1 About the Toolkit

What is the Community-Based Toolkit for Road Safety Campaigns?

The Toolkit is a user-friendly tool for communities to help them develop an effective road safety campaign. It contains knowledge, guidance and resources that can support communities in the development and delivery of their own campaign. It includes:

- a clear summary of the research about road safety campaigns; and,
- a more detailed, comprehensive report that describes the evidence-base for road safety campaigns, what is known about their effectiveness, common theoretical approaches that guide the development of campaigns, and the latest knowledge regarding the ways that people learn.

In addition, the Toolkit also contains a variety of fact sheets created by experts in social marketing, research and evaluation that present strategies to help communities to:

- engage a group of interested stakeholders who can play a role in delivering a road safety campaign;
- identify an appropriate issue and target audience for the campaign;
- use a solid approach to create campaign messages and visuals;
- develop a practical dissemination strategy to promote the campaign; and,
- prepare for an evaluation of their campaign.

Finally, the Toolkit also contains a pedestrian fact sheet as well as two examples of a pedestrian campaign that were created by Safer Roads Ottawa using this approach, and a list of road safety resources that can help communities learn the facts about priority road safety issues.

An expanded version of the Toolkit that includes additional fact-sheets will be made available in the Fall of 2016 regarding a range of other road safety issues (e.g., distraction, alcohol and drug impairment, cyclists, speeding) that communities can choose from when creating a road safety campaign. Stay tuned for updates at www.tirf.ca.

Why was the Community-Based Toolkit created?

Campaigns are one of the most commonly-used tools to promote road safety, and in the past decade much has been learned from research emerging from several disciplines that can inform the development, implementation and delivery of road safety campaigns.

The Toolkit was created to fill an important gap between research and knowledge about effective road safety campaigns, and the desire among communities to take action on important road safety issues in their own communities. In particular, it was noted that it can be challenging for communities to gather and access research about effective campaigns and

important road safety issues, as well as to tap into expertise and resources that make it possible for them to create local campaigns.

The Toolkit was also created because road safety problems are local. While many national and provincial/territorial road safety campaigns exist, they can be difficult for communities to use at a local level for a variety of reasons.

- **Communities may be unable to find a national or provincial/territorial campaign that specifically addresses the road safety problem, and the characteristics of that problem which they are experiencing in their community.** Moreover, larger-scale campaigns are typically directed towards a general audience of all ages which can make them less effective in relation to specific audiences that may be a focus of concern (e.g., young drivers, female drivers, elderly drivers) in a community. And, local communities often find it difficult to make national or provincial/territorial data relevant to the local context.
- **Communities may find that the creative design of the campaign, the key messages and/or the use of specific visuals is inconsistent with their experiences or not relevant to their community.** To illustrate, distracted driving campaigns that utilize cell phones in vehicle and emphasize talking/texting as visuals are often inappropriate for many rural communities where cell phone coverage is limited or non-existent (e.g. northern Ontario) and where other types of distractions may be considered more relevant (e.g., changing CDs or using GPS). Also, the choice of wording and approach associated with key messages may not fit with local culture or context. This has important implications for community buy-in and support.
- **National and provincial territorial campaigns generally cannot acknowledge the different types of communities that exist (e.g., urban, rural) and it can be difficult to link them to local government or policy issues that are relevant to the campaign.** This may include: past high-profile crashes in the community, infrastructure improvements or lack thereof, the presence or lack thereof of alternative transportation, the presence of wildlife, and the lack of sidewalks or bicycle paths). It is important that campaigns resonate with communities, reflect their experience, and strike a personal or emotional chord within the community to encourage behaviour change.
- **Finally, and perhaps most importantly, communities often struggle with the development and implementation of road safety campaigns because successful campaigns require knowledge and tools in relation to research as well as social marketing that can be challenging or expensive for communities to effectively leverage.** Gaps in these areas can result in key partners involved in campaign initiatives having very different perspectives and understandings of road safety issues and also effective campaign strategies, and these, often-opposing, viewpoints can be a barrier to campaign development and delivery.

What process was used to develop the Toolkit?

The Toolkit was developed using a step-wise and logical approach that involved a series of meetings with a coalition of community members representing local government agencies and advocacy organizations.

As a first step, the research about effective road safety campaigns and pedestrian road users was presented to the group by research staff from the Traffic Injury Research Foundation (TIRF). This helped to create a common base of knowledge for discussion which helped to identify priority road safety issues, and to document local attitudes, experiences and perspectives in relation to pedestrians in Ottawa. In addition, group members were asked to review brief summaries of the research on these topics to identify what information was most relevant and useful for inclusion in the Toolkit to inform the development of a road safety campaign.

Next, an overview of social marketing strategies and approaches was presented to the group by Acart Communications, Inc. to provide a common base of knowledge about messaging, branding and dissemination of campaigns. Collectively, this content knowledge was used to generate ideas for a pedestrian campaign for Ottawa. The group also again reviewed brief summaries of the knowledge that was shared in relation to messaging, branding and dissemination to identify the most useful and relevant information for the Toolkit.

Feedback from discussions was then used by TIRF and Acart to develop concepts for a pedestrian campaign for Ottawa. These concepts were then refined and focused with additional feedback from the group to create the final campaign designs which are included in the Toolkit as examples of the work emerging from the Toolkit. Finally additional fact sheets with regards to stakeholder engagement and campaign evaluation were developed by TIRF and reviewed by the group and included in the Toolkit.

Who was involved in developing the toolkit?

Several partners played important roles in bringing together the knowledge and resources included in the Toolkit. These partners included national experts in road safety research and social marketing, as well as Ottawa-based government, business and advocacy organizations.

- **Safer Roads Ottawa** (ottawa.ca/en/residents/transportation-and-parking/safer-roads-ottawa-program) is a partnership between Ottawa Fire Services, Ottawa Paramedic Service, Ottawa Police Service, Ottawa Public Health and the Public Works Department.
- **Community-based advocacy organizations** include Ottawa chapters of the Multiple Sclerosis Society, the Heart andStroke Foundation, Gotta Walk, Citizens for Safe Cycling, Green Communities Canada (School Travel Planning program), the Council on Aging of Ottawa, and Walk Ottawa.
- **Traffic Injury Research Foundation** (TIRF; www.tirf.ca) is Canada's road safety research institute. It is a world leader in research, program and policy development, evaluation, and knowledge transfer focusing on the road user and behaviours that result in driver error and account for 80% of road crashes. TIRF's mission to reduce deaths and injuries resulting from road crashes is achieved by designing, implementing, evaluating and promoting evidence-based strategies. 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 address them effectively.

- **Acart Communications, Inc.** (www.acart.com) is a long-time partner of TIRF. Acart helps clients change attitudes, provoke action, and improve lives. They are a specialized social issues marketing agency that combines social marketing and corporate social responsibility. As a one-stop shop, Acart offers a complete range of in-house communications services including: branding and corporate identity; design; marketing and communications planning; copywriting; partnerships; digital media; social media engagement; advertising; HR marketing; and, media. Established in 1976, Acart has experienced continuous growth and enjoyed national and international recognition for outstanding creativity.

Special Acknowledgement

TIRF gratefully acknowledges the following individuals who shared their insights, experiences and expertise about road safety issues and community-based road safety organizations to inform the development of the Toolkit:

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Who funded the development of the Toolkit?

The Toolkit was funded by the **Canadian Automobile Association** (www.caa.ca). CAA is a federation of nine Clubs providing 6 million Members with exceptional emergency roadside service, complete automotive and travel services, Member savings and comprehensive insurance services. CAA also advocates on issues of concern to its members, including road safety, the environment, mobility, infrastructure and consumer protection. The mission of the Association is to enhance Clubs' ability to better serve the Members and to prosper as a national organization. CAA's National Office executes the vision and strategic plan of the National Board in service of this mission.

Who can use the Toolkit?

The Toolkit is freely available to organizations and groups that are concerned about road safety issues in their communities, and that are interested in implementing a road safety campaign to encourage safer habits on the roads.

This document is part of the Community-Based Toolkit for Road Safety Campaigns.

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ROAD SAFETY CAMPAIGNS: WHAT THE RESEARCH TELLS US

By Robyn D. Robertson, and Charlotte R. Pashley, TIRF

How effective are road safety campaigns?

Prior research from many countries over the past three decades has investigated the effects of road safety campaigns. While individual evaluations have focused on different road safety issues, and different measures of behaviour change (e.g., crash data, observational data, self-reported changes in behaviour, perceptions and attitudes), overall many have shown a range of positive outcomes and demonstrated that road safety campaigns can change perceptions and reduce crashes. One of the most prominent studies involves a European meta-analysis[1] of 437 effects extracted from 228 international studies conducted in 14 countries during the past 30 years. It revealed that road safety campaigns generally:

- reduced the number of road incidents by approximately 9%;
- increased seatbelt use by 25%;
- reduced speeding by 16%;
- increased yielding behaviour by 37%; and,
- increased risk comprehension by about 16% (Phillips et al. 2009).

What factors help to make a campaign effective?

