between active modes of transportation and transit services. Work is already underway at TIRF, and it is anticipated that demand for more research on these topics will grow in the coming years. As such, each of these topics was explored to determine how TIRF research services can advance knowledge in these areas, and provide both direction and leadership for the road safety field.

The TIRF Board is proud to represent an organization whose work is directly relevant to government, industry, and the communities in which we live. The services delivered by TIRF have tangible benefits that make safer roads a reality.



Ian Anderson is the President of Temple Scott Associates Inc.

Sincerely,

A handwritten signature in blue ink that reads "Ian Anderson". The signature is written in a cursive, flowing style.

MESSAGE FROM THE PRESIDENT

Road safety management is arguably the most essential pillar of the U.N. Decade of Action. Effective management requires the translation of research findings that emerge from the other four pillars and the use of this knowledge to implement evidence-based programs and policies to improve social life. Yet road safety management is also perhaps the most challenging pillar to achieve.

The other four pillars emphasize engineering, design, behaviour and health, which represent distinct disciplines, unique systems and diverse practices across multiple organizations. Further, each of these fields is comprised of a wide array of subjects that range from ergonomics to civil engineering, urban planning to data mining, and neuroscience to adult education to name a few. In essence, road safety managers must draw upon the strongest evidence produced in individual fields and integrate these findings to create a comprehensive, cohesive and flexible road safety plan.

The demand for effective road safety management has underscored the critical need for usable knowledge transfer (KT) strategies which acknowledge the multidisciplinary nature of road safety. Knowledge transfer is a dynamic and iterative process; not a single, point-in-time event. KT makes it possible to synthesize and disseminate knowledge and exchange ideas and perspectives. More importantly, KT makes it possible to more rapidly achieve the benefits of new knowledge which is a fundamental component of road safety management.

In 2016, TIRF aimed to support the development of road safety management strategies. We used two different knowledge transfer approaches, with a focus on high-priority topics that are currently challenging road safety managers: distracted driving and drug-impaired driving.

The first approach involved gathering and synthesizing the tacit knowledge and insight gained by diverse road safety professionals through decades of practical, day-to-day experience working in very different organizations and systems, and transforming it into explicit knowledge that can be more easily shared with and used by a much larger group of stakeholders. In June 2016, TIRF held its first meeting of the Canadian Coalition on Distracted Driving (CCDD) and created a National Action Plan for Canada. This facilitated exchange produced a series of tools and activities that could benefit road safety managers in diverse organizations, and TIRF will work with CCDD members to fulfill the Action Plan in 2017.

Similarly, in August 2016, TIRF interviewed 45 practitioners and managers in enforcement, transportation and health departments in 25 agencies across the country. The objective was to capture experiences with drug-impaired driving strategies, gauge what has worked well and what gaps exist, and identify opportunities for improvement. This tacit knowledge was synthesized to inform decision-makers about important features and implementation issues related to drug-impaired driving policy.

The second approach used by TIRF was to compile and review the latest research in relation to each of these topics, and develop educational materials that are guided by the needs and concerns of road safety managers. These initiatives are designed to reduce duplication and increase efficiency across organizations. A repository of distracted driving research and information is currently under development and will be made available on the new Drop It And Drive™ website in Fall 2017. In addition, a bilingual Drug-Impaired Driving Learning Centre that contains five modules will soon be launched. This one-stop, comprehensive, web-based tool contains the latest evidence in each of these areas and can help road safety stakeholders develop an evidence-informed strategy to reduce drug-impaired driving.

Knowledge transfer is paramount to effective road safety management. Decision-making must be informed by research and practice, and guided by awareness of the contextual environment in which policies and programs will be implemented. TIRF is proud to support the work of road safety managers across Canada and other jurisdictions, and provide research, tools and resources to facilitate efforts to achieve Vision Zero.

Let us know how we can help you.



Robyn Robertson has been with the Traffic Injury Research Foundation for 17 years.

Sincerely,

Robyn Robertson

Region 4 FIA Award



TIRF is honoured to have received a Region 4 FIA Americas 2016 Award in the category of Most Outstanding Initiatives of the Americas. We acknowledge and extend our thanks to all TIRF research partners who make our work possible.

