Innovation ° Education ° Safety ° Life Skills A Catalyst for Action on Safe Roads and Alternative Fuels



In our neighbourhoods and around the world

Traffic injuries are killing our youth

Road traffic injuries are the eighth leading cause of death globally, and the leading cause of death for young people aged 15–29.



More than three-quarters of all road traffic deaths are among young males.

The UN Global Status Report on World Road Safety 2013 says that "current trends suggest that by 2030 road traffic deaths will become the fifth leading cause of death unless urgent action is taken".

The key five global risk factors are speed, impaired driving, seat belts, child restraints and helmets (motorcycles).

Eighty-eight countries reduced the number of deaths on their roads between 2007 and 2010, showing that **improvements are possible**, and that many more lives will be saved if countries take further action.

Canada is a world leader

A number of these countries, such as Australia, **Canada**, France, the Netherlands, Sweden and the United Kingdom have achieved steady declines in road traffic death rates through coordinated, multi-sectoral responses to the problem. Such responses involve implementation of a number of proven measures that address not only the safety of the road user, but also vehicle safety, the road environment and post-crash care.

Source: UN Global Status Report on World Road Safety 2013

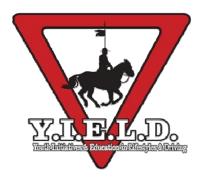


In Alberta, there is an organization making great strides to further reduce the number of injuries and deaths due to traffic injuries through innovation, education and life skills development:

Y.I.E.L.D...

What is YIELD?

Youth Initiatives & Education in Lifestyles & Driving



Y.I.E.L.D is a registered non-profit organization in Alberta, created in 2003, that focuses on Traffic Safety issues with our youth who will be our leaders of tomorrow.

Members of the YIELD Association include Police officers, emergency service personnel, citizens and former street racers. YIELD members, who are all **volunteers**, work closely with other volunteers in each community that now includes students, teachers, local law enforcement, parents and automotive enthusiasts.

The **collective expertise** of this small membership provides students and young drivers with first-hand, real-life experiences regarding the results of speed and drinking-and-driving.

The Y.I.E.L.D. program concentrates on **demonstrating the drastic consequences** of speed-related collisions, drinking and driving collisions and the consequences these events bring upon the family and the community. We try to instill in the students **a proper and positive attitude**; to be more responsible and respective of others and family.

The YIELD program began by taking an old Chevy Caprice highway patrol car to a racetrack to race against kids. Over the years, Y.I.E.L.D. has converted a number of vehicles to become drag race cars.

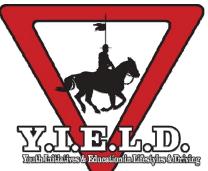
The vehicle's we bring to presentations are Canada's first officially recognized RCMP race car program.



"First of all, we get the attention of our audience with the car," says Y.I.E.L.D. President Gord Buck, "then we add a variety of media such as videos and classroom instruction. We encourage questions, and talk with them not at them, to get them as engaged as possible."

"We talk about the mechanics of a collision, how and why they take place, and what happens during a collision," says Buck.

The program has grown to encompass *In the School/ Community* presentations, *At The Racetrack* program and *The Electric Mini Cooper race car* - a component that shows the real-world results of combining a love for cars with the value of a post-secondary education.



There is a tremendous need

Traffic injuries are down - but not enough

A 21-year-old suspected impaired driver was charged in a deadly crash early one Sunday morning in **Calgary** (January 27, 2013) following a street race.



In **Edmonton** a young female adult and a female juvenile were charged in the fatal street racing death of a pedestrian.

Another incident occurred in **Magrath**, **Alberta** with the fatality of four youths; driver inexperience was cited as the primary cause.

History has shown that strict enforcement of traffic laws alone has failed to stop the carnage on our roadways and **a strong education plan** is critical to changing the attitudes of young people aged 15-29, particularly young men.

We need to engage with them and show them that they can lead the way through innovation and education.





An Alberta program is saving lives

Y.I.E.L.D PART 1: In Schools & Communities

Y.I.E.L.D. is a unique education & innovation program that uses the automobile as the focal point to generate interest within the key target group - young males both in schools and in the community. Y.I.E.L.D. shows the tragic results of speed, impaired driving and not using seatbelts, while giving students the opportunity to become part of the solution.



Police and professional car racers, who have personal knowledge and experience, engage students/community through casual conversation and by using static displays that include a rollover simulator, a race car, trailer and a Razor side by side ATV. The Y.I.E.L.D. race car, a 2000 Chev Camaro, a former highway patrol vehicle and is the only race vehicle of its kind that partners with the R.C.M.P. and is authorized to display the RCMP corporate identity.

Y.I.E.L.D. has seen first hand how youth will embrace new ideas and thought processes when given the right information in a way that they not only comprehend but readily accept and are inclusive of their abilities.

Simply put, we tell students that, if you are going to race anyway, race on a legal race strip (like Edmonton's Capital Raceway) rather than on a highway where you are putting not only yourself in danger but also everyone watching and non-involved pedestrians/drivers.



JB's Power Centre Street Legal

Y.I.E.L.D PART 2: At the Track

During Y.I.E.L.D.S's presentations to communities and schools regarding street racing, we encourage youth to bring their vehicles to Castrol Raceway instead of on the street where they can have their vehicle mechanically checked and they can race in a structured, safe environment. At the track it eliminates the chances of causing injury to innocent bystanders (or themselves) and preventing drastic consequences due to a mechanical failure and/or their inexperience behind the wheel. At the track any crash is contained and there is little to no collateral damage.