A subsequent European meta-analysis that examined 119 effects extracted from 67 international studies further revealed insight into the features of campaigns that contribute to effectiveness in terms of crash reductions. These features included:

- drinking and driving campaigns;
- shorter duration (less than one month);
- personal communication;
- roadside delivery, use of roadside media, or delivered in proximity to the behaviour occurring;
- combined emotional/rational message has a stronger influence than a purely rational message;
- accompanied by enforcement; and,
- combined with mass media (Phillips et al. 2011).

1 "Meta-analysis is a statistical technique used to summarize the results of a group of individual studies sharing a common research hypothesis and a common measure of effect. This approach is used is to estimate the size of the effect that an intervention (e.g., road safety campaigns) has according to several outcome measures (Phillips et al. 2009; p.25-26).

What theoretical models are most often used for evidence-based campaigns?

There is consensus among experts in the field of road safety that the best road safety campaigns are based on research-driven, psycho-social theories of behaviour. Some of the leading theories that have been used in this regard include behaviour change theories, theories of social persuasion, and fear-based campaigns. Examples of leading theories are briefly described below.

Behaviour change theories

- **Theory of Planned Behaviour (TPB).** This theory predicts that personal decisions (i.e., intentions) to carry out certain behaviours are based on a combination of: 1) attitudes toward the behaviour; 2) subjective norms; and, 3) perceived behavioural control. According to this theory, these three major factors influence a person to either engage in a specific behaviour, or to choose not to do so. For example, individuals who believe that speeding is a fun activity that most people engage in, and can do it easily without endangering others, are more likely to make decisions to engage in speeding behaviours compared to individuals with a different set of beliefs.
- **Health Belief Model (HBM).** This theory has been widely adopted to explain human behaviour. Its underlying premise is that the main motivator for people to preserve or protect their health is to avoid negative health behaviours. Key factors include susceptibility to the consequences of action, perceived seriousness of the consequences of action, perceived barriers that decrease the likelihood of action; perceived benefits that increase the likelihood of action; confidence in the ability to take action (i.e., self-efficacy); and, internal and external cues/motivators to affect the likelihood of action. Although other motivational factors might contribute to the adoption of the specific health behaviour, HBM proposes that avoiding a negative health outcome is the most influential factor (Delhomme et al. 2009).
- **Protective Motivation Theory (PMT).** This theory is similar to HBM in that it targets an individual's motivation to avoid actions that would be detrimental to their health. However, it more closely highlights the possible threats and vulnerability a person may feel from the idea of engaging in a negative behaviour. The concept of protection motivation stems from one's desire to protect or defend themselves against negative consequences of a behaviour based on fear and coping appraisal. In this model, self-efficacy also plays a very significant role in a person's decision to adopt the behaviour; it is the determining factor that results in change or resistance to change.
- **Transtheoretical Model of Change (TMC).** This model acknowledges that behavioral modification is a process that must be accounted for during the development of any campaign that aims to alter road user behaviour. It addresses this process and suggests that people may be in different stages of change and must pass through the five stages of change (i.e., pre-contemplation, contemplation, preparation, action, and maintenance) before

permanent behaviour change can occur. The model suggests that these stages are fluid and that it is possible for an individual to move forward and backwards between the stages.

Theories of social persuasion

- **Social Norms Theory.** This theory suggests behaviour is influenced by (often inaccurate) perceptions of how other members of a person's social group think and behave (Yanovitzky 2004). This phenomenon is similar to the 'bandwagon effect' described by McAllister & Studlar (1991) which predicted that personal beliefs are strengthened if it is believed that others share the same attitudes and perceptions towards the behaviour. It suggests that a person's social perceptions may have a more powerful effect on behaviour than the risks to health or safety.
- **Elaboration-Likelihood Model.** According to this model, developed by Petty and Cacioppo (1986), the likelihood that a person will elaborate or change their attitude is dependent on a person's motivations and their ability to elaborate on the situation. In other words, individuals are motivated to process a message if it is viewed as personally relevant or if they feel a high level of personal or social responsibility regarding the behaviour (Wundersitz et al. 2010). This means that audiences that have prior knowledge of the issue, and possess the ability to understand the message, are more likely to use this route.

For more information about theoretical models of road safety campaigns, please review the full report entitled "Road Safety Campaigns-What the Research Tells Us" contained in the Toolkit.

Are fear-based appeals that use graphic and shocking images an effective approach to road safety campaigns?

Campaigns that utilize fear-based appeals often receive more media attention due to the use of graphic and shocking images. While this approach can produce the desired results, it is important that it is used selectively and in an appropriate context for several reasons. These campaigns are not equally effective with all audiences; younger and male audiences are more difficult to influence using this approach, and the effects of fear-based appeals are often short-lived (SWOV 2009). More concerning is that research shows that individuals that are most likely to engage in the behaviour, and are most invested in it, are most likely to ignore or reject the message if it is not well-constructed.

However, well-designed fear-based campaigns can be effective, as demonstrated by two compelling examples "the impossible driving and texting test" developed by Responsible Young Drivers in Belgium (http://youtu.be/HbjSWDwJILs) and 'embrace life' by Sussex Safer Roads in the United Kingdom (http://youtu.be/h-8PBx7isoM). These messages illustrate the negative consequences but in ways that are less graphic and confrontational and that rely upon positive emotions. These examples also contain a high degree of personal relevance to the target audience and suggest ways that drivers can protect themselves.

What are the limitations of the research?

There are some important considerations that should be acknowledged in relation the research regarding the effectiveness of road safety campaigns. These include:

- Campaigns are generally not systematically and empirically evaluated.
- It is difficult to determine how to accurately and objectively measure the impact of a campaign on a specific population, and this is one of the leading issues surrounding the evaluation of road safety campaigns. In other words, it can be difficult to identify appropriate outcome measures regarding behaviour change that demonstrate the effectiveness of a campaign.

  Many common evaluation measures include surveys of attitudes, perceptions, and behaviours of road users related to the campaign and its targeted issue. While self-report data can be very useful to understand and interpret message penetration and public concern, these measures do not capture actual changes in behaviour. Observational surveys (i.e., road-side observations to detect increases/decreases of a specific behaviour) provide a solution to this problem but are expensive and time-consuming.
- There are also a variety of methodological research design challenges that are often encountered during road safety campaign evaluations. For example, it can be difficult to identify comparable or representative control groups (i.e., similar populations who are not exposed to the campaign) whose behaviours can be compared to those who are exposed in order to measure behaviour change across the groups. Control group areas may also be exposed to other factors or campaigns that could influence behaviour in similar ways to the experimental group, as was the case demonstrated in the National Highway Traffic Safety Administration's (NHTSA's) distracted driving campaign evaluation (Chaudhary et al. 2014).
- Similarly, many campaigns consist of multiple strategies (e.g., enforcement, TV advertisements, billboards) to ensure that campaign messages are heard and adopted. However, it becomes difficult for researchers to determine which strategy contributed the most to the effectiveness, or lack thereof, of a campaign.

How can research about learning styles inform the development of a campaign?

Education is an important and often under-rated component of effective road safety campaigns. While the ability of a campaign message to capture and engage the attention of an audience is essential to increase awareness about an issue, the true success of a campaign is gauging what people have learned and how they have acted upon that new knowledge. It is for this reason that understanding the process of learning, and the various ways in which people retain information can provide local governments and community partners with an important advantage to inform campaign development.

Neil Fleming's *VAK (visual, auditory, kinesthetic)* model is described as one of the most commonly used representations of the ways in which people receive information. According

to this theory, certain individuals are better able to learn new information depending on how it is disseminated (i.e., seeing it, hearing it, or touching it). Therefore, in order to reach and appeal to as many people as possible, campaigns should include resources and materials that incorporate multiple paths to learning.

Motivation (i.e., the internal state that guides and sustains behaviour and intentions) also plays an important role in the desire or willingness to learn. If there is no motivation to consider a desired change, it is unlikely that individuals will respond to a campaign. Messages should identify and address both intrinsic (innate factors) and extrinsic (external factors) motivators in a campaign. Examples of intrinsic motivational factors can include encouraging individuals to identify and set personal goals, or relating road safety issues to real life situations that may affect them. Conversely, extrinsic motivators could include giving incentives for changing behaviour or highlighting the consequences of failing to make the proposed change.