Prince Michael International Road Safety Award

The prestigious Prince Michael International Road Safety Award was conferred upon the Belize Road Safety Project on December 13, 2016 in London, United Kingdom. The award recognizes the Road Safety Project's leadership role in the region. Chief Executive Officer, Ms. Yvonne Sharman Hyde of the Ministry of Economic Development and Petroleum, and Chief Executive Officer, Mr. Errol Gentle from the Ministry of Works and Transport, accepted the award on behalf of the Government of Belize.



TIRF is proud to have provided technical expertise to the Road Safety Project in the areas of Road Safety Awareness Campaigns, Surveys and Focus Groups of Knowledge, Attitudes and Practices (KAP) and Monitoring and Evaluation. They are currently involved in building capacity among traffic and transport enforcement officers through a series of specialized training courses.

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2016 IN REVIEW

Since its inception in 1964, TIRF has become internationally recognized for its accomplishments in a wide range of subject areas related to identifying the causes of road crashes and developing programs and policies to effectively address them.

TIRF would like to highlight some of its research and publications in 2016.

White Paper: Safety Performance of teenSMART (2016)
<http://tirf.ca/TIRFCAD16S>



Evaluation of alcohol ignition interlock program in Nova Scotia (2017)
<http://tirf.ca/XTIRF17a>



The Role of Driver Age in Fatally Injured Drivers, 2000-2013 (2016)
<http://tirf.ca/TIRFCAD16L>



Fatigue-Related Fatal Collisions, 2000-2013 (2016)
<http://tirf.ca/TIRFCAD16M>



Prevalence and trends of drugged driving in Canada (2017)
<http://tirf.ca/XTIRF17c>



A New GDL Framework: Planning for the Future (2016)
<http://tirf.ca/TIRFCAD16Q>



Strategies to Improve Teen Driver Safety Lessons Learned (2016)
<http://tirf.ca/TIRFCAD17E>



Road Safety Monitor 2014: Knowledge of Vehicle Safety Features in Canada (2016)
<http://tirf.ca/TIRFCAD16H>



Cannabis & Road Safety: Policy Challenges (2016)
<http://tirf.ca/TIRFCAD16O>



NEW EDUCATIONAL PROGRAM

DROP IT AND DRIVE™

At the end of 2016 Drop It And Drive™ (DIAD) became a TIRF education program and now operates under the auspices of TIRF.

Mission

Drop It And Drive™ (DIAD) is a Traffic Injury Research Foundation education program focused on preventing distraction-related road user injuries and fatalities. DIAD distracted driving seminars for schools and workplaces are thought provoking and interactive, using science and real stories to engage communities in practicing safer road behaviours.

Staying Connected

The goal of the Drop It And Drive™ Program is to help raise awareness about this growing problem through its Blog, social media and powerful on-site seminars. By delivering seminars to schools, colleges, universities, community groups, organizations & corporations throughout North America, DIAD aims to not only effect change within our immediate audience, but through them, reach parents, peers, co-workers & neighbours.

Services

The DIAD Program delivers unique reality-based, solution-focused multi-speaker presentations and seminars throughout Canada and the United States to raise awareness about distracted driving. Our dynamic approach delivers a powerful message with a combination of research, knowledge, personal experience, energy and humour.

Corporate Seminars

A variety of customized seminars are offered to corporate clients to strengthen workplace safety and distracted driving policy and practices. Seminars are designed to identify distraction-related risks in the workplace, and speakers work directly with managers and line staff to support the development of a distracted driving policy as well as prevention-focused activities to reinforce it. Clients are also offered a high school presentation in their community as a charitable service.

Youth Education Seminars

The goal of the Drop It And Drive™ youth education program is to raise awareness about the risks associated with distracted driving. Providing road safety programs

'I would highly recommend to any school, municipality or corporation in Canada to have Drop It And Drive attend their organization to present to their students, staff or key stakeholders.'

City of Ottawa, Traffic Management and Operational Support Branch

for elementary schools and delivering presentations at high schools provides the opportunity to positively impact the next generation of drivers to help reduce injuries and fatalities. Talking to youth about the risks related to distracted

driving is essential because they have the greatest opportunity to be the solution...the choice is theirs. It took a full generation – 25 years for drinking and driving to become socially unacceptable. We can't afford the lives it will cost us if it takes that long for distracted driving to become socially unacceptable.



