



# LEARNING TO BE A BICYCLE FRIENDLY DRIVER:

Driver Training Program for Safely  
Sharing the Road with Bicycles  
*Feasibility Study*

**Project Team:**

Project Lead: Nancy Smith Lea, Toronto Centre for Active Transportation

Writer/Researcher: Yvonne Verlinden, Toronto Centre for Active Transportation

Advisor: Dr. Beth Savan, Principal Investigator, Toronto Cycling Think & Do Tank, School of Environment, University of Toronto

Advisor: Dr. Pamela Robinson, MCIP RPP, Associate Dean, Graduate Studies and Strategic Initiatives, Associate Professor, School of Urban and Regional Planning, Ryerson University

**Cover Photo:**

Anthony Price

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## Introduction

Every year, hundreds of people are killed or seriously injured on Toronto's streets; 59% are people walking or cycling, a disproportionately higher number than all other transportation choices (City of Toronto, *Vision Zero Road Safety Plan*, 2016). In reviewing these deaths, Toronto's Medical Officer of Health (McKeown, 2011) recommended creating an educational program for motorists to prevent future deaths and injuries. This report focuses specifically on education related to sharing the road with people on bicycles. As Toronto's bicycle network expands and new bike infrastructure is introduced to our city's streets, training for people who drive on how to interact safely with people on bikes is increasingly necessary.

## Objective

In 2017, with funding from the Metcalf Foundation, the Toronto Centre for Active Transportation (TCAT), a project of the Clean Air Partnership, conducted preliminary research into the feasibility of developing a safety course for people who drive with a specific focus on how to share the road with people on bikes. The study included a scan of driver training programs with related goals and interviews with 15 key stakeholders (see Project Scope for a full list of stakeholders interviewed) to gain their input and advice into opportunities and obstacles for a program of this type (see Appendix A for the list of questions asked). From this research, a number of possible course delivery models were outlined. This report summarizes the main findings and makes recommendations for moving forward.



Figure 1. Cycling along a busy street in Scarborough, where little bike infrastructure exists. Photo Credit: Marvin Macaraig

## Driver Education in Ontario

The Ministry of Transportation's Beginner Driver Education program (BDE) set out new curriculum requirements for driver training courses in 2008, and course providers are kept abreast of ongoing changes in legislation. While not mandatory to obtain a G license, taking a training course at an approved driving school with an approved curriculum reduces the time required to progress through the graduated licensing system. Many insurance companies also offer discounts to people new to driving who have taken approved training.

The Driver's Handbook underwent an extensive revision in 2013, and bicycling advocacy groups took part in this process. Bicycle infrastructure such as sharrows, painted bike lanes and bike boxes are described. New legislation is also added to the Handbook as it is passed (for example, the 1-metre safe passing rule), and knowledge test questions are updated on a scheduled basis to reflect these changes.

Further testing is required for people seeking additional license classifications (for example, Class M for motorcycles, Class B for school buses), and for people over the age of 80. In some instances, training may also be obligatory. For example, beginning in July 2017, completion of an approved training course is required before attempting the Class A road test for tractor-trailers.

Many people, however, do not participate in any further driver training after obtaining their Class G license.

## The Changing Experience of Driving in Toronto

Through these government-regulated training programs, many people new to driving are receiving education on how to share the road with people on bicycles. However, the vast majority of people who are currently driving on Toronto's streets earned their licenses before this level of training was implemented, and as a result have never received any formal education on this topic. Moreover, the number of people using bicycles to travel around the city is growing – between 2006 and 2011, daily trips by bicycle increased by



Figure 2. The Queen's Quay bike lane along Toronto's waterfront is separated from motor vehicle by a transit line and includes traffic signals specifically for bicycles. Photo Credit: Waterfront Toronto