Table 1: Campaign Effectiveness

Campaign Location	Campaign Issue/Theme	Primary Medium	Target Audience	Cost	Effectiveness
Australia and New Zealand	Tagline -"if you drink then drive, you're a bloody idiot". Using graphic images of physical consequences	Television	Primarily young males aged 18-24	$70 million AUD and $50 million NZD	Most crash reduction effects were found with young females and middle-aged males.
Western Montana	Tagline –"4 out of 5 young adults don't drink and drive".	TV and radio PSAs, newspapers, billboards and movie slide ads. Control counties received low dosage exposure to free radio and TV PSAs and paid newspaper ads. Promotional items with message were distributed statewide	21-34 year olds	$500,000	It successfully changed perceptions about drinking and driving behaviour among peers in target communities.
Syracuse, NY and Hartford, CT	Tagline –"phone in one hand, ticket in the other". High visibility enforcement campaign.	Delivered 4 waves of enforcement between April 2010 and April 2011. The first wave was 2 weeks, the other phases were 1 week. Campaign delivered in English and Spanish with heavy media coverage and support from stakeholders.	Drivers aged 18-45	$559,161USD	Driver surveys showed increased awareness that laws were being enforced, and recognition of slogan.
Quebec	Tagline - "be smart, stay alive, buckle up". Fear-based appeal seatbelt campaign. Visuals equated a 40km/hr crash with a fall off of a 3-storey building by a man with a loaf of bread in one hand and quart of milk in the other, suggesting short trips close to home where most crashes occurred; follow up campaign targeted back seat passengers. Challenged myth that low speed crashes are not dangerous and illustrated negative consequences but made it difficult for the audience to reject the message.	Delivered using mass media (TV and radio) and collateral materials.	N/A	First Phase $1 million CAD Second Phase $1.2 million CAD	It raised usage rates from 67% (one of lowest levels in Canada) to over 93% and changed behaviour among young males who were least likely to buckle up. Longevity and persistence combined with powerful message were keys to success.
Belgium	Tagline -"the safety belt. one second changes everything" or "la ceinture, une seconde qui change tout". Seatbelt campaign designed to increase belt use. Focus on lower speed crashes in urban areas based on crash analysis. Campaign utilized theory of planned behaviour. National campaign in 2008; in which effects on high school and university students were studied.	Campaign consisted of a mix of campaign materials including TV spots, posters, bumper stickers, website, leaflets, billboards on roadways, television programs.	Drivers and passengers	N/A	Study revealed that being exposed does not guarantee an effect and that awareness of exposure is important; visual interest and message placement influence awareness.
Jordan	Tagline –"seatbelts may not be comfortable at first, with use you get used to it". Seatbelt campaign designed to increase belt use. Campaign incorporated protection motivation theory. Emphasis was on the benefits of seatbelts using positive messages.	Delivered over a 4-month period through Mosques/ Churches, TV and radio, newspapers and televised educational programs with experts.	General public	N/A	Observation survey and in-person interviews showed increased usage rates and revealed that Mosques/ Churches were an effective way to reach the target audience.

Notes

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Stakeholder Engagement

By Robyn D. Robertson, TIRF.

Why is stakeholder engagement important?

Developing a road safety campaign takes not only time and energy, but also different skill sets. Identifying natural partners who have different skill sets and share an interest in road safety can help make it easier to develop and implement an effective campaign. In every community the composition of stakeholders may vary. However, some of the potential partners to consider include City Councils and municipal/regional transportation departments, police, public health officers, automobile clubs, public transportation agencies, local businesses (e.g., delivery companies, real estate agents and others who spend time on the road) and advocacy organizations. Efforts to include stakeholders and individuals who represent all age ranges are also important to ensure the community is well-represented in terms of interests, perspectives, experiences and preferences.

How do I encourage stakeholders to participate in and support the development of a road safety campaign?

The first step to building effective partnerships with stakeholders is to understand their mission, goals, and activities to determine how road safety campaigns can complement and/or benefit their respective organizations. While organizations are often willing to contribute to social causes, these causes are numerous, and also 'in addition' to their day-to-day activities. As such, stakeholders can be more motivated by requests that include a benefit for their organization. These benefits may include increased visibility in the media, at events or in the community, more opportunities to engage directly with members of the public, official recognition or acknowledgement of their contribution, opportunities to connect with key audiences or opportunities to promote their products or services. In this regard, meeting individually with each stakeholder to learn about their organization and priorities can provide campaign organizers with information that can help them to create a more relevant and effective request for their cooperation, and gain much-needed buy-in.

At the same time, knowledge about the politics that influence each stakeholder and their ability to engage in certain tasks (e.g., fundraising, advocacy) or to work with others can help ensure that the roles and responsibilities of each partner are clearly defined and appropriate, and that expectations are consistent with these qualities.

What is the best way to allocate roles and responsibilities to each stakeholder to keep the workload for each organization manageable?

Taking a little bit of time to learn more about the day-to-day operational practices of stakeholders is a key to matching tasks with their natural abilities or the ease with which they

can accomplish things. Recognizing the strengths of each stakeholder in terms of what they do well, and who may have access to relevant skill sets such as communications, marketing and design, fundraising, and influential partnerships can help to identify the best stakeholder(s) to undertake specific tasks. For example, businesses that routinely undertake marketing and promotion activities in relation to their business are well-positioned to participate in branding or creating promotional materials. Local government is well-positioned to make linkages to different sectors in the community and have experience working with media. Not only does the matching of skills to tasks make it more efficient for stakeholders to complete these tasks, but it also enables them to make an important contribution to the campaign that is in their 'comfort zone'. In other words, matching creates a sense of satisfaction that is valued and that keeps stakeholders engaged.

Another essential feature of assigning roles and responsibilities is to ensure the workload is spread fairly evenly across stakeholders and that just a few stakeholders are not responsible for the bulk of the work. This has two negative consequences. First it makes those doing the bulk of the work feel overwhelmed and even a little bit resentful when it comes to sharing credit for the campaign. Second, it makes those doing minimal work feel that their participation is unimportant and they are not included in decision-making, making it more likely that they will not remain engaged throughout the process.

How can stakeholders help the campaign reach its target audience and key influencers?

Understanding the membership of each stakeholder and their respective types of communication mechanisms and tools used for dissemination and outreach can provide important insight into opportunities to strengthen campaign penetration and reach. Some organizations may be very active on social media and have a membership comprised of business professionals; other organizations may have a lot of individual community members who meet regularly, and other organizations may have experience with using posters and brochures in schools. Figuring out what natural communication channels already exist among stakeholders and that can be leveraged is a good way to determine how to best and efficiently disseminate the campaign materials to different audiences using cost-effective strategies.

What should I do if stakeholders do not complete tasks that are assigned?

One way to help ensure that tasks are accomplished is to break down larger tasks into steps and keep stakeholders focused on immediate and next steps to avoid them feeling overwhelmed by challenging assignments. For example, the first step to develop a brand is to identify the key message; the first step to planning an evaluation is to determine who may have evaluation experience that can be tapped. Sometimes it is more manageable to focus on individual steps in a task as opposed to the whole task and getting started is often the hardest part.

Flexibility is also key to the completion of tasks. In a crunch, stakeholders are always going to place a priority on their core business and may be unable to complete certain tasks in the allotted time. For this reason, including at least two persons in task assignments can provide support for the task and help to ensure that if one person faces an unexpected challenge that at least one other person with knowledge of the task can either take over or at least keep things moving forward. Efforts to meet stakeholders halfway to help them manage schedules so they can complete assigned tasks are a necessary feature of negotiating the completion of work. This also demonstrates to stakeholders that you are willing to work with them to make things easier and helps to keep them engaged. Finally, it should be expected that some stakeholders will not be able to deliver on assigned tasks for a variety of reasons. Having a 'Plan B' for critical tasks can help minimize the negative consequences.

How do I keep stakeholders engaged throughout the entire process?

One important way to keep stakeholders engaged is to listen to their ideas, perspectives, and make the process inclusive so everyone has an opportunity to contribute to discussion. At the same time, it is important to make sure that discussions are not dominated by a few persons with strong opinions. One way to overcome this problem is to invite each individual during discussion to specifically comment on issues and share their thoughts if it appears some people are not participating. Most importantly, discussion of key issues at each meeting should include different options and alternatives that can be considered and decision-making should be consensus-based, although at times this may be more difficult to accomplish.

Keeping stakeholders engaged is also more easily achieved when committees have clear agendas and objectives to accomplish, and these objectives are efficiently accomplished at each meeting. Similarly, the assignment of responsibility for tasks and action items between meetings, as well as clear timelines are essential to ensure the work is completed. These are all important elements of meetings because partners are more likely to remain active throughout the process if progress is continuously achieved and goals are met. Stakeholders are more likely to disengage if meetings become repetitive and it appears that work is not being completed.

At the same time, it must be acknowledged that partners are volunteering their time and resources to this activity, and efforts are also needed to accommodate schedules and competing demands. As such, making sure that timelines to complete tasks are reasonable, and that efforts to manage timelines to accommodate 'unforeseen' challenges are available, are necessary to avoid organizations feeling like they are not making a contribution.

Finally, and most importantly, regular and timely communication with stakeholders about work plans, timelines, obstacles and how they are being addressed, responsibilities and outcomes is essential to ensure ongoing interest in and support for the campaign. This emphasis can also help stakeholders to see where they have made key contributions that helped to deliver the final campaign and sustain their buy-in and continued partnership.

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CREATING AN EFFECTIVE ROAD SAFETY CAMPAIGN

By Robyn D. Robertson, TIRF.

Why should organizations consider using a road safety campaign to make roads safer in their own community?

While there is national concern about a variety of road safety issues (e.g., speeding, distraction, pedestrians, drinking and driving), the level of concern regarding each of these problems may vary across individual communities. In addition, road safety problems are local, meaning that the specific characteristics of a problem are often unique in each community. For example, the distraction problem in one community may be mostly related to drivers checking their phone at busy urban intersections at a red-light; in another community distraction may mainly involve cyclists and pedestrians who are using headphones.