Follow us on facebook

<https://www.facebook.com/DropItAndDrive>



Drop It And Drive™@DropItAndDrive

NEW LEARNING CENTRE

Drug-Impaired Driving Learning Centre



TIRF will soon launch a new web-based tool, the Drug-Impaired Driving Learning Centre (DIDLC). Funded by State Farm®, the DIDLC aims to synthesize evidence-based research on drug-impaired driving.

This topic represents a major challenge to road safety professionals around the world. The number of impairing substances, including over-the-counter medications (OTCs), and prescription and illegal drugs, is substantial. However, unlike research about alcohol, much less is known about the impairing effects of these substances on driving. Fortunately, research is underway at an unprecedented pace to develop new knowledge, although this has also made it challenging for policymakers and practitioners to keep pace with the latest evidence.

The DIDLC was developed to meet the needs of a wide spectrum of diverse stakeholders. This one-stop, comprehensive, web-based tool is being designed to inform decision-making by synthesizing the evidence related to drug-impaired driving. The Learning Centre contains several modules that are structured in a question and answer format, similar to other TIRF educational programs. Module topics include the scope of the problem according to available data, the impairing effects of drugs on driving, and laws and countermeasures, including available technologies. This user-friendly tool can help road safety stakeholders develop an evidence-informed strategy to reduce drug-impaired driving.



CONTINUING PROGRAMS

Automated Vehicles: Driver Knowledge, Attitudes, and Practices



TIRF in partnership with the Toyota Canada Foundation (TCF), released a report entitled, "Automated Vehicles: Driver Knowledge, Attitudes, and Practices." More than 2,600 Canadian drivers responded to the national poll that investigated driver knowledge, attitudes, and practices in relation to much anticipated, semi- and fully-automated vehicles.

The increasing availability of advanced safety features that work in tandem, such as lane-keeping and forward collision warning systems, have been an important step towards the development of automated vehicles.

Currently, expectations are high that the advent of semi- or fully-automated vehicles will dramatically reduce road crashes and produce a range of other benefits. But whether these gains are achieved will ultimately depend entirely on drivers.


Results of this study revealed that 16% of Canadians strongly agreed that it would be unnecessary to pay attention to the road environment when using the self-driving feature of a semi-automated vehicle. Some drivers also reported they would be more willing to take risks when using a semi-automated vehicle. Almost 25% of drivers reported they would drive tired or fatigued, and 17% would engage in a non-driving activity such as texting, reading or working more than they do now. TIRF will work to provide educational resources to overcome these misperceptions. Materials will be made available through Brain on Board (www.brainonboard.ca) in 2017.

<http://tirf.ca/TIRFCAD16J>



CONTINUING PROGRAMS

Canadian Coalition on Distracted Driving

 **the co-operators** In the summer of 2016, TIRF in partnership with DIAD and The Co-operators, hosted its first annual meeting of the newly-created Canadian Coalition on Distracted Driving (CCDD) in Ottawa. During this two-day working session the CCDD gathered knowledge to form a National Action Plan.

Over the remainder of the year, the CCDD finalized the National Action Plan. The plan was designed to harness the collective knowledge and learning that has been gained by many organizations, transforming their experience into

<http://tirf.ca/TIRFCAD17C> practical tools and resources that can be used by a much larger group of stakeholders to improve efficiency and outcomes.



The Plan contains 15 action items organized according to four priority areas: education and prevention, enforcement, data and research, and, technology and industry. The components of the plan represent the most essential activities that can support the efforts of agencies with a vested interest in the issue, and help them meet their objectives. In 2017, the CCDD will produce the series of tools contained in the Plan, and convene discussions in key sectors to help agencies amplify efforts to reduce distracted driving.

Drinking and driving among women in Ontario: A qualitative study



During 2016 TIRF completed a new study to investigate knowledge, attitudes and perceptions among women in Ontario and their experiences in relation to drinking and driving. This project was undertaken with support from the Ontario Women's

Health Network (OWHN) and was funded by Beer Canada through its continued support of Change the Conversation. The exploratory nature of this research was designed to increase knowledge about the understudied factors that contribute to the risk of impaired driving among women. It used a mixed-method approach to integrate both qualitative and quantitative data collection strategies.

