



# DRIVER EDUCATOR'S NEWSLETTER

WINTER 2007 Edition Volume 4

# Auto\$mart D.E.N.

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## Charting **The Path Ahead** for Driver Education

Changes are needed in how new drivers are taught, what they are taught and how they are tested, according to a group of experts whose views have been compiled in a circular published by the Transportation Research Board (TRB), a division of the U.S. National Research Council.

*Driver Education: The Path Ahead* summarizes the proceedings of a mid-year meeting and workshop conducted by the TRB's Operator Education and Regulation Committee in September 2005.

Issues covered in the circular include

- novice drivers
- the content of driver education
- instructional methods for young drivers
- student competency measures
- an evaluation of novice driver training effectiveness
- the future of driver education

Although the TRB is based in Washington, D.C., the report has a distinctly Canadian flavour. Two of the authors, Larry Lonero of Northport Associates and Daniel R. Mayhew of the Traffic Injury Research Foundation, are Canadians.

High accident rates among drivers in the first weeks after they are licensed, and how to address the problem, is a common theme throughout the circular. One paper quotes a recent U.S. study of 16-year-olds that found that "the crash rate for both males and females was estimated to be three times greater during the first 1,000 miles of driving as compared with the next 2,000 to 3,000 miles of driving." The author, David F. Preusser of Preusser Research Group, Inc., suggests that future driver education could reduce crashes by focusing on the initial "errors of inexperience," rather than trying to develop a "lifetime of responsible driving." »



► A. James McKnight of Transportation Research Associates picks up on this theme by proposing that driver education focus on the errors that are the biggest contributors to high initial accident rates. These include frequent lapses of attention, not looking where hazards lurk or recognizing them when they appear and not adjusting speed to road and traffic conditions.

In a paper that considers training methods, John F. Brock of General Dynamics notes that methods available today are far more interactive and individualized than traditional classroom instruction. Computer-based training (CBT), for example, can put students behind the wheel, where they can be exposed to and learn to handle the many threats to safety before they encounter them on the road. Some studies suggest that CBT reduces the time of instruction by about one third or increases the effectiveness of instruction by about one third.

Mr. Lonero agrees that focusing the content of driver education on “critical skills and avoidance of the most common errors offers the opportunity to improve novice drivers’ high initial accident rate.” To be sure that appropriate skills are being taught and mastered, argues Mr. Lonero, valid, reliable measures of students’ learning outcomes and competencies are needed. Such competency standards must satisfy licensing and safety needs.

In a paper entitled “The Future of Driver Education,” Daniel Mayhew argues that “There is a need to expand the relatively short duration of DE, which typically involves 30 h in class and 6 h in vehicle taken over a few months or weeks just before the road test. There is a need to focus on the development of the skills most critical to safe driving performance in situations where young drivers are at highest risk, rather than on a broad range of knowledge and skills in a relatively superficial manner.”

Louis Brzozowski, Senior Manager within the Office of Energy Efficiency (OEE), notes that materials in the Auto\$mart Driver Education Kit can help instructors teach novice drivers how to avoid many of the “errors of inexperience” noted in the TRB circular. By making the link between safety and fuel efficiency, the Auto\$mart materials support a new way of teaching old lessons.



## Driver Education Structure by Jurisdiction

Jurisdiction	Graduated Driver Licensing (GDL) Program	GDL Time Discount	Insurance Premium Discount	Classroom Hours	In-Car Hours
Alberta	YES	NO	YES	15	10
British Columbia	YES	YES	NO	16	12
Manitoba	YES	YES	NO	34	8
New Brunswick	YES	YES	YES	25	10
Newfoundland and Labrador	YES	YES	YES	25	10
Nova Scotia	YES	YES	NO	25	10
Northwest Territories	YES	NO	YES	N/A	N/A
Nunavut	NO	NO	YES	0	0
Ontario	YES	YES	NO	25	10
Prince Edward Island	YES	NO	YES	25	10
Quebec	YES	YES	NO	0	10
Saskatchewan	YES	NO	NO	30	6
Yukon	YES	NO	YES	20	10

“The papers seem to be hinting that there is a need to look beyond the licensing test, which is certainly consistent with the Auto\$mart safety and fuel efficiency messages,” says Mr. Brzozowski. “Many of these experts are calling for a new approach to driver education, and we believe Auto\$mart can be part of that new approach.”

*Driver Education: The Path Ahead* is available on-line at [www.trb.org/news/blurb\\_detail.asp?id=6601](http://www.trb.org/news/blurb_detail.asp?id=6601).

# In the D.E.N.

with Ben Estrada



## Educating Novice Drivers: A privilege and a responsibility

As I was training a group of teenagers one evening, it occurred to me that these young people remind us from time to time of the importance of our work. Basic questions that we hear from each new class, on subjects like proper space management and other driving techniques, seem routine to educators. But what is common knowledge to us is new to them. Our answers give students the information they need to drive safely – information that can save lives.