Road safety campaigns are flexible tools that communities can use to increase awareness and knowledge about specific road safety problems in their own community and can be adapted to a wide range of issues. Campaigns can be designed to target different audiences, are easily adapted to different media, and can be delivered for various lengths of time. They can also be delivered at local, regional, provincial or national levels. For these reasons, road safety campaigns have been used by jurisdictions around the world to reduce risky behaviours on the road and motivate positive changes in behaviour.

What organizations can be engaged to assist in developing and delivering a road safety campaign?

There are a wide range of stakeholders in every community who have a vested interest in road safety. Key stakeholders that should be consulted and included in the development of a community road safety campaign may include:

- Local government
- Police agencies
- Public health and/or health care providers
- Business leaders
- Community/advocacy groups
- Automotive clubs
- Local media
- Youth organizations

While not every stakeholder may be able to participate, it is important that they are invited and, at a minimum, made aware of the initiative to develop a community road safety campaign.

For more information about engaging stakeholders, please review the Stakeholder fact sheet contained in the Toolkit.

Why is it important to choose a theoretical model to strengthen my road safety campaign?

Road safety experts agree that the best road safety campaigns are based on psycho-social theories of behaviour, including behaviour change theories, theories of social persuasion, and fear-based campaigns. While these theories may use different terms and emphasize some aspects of behaviour as being more important than others, generally speaking, they are not fundamentally that different; neither are they mutually exclusive.

Generally these theories suggest that the factors that most influence behaviour (e.g., attitudes, intentions, social norms, perceived vulnerability, perceived barriers or consequences, or sources of social control) must be understood in order to change the problem behaviour. Hence, choosing a theoretical approach to guide campaign development can inform decision-making and ensure a coherent campaign strategy is developed, and increase the likelihood of behaviour change.

The first step to choose a theoretical model is to understand the road safety problems that exist in your community based on available police and health data. These data can help identify key factors in crashes (e.g., speed, distraction) and the most appropriate topics for a road safety campaign. Once a topic is selected, the next step involves talking to different segments of the community to understand the situational dynamic that contributes to the behaviour. For example:

- Drivers often speed because they are late and trying to make up time.
- Pedestrians cross mid-block instead of at intersections because it's more convenient.
- Cyclists disobey rules of the road because they do not believe they have to follow the same rules as cars.
- Drivers use electronic devices while driving because they believe they are better drivers and do not understand the risks.

It is important to understand the reasons why people engage in risky or problem behaviour on the road in order to develop messages that are most likely to motivate them to change their behaviour. It is equally important to understand that there are a variety of external and environmental factors that shape behaviour that must be considered. In addition to the attitudes of peers and social norms, people are also influenced by the presence of social controls and barriers to the behaviour. Collectively these factors will enable communities to adopt an approach that is well-suited to the problem and incorporate messages and delivery strategies that have the potential to positively influence behaviour change.

For more information about theoretical models of road safety campaigns, please review the full report entitled "Road Safety Campaigns - What the Research Tells Us" contained in the Toolkit.

What approaches to campaign messages are most often used?

There are four main approaches to campaign messages that are most often used in social marketing campaigns (social marketing approaches aim to change the behaviour of a target audience). There are advantages and disadvantages associated with each style. Of importance, it should be underscored that some of these styles may be more appropriate for some audiences than others. Each of these approaches is briefly described below and campaign organizers should select the approach that is best suited to their community, topic and the situational dynamic underlying the problem behaviour.

- **Positive messages.** Research clearly shows that audiences in general respond better to positive and constructive messages. They respond less well to negative messages that convey critical, accusatory, or confrontational approaches to a problem. Drivers of all ages are generally unmoved by messages that are perceived as lectures that emphasize what not to do. "Don't" messages fail to suggest practical alternatives to replace unsafe behaviours. In other words, people know what they should NOT do, but not what they SHOULD do in lieu of the risky behaviour. Hence positive messages that provide the audience with an alternative to the behaviour that is easily adopted are powerful in influencing behaviour change.

  Too often, messages the public receives about road safety (and societal issues in general) underscore negative consequences which can result in two typical reactions: 1) drivers become de-sensitized to messages; and, 2) drivers 'tune out' these messages and believe that they are somehow different from the drivers portrayed in the message (e.g., I'm a better driver than them), meaning that the message is perceived as irrelevant. In sharp contrast, drivers are more attracted to positive and constructive messages that illustrate how such situations can be managed or avoided entirely.

- **Humor.** The use of humor to deliver a key message is useful to engage the target audience and make them more receptive to the message and more open to suggestions that behaviour change is needed. In particular, people who engage in the problem behaviour are often defensive to messages that suggest their behaviour is wrong or problematic. These individuals are often less defensive about their own behaviour and more likely to respond messages use humor. Audiences are also often more receptive to humorous messages because it minimizes the 'lecturing tone' which audiences are more likely to ignore.

- **Fact-based messages.** These types of messages rely upon research evidence and are designed to educate an audience about risks and consequences in a constructive way, and to encourage them to make informed decisions about their behaviour. The presentation of facts based upon hard data makes it more difficult for people to dismiss or minimize risks and can help to correct misperceptions as well as focus discussion away from personal opinions. In addition, a presentation of the facts can also stimulate interest among the target audience and motivate them to get the facts or to be better informed about issues and understand the risks.

- **Fear-based appeals.** This approach to road safety campaigns confronts people with visual images or associations of negative consequences of risky behaviours by capitalizing on their fears (SWOV 2009). This approach takes advantage of the emotions of a target audience that are provoked with graphic imagery (e.g., crash footage, blood, injuries) to scare and shock individuals, or that use messages that attempt to invoke shame or guilt. The effectiveness of such approaches is unclear. Research shows that people react differently to fear-based campaigns depending on their characteristics, as well as how the fear appeals are used. A review of road safety campaign materials in Australia determined that positive emotional appeals (e.g., those using humor) may be more persuasive for young males than fear appeals, whereas the opposite was found to be true for females (Wundersitz et al. 2010). As well, fear-based approaches have been shown to be less effective on individuals who do not feel vulnerable or susceptible to the issue in the first place (Cismaru et al. 2009). This has implications for the estimated effectiveness of campaigns where the target audience does not feel the need to change, or believes the issue is not relevant to their own behaviour.

What are the most important steps associated with creating a road safety campaign?

A well-designed campaign is based upon three important steps:

- The first step is to analyze local crash data (often available from police agencies) to quantify the extent of the road safety problem and its characteristics. These data are essential to ensure that there is a need to address the road safety issue and that the campaign can be appropriately targeted to the relevant audience. For example, local data may show that distracted driving is in fact a significant contributor to road crashes in the community, and both male and female drivers aged 25 to 45 often engage in this behaviour. This would suggest that a distracted driving campaign targeted towards this audience would be an appropriate strategy for this community.
- The second step is to understand why people are engaging in the behaviour. Discussing the issue with different community partners to gain insight into the issue is a good strategy to gather this information. For example, the behaviour may be a result of misinformation or misperceptions about the problem, local attitudes towards the behaviour in terms of its acceptability, misunderstanding of the risks, or because the problem behaviour is easier and more attractive than safer alternatives. There are also a variety of external and environmental factors that shape behaviour. In addition to the attitudes of peer groups and social norms, people are also influenced by the presence of social controls and barriers to the behaviour such as the presence of enforcement.

  Research has demonstrated that people's inability to accept a message as necessary or relevant to their own behaviour stems from four factors:

  - » low perceived susceptibility to the negative consequences of the behaviour;
  - » a failure to believe in the seriousness of the problem;
  - » a lack of perceived risk; and,

- » the belief that behaviour change costs more than the benefits of performing the behaviour (Gotthoffer 2001).

Campaigns should seek to address these barriers to ensure messages are relevant to the audience.

It is also easier to change behaviour when messages are delivered in close proximity to it. This means that a core objective should be to reach drivers when they are in their vehicle, and the use of enforcement strategies to augment the delivery of campaigns if practical and feasible, can strengthen barriers to the behaviour and increase controls to help prevent it. Recognizing why people engage in the behaviour is necessary in order to identify what types of messages can best influence it (e.g., fact-based, fear-based, persuasive, social norming).

- The third step involves the messaging and design of a campaign. The tone and content of the message as well as its visual presentation and imagery must resonate with the personal experiences of road users whose behaviour is targeted. These messages should be compelling or persuasive, interesting, attractive, evoke an emotional response, and suggest alternative behaviours that are easy to adopt to help ensure that drivers are not only aware of messages, but likely to accept them.

For more information about branding and messaging in relation to campaign design, please review the Branding and Messaging fact sheet contained in the Toolkit.

How can communities promote and disseminate their road safety campaign?

Dissemination strategies should be developed with consideration of what types of communication tools are most often used in your community, and also what types of tools the different stakeholders involved in the campaign use themselves. For example, local businesses may promote their products and services in local newspapers and use flyers. Community organizations may use posters, and local government may produce brochures and share information about services online. There are also a range of campaign materials that can be distributed such as t-shirts, key chains, bumper stickers and so forth. It is important to review what types of materials are familiar to the target audience in your community. The best way to disseminate your community road safety campaign is to use communication strategies that are familiar to the target audience and that already exist. Discussion with stakeholders to better understand how they currently promote their own organizations and services can provide good insight into what strategies may work best in the community.