75% (Ledsham & Savan, 2017), and recent census data shows the percentage of people cycling to work is now as high as 34% in some downtown neighbourhoods (Cycle Toronto, 2017). This growth means that motorists now encounter people on bicycles with greater frequency than in the past and must negotiate the sharing of road space with these users. New legislation, such as the 1-metre passing rule, has been passed which requires people driving to adopt new behaviours. The infrastructure used to protect people on bicycles is also rapidly changing. In June 2016, the City of Toronto approved a new Cycling Network Plan, which identifies 525km of new bike infrastructure to be implemented over the next 10 years. Bike boxes, painted bike lanes, and bike lanes separated by curbs, flexi-post bollards, or planters are becoming increasingly common in the downtown, and are beginning to appear in the inner suburbs as well. Much of this infrastructure is unfamiliar to people driving in Toronto, and inconsistency across the network adds to the confusion, with a separated bike lane often giving way to a painted bike lane or sharrows due to road constraints, before resuming one block later.

Starting in June 2017, City of Toronto parking enforcement officers were dedicated to patrolling bicycle lanes and ticketing those who obstruct them. The campaign has been highly successful, in part because of the use of social media to celebrate unobstructed lanes and denounce offenders, including delivery companies (see Figure 3). Enforcement is only one tool, however, and should be paired with both design solutions and education. This report specifically explores the feasibility of offering a bicycle friendly driver course for people who drive in Toronto to educate them about new rules and infrastructure and teach them tactics to safely share the road with bicycles.



Figure 3. An example of a tweet from a Parking Enforcement Officer, publicizing the unsafe behaviour of a courier company.

## Project Scope

Research for this feasibility study was conducted between April and July, 2017. There were three phases: 1) conduct a market analysis scan of existing bicycle friendly driver training programs and document their key components, 2) interview 15 stakeholders to understand opportunities and obstacles in developing and offering a new course for people who drive in Toronto (see Figure 4), and 3) develop 3-4 scenarios of different course delivery models, with a recommendation for which, if any, is the best to move forward to the next stage of business development.

<b>Organization</b> (local unless otherwise noted)	<b>Interviewee</b>
Canadian Automobile Association (CAA)	Teresa Di Felice, Director, Government & Community Relations
Centennial College	Richard Oakey, Program Officer
Transportation Services, City of Toronto	Barbara Gray, General Manager
Cycle Toronto	Keagan Gartz, Director of Programs
Envirocentre (Ottawa)	Elyse McCann, Programs Manager
FC Bikes (Fort Collins, Colorado)	Jamie Gaskill-Fox, FC Bikes Program Specialist
Hynex Consulting and Transportation Inc	Dave Hynek, Owner
McLeish Orlando	Patrick Brown, Partner
Evaluation and Training Office, Ministry of Transportation	Henry Cameron, Team Lead
Road Safety Policy Office, Ministry of Transportation	Fazelah Ali, Senior Policy Advisor
Sustainable and Innovative Transportation Office, Ministry of Transportation	Cliff McLeod, Team Lead (Acting); Michael Canzi, Senior Policy Advisor (Acting)
Safer Roads Ottawa (Ottawa)	Rob Wilkinson, Coordinator; Kale Brown, Project Officer
San Francisco Bicycle Coalition (San Francisco)	Ana Vasudeo, Program Director
Share the Road	Jamie Stuckless, Executive Director
Traffic Safety Programs, Traffic Services, Toronto Police Services	Brett Moore, Sergeant
Young Drivers	Peter Christianson, President

A number of professionals from the insurance industry also participated in email exchanges, although none were interested in or available for a full interview.

Figure 4. List of Interviewees

## What is a Bicycle-Friendly Driver Course?

Training on how to safely share the road with people on bicycles is currently being offered in a number of jurisdictions, including San Francisco, California and Fort Collins, Colorado, and has been offered to taxi drivers in Ottawa in the past. Generally, these courses are one to one-and-a-half hours in length and are offered in-class. They cover topics such as local bike infrastructure and how to use it, tactics to avoid the crash types that are most frequent locally, common misconceptions, and local rules of the road with an emphasis on the rights and responsibilities of motorists and cyclists. Instructors are certified to teach bicycle safety and have received further training for this course specifically. Typical audiences include the general public (often through libraries or community recreation centres), high school students, and professional drivers at both private companies and the municipality (e.g. delivery vehicles, buses, etc). Figure 5 lists examples of organizations that have participated in a bicycle friendly driver program offered in Fort Collins, Colorado. The format is generally a PowerPoint presentation paired with open discussion. Film clips tailored to the specific needs of a certain audience may be included (for example, pointing out the blind spots on a municipal transit vehicle). A short test may follow the session to ensure learning, and participants may be given a certificate of completion or a decal to display on their vehicles.