The IHRA sanctioned 1/4 mile Drag strip at **Castrol Raceway** is home to one of Canada's fastest growing factions of Street Rods and Sport Compact Cars. Since the inception of the "Fast and The Furious" sub-culture the growing popularity of the V8Less series along with the demand for extreme sports is ever increasing. Competitors and spectators jump at the chance to see their friends, family and adversaries compete on the quarter mile.

The 2014 season will host over 23 "Street Legal" events with many held under the lights late into mid-summer evenings.

Castrol Raceway works very closely with the Y.I.E.L.D. program to promote street-legal racing at the racetrack rather than "on the street".

Friday Nights: Gates open at 5:00 pm and racing starts at 6:00

Y.I.E.L.D. has left a tremendous impression on Alberta's youth through our education program. But there is more to be discovered - through innovation:







Alberta students create electric performance

Y.I.E.L.D PART 3: Innovation - The Electric Mini Cooper

The success of "Street Legal" at many of the Junior and Senior High Schools in Alberta in 2012 and over 16,000 races at Capital Raceway is due in large part to the response from youth when they see the real-world results that a post-secondary education in the automotive & engineering can provide - they appreciate the efforts of youth (like them) who have graduated High School then moved on to the 'trades' (automotive mechanic/technician) or graduate studies (engineering).

To underscore the importance of a post-secondary education, Y.I.E.L.D. worked with the **Senior Engineering Class** of the **University of Alberta** in the original design phase of an <u>electric-powered</u>

<u>Mini Cooper</u> and ultimately to race the mini "Street Legal" against traditional gas-powered vehicles.

YIELD will be using commercially available electric motors as recommended by the engineering team: an 11" Trans Warp and an 11" Warp DC motors joined (coaxial) end-to-end for the power. With these motors and our battery management



system, we expect the Mini to run the 1/4 mile at 130 MPH in 10 seconds.

Even with the invaluable time and effort expended by the U of A Engineering students and professors, the total cost of this program will still reach over \$85,000.



Alternate fuel of the future for transportation

The Y.I.E.L.D Budget: The Mini Cooper Electric Drag Car

- Y.I.E.L.D is a unique catalyst for action on one of the primary energy issues alternate fuels of the future for transportation - and has incorporated this innovation into an education and research program that is impacting thousands of young adults in Alberta.
- YI.E.L.D **educates Alberta's youth** regarding the eighth leading cause of death globally among young people aged 15–29.
- YI.E.L.D **encourages youth to stay in school** and shows them concrete reasons why they can/should move on to post-secondary education
- YI.E.L.D takes street racing off the street
- YI.E.L.D supports and encourages research
- YI.E.L.D will show concrete results of Alberta innovation by our youth

Help us "Approve" the bottom line:

Mini Cooper Electric Drag Car Project	COST
Used Mini Cooper	8,500.00
11" Siamese electric motor	15,000.00
Battery management module	9,500.00
Battery pack	15,000.00
Lenco race transmission	4,000.00
Driveline & Suspension modifications	18,500.00
4 Link 9" race suspension differential with spool	4,000.00
10 point halo roll cage	1,800.00
Race wheels & tires	2,750.00
Paint	3,200.00
Emergency lights & siren	1,500.00
Miscellaneous & Shop Supplies	1,000.00
	84,750.00

Program Expansion

Y.I.E.L.D Expands it's Unique Educational Format to Red Deer.



Y.I.E.L.D. has taken it's unique form of education and expanded into the Red Deer, Alberta area with the addition of our newest program car. Our Red Deer car was formally campaigned by the Saanich Police Service in through out B.C. The Saanich Police Service members have retired and there were no other members able to continue with their program. **Y.I.E.L.D.** was able to acquire their operational race car and move it to Red Deer. Now re-decaled as a Retro style R.C.M.P. patrol car, it will continue to provide educational service to our youth.



1979 Pontiac LeMans with a small block 350 putting out about 425 horse power.



Keeping Y.I.E.L.D moving forward

Y.I.E.L.D Partnership Packages

Y.I.E.L.D now operates two teams within Alberta. These teams operate of funds provided by our partners, which allows us to attend events and school talks throughout the year. It also allows us to make improvements to our vehicles when required. These teams each have their own budget and partnership groups. Below are the levels of partnership that are available. These numbers are merely a base and a partnership agreement can be tailor made to suit the needs of the partner and the team they are partnering with. Also agreements can be reached to partner with both teams at a specific level.

Title partner \$15 000

- Only partner logo on cars for team partnered with.
- Top billing on of company logo on Trailer, Pit Crew Shirts, and Shirts given away during race challenges (~50 per year per team)
- Acknowledgement through social media, Facebook, twitter, Instagram, and large presence on Website
- Pit lane pass and one ride down track in car. (incumbent on partner to attend event where YIELD is present)
- Program will attend 1 partner event (dependent team member availability)

Major partner \$14 999 - \$5 000

- Large company logo on Trailer, Pit Crew Shirts, and Shirts given away during race challenges (~50 per year per team)
- Acknowledgement through social media, Facebook, twitter, Instagram, and large presence on Website
- Pit lane pass and one ride down track in car. (incumbent on partner to attend event where YIELD is present)
- Program will attend 1 partner event (dependent team member availability)

Partner \$4 999 - \$ 2000

- Company logo on Trailer
- Acknowledgement through social media, Facebook, twitter, Instagram, and presence on Website.

You will note that our Website is currently under construction. Due to the recent expansion and growth of our program our team members have been focused elsewhere. Our goal is to provide a world class website with regular updates, twitter feed scroll including that of our partners, direct links to partners website, ect.

If you have any questions please contact us at:

Edmonton Area Nichole OLENEK <u>yieldinfo@gmail.com</u>

Innovation ° Education ° Safety ° Life Skills

A Catalyst for Action on Alternate Fuels for Transportation