Well-executed campaigns are those that carefully consider the use of various campaign tools and strategically select those that are most accessible, practical, and likely to reach the target audience, particularly if budgets are limited. While there is often a desire to utilize a broad spectrum of tools in diverse locations to maximize reach and penetration, and cost is always a factor, the guiding strategy should not lose sight of the characteristics of the target audience and where the behaviour is most likely to occur. Hence is may be more feasible and efficient to deliver posters in places of business frequented by the target population, to place billboards

on the roads where they are likely to drive or at high crash locations, or to utilize radio public service announcements during peak driving periods when the behaviour is likely to occur. Similarly, if the target audience spends less time watching TV or online, these may not be the most efficient strategies to reach them, and they are unlikely to be engaged in the problem behaviour during these moments.

When is the best time to reach the target audience with road safety campaign messages?

Messages that are delivered in close proximity to the behaviour are most effective in changing it. This means that a core objective should be to reach drivers when they are in their vehicle, and the use of enforcement strategies to augment the delivery of campaigns if practical and feasible, can strengthen barriers to the behaviour and increase controls to help prevent it.

How long should a road safety campaign be delivered?

The duration of the campaign is linked to its effectiveness. Positive outcomes can be achieved with campaigns that are delivered for fairly short periods of just one month and it is not necessary to sustain such campaigns over a longer period if it is neither practical nor feasible to do so. However, it is also possible to utilize a campaign over a much longer period of a few years by intermittently refreshing it with new messages, but using the same theme and topic to reinforce behaviour change on a larger scale. This can help to keep the issue 'top of mind' without expending significant resources, and serves the larger purpose of re-shaping attitudes and social norms related to an issue.

To illustrate, repeated and continuous messaging conveying that drinking and driving is risky and has serious consequences has produced widespread consensus that drinking and driving is unacceptable. Similarly, campaigns underscoring the importance of wearing a seatbelt has resulted in some 93% of Canadians wearing their seatbelt in a vehicle. Neither of these changes happened quickly or in a short time frame, but instead were achieved over a much longer period, resulting in widespread social change.

Why should communities evaluate their own road safety campaigns?

The knowledge and learning that is available about the effectiveness of road safety campaigns is only available because jurisdictions chose to pursue the evaluation of their respective campaigns. While important lessons have been learned from previous campaign evaluations, there is still a considerable need to develop and adopt better and more rigorous approaches to evaluations. In particular, evaluations based upon observational or crash report data could provide greater insight into the impact campaigns have on overall road safety and behaviours. As such, communities should also not overlook the importance of evaluation in relation to their own campaigns, and incorporate this into the planning process.

For more information about campaign evaluation, please review the Evaluation fact sheet contained in the Toolkit.

Notes

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ACART

5

Messaging

By Tom Megginson, Creative Director, Acart Communications

What is a messaging strategy? Why do I need one?

A messaging strategy helps to ensure a campaign has a clear, focused message in all of its materials, press/media materials , and on social media.

Your messaging includes different types of words and messages:

- campaign name (see: Branding)
- campaign slogan or tagline (see: Branding)
- key message
- secondary messages
- hashtags (for use on social media)

How do I create a key message?

A "key message" is generally defined as a description of who you are and what you are trying to accomplish.

In the online world of community groups, it is best to keep this message as short as possible, so that it can appear on a website homepage, or social media pages. (There's a free letter counter at www.lettercount.com that will help you make sure it fits in the various pages.) For example, @walkottawa simply uses "Walkability issues in Ottawa" as its key message on Twitter, which shows topicality and focus.

How do I create secondary messages?

Secondary messages are a family of statements that are similarly structured and that address the main topics or audiences your group, or campaign, wants to influence.

For example, if your campaign seeks to tell drivers, cyclists, and pedestrians to be respectful of each other, you might develop three secondary messages (one for each group) that promote the benefits of respecting the road rights of the other two

- **To drivers:** Cyclists and pedestrians are more vulnerable to injury. Give them space, and we'll all get to our destinations with less stress.
- **To cyclists:** Pedestrians and drivers count on you to move predictably. Share the road (and not the sidewalk) by the rules, and everyone will enjoy their ride.
- **To pedestrians:** Drivers and cyclists are moving fast. Watch for them, cross roads at appropriate times and places, and our roads will be more friendly for everyone.

How do I create a hashtag?

A hashtag is a word, or combination of words, that appear beside a pound symbol (#) and make posts on social media searchable on most networks. For example, a search for the #roadsafety hashtag, on Twitter, produces a list of the most important recent Tweets tagged with that topic.

There are two ways in which hashtags are used in campaigns. The first is to use generic tags (such as #roadsafety, above) which allows your content to be seen by interested people who are not necessarily following you, on Facebook, Twitter, or Instagram.

The other type of hashtag is a "campaign" one, such as #IceBucketChallenge, which is unique to a campaign and helps it "go viral" as more and more people share it, and a search for the hashtag yields exclusively to posts about your campaign. Including it in printed materials allows people to find it online more easily than remembering a web address.

This latter type of hashtag, however, comes with risks. The first is that the hashtag has been used, or is being used, by someone else in a negative context. For example, if you were to use the hashtag #watchtheroads as a safety message, you might be disappointed to see that it is often used jokingly by new drivers to warn others that they might drive unsafely. A simple search, within each social media network for the hashtag you are considering, can avoid this problem.

What kind of messaging should I not use?

This campaign toolkit has been developed with research that indicates negative messages and imagery are less effective, in social marketing, than positive ones.

Avoid:

- shaming of drivers, pedestrians, or cyclists
- fear-based messages or violent imagery
- language that could be considered racist, sexist, or homophobic (obviously!)

For examples of positive and negative traffic safety campaigns from around the world, visit the social marketing review blog **Osocio** at osocio.org/category/road_safety.

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6

Branding

By Tom Megginson, Creative Director, Acart Communications

What is a brand?

A brand is the total experience that a person has with a product, organization, or cause. Its basic elements are a logo, and imagery and messaging (like a slogan) used in promotional campaigns in advertisements, on a web site, and on social media.

Some important considerations to guide the development of a campaign brand include:

- Is it recognizable?
- Is it memorable? Will people easily recall its name, its look, and what it's about?
- Is it visually interesting? Is there something about it that will catch people's attention?

Why do I need to brand my campaign?

- A good brand helps a campaign get noticed by the right people, by providing words, images and messages to which they can easily relate.
- It helps people remember the campaign as they encounter it in different places so that they can see and understand the "big picture" about the campaign issue.
- A memorable name for a campaign makes it easier for people to recall the campaign so they can find it online through search engines or social media.

How do I start to create a campaign brand?

- Choose a short, simple, and memorable name for the campaign. If you add a local element to it (like a community name) it will be more personally relevant to your audience. Search the name you select in a search engine, to see if anyone else has used it. This helps to avoid confusion with other campaigns that are similarly named.
- Think of a key message that summarizes what you want to achieve, like "Making our roads safer," or "Working together for a more livable city." This does not have to be unique, but should be true to the objectives and spirit of your group or campaign.
- Think of colours that feel representative of your message. For example: reds imply passion or danger; oranges, caution; greens, environment and positivity; blue, order and authority.
- Think of images to help convey the campaign message. The style of images should be used consistently and can be realistic (photos of people in ordinary situations) or symbolic (icons or illustrations). Keep in mind the cost of images that you select for a campaign as some types of images may be more costly to obtain than others. Look at other campaigns to see what styles of images can be considered.

How do I launch my campaign brand?

- The first step is developing a look and feel. Important components include a logo, choosing a font and a primary colour (with just a few complementary colours) for your brand. The logo, font(s) and colours should be used consistently across all campaign materials so they are recognizable as belonging to the same campaign. These elements of the brand can then be used to develop basic materials like a website, Twitter or Facebook pages, posters, presentations, and fact sheets.
- Another important step is to look at what similar organizations or causes in other communities are doing; particularly those that are relevant to your campaign issue. Connect with them on social media so you can share resources and cross-promote. Also, connect with local stakeholders, such as police agencies, health agencies, transportation agencies and other community groups that have a similar approach to issues.
- Consider turning your name, or slogan, into a hashtag (e.g., #saferroadsottawa). This allows you to make the material and content that is shared on social media easily searchable by interested people.

How will I make sure my campaign brand is successful?

- The road safety community is international and very helpful. You can get inspiration for grassroots campaigns, or content to share, simply by asking for advice.
- Act locally. Invite community groups, such as business improvement areas, chamber of commerce, neighbourhood associations, or school councils, to meet with you to discuss the most important road safety issues and ways that they have addressed them.
- Be mindful that your campaign brand respects the diversity of people and opinions in your community, and avoids any messaging, imagery, or other content that offends groups of people (is racist, sexist, homophobic, transphobic, ableist, ageist).
- Listen to feedback, including criticism. If you make a mistake with something, and you are told it is offensive, simply understand the nature of the problem, apologize, and make changes you think will solve the problem. Everyone makes mistakes, but the challenge is to learn from them.
- Search for "*Branding 101*" or "*Community group branding*" on the internet. There are many free online resources available.