Results showed that while many of the women in this study had some knowledge in relation to each of the six topic areas that were explored, there were also some important gaps in knowledge that can contribute to women choosing to drive after drinking or ride as a passenger of a drinking driver. Most importantly, women can benefit from more knowledge about important factors that affect how women metabolize alcohol as

<http://www.tirf.ca/TIRFCAD17H>



compared to men, as well as about factors that contribute to women being more impaired after consuming the same amount of alcohol. Messages are also needed to increase awareness among women that their subjective estimates of their own level of intoxication are often incorrect. Campaigns that are relevant to the personal experiences of women and reasons they engage in these behaviours would be welcome. Results provide insight regarding the types of knowledge and content that should be included in prevention messaging, important features of prevention messaging that are more appropriate for women, and potential ways that such messaging can be delivered.



CONTINUING PROGRAMS

BikeMaps



TIRF and the University of Victoria have completed the pilot phase of the BikeMaps.org project, funded by the Public Health Agency of Canada. During the pilot phase, BikeMaps.org was released in Edmonton and Ottawa, and further promoted in Victoria. The main objective of this project is to develop and use a technology to produce knowledge and data that can help make cycling safer for, and more accessible to, all Canadians. To ensure the public and stakeholders as well as decision-makers are aware of the availability of this new tool, citizen and stakeholder engagement activities were organized throughout the year to help promote it. Evaluation of the pilot phase results are currently underway, and four phase 2 cities have been selected after issuing a call for proposals. The four cities are Guelph, Kelowna, Lethbridge and St. John's. The anticipated completion date for the project is 2019.

LEADING BY EXAMPLE

TIRF researchers regularly travel* across Canada and abroad to attend research conferences, meet with government and industry leaders and speak to practitioners and non-technical audiences alike. 2016 was no exception as TIRF researchers participated in more than 18 events, including:

Transportation Research Board 95th Annual Meeting in Washington, DC from January 10th–14th, 2016.

CADCA 26th Annual National Leadership Forum in Washington, DC on February 2nd, 2016.

Social innovation workshop "Journey to MaRS" organized by Parachute and held in Toronto, ON, February 25th, 2016.

Canadian Trucking Alliance Board of Directors meeting presentation in Phoenix, AZ on March 22nd, 2016.

Annual Lifesavers Conference in Long Beach, CA, April 5th, 2016.

The international conference on The Reliability of Statistics & Databases in Measuring Road Safety Performance Index (PIN) in Tunis, Tunisia from May 6th–7th, 2016.

Annual Conference of the Association of Ignition Interlock Program Administrators (AIIPA) in Denver, CO from May 16th–18th, 2016.

The Emerging Issues Research Forum at the Canadian Insurance Institute in Toronto, ON, May 25th, 2016.

Canadian Association of Road Safety Professionals (CARSP) in Halifax, NS from June 5th–8th, 2016.

Annual Meeting of the Canadian Council of Motor Transport Administrators (CCMTA) in Halifax, NS from June 19th–22nd, 2016.

Emerging Issues Research Webinar on Automated Vehicles for the Canadian Insurance Institute, June 23rd, 2016.

Innovative Approaches to Wildlife and Highway Interactions Workshop in Sagehen Creek Field Station, CA from July 25th–29th, 2016.

Drugs & Driving Expert Panel Discussion organized by State Farm® in Toronto, ON, September 21st, 2016.

Canadian Association of Mutual Insurance Companies in Charlottetown, PEI, October 3rd, 2016.

13th Annual Meeting of the DWI Working Group in Savannah, GA, October 4th–5th, 2016.