As educators, we have the opportunity to provide young people with the knowledge, skills and, most importantly, attitudes needed to protect their well-being on the road. In my opinion, driver education contributes to this basic purpose in the following ways, to mention a few:

- ☛ It promotes the safe, fuel-efficient and rewarding use of the automobile.
- ☛ It promotes a strong sense of personal responsibility for traffic conditions and encourages young drivers to be part of the solution, not part of the problem.
- ☛ It stresses mature and responsible attitudes.
- ☛ It encourages cooperation and engagement in solving public problems, such as reducing pollution, greenhouse gas emissions and traffic fatalities.
- ☛ It fosters pride and results in high standards of performance and conduct for students, as both drivers and pedestrians.

Driver educators are privileged to play an important role in teaching the next generation of Canadians how to drive safely and with fuel efficiency in mind. It is encouraging to know that we are making a difference in people's lives – something we should remind ourselves of every time we step into the classroom or take our place in the vehicle beside a novice driver.

*Ben Estrada is an AutoSmart Master Trainer with Brisa Driving School Inc.*





# Don't be stumped by a student!

If you've spent any amount of time in a classroom of teenagers, this won't come as a surprise: *kids are bright!* They are well-read, knowledgeable and, thanks to the Internet, have access to a world of information.

Chances are at least a few of your students are keenly interested in automotive technology and are keeping abreast of all the latest developments. So to avoid being stumped by inquisitive students (remember, they're not *really* trying to embarrass you!), you might want to familiarize yourself with some emerging fuel-efficient technologies that are either available now or will be soon. Here's a primer to get you started.

- ➔ *Advanced technology vehicles* employ a new type of powertrain or a clean fuel source to enhance fuel efficiency and produce cleaner-running vehicles.
- ➔ *Alternative fuel vehicles* run on fuels other than gasoline or clean diesel. Alternative fuels include biofuels, such as ethanol, propane and natural gas.
- ➔ *Continuously variable transmissions (CVTs)* use a continually variable range of gears to keep the engine in its most efficient power range regardless of speed, thereby improving fuel economy.
- ➔ *Cylinder deactivation* is an advanced technology that "turns off" half of the engine's cylinders under certain low-load driving conditions, such as highway driving. Since fuel and spark are delivered to only half of the cylinders, the engine's efficiency is improved.
- ➔ *Direct-injection clean diesel engines* use advanced engine and emissions-control technologies and ultra-low-sulphur fuel to achieve 20 to 40 percent better fuel economy than their gasoline-powered counterparts.
- ➔ *Downsized engines with a turbocharger or supercharger* use a turbine in the exhaust stream to drive a compressor in the intake manifold, which compresses the air going into the engine. The higher-pressure air in the manifold forces more air into the engine than would otherwise be the case, increasing engine power. The fact that the engine produces more power allows it to be downsized without sacrificing horsepower.
- ➔ *Gasoline direct injection (GDI)* uses sophisticated electronic fuel and air-flow controls and precision injectors to optimize the mix of air and fuel under different operating conditions. It varies the amount and timing of fuel injected into each engine cylinder, maximizing combustion efficiency and minimizing vehicle emissions.
- ➔ *Hybrid-electric vehicles* use a battery-powered electric motor working with a gasoline or diesel internal combustion engine or fuel cell. A technology known as regenerative braking helps recharge the battery. To optimize performance and fuel efficiency, a computer is used to manage the energy from these three systems.
- ➔ *Sequential spark ignition engines* incorporate two ignition plugs in each cylinder – one near the intake valve, the other near the exhaust valve. This configuration improves combustion efficiency by ensuring a more complete and clean burn.
- ➔ *Variable valve lift* in a continuously variable system controls the gas mixture by closing the intake valves precisely when the necessary mixture is in the combustion chamber. This advancement reduces fuel consumption.
- ➔ *Variable valve timing (VVT) or cam phasing* enables engine valves to be opened and closed at the most opportune moments during the engine cycle. As a result, the engine generates more power and pumping losses are reduced, for a combined effect equalling a 3 percent improvement in fuel efficiency.

More information on these technologies is widely available on the Internet.

# Industry Snapshot

## Reveals Variations in Driver's Ed Across Canada

A snapshot of the Canadian driver education industry has revealed big differences across the country in the types of programs offered, the number and proportion of new drivers who receive training and even the amount of information on driver education that is available from one jurisdiction to another.

In Nova Scotia and Saskatchewan, for example, driver education is mandatory for beginner drivers. About 80 percent of new drivers in Manitoba and 80 to 85 percent of beginners in Newfoundland and Labrador receive professional instruction. At the other end of the scale, only about 25 percent of new drivers in the Yukon Territory and 30 percent in Nunavut receive driver education.

In British Columbia, 26 percent of new drivers complete an approved course offered through an approved driving school, but the number of drivers receiving non-approved professional instruction from other driving schools is not known. Falling in the middle are Ontario, where about 50 percent of new drivers receive professional instruction, Quebec (62 percent) and Alberta (65 to 70 percent).

Commissioned by Natural Resources Canada's (NRCan's) Office of Energy Efficiency (OEE), the situation analysis of driver education in Canada was undertaken in the fall of 2005 by Northport Associates. The firm specializes in the behavioural aspects of health and safety, including transportation safety. The study was managed by Larry Lonero, a principal of Northport Associates and an internationally recognized expert on driving.