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7

Social Media

By Tom Megginson, Creative Director, Acart Communications

What is social media?

Social media is a blanket term for various online networks that allow users to share news, ideas, images, and/or video. Some of the most popular social media channels include Facebook, Twitter, Instagram, and YouTube.

Different networks specialize in different kinds of engagement:

- **Facebook:** Most often used for community engagement and commentary, and sharing all kinds of content (images, links, and general posts).
- **Twitter:** Often used for short messages to a potentially larger audience, if posts are re-shared. This tool is best used to share news, links, and to engage with other community groups and authorities (e.g., police, politicians, partner organizations and interested partners).
- **Instagram:** Mostly used for photo and short (15 second) video sharing.
- **YouTube:** Best for sharing high-quality videos.

How do I start?

Choose the networks that seem to best suit your message, content, and audience. Many groups begin with Facebook, because it is used by people of all ages and walks of life. Twitter is also a popular choice because it makes it easier to reach out to groups, individuals, and brands without requiring them to follow you.

What do I post?

Start with things you already have access to: topical news links, online resources, and of course any events, materials, or news related to your organization. Follow, comment on posts by others (positively), and share content that other groups post that is relevant to your campaign issue to build your network.

How often should I post?

It is not necessary to post several times a day or even every day, but you should share interesting content at least a few times a week so that followers know you are active and engaged.

There are several free online resources that can help you manage posting to multiple social media accounts, such as HootSuite (hootsuite.com), which also provide free online tutorials about what to post, where, when, and how often.

How do I know if I'm doing it right?

Your community will build slowly. Ask all your members to follow, and encourage their networks to follow as well, and you should see it grow almost every day. Stay focused on not just your number of followers but also who is following you. This will help you identify relevant partners and gauge the quality of your engagement with your target audience.

An important aspect to the success of the social media component of your campaign is to recruit and foster alliances with relevant others. For example, a road safety campaign can also be shared by police services, paramedics, and health organizations within your community on their respective social media channels. Community groups and individual advocates interested in road safety can be engaged and encouraged to re-share the materials to their members. Local businesses may also wish to get involved as part of good citizenship.

What do I do if someone is negative or abusive to me on social media?

This is the biggest issue on social media. People are free to say almost anything to each other, in public, within the limits of speech laws.

While you cannot prevent negative comments, there are ways to deal with them that will help you keep your brand looking professional.

If your campaign is criticized, consider politely explaining the positive objectives — if the criticism is civil. Abusive comments can either be ignored or in worst cases the users can be reported or blocked. The key is to never take anything personally, and not to be provoked into an angry response.

Generally, valid complaints about services can be "taken offline" through private messaging, email or a campaign phone number or e-mail address. Attempts to report a crime should be redirected to the police or 911.

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8

CAMPAIGN EVALUATION

By Robyn D. Robertson, and Ward G.M. Vanlaar, TIRF

Why is it important to evaluate your program?

Evaluation of a road safety campaign is useful to gauge whether it has had the desired effect or not, and to gather evidence of any effects. Other reasons include:

- To continuously improve the delivery of the campaign by identifying gaps and how to overcome them to increase effectiveness.
- To provide hard evidence to decision-makers that the campaign is having positive effects and to justify continued or new funding.
- To determine whether the program is reaching the appropriate audience and find even more effective ways to reach them.
- To identify how and why the program has influenced the behaviour of the target audience, and their reactions to the campaign. This can be important to ensure continued support and motivation to deliver the campaign.

Who can help to create and/or conduct an evaluation?

Conducting an evaluation can be a daunting task. As a first step, it is useful to identify any persons in your community who can provide assistance and support to develop an evaluation plan as well as conduct an evaluation. Talking to different stakeholders who may have some experience with evaluations is a good first step. For example, local governments often undertake evaluations of programs and services at various times and in relation to different issues. Similarly, businesses and non-profits may be involved in market research and the evaluation of the effectiveness of services. Finally, students in college and university who are taking courses in statistics, research methods, and social sciences may also be local resources that can provide knowledge and assistance. In particular, students are often required to conduct case studies or their own research projects and may be interested in using a campaign evaluation for a project for their class.

When should a campaign evaluation plan be developed?

Planning for an evaluation should occur as the campaign is being developed. Often evaluation plans are not considered until after the campaign has been completed. However, this can make it very difficult to evaluate the effectiveness of the campaign. This is because some of the data that are needed to measure effectiveness must be collected before the campaign is launched or during the campaign. In other words, if data are not collected prior to or during the campaign, it may be impossible to evaluate its effects, or to determine if positive effects were a direct result of the campaign as opposed to other factors.

In addition, an evaluation of the campaign will also have some costs that need to be accounted for in the campaign budget.

How do I design an evaluation?

The **SMART principle** is very useful to guide the design of an evaluation plan. SMART is an acronym that describes the key objectives of your evaluation:

- **Specific:** An example of a clearly defined campaign objective is 'to decrease drink driving by a specific amount (e.g., 15% or 30%)'. A more general objective such as 'to decrease drink driving by as much as possible' makes it impossible to evaluate whether you have reached your objective.
- **Measurable:** The objectives of your campaign should be measureable, and measures may include changes in behaviour, attitudes, beliefs or knowledge. The data that will be used to measure these changes must be collected as part of the evaluation. For example, changes in behaviour are often measured through observations or roadside surveys whereas changes in attitudes and beliefs may be measured using public opinion surveys or focus groups. Collecting these data prior to the campaign and then again after the campaign can then determine if any changes occurred.

  In addition, tools or devices may be needed if an objective is to reduce the level of alcohol impairment or speed of vehicles. In other words, are the tools (e.g., breathalyzer, speed cameras) available and do campaign organizers or partners (e.g., police) have the ability and the authority to collect these measures.
- **Actionable:** This means that you are able to do something that can reduce the road safety problem that is the focus of the campaign. For example, can you do anything to reduce speeding in your community, such as increase knowledge about the risks or reduce the number of people who speed?
- **Reasonable:** When delivering a campaign to change behaviour and make roads safer, it is important to be realistic when setting is objectives. For example, it may be more realistic to aim to decrease the number of drink drivers in your community by 15% rather than 95%. It is important to strike a balance between setting a challenging goal and also setting a reasonably achievable goal within the timeframe of the campaign. Keep in mind it is often easier to change knowledge and attitudes and more difficult to change behaviours so objectives should be selected with this in mind.

  In addition, the size and frequency of the problem will influence the amount of change that can be achieved. For example, very few people do not wear their seatbelt or drink and drive so it will be harder to achieve substantial change among this minority of drivers who likely have already been exposed to other campaigns. Conversely, many more people speed or drive distracted so there is a much larger population of drivers who can be changed.
- **Time-specific:** The objectives of an evaluation should be time-specific, meaning that the objectives that will be achieved by the campaign will be achieved within a specific period

of time; this is often the period of time during which the campaign will be delivered. For example, a campaign objective to reduce the number of distracted driving violations will be reached within a 12 month period.

What types of evaluations should be considered?

There are generally two types of evaluations that can be considered depending on the needs of the community.

- An impact (or outcome) evaluation is used to determine whether a campaign achieved its objectives (e.g., a change in behaviour, a reduction in crashes, a change in knowledge or attitudes).
- A process evaluation is used to understand why the program did or did not achieve its objectives.

If a community replicates a campaign that was previously delivered and evaluated in another jurisdiction for effectiveness, campaign organizers may prefer to only conduct a process evaluation to determine whether the campaign was properly implemented and how it can be improved.

What tools are needed to conduct a process and an impact evaluation?

Tools for a process evaluation generally include:

- Timeline, Gantt chart to monitor progress in light of agreed-to timeline;
- Work flow chart to clarify who is responsible, when, and for what;
- Budget expenditures to estimate and track costs and to help avoid over-spending;
- Surveys to collect information about experiences;
- In-depth interviews or focus groups (guided by a set of key questions that are developed in advance and used with all participants) to measure opinions and attitudes of key-stakeholders.

Outcome evaluations typically consist of comparisons of the situation prior to campaign delivery to the situation after campaign delivery. This should be done with a control group which is a group of participants that are not exposed to the campaign. This means that the situation (e.g., knowledge, attitudes, behaviours, crashes, violations) before and after the implementation of your campaign among persons exposed to the campaign is compared to the situation before and after the campaign among people that are NOT exposed to the campaign. Comparing this before/after situation among those two groups of people (i.e., your target audience and persons not exposed to the campaign), makes it possible to rule out alternative explanations that may explain any changes that occur and makes it more likely any changes were due to the implementation of your campaign. For example, the effect or

change that occurs might be perceived as due to another program or effort that is taking place simultaneously with your campaign. However, using a second group of people who are not exposed to the campaign to control for this factor makes it possible to determine whether the effect is truly the result of your campaign.

What research questions should be asked?