In the cases explored for this feasibility study, the organizations offering these courses began by offering similar training exclusively for people who bike. Tailoring the information to people who drive has allowed these organizations to grow their audiences. FC Bikes in Fort Collins, Colorado, has participants in its education programs categorize themselves based on Roger Geller's four types of cyclists: "Strong and Fearless" (heavy traffic

**Congratulations** to these businesses and organizations that have hosted the Bicycle Friendly Driver certification class for their employees and members. We applaud their commitment to employee education and safety for ALL road users.

**Participating Organizations:**

Allen Service	Transit	New Belgium Brewing
Brinkman Construction	City of Loveland	Odell Brewing Company
City of Greeley Facilities Department	Connell Resources	Platte River Power Authority
City of Greeley Transportation Department	Gallegos Sanitation	Rocky Mountain High School
City of Greeley-Evans	Greenride	The Group Real Estate
	Horse and Dragon Brewing	USGS
	Martin Marietta	

**The following departments within the City of Fort Collins have hosted the class:**

Streets	Planning Development and Transportation	Traffic Operations	Utilities Water
Information and Employee Services	Sustainability Services	Utilities Environmental and Regulatory Affairs	Quality Lab
Natural Areas	Transfort	Utilities Light and Power	Utilities Application Services
Parks		Utilities Water	

**To host a FREE Bicycle Friendly Driver certification course at your business, visit [fcgov.com/BicycleFriendlyDriver](http://fcgov.com/BicycleFriendlyDriver) or call 970-221-6987.**

**Logos:** BICYCLE AMBASSADOR, Bike Fort Collins, City of Fort Collins FCBIKES

Figure 5. An advertisement for the Bicycle Friendly Driver course offered in Fort Collins, Colorado. Credit: City of Fort Collins

without bike facilities is not a deterrent to cycling), "Enthusied and Confident" (comfortable cycling on the road but prefer separate bike facilities), "Interested but Concerned" (curious about cycling but won't ride without separate bike facilities), and "No Way, No How" (no interest in cycling) (Geller, 2009). Not only did FC Bikes see an increase in participants of nearly 400% after it introduced sessions geared towards drivers, attendees to these classes were more likely to describe themselves as non-cyclists ("No Way, No How" or "Interested but Concerned"), compared with participants in their traditional bicycle education classes. Although the classes focused on driving behaviour, some participants also reported feeling more confident about riding a bicycle as a result of taking the class (FC Bikes, 2017).

## Conditions for Success

This report looks at the feasibility of starting a similar program for people who drive in Toronto. Though each program is different, they had a number of features in common which interviewees identified as conditions contributing to their success.

### 1. Strong municipal involvement

The municipal level of government plays a critical role in creating a safe road environment. It decides which infrastructure to implement on local streets, it enforces the Highway Traffic Act, and it creates its own by-laws that affect driving. It also employs thousands of people to drive public transit and other municipal vehicles, and approves licenses for businesses that employ thousands more. As mentioned above, driver training is regulated at the provincial level and regular updates are made, but within the current system, only new drivers are exposed to this information. The majority of people face an increasingly complex urban driving environment without the support of additional training. Municipal governments can act in a uniquely local way to address this gap through targeted education.