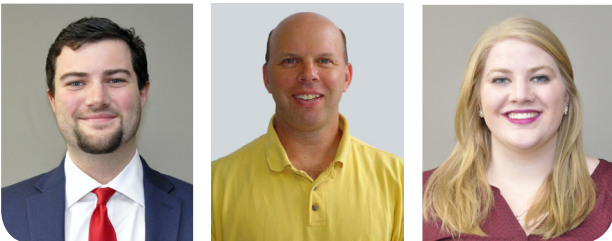
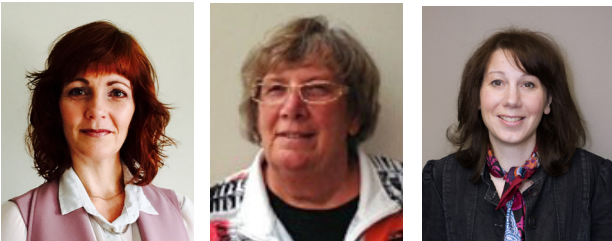
International Council on Alcohol, Drug and Traffic Safety conference in Gramado, Brazil, October 17th, 2016.

International Symposium on Traffic Safety in Abu Dhabi, UAE, November 2nd, 2016.

arrive alive DRIVE SOBER conference in Toronto, November 6th–7th, 2016.

* Note: charitable donations are not used for travel expenses.

HOW YOUR DONATIONS MAKE A REAL-WORLD IMPACT



Your contributions supported TIRF's work to:

- > Conducted a 90 minute webinar in February for the Property And Casualty Insurance Compensation Corporation (PACICC) to discuss emerging risks associated with automated vehicles, and in particular the implications of automated vehicles on driver behaviour.

- > Served as a reviewer of a major report on automated vehicles for the Insurance Institute of Canada (IIC) and delivered a presentation on driver behaviour and automated vehicles at an event hosted by the IIC to release the report to diverse stakeholders.

- > Worked with the Waterloo Regional Police (WRPS) on training for drug-impaired driving enforcement.



- > Met with representatives of the Ontario Provincial Police to share recent research about alcohol interlocks and experiences in other jurisdictions using alcohol interlocks in commercial vehicles.
- > Worked with the City of Edmonton Office of Traffic Safety and Transport Canada to plan and organize the 2019 International Conference on Alcohol, Drugs and Traffic Safety in Edmonton.
- > Served on an expert panel to review submissions to the Ontario Trucking Association and the Canadian Trucking Alliance for its annual Driver of the Year award.
- > Presented at the Not By Accident Conference in London, Ontario for the Southern Ontario Injury Prevention Conference. TIRF highlighted new research showing some drivers may take more risks in automated vehicles.
- > Provided testimony to the Senate about proposed legislation to permit the use of oral fluid testing devices by police at roadside to detect drug-impaired drivers.
- > Provided testimony about research on speeding and photo enforcement at a City of Ottawa council meeting.
- > Delivered a presentation at the Vision Zero conference hosted by Parachute Canada to share TIRF's research on alcohol and drug-impaired driving as well as automated vehicles.

PROJECTS AND SPONSORS

TIRF acknowledges the support received in the form of project grants and contracts from the following organizations:



Government of Belize



Public Health
Agency of Canada

Agence de la santé
publique du Canada



Ontario
MINISTRY OF TRANSPORTATION



ASSOCIATION OF IGNITION INTERLOCK PROGRAM ADMINISTRATORS

DONORS

TIRF gratefully acknowledges the many concerned companies, corporations, associations and governments whose contributions in 2016 supported the Foundation's efforts to reduce the losses that occur from road crashes. We also acknowledge with gratitude the private, individual donations and memorial donations received from individuals across Canada.



Alberta Transportation
 BMO Financial Group
 The Beer Institute
 PEI Transportation and Infrastructure Renewal
 Smart Start Inc.

Wawanesa Insurance
 Hydro One
 Gore Mutual Insurance Company
 The Co-operators
 Coalition of Ignition Interlock Manufacturers
 State Farm



Industrial Alliance
 Ontario Trucking Association

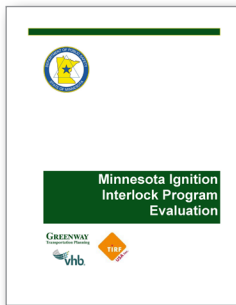
Used Car Dealers Association of Ontario
 Young Drivers of Canada

ADDITIONAL DONORS

We wish to extend personal thanks to our many private donors.

TIRF USA UPDATE

Minnesota Ignition Interlock Evaluation



TIRF USA and VHB, Inc. under contract with Greenway Transportation have completed an evaluation of the Minnesota ignition interlock program. Results of the evaluation showed that more than 78% of program participants completed the program and that those who completed the program were 39% less likely to recidivate.