Essentially, an evaluation is conducted to find out whether a campaign has had the desired effect, or not, and why. However, the way that research questions are formulated depends on different factors, such as the objectives of the program and what data are available or what data can be reasonably collected for the evaluation. For example, the objective of a road safety campaign may be to increase awareness about the risks associated with speeding. In this case, research questions would focus on whether levels of knowledge and awareness have increased or not. The objective of the campaign may also have been formulated as a reduction in speeding-related crashes, in which case research questions would focus on the actual behaviour and resulting crashes. Depending on what data are available or can be collected, research questions can be further refined accordingly. In the former example, self-reported levels of knowledge and awareness before and after the campaign can be used to evaluate the impact of the campaign. Alternatively, the audience reach or penetration of the campaign can be used as a proxy measure of awareness. In the latter example, crash data can be used to measure trends over time in terms of speeding-related crashes.

What types of data or indicators can I use for my evaluation?

There are two important types of indicators that are complementary and should be included in an evaluation plan to help communities understand whether their campaign was effective, and why it was effective.

- Outcome indicators demonstrate whether the campaign produced positive changes in outcomes such as knowledge, attitudes and behaviours as well as social norms, and ultimately crashes.
- Process indicators provide insight into why campaigns were effective (i.e., what campaign practices, features or strategies contributed to positive outcomes).

There are also different types of data sources that have distinct strengths and limitations that, combined, can provide a clearer understanding of effectiveness as part of an evaluation. These data sources can include:

- enforcement and violation data;
- crash data;
- measures of knowledge and attitudes collected through surveys, focus groups and interviews with citizens as well as stakeholders;
- measures of behaviour which can be collected through self-report surveys and observational surveys;

- measures of social norms that can be collected through self-reports or observed behaviours;
- measures of campaign dissemination including:
  - » estimated ad value of media plays
  - » number and placement of media articles;
  - » distribution of campaign materials and persons reached;
  - » measures of social media engagement;
  - » downloads from websites and related web analytics gathered through programs such as Sysomos, Radian6 and Source Metrics;
  - » measures of community interaction related to events or contests.

Communities are also encouraged to collect data at multiple points both during the campaign as well as post-campaign. While collection of data throughout the campaign can provide opportunities to identify challenges and re-adjust the campaign to improve delivery during active periods, ongoing data collection at multiple points post-intervention can help gauge at what point campaign effects begin to deteriorate and the optimal time to reinforce campaign messages by repeating campaign activities.

Obtaining data for an evaluation can be expensive and labor-intensive. For this reason, it is recommended that stakeholders are involved upfront to verify what types of data may already be available. For example, police or City Councils or transportation departments may be able to share crash data or enforcement data. Or perhaps a stakeholder has already collected data about the public's attitudes and opinions, which could be valuable.

What types of analyses should be considered?

While some simple comparisons between the before and after situation can be revealing, the topic of data analysis can become rather complicated very quickly in evaluation research. For example, when using crash data, a small number of crashes make it difficult to reasonably compare changes in the number of crashes before and after the campaign. Similarly, when looking at trends (year-to-year changes), more than two data years are needed to draw conclusions. While analysis of one variable (e.g., speed) or two variables (e.g., speed in relation to time of day or type of road) can be useful and are not difficult to manage, it is recommended to consult with someone experienced in the analysis of multiple variables to ensure valid conclusions are drawn.

Where can community-based organizations obtain more information about conducting an evaluation?

There are some useful guides that have been developed by non-profit and health organizations to assist community-based organizations in undertaking research. These guides have been designed to help communities undertake their own evaluations and provide step-

by-step explanations for the different features of evaluations. These guides can be accessed at:

- Zarinpoush, F. (2006). Project Evaluation Guide for Non-Profit Organizations. Fundamental Methods and Steps For Conducting Project Evaluation. Imagine Canada. (http://sectorsource.ca/sites/default/files/resources/files/projectguide_final.pdf).
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Notes

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ROAD SAFETY ISSUES

Pedestrians: What Do We Know?

By Robyn D. Robertson, TIRF

This fact sheet contains an overview of the pedestrian safety issue. It summarizes the latest statistics in relation to the number of pedestrians killed and injured each year, describes high-risk groups of pedestrians, and key factors that contribute to pedestrian collisions. It also reviews common characteristics associated with pedestrian collisions, the types of drivers involved in these collisions, and ways that pedestrians and drivers can better protect themselves on the road.

How many people are killed and injured in collisions involving pedestrians?

Almost 9,000 pedestrians were killed and hundreds of thousands were injured in Canada in road collisions between 1989 and 2009. According to Transport Canada, an analysis of pedestrian collisions revealed that 60% of pedestrians killed in traffic crashes were trying to cross the road.

- Since 2009, there have been slightly more than 300 pedestrians killed each year in road crashes. This accounts for more than 15% of all road fatalities. In addition, pedestrians also represent approximately 14% of all serious injuries (Transport Canada 2015).
- While the total number of pedestrians killed on Canada's roadways each year seems to be declining, the percentage of deaths among these victims as a percentage of all road user deaths does not show a similar decline.
- This suggests that while fewer Canadians are dying on the roadways overall, it is drivers and passengers of vehicles who are benefiting the most from progress in road safety, and to a lesser extent, vulnerable road users such as pedestrians.

Why are pedestrians more likely to be killed or injured in collisions?

It has been estimated that pedestrians are **284 times** more likely to be killed or injured in a collision than motorists (CCMTA 2013). Pedestrians are more likely to be killed and injured as compared to other groups of road users because they lack the hard, protective exterior of a vehicle, or safety features to protect them. As such, it is essential that drivers keep this fact in mind when they are behind the wheel. In addition, pedestrians are smaller and therefore less visible to motorists, and this problem is pronounced when pedestrians are not crossing at intersections or designated crosswalks as drivers are less likely to expect pedestrians on the roadway. To illustrate, a TIRF national opinion poll in 2008 revealed that 67% of Canadians had often observed people jaywalking (Vanlaar et al.2009).

At the same time, intersections have also become larger and more complex with more lanes of traffic and designated turning lanes. This means that there is much more information for pedestrians (and drivers) to process and it takes much longer to cross these intersections.

Older pedestrians are also often at increased risk because of mobility issues as well as declines in vision, hearing and perceptual skills that are common with age. As such, these pedestrians may have difficulty seeing oncoming traffic, judging distance, hearing cues, and may also walk more slowly than pedestrians of other age groups. Similarly, younger pedestrians are also at greater risk due to less developed cognitive, visual, and auditory senses and their smaller size. Finally, distraction among pedestrians is also a growing concern.

Who is more often at fault in pedestrian collisions?

In recent years, drivers are more often at fault in collisions with pedestrians, although this is not always the case. According to Transport Canada, national data reveal that 33% of fatally injured pedestrians were struck by a driver who had committed a traffic infraction prior to the crash. At the same time, research also shows that 33% of fatally injured pedestrians were at-fault for the crash (Transport Canada 2011). In other words, both drivers and pedestrians are sometimes at fault in pedestrian collisions. This means that both drivers and pedestrians need to ensure that they follow rules of the road as this enables other road users to better anticipate their behaviour and reduce risks. At the same time, drivers have an additional responsibility to drive defensively and cautiously in pedestrian areas due to the much greater vulnerability of pedestrians.

What types of driver characteristics are common in collisions with pedestrians?

Common errors among drivers involved in pedestrian collisions include:

- failing to yield the right of way to pedestrians;
- distraction and inattention; and,
- speeding.

Of importance, the vehicle speed when pedestrians are struck is a determining factor in the seriousness of injuries they will incur. When pedestrians are struck at 50 km/h, they are 8 times more likely to be killed than if they are struck at 30 km/h; pedestrians generally have a 50% chance of survival at speeds of 40-45 km/h, hence the move in several jurisdictions to reduce speeds on urban roads to 40 km/h.

Speeding is a particular concern among young drivers as 18% of drivers who kill a pedestrian are aged 16-24 and likely speeding. Young drivers have slower reaction times and their hazard perception skills are not well-developed. They scan the road less, are less likely to detect hazards and take longer to respond to them which put pedestrians at risk.

More recently, a 2010 review of pedestrian deaths in Ontario by the Office of the Chief Coroner (2012) revealed that just five pedestrian circumstances accounted for 70% of deaths:

- pedestrian hit at a mid-block location while crossing;
- pedestrian hit on the sidewalk and/or shoulder of the road;

- vehicle was going straight through the intersection while the pedestrian crossed without the right-of-way;
- vehicle turning left while the pedestrian crossed with the right-of-way at the intersection; and,
- vehicle turning right while the pedestrian crossed with the right-of-way at the intersection.

In addition, several factors emerged as causal in these deaths including vehicle speed, distractions among pedestrians, failure to yield by the driver, pedestrians crossing against the signal, mid-block crossings, and pedestrian disabilities.

Where do pedestrian collisions most often occur?

A majority (75%) of pedestrian fatalities occur on urban roads and pedestrian collisions more often occur on urban roads with speeds of 70 km/h or less, and near intersections when pedestrians are crossing a roadway (Transport Canada 2015).

- Intersections pose a high-risk area due to the large volume of vehicles and foot traffic which increases the chance of collisions.
- Pedestrian collisions are also common close to a bus stop, a school zone, or a multi-lane road.
- More than half (55%) of pedestrian casualties occur at night and/or with low-light conditions, and since there are also fewer pedestrians at night they are truly over-represented in collisions during this period (CCMTA 2013).

What types of pedestrians are most at risk for collision involvement?