A municipality's role can take different forms, from offering the course directly to hiring a non-profit or for-profit enterprise to provide training to the public, to those working as drivers in the city, or to municipal staff. These options will be explored further below, but consistent among them is a strong endorsement from the City, which opens doors and allows the training to have a broader reach. For example, FC Bikes in Fort Collins found that the local Chamber of Commerce willingly supported their Bicycle Friendly Driver program because it was being offered directly by the City. The EnviroCentre in Ottawa found that partnering with the City's Safer Roads Ottawa office (an inter-departmental initiative with a road safety mandate) allowed them to reach local taxi drivers

and was important when contacting driver training schools. In San Francisco, the City's Vision Zero Coalition regularly brings together city leaders, municipal departments and advocacy groups to cooperatively work on safe streets strategies. The City's enlistment of the San Francisco Bicycle Coalition to conduct training has lent credibility to their educational programs and allowed that organization to procure clients from the private sector.

The City of Toronto has a similar coalition in place, the Toronto Road Safety Plan Partner Committee, which was launched in 2015 to provide input into the Vision Zero Road Safety Plan (approved by Council in 2016) and its implementation going forward. The Partner Committee is cross-sectoral, with membership that includes a car-owner lobby group (CAA), groups representing vulnerable road users (Cycle Toronto, Walk Toronto, CARP, the Disability Issues Committee), the health and education sectors (TDSB, TCDSB, Toronto Public Health, Sunnybrook Health Sciences), enforcement (Toronto Police Services), and active transportation research (TCAT). This ability to bring many partners together under one banner makes Vision Zero an ideal platform for launching a bicycle friendly driver program, which would also work across sectors to bring enhanced road safety education to businesses and the public. Education forms one of the four pillars of the Road Safety Plan (City of Toronto, 2016).

### 2. A parallel bicycle training program

A bicycle friendly driver program may have the best chance of success if it is launched in parallel with expanded bicycle training. In both Ottawa and Fort Collins, bicycle training is offered by the City for a variety of ages and levels in a model similar to swimming lessons. In San Francisco, the transportation agency contracts the local bicycle advocacy organization, the San Francisco Bicycle Coalition, to offer bicycle training to people across



Figure 6. A poster advertising a Safe Cycling 101 workshop, conducted by Cycle Toronto and hosted by Scarborough Cycles. Credit: Scarborough Cycles

the city through community grants.

In Toronto, while bicycle education is currently ad hoc, there are a few different organizations that offer basic workshops that could be expanded to reach a larger audience. CultureLink Settlement and Community Services offers an introduction to bicycle education for children in a growing number of schools. Cycle Toronto offers a number of training workshops for adults who cycle or are interested in starting, including Safe Cycling 101, Bicycle Maintenance Clinics, and Ride the City 101 Bike Tours. These programs are each one to two hours long. They are offered in workplaces in a Lunch and Learn-style workshop, arranged either directly with the employer or through a contract with Smart Commute, a Metrolinx program which assists

employers to develop incentives to shift employees away from commuting by car and to adopt sustainable transportation options (e.g. cycling, walking, transit). These workshops are also offered to the public out of local libraries and community centres. CAN-BIKE training, an accredited bike safety course, is periodically offered through the City of Toronto's Parks and Recreation department for a fee. The Ministry of Transportation is currently updating the Cycling Skills Guide to include examples of new types of infrastructure.

### 3. Public support for road safety

A high level of public support for road safety initiatives is important not only for securing municipal support, but also for gaining buy-in from companies with commercial vehicle fleets. In San Francisco, there is also strong public pressure on transportation network companies (TNCs) providing ride-sharing services with non-commercial fleets (e.g. Uber, Lyft) to work with local advocacy organizations. Being able to say their drivers receive training on sharing the road safely with people on bicycles is a risk management strategy for these companies, and they are willing to invest in this service.

## Risk Factors

Through the market scan and interviews with key stakeholders, a number of risk factors were also identified which could potentially undermine the success of a bicycle friendly driver program in Toronto.

### 1. Established Curricula and New Training for Truck Drivers

EnviroCentre in Ottawa found they had little success working with driving schools because their curricula and lesson materials are established well in advance in order to undergo the Ministry's approval process. Extra material or a presentation from an external organization on a specific topic could not be incorporated due to time constraints. Moreover, the introduction in 2017 of a mandated training course for those seeking their Class A tractor-trailer license may mean that novice truck drivers feel they have received enough training.