Tara Casanova Powell
Director of Research

TIRF USA RSM 2016: Alcohol-Impaired Driving in the United States

TIRF USA conducted the second annual Road Safety Monitor (USA RSM) on alcohol-impaired driving with sponsorship from Anheuser-Busch in October 2016. A total of 5,050 U.S. drivers completed the poll. Increases in the prevalence of alcohol-impaired driving were observed in

<http://tirf.ca/TIRFUSA16D>

comparison to the previous RSM. These results were consistent with the increase in alcohol-impaired driving fatalities reported by NHTSA in 2015.



Colorado Ignition Interlock Evaluation

TIRF USA, in partnership with VHB, Inc. and Greenway Transportation Planning, are conducting an evaluation of the ignition interlock program in Colorado with funding from the Colorado Office of Behavioral Health and the Colorado Persistent Drunk Driving Committee. The evaluation includes a comprehensive review of the interlock program, DUI education and treatment program, and probation services to determine the effects and efficacy of these programs to reduce impaired driving recidivism rates.

TIRF USA RSM 2015: Alternatives To Alcohol-Impaired Driving

TIRF USA in partnership with TIRF in Canada released additional information from the first annual Road Safety Monitor (RSM) focusing on safe ride home programs as an alternative to alcohol-impaired driving. The public opinion poll sponsored by Anheuser-Busch investigated the opinions and behaviors of US drivers in relation to this issue. Results showed

<http://tirf.ca/TIRFUSRSM15-2>

the reported use of a designated driver was low. Even when drivers were aware of ride sharing programs or public transportation in their area, these programs were not widely used.



PROJECTS AND SPONSORS

TIRF USA acknowledges the support received in the form of project grants and contracts from the following organizations:

- > US Food and Drug Administration
- > Minnesota Office of Highway Safety
- > Colorado Office of Behavioral Health
- > Anheuser-Busch



PROGRAMS AND SERVICES

TIRF is an independent, evidence-based source of research and education materials on a wide range of road safety issues related to road safety. Accurate and timely information is provided through its professional staff, extensive library, and international network. TIRF communication and information services include:

- brochures;
- fact sheets;
- press releases and conferences; and,
- websites and educational resources.



Staying Connected

TIRF connects to the public, the research community, government agencies, road safety agencies, media and private companies in a number of different ways. TIRF maintains a private electronic mailing list and is active on a variety of social media channels. Through these channels, stakeholders receive regular notices regarding projects, publications and the TIRF Bulletin three to four times a year.

Follow us on facebook
<https://www.facebook.com/tirfcanda>

TIRF Canada @TIRFCANADA

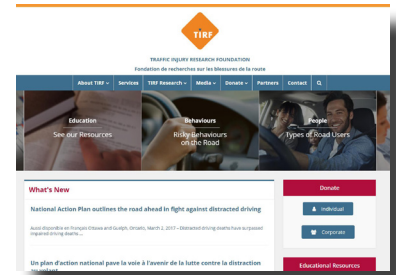
For the latest research & activities
<http://tirf.ca/dont-miss-thing/>

WEBSITES

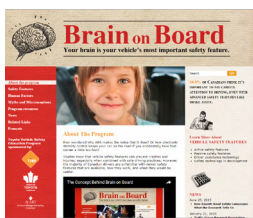


Traffic Injury Research Foundation tirf.ca

In 2016, TIRF developed a new and refreshed website, with a bold new look and enhanced navigation experience. Launched in March 2017, this website includes improved navigation functionality, with a new search feature. We've re-organized our content, so that it is more user-friendly to make your experience much better.



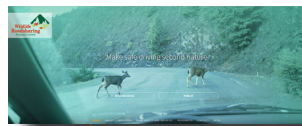
Brain on Board brainonboard.ca



TIRF's first bilingual national education program, Brain on Board is a one-stop-shop to learn about the many vehicle safety features that are rapidly becoming standard on vehicles, and how to maximize the protection they provide by combining them with safe driving behaviours.

Wildlife Roadsharing Resource Centre wildliferoadsharing.tirf.org

The Wildlife Roadsharing Resource Centre (WRRC) is a centralized source of information, research, education, resources, and many other features to answer the above and other questions you may have regarding wildlife-vehicle collisions. The website is designed for Researchers and Practitioners as well as the public.