Generally speaking, pedestrians who are male, who are aged 56 and older or aged 14 years and younger are more often involved in pedestrian collisions as compared to pedestrians of other ages. In addition, pedestrians impaired by alcohol and drugs also account for a significant proportion of pedestrian fatalities and injuries. Each of these groups is briefly described below and the data are from a TIRF analysis of these crashes using TIRF's National Fatality Database.

Male pedestrians. Between 2000 and 2010, 63% of fatally injured pedestrians were male, whereas 37% were female. Among seriously injured pedestrians, slightly more than half (56%) were male, while 44% were female.

Older pedestrians. Pedestrians that are older are more often involved in collisions due to declines that are associated with age. For example, older pedestrians are more fragile and experience declines in mobility that result in a slower walking pace or the need for walking aids or mobility devices. Declines in perceptual skills such as difficulty seeing, hearing, or recognizing cues that it is safe to walk are also more pronounced with aging.

In particular, as not only drivers but pedestrians age, it becomes more difficult for them to estimate speed and distance. In other words, older pedestrians are less able to accurately gauge how quickly vehicles are approaching and how long it will take them to cross the street safely. This is particularly a concern in relation to mid-block crossing among older pedestrians (i.e., when pedestrians attempt to cross the road from the middle of a block instead of at an intersection with a crosswalk). To illustrate, an Australian study (2015) revealed that pedestrians over 75 years old were more likely to cross the street when there was not enough time for them to cross safely, based on the speed of approaching vehicles combined with their walking speed (Oxley et al. 2005). Conversely, a study in France (Lobjois & Cavallo 2007) showed that older pedestrians (defined as aged 65+) selected larger gaps in traffic compared to younger pedestrians so that they had more time to safely cross which was necessary due to slower walking speeds. These different results may be a function of different age categories that were used in each study or other differences in methodology, however this provides some context for the over-representation of older pedestrians in collisions. According to Transport Canada, 35% of fatally injured pedestrians were aged 65 or older even though they represent just 13% of the population, and 63% of pedestrians killed at intersections were 65 or older (Transport Canada 2011).

Similarly, a more recent TIRF analysis of national pedestrian data between 1995 and 2010 revealed that pedestrians aged 56 or older are more likely to be fatally or seriously injured than younger pedestrians. In addition:

  - » Almost 43% of pedestrian fatalities were aged 56 or older.
  - » Among pedestrian fatalities aged 56 and older, half were female.
  - » Among seriously injured pedestrians, one-quarter (25%) were aged 56 or older.
  - » Almost one-third (30%) of seriously injured female pedestrians were aged 56 or older (Vanlaar 2013).

- **Younger pedestrians.** Children aged 14 years and younger are also a high-risk group for fatalities and injuries in pedestrian collisions.
  - » According to a review of the pedestrian issue by the Canadian Council of Motor Transport Administrators (CCMTA) in 2013, the overall physical, cognitive, visual, auditory development of children puts them at a disadvantage as a pedestrian.
  - » Children aged 5 to14 years are at greatest risk of pedestrian fatalities and have the highest incidence of pedestrian-related injuries.
  - » On average, 30 child pedestrians younger than 14 years are killed and 2,412 are injured every year.
  - » 6% of fatally injured pedestrians were under the age of 16 and of these, 20% ran out into the street;
  - » Pedestrian-related injuries contribute to almost 12 percent of all injury-related deaths of children younger than 14 years of age. (CCMTA 2011; PHAC 2012)

- **Alcohol-impaired pedestrians.** Alcohol consumption by pedestrians remains a contributing factor in a large number of pedestrian fatalities.
  - » Almost half (46%) of fatally injured pedestrians tested positive for alcohol in 2010; this represents a slight increase from 45.2% in 1990.
  - » Between 2000 and 2010, among fatally injured pedestrians, males were more likely than females to have consumed alcohol prior to the crash.
  - » Almost half (46%) of males had been drinking compared to 29% of fatally injured female pedestrians.
  - » Among fatally injured pedestrians who had been drinking, 87.7% had BACs over the illegal limit of .08 and 67.6% had BACs over twice the illegal limit (Vanlaar 2013).
- **Drug impairment.** The use of drugs among pedestrians is also a source of concern, although testing rates for drugs are low for vulnerable road users killed in road crashes. Just one-third (37%) of pedestrians killed are tested for drugs compared to a testing rate of 65% for alcohol.
  - » Among fatally injured pedestrians who were tested for the presence of drugs, 39% of pedestrians tested positive.
  - » Data show that between 2000 and 2010, the percentage of fatally injured pedestrians testing positive for drugs increased from 37.5% to 40.7% (Vanlaar 2013).

Is the public concerned about the issue of pedestrian safety?

In the past several years, the issue of pedestrian safety has been reported as being less of a concern to Canadians as compared to other road safety issues such as distraction, drinking and driving, and young drivers. For example, in 2008, pedestrians behaving unsafely were the 2nd lowest concern for the public at 43%, according to polls. This may be due to the fact that in this same year, 29% of Canadians reported they had a near miss with a pedestrian or cyclist and just 1.5% reported experiencing a collision (Vanlaar et al. 2009).

Of importance, these low levels of concern make it difficult to increase pedestrian safety and efforts are needed to increase public concern to generate higher levels of support for pedestrian safety initiatives. As evidence of this, other countries such as Sweden and the Netherlands that have achieved much greater progress in reducing pedestrian collisions have accomplished this due, in part, to much higher levels of concern among the public.

What types of strategies can help to improve pedestrian safety?

There are several strategies that are available to help improve pedestrian safety. Each of these strategies is briefly described below.

- Most provincial Highway Traffic Acts underscore that the relationship between drivers and vulnerable road users, such as pedestrians, should be based upon mutual respect.

To this end, vehicles must provide sufficient space to cyclists on the road as well as yield to pedestrians at all times. At the same time, it is equally important that pedestrians also follow road rules by obeying traffic signals and crossing roads in the designated areas.

- Education campaigns are particularly well-suited to this road safety issue because pedestrian collisions are often due to both drivers and pedestrians not following the rules of the road at various times. In other words, drivers and pedestrians are often equally at fault in these types of collisions. In addition enforcement may be more problematic for police officers who may be reluctant to issue citations to pedestrians for jaywalking.
- Some jurisdictions in Canada are examining speed limits in areas with high pedestrian volume since pedestrians are more likely to survive collisions with vehicles at lower speeds of 30 km/h 40 km/h and less likely to survive collisions at 50 km/h.
- Vehicle safety technologies are advancing with the development of external airbags and hazard warning systems that can help to protect pedestrians in collisions with vehicles.
- Finally, many countries, including Canada are adopting a new philosophy to guide road safety plans that emphasizes the 'safe systems' approach. This approach encourages the physical separation of more vulnerable road users such as pedestrians and cyclists, from other vehicle traffic.

What can pedestrians do to better protect themselves on the road?

To better protect themselves on the road, pedestrians should never assume that drivers can see them. Not only does the pillar of the windshield obstruct the driver's field of view, but drivers of heavy trucks and larger vehicles such as SUVs that are higher than street level often find it difficult to see smaller pedestrians. As such, pedestrians are encouraged to make eye contact with drivers to ensure that they have been seen before crossing the street. In addition:

- cross only at marked crosswalks/traffic lights;
- be alert to all traffic, especially turning vehicles;
- steer clear of hedges, parked cars and other obstacles;
- avoid jay-walking and rushing into the street;
- wear lighter coloured or reflective clothing when walking at night;
- avoid traveling on foot while intoxicated; and,
- do not begin to cross the road when there is not enough time to make it safely across.

CCMTA recommends that young pedestrians between the ages of five to 10 years can benefit from education either at home or at school about how to safely walk to and from school. Seniors can also benefit from 'refresher' materials or courses. Servers in bars may also be well-positioned to encourage pedestrians who have been drinking to take a cab rather than walk.

What can drivers do to better protect themselves on the road and avoid collisions with pedestrians?

To better avoid collisions with pedestrians, vehicle drivers are encouraged to:

- always look for pedestrians and be prepared to stop, especially on residential streets and near schools and bus stops;
- be patient when pedestrians need extra time to cross the road; and,
- drive the speed limit.

Where can I find additional information about pedestrians?

- Bureau of Infrastructure, Transport and Regional Economics (2015). Pedestrian and Road Safety Information Sheet. Department of Infrastructure and Regional Development. Autralian Government.
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Resources for Other Road Safety Issues

- Traffic Injury Research Foundation. National Education Program on Drinking and Driving – www.changetheconversation.ca
- Traffic Injury Research Foundation. Young and New Drivers Resource Centre – www.yndrc.tirf.ca
- Traffic Injury Research Foundation. Driver Behaviour and Vehicle Safety Features – www.brainonboard.ca
- Transport Canada. Overview of Road Safety Issues in Canada - http://www.tc.gc.ca/eng/motorvehiclesafety/tp-tp15145-1201.htm
- Canadian Council of Motor Transport Administrators – Issue specific publications on distraction and cell phones, drugged driving, alcohol impaired driving, aging drivers, and pedestrians. http://ccmta.ca/en/publications/road-safety-research

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