An important opportunity still exists, however, to reach already-licensed truck drivers, who are not required to participate in the new training course.

### 2. No Mandatory Training for Vehicle for Hire Industry

The way people are employing themselves as professional drivers is changing, making them potentially harder to reach, and municipalities are responding to pressure to level the playing field between the taxicab industry and ride-sharing services. In San Francisco, the San Francisco Bicycle Coalition has the opportunity to provide training to all new licensed taxi drivers in the city, however TNCs are exempt from this requirement. In Toronto, mandatory training for taxicab and limousine drivers was removed in 2016, through the Vehicle for Hire by-law which permits TNCs such as Uber, while reducing regulatory burden for the taxi industry.



Figure 7. A lane shared by buses, taxis and bicycles on weekdays in downtown Toronto. Photo Credit: Yvonne Verlinden

### 3. Autonomous vehicles

With the advent of autonomous vehicles, the transportation landscape will change dramatically, and eventually there will no longer be a need to train people on how to drive. Complete automation, however, has yet to be achieved, and complete adoption is even further in the future, so although demand for a bicycle-friendly driver program may eventually disappear, person-operated vehicles will continue to be the norm in the coming years.

## Possible Delivery Models

A number of possible course delivery models emerged from the market scan and interviews. They are presented here in order of preference, based on their perceived feasibility in the Toronto context.

### 1. SUBJECT MATTER EXPERT-LED TRAINING

In this option, training would be delivered preferably by a partnership between a non-profit specializing in cycling education and a for-profit driver training firm, although each could also lead the project independently. These organizations have specialist knowledge and access to qualified staff familiar with the training required to safely share the road. They also have a base of materials to build upon and experience with designing similar education courses.

Funding for the initial program development would come from the City, who would approve the

content and also facilitate its delivery to municipal employees who drive as part of their job. Through additional City or grant funding, the program could be made available to the public and to high school students. The City's endorsement of the program would attract businesses with driver fleets to pay for the training on a fee-for-service basis. Participation from businesses would be voluntary however, and would require significant public pressure for improved road safety as a motivator.

#### *Precedents and Opportunities:*

- Toronto Transit Commission (TTC) training: Vehicle operators undergo re-certification on a regular basis (for example, every five years for bus drivers), offering an opportunity to reach these employees. A precedent exists for a training partnership between the TTC and an external organization -- Living Works Group, a social enterprise with a suicide prevention mandate, currently offers training sessions in

Item	Description	Annual Cost (USD)
Part-Time Coordinator	Salary range between \$35/hr - \$200/hr	\$9,100 - \$52,000
Instructor Fees	30 presentations at 2.5 hours each, \$15-25/hour	\$1,125 - \$1,875
5" Stickers	2000 at \$0.58 each	\$1160
Certificates	2000 at \$0.20 each	\$400
Exams	2000 exams at \$0.33 each	\$660
Demographic/Evaluation Packets	2000 packets at \$0.33 each	\$660
Printed Sign-In Sheets	30 sign-in sheets, 4 pages each at \$0.10 per page	\$12
Bicycle Friendly Driver Pledge Cards	2000 business card-sized pledge cards	\$115
Promotional Rack Cards	5000 full colour rack cards	\$365
Data Entry	Data entry of exam results and evaluations	\$1000
13" Fleet-Sized Stickers	500 at \$3.75 each	\$1875
5" Window Clings	1000 at \$0.53 each	\$530
Recognition/Advertisement in Newspapers and/or Magazines	Estimated 6 advertisements per year at \$700-\$2000 per advertisement	\$4,200 - \$12,000
<b>Total Budget</b>		<b>\$21,202 - \$64,102</b>

Figure 8. Sample Budget from the FC Bikes Bicycle Friendly Driver Education Program. Amounts represent operating costs only.

suicide intervention to TTC subway and surface transportation supervisory staff (TTC, 2016).