Change the Conversation changetheconversation.ca



This website hosts the online component of a national education program to reduce impaired driving in Canada. Its goal is to share the facts about impaired driving with the public and interested professionals and it also contains many free downloads and resources.

Drop It And Drive™ dropitanddrive.com



Drop It And Drive™ (DIAD) is a Traffic Injury Research Foundation education program focused on preventing distraction-related road user injuries and fatalities. DIAD distracted driving seminars for schools and workplaces are thought provoking and interactive, using science and real stories to engage communities in practicing safer road behaviours.

Alcohol Ignition Interlock Curriculum for Practitioners aicp.tirf.ca

This website contains a variety of instructional materials that can assist agencies and organizations in educating their staff and members about alcohol ignition interlocks.



Young and New Driver Resource Centre yndrc.tirf.ca



The Centre serves as a comprehensive source of information about young and new driver safety and contains information about young and new driver research and the many policies, programs and initiatives targeted towards this group.

MEDIA AND INFORMATION REQUESTS

In 2016, TIRF received 207 information and media requests. TIRF's main website had on average 300 visitors each day, over 189,981 page views, over 109,522 visitors in 2016.

SOCIAL MEDIA



658 Likes



1,320 Followers

WEBSITE

109,522
Visitors

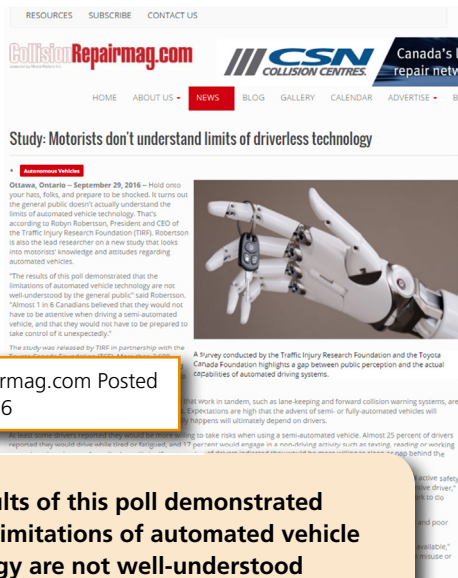
300
Visitors
per day

189,981
Page
views



The Globe and Mail Posted Oct 13th, 2016

"The research supports the notion that if people believe they will get caught, they will more likely change their behaviour – reduce their speed, not drink and drive, not be distracted at the wheel," said Ward Vanlaar, chief operating officer of the Traffic Injury Research Foundation. **"This can be accomplished by choosing locations and times for enforcement strategically."**



CollisionRepairmag.com Posted Sept 29th, 2016

"The results of this poll demonstrated that the limitations of automated vehicle technology are not well-understood by the general public" said Robertson. "Almost 1 in 6 Canadians believed that they would not have to be attentive when driving a semi-automated vehicle, and that they would not have to be prepared to take control of it unexpectedly."

Tweet Posted by Jennifer McIntosh City Hall reporter for Metroland Media's group May 4th, 2016



Jennifer McIntosh @CityJMAC · 4 May 2016
Ward Vanlaar, Traffic Injury Research Foundation, said speed a factor in 18 % collisions nationwide annually. #ottnews

REPORT OF THE INDEPENDENT AUDITORS ON THE SUMMARY FINANCIAL STATEMENTS

To the Members of Traffic Injury Research Foundation of Canada

The accompanying summary financial statements of Traffic Injury Research Foundation of Canada, which comprise the summary statement of financial position as at December 31, 2016, and the summary statement of operations and net assets for the year then ended, and related notes, are derived from the audited financial statements prepared in accordance with Canadian accounting standards for not-for-profit organizations, of Traffic Injury Research Foundation of Canada as at December 31, 2016 and for the year then ended.

We expressed an unmodified audit opinion on those financial statements in our report dated April 26, 2017.

The summary financial statements do not contain all the disclosures required by Canadian accounting standards for not-for-profit organizations applied in the preparation of the audited financial statements of Traffic Injury Research Foundation of Canada. Reading the summary financial statements, therefore, is not a substitute for reading the audited financial statements of Traffic Injury Research Foundation of Canada.