- EnviroCentre taxi training: In 2012-2013, Safer Roads Ottawa partnered with the non-profit EnviroCentre to offer bicycle-related training to the City's new taxi drivers.
- San Francisco Bicycle Coalition: This advocacy group operates its educational programming using a blended model. It has a contract with the San Francisco Municipal Transportation Agency (SFMTA) to provide bicycle-friendly driver training to the City's new taxi drivers and bus drivers and receives grant money to run bicycle education sessions for the public. Technology companies with employee shuttles and TNCs also engage their services to train their drivers. The level of frequency and customization varies from company to company, but the complete package costs between \$20,000-30,000 annually and includes monthly sessions and tailored videos.
- The Ministry of Transportation currently has no similar programs in place, but has supported bicycle safety curriculum development in the past through its Cycling Training Fund. Smart Commute, a provincially funded regional program, currently partners with Cycle Toronto to offer Safe Cycling 101 sessions in workplaces to encourage people to commute by bicycle.
- The City of Toronto's Vision Zero Plan includes dedicated funding for education programs.



Figure 9. A vehicle crosses a bike lane to make a right hand turn. Photo Credit: Yvonne Verlinden

## 2. COLLEGE OR UNIVERSITY CONTINUING EDUCATION COURSE

Colleges and universities offer standalone continuing education courses open to anyone looking for skills enhancement in a certain subject area, including individuals from the general public and employees fulfilling professional development requirements. A number of these institutions also already have transportation departments, where they teach MTO-approved truck, bus, motorcycle, and driver-instructor training and mechanic apprenticeships (for example, Centennial College and Humber College). Setting up a course through a college or university would take advantage of logistics structures already in place, in terms of registration, payment of fees and classroom space. A partnership with an institution would also lend credibility to the course. Typically, however, these courses are spread over a number of sessions, rather than as a one-off workshop lasting only a couple of hours. There would also be less flexibility to customize the content to the needs of a specific client, as the course curriculum must be approved in advance by the dean of the department or faculty. Meeting at the institution, rather than at a place of business, could present an additional barrier to some clients.

In this model, the employer or the participants themselves would likely cover the cost of the course. For people to invest the time and money, there would have to be a considerable incentive in place. As part of the interviews and market scan for this study, we investigated the possibility of offering an insurance discount to people who participate in a bicycle friendly driver program, similar to the discount offered to new drivers who complete a driver education course. Because insurance is a regulated industry, the process for setting rates is closely controlled, and an insurance company must demonstrate that a discount is justified by showing that people belonging to a certain category have a lower risk factor. As a result, there is a relatively

high bar to meet these conditions. For a bicycle friendly driver course to qualify, it would have to be demonstrated that taking the course reduces the motorist's risk of collision, or that collisions involving bicycles could have been avoided through education. Currently, this type of data is not available. As people on bikes make up only a small percentage of those involved in all collisions, including those with minor and no injuries (3% in 2016; Toronto Police Service), we found there was little interest from the insurance industry in exploring this possibility.

However, there may be an opportunity to incorporate bicycle friendly driver training into existing or new transportation courses offered by colleges.



Figure 10. Sharrows in front of Toronto's Union Station remind drivers that there is no separated bicycle infrastructure in this area and cyclists will be mixing with motor vehicle traffic. Photo Credit: Yvonne Verlinden

### 3. MANDATED TRAINING PROGRAM

A number of respondents voiced skepticism that businesses would voluntarily participate in bicycle friendly driver training. Truck sideguards were mentioned as an example of an initiative which would improve safety, but which has not seen widespread, voluntary adoption. Although public support for road safety action is currently high, the City could guarantee participation by mandating training for certain businesses that rely heavily on driving. Examples include transportation network companies, taxis, delivery vehicles, food trucks, and limousine services. A number of these businesses are already regulated under the City's business licensing services. Successful completion of the training program by employees who drive would be a requirement of obtaining their business license. The training could be provided in-house, or could be out-sourced to a non-profit group (as in San Francisco), a driver education firm, or a local college with a transportation department. The cost of the training would be the responsibility of the business. The City could offer a more general version of the training to the public through community recreation centres and libraries.