Management's Responsibility for the Summary Financial Statements

Management is responsible for the preparation of a summary of the audited financial statements on the basis described in note 1.

Auditors' Responsibility

Our responsibility is to express an opinion on the summary financial statements based on our procedures, which were conducted in accordance with Canadian Auditing Standard (CAS) 810, "Engagements to Report on Summary Financial Statements".

Opinion

In our opinion, the summary financial statements derived from the audited financial statements of Traffic Injury Research Foundation of Canada as at and for the year ended December 31, 2016 are a fair summary of those financial statements, in accordance with the basis described in note 1.



Chartered Professional Accountants, Licensed Public Accountants

April 26, 2017

Ottawa, Canada

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. KPMG Canada provides services to KPMG LLP.

TRAFFIC INJURY RESEARCH FOUNDATION OF CANADA
Summary Statement of Financial Position
December 31, 2016, with comparative information for 2015

	2016	2015
Assets		
Current assets:		
Cash	\$ 143,978	\$ 32,069
Amounts receivable	392,033	568,448
Prepaid expenses	15,655	25,634
	551,666	626,151
Tangible capital and Intangible assets	40,273	53,437
	\$ 591,939	\$ 679,588
Liabilities and net assets		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 53,349	\$ 57,349
Deferred revenue	175,000	225,248
Current portion of obligations under capital lease	14,200	14,200
	242,549	296,797
Obligations under capital lease	29,582	43,782
Net assets:		
Unrestricted	191,415	198,298
Internally restricted research reserve fund	88,120	87,274
Invested in tangible capital and intangible assets	40,273	53,437
	319,808	339,009
	\$ 591,939	\$ 679,588

See accompanying notes to summary financial statements.

TRAFFIC INJURY RESEARCH FOUNDATION OF CANADA
Summary Statement of Operations and Net Assets
Year ended December 31, 2016, with comparative information for 2015

	2016	2015
Revenue		
Project contributions	\$ 1,753,062	\$ 1,324,351
Government grants	21,200	16,200
Fees and honoraria	11,608	21,803
Donations	50,167	41,731
Other Income	6,928	2,805
	1,842,965	1,406,890
Expenses		
Research	1,298,364	946,092
Administration	356,724	341,752
Promotion	207,475	115,408
	1,862,063	1,403,252
Excess (deficiency) of revenue over expenses before the undernoted	(19,098)	3,638
Loss on disposed of tangible capital assets	(103)	
Excess (deficiency) of revenue over expenses	(19,201)	3,638
Net assets, beginning of year	339,009	335,371
Net assets, end of year	\$ 319,808	\$ 339,009

See accompanying notes to summary financial statements.

TRAFFIC INJURY RESEARCH FOUNDATION OF CANADA

Notes to Summary Financial Statements Year ended December 31, 2016

The Traffic Injury Research Foundation of Canada (the “Foundation”) is incorporated without share capital under the Canada Corporations Act. Effective September 9, 2013, the Foundation continued their articles of incorporation from the Canada Corporations Act to the Canada Not-for-Profit Corporations Act. The Foundation is registered with Canada Revenue Agency as a charitable organization and is tax exempt under the Income Tax Act (Canada).

1. Summary financial statements:

The summary financial statements are derived from the complete audited financial statements, prepared in accordance with Canadian accounting standards for not-for-profit organizations in Part III of the CPA Canada Handbook – Accounting, as at and for the year ended December 31, 2016.

The preparation of these summary financial statements requires management to determine the information that needs to be reflected in the summary financial statements so that they are consistent, in all material respects, with or represent a fair summary of the audited financial statements.

These summarized financial statements have been prepared by management using the following criteria:

- (a) whether information in the summarized financial statements is in agreement with the related information in the complete audited financial statements; and
- (b) whether, in all material respects, the summarized financial statements contain the information necessary to avoid distorting or obscuring matters disclosed in the related complete audited financial statements, including the notes thereto.

Management determined that the statement of changes in net assets and the statement of cash flows do not provide additional useful information and as such has not included them as part of the summary financial statements.

The complete audited financial statements of Traffic Injury Research Foundation of Canada are available upon request by contacting the Foundation.



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