### 4. ONLINE/MEDIA

During interviews, a number of stakeholders suggested an online format or a media campaign with short film clips and attention-grabbing messaging. The advantage of these formats is their reach, particularly with a partner such as the City of Toronto or the CAA. Their level of access to many avenues of communication and a large membership is invaluable. Videos have also proved to be a useful tool to reach drivers for TNCs. The format, however, also has its drawbacks- namely, there is no way to ensure viewer attention or to answer questions, and it is more difficult to check for learning. The examples explored in this study show that it is possible to gather an audience in person around this topic, and those offering these courses report that the in-class interactions are very valuable, as people are able to recall situations where they themselves were uncertain as drivers and seek advice. Moreover, there are a number of organizations who are already sponsoring or creating road safety media campaigns, including the City of Toronto's Transportation Services, Toronto Police Services, the Ministry of Transportation, CAA and Share the Road Cycling Coalition. An online or media campaign on this topic may duplicate work already being undertaken, while a targeted, in-person, workshop-style course would reach audiences in a different way.

## 5. ROADSIDE TRAINING AND TICKET DIVERSION TRAINING

Police in certain jurisdictions in England have launched roadside training campaigns for drivers related to sharing the road with bicycles. An officer riding a bicycle along the roadside flags drivers who pass too closely. These people are immediately given 15 minutes of education on safe passing distances, delivered in a roadside pull-off. Repeat or extremely aggressive offenders are ticketed.

Another initiative in California allows both people who drive and people who bike to attend road safety workshops in order to receive a reduction in a fine for a traffic violation. The San Francisco Bicycle Coalition is working with the City and local enforcement agencies to implement a system whereby they will provide the remedial training for bicycle-related infractions. Ontario's Highway Traffic Act contains no provisions that would allow for either of these strategies to be adopted, although there is currently interest in creating laws with more protection for vulnerable road users, and training could be mandated in the future.

In Toronto's Vision Zero Road Safety Plan, one of the existing safety measures described is the SPACE to Cycle Campaign, which stands for Safety, Prevention, Awareness, Courtesy, Education. This periodic Police Services campaign targets behaviour that puts people on bikes at risk, such as drivers opening their door improperly into the path of a cyclist or parking in bike lanes. Typically offered once a year during Bike Month, the campaign could be expanded, to target unsafe behaviour on a more regular basis.



Figure 11. A temporary bike lane created using pylons delineates space for people on bikes during construction. Photo Credit: Yvonne Verlinden

## Conclusion and Next Steps

The stakeholders interviewed agreed unanimously that there is a gap in the knowledge of current road users when it comes to sharing the limited space on our streets. The respondents described how recent increases in cycling and the appearance of new, unfamiliar infrastructure have created some confusion and led to mounting tensions. An opportunity exists to begin addressing these issues through targeted bicycle-friendly driver training, an approach that is growing in popularity in other jurisdictions where it is paired with municipal support, parallel bicycle education courses, and strong public concern for road safety.

Safer Roads Ottawa emphasizes the importance of finding champions to lead initiatives and to be the first adopters. Throughout the interviews, stakeholders from colleges and driving schools, as well as advocacy groups, expressed interest and potential support/sponsorship for a program that would educate people who drive on how to share the road safely with people on bikes in Toronto's changing streetscape. We have identified a series of next steps that would draw on these prospective champions to move this initiative forwards. Buy-in would be required from various stakeholders, including the City (Transportation Services, Police Services and the TTC), colleges and driver training schools, non-profit cycling advocacy groups, and the business community. We recommend:

- That already engaged stakeholders be gathered into a Partner Committee on Road Safety Education under the Vision Zero umbrella, and further efforts be made to engage new stakeholders, including TNCs, courier services, commercial delivery fleets and the TTC;
- That this committee identify top educational priorities for both people who drive and people who bike related to the use of new infrastructure and sharing the road;
- That the City create an integrated strategy to address these priorities through targeted media campaigns and in-person workshops;
- That experts in the field of driving and cycling safety and education develop workshop curriculum, with City endorsement;
- That cycling workshops be made more broadly available in schools and to the public, with targets set to ensure equal access across the City;
- That driving workshops first be offered in-house, to TTC employees and other municipal staff who drive as part of their job, and then be launched to one or two early adopters in the commercial sector who can champion it from the lens of corporate social responsibility and prompt further investment from the business community. An alternate scenario, drawing from the experience of other cities, is for the non-profit sector, with funding from the City and/or the private sector, to develop a pilot program that targets professional drivers.

These education efforts would be most effective if paired with parallel actions in the remaining pillar areas of the Vision Zero Road Safety Plan, including the continuing roll-out of new infrastructure that creates safe, protected spaces to cycle on Toronto's streets.

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## Appendix A: Interview Questions

Interviews were either 15 minutes or one hour long, depending on the participants' interest level and the degree to which their organization's activities were applicable to this study. Two sets of questions were used: a targeted set for organizations that had experience offering bicycle friendly driver education, and a more general set for organizations involved in road safety, but who have not offered such a course before.

### Introductory script:

*The Toronto Centre for Active Transportation, in partnership with the Metcalf Foundation, is undertaking a feasibility study into developing a training program for drivers about how to safely share the road with bicycles. We're in the exploratory phase, looking at what this course could look like and what the logistics of it would be. Our objective is to outline 3 or 4 possible course delivery models for Toronto.*

### General Questions:

Question	Follow-Up/Prompt
1. From your perspective, is there a need for such a course?	Why?
2. Are you already engaged in educating drivers on how to share the road with other users?	What are you doing? Would you be willing to share any examples, course materials or curriculum outlines with us?
3. What would motivate people to take a course specifically on how to share the road safely with cyclists?	Would a discount in auto insurance be sufficient motivation (and would it be possible)? Would positive social pressure be enough (for example, by handing out "Bicycle Friendly Driver" certificates and stickers to those who complete the course)?
4. What is your organizations's process for setting up a new education program or campaign?	How is it funded? What costs are involved? Do you have a minimum enrolment that you target?
5. Do you think that you would be interested in a partnership with [a non-governmental organization with expertise in cycling/a municipal, driver education, insurance or other organization] to deliver a standalone course or a session as part of a larger training program?	
6. In our scan, we came across several approaches that people are using in other jurisdictions to educate drivers to share the road with cyclists. They include the standalone course that we've been focusing on, a session as part of a larger required training course, videos that are required viewing for fleet drivers, and roadside training for drivers who have been charged with an infraction (such as passing too closely). Do any of these alternatives strike you as more or less feasible than offering a standalone course? (One hour interviews only)	
7. Do you foresee any obstacles that we haven't already talked about? Do you have any advice for moving forward or ideas of opportunities?	
8. Do you have any suggestions for other people we should speak to?	

**Targeted Questions** (for organizations with experience offering a bicycle friendly driver education course):

Question
1. Your organization is engaged in driver education. What need do you see there?
2. In our scan, we identified a number of different methods to reach drivers. Could you describe your organization's approach and speak to its strengths and drawbacks?
3. Could you describe the curriculum you used for this program? What worked well? Do you have any curriculum outlines or course materials on this topic that you could share with us?
4. What is your organization's process for setting up a new course or bicycle education program?
5. How was your program funded?
6. Did you evaluate the program?
7. Was your program tied to the City? If so, could you speak about that relationship a bit? How important was the City's involvement to your program's success?
8. What success did you have partnering with other agencies (for example, driver training programs or private companies with vehicle fleets)?
9. We've identified a discount in auto insurance as a powerful potential motivator for taking a driver education course. Did you explore this possibility at all?
10. Are there any obstacles that we haven't already talked about that we should be aware of? Do you have any advice for moving forward or ideas of opportunities?
11. Do you have any suggestions for other people we should speak to?