The study report, published in March 2006, provides the first national picture of driver education in Canada. The report is based on feedback from provincial and territorial officials and on responses to a questionnaire that was distributed to driver education contacts in every province and territory. For each jurisdiction, the report

- identifies the organization responsible for driver education
- provides details, where available, on the structure, content and delivery of driver education programs, the number of students enrolled annually and the number of commercial driving schools and licensed driver educators working in the province/territory
- identifies major changes that may be under way or planned in driver education programs

- provides information on the fuel efficiency component of driver education programs and whether they are aware of and are using Auto\$mart's driver education materials

"The information obtained about the fuel-efficient driving component of beginner driver education ... indicates that all Canadian jurisdictions are aware of NRCan's Auto\$mart program," notes the report.

"Auto\$mart materials are used in beginner driver education programs in nine of the thirteen jurisdictions. Only one of the remaining jurisdictions uses other fuel-efficient driving materials in its program. The others do not use materials specific to fuel-efficient driving in their beginner driver education programs."

Louis Brzozowski, Senior Manager within the OEE, says the OEE will use the situation analysis to plan and target future marketing strategies for the Auto\$mart Driver Education Kit.

"It can also serve as a planning resource for the industry and for provincial and territorial officials who are responsible for licensing and driver education," says Mr. Brzozowski. "The report can give jurisdictions a real sense of where they stand in comparison with other provinces and territories when it comes to educating the next generation of new drivers in Canada."

For more information or a copy of the report, contact us by e-mail at [autosmart@nrcan.gc.ca](mailto:autosmart@nrcan.gc.ca).

## Auto\$mart Goes Global

More than 100 delegates at SAFEX 2006, the World Driving Training Conference, attended a presentation on the Auto\$mart Driver Education Kit by Louis Brzozowski (below, on the right), Senior Manager within the OEE. Sponsored by the International Association for Driver Education (IVV), SAFEX 2006

was held in Dubai, United Arab Emirates, in March 2006.

As a result of invitations to such prestigious international events, Auto\$mart's reputation continues to grow outside Canada. Graham R.J. Fryer, President of the IVV, praised Auto\$mart as a fresh, new approach to driver education.



# EYA and Auto\$mart Join Forces to Help “Gas Addicts”

## Kick the Habit



Are Canadians addicted to gasoline? The Environmental Youth Alliance (EYA) thinks so – and the Vancouver-based organization is using Auto\$mart driver training information and techniques to help motorists kick the habit.

EYA is a non-profit community development organization dedicated to improving the physical and social environment through community projects that involve, train and employ young people. With funding from the Office of Energy Efficiency (OEE), EYA has developed the Fuel Smart Driver Training Program. It encourages people aged 15 to 30 to make environmentally wise decisions when buying and driving a vehicle.

“We are trying to educate young people and Canadians in general on the benefits of energy efficiency on the road,” explains Karun Koernig, the EYA manager in charge of the program. “When we heard about the Auto\$mart Driver Education Kit, we thought it would be worthwhile to incorporate some of these materials into our program.”

EYA’s Fuel Smart Driver Training Program has evolved in stages, beginning in January 2006 when a contribution agreement was signed with the OEE. Step one was to develop the training curriculum, which incorporates elements of Auto\$mart and the Eco-Driving program, which is widely used in Europe. This was followed by the first of a series of “train the

trainer” sessions; over time, more than a dozen driver instructors will be trained on how to teach their peers to use the program materials. EYA then began to offer one-hour lessons to individual drivers and small groups of four to eight people. A Web site was launched, and to bring the program full circle, EYA has begun to monitor the impact of training on drivers.

*“The Fuel Smart Driver Training Program is not your typical driver education program,” adds Mr. Koernig.*

“None of this would have happened without Natural Resources Canada’s support,” notes Mr. Koernig. “We were really excited about the Auto\$mart materials because they are specific to Canada and are aimed at young drivers. The Auto\$mart content is great, and we are using a lot of it in our program, complementing it with techniques that people can use minute-to-minute in the vehicle to save fuel and help the environment.”

“The Fuel Smart Driver Training Program is not your typical driver education program,” adds Mr. Koernig.

“We are taking the training out of the driving school milieu. We don’t have a captive audience of students who are there for the sole purpose of getting their licence. So we have used our knowledge and expertise in youth engagement to develop a different approach for a different situation. Ours is not a driving lesson – it is an environmental lesson.”

Whether in a group setting or one-on-one, a typical Fuel Smart Driver Training session lasts about one hour, so the emphasis is on conveying a few key messages that can make a difference on the road. “Basically, we are promoting a calmer, less aggressive style of driving that is safer, saves fuel and is more relaxing,” says Mr. Koernig.

The Gas Addict Homepage, launched in July 2006, is a key element of the Fuel Smart Driver Training Program. The site is built around a “12-step program to fuel freedom.” It offers information on topics ranging from the

# Winter Tires Can Improve Safety and Fuel Efficiency

relationship between fuel consumption and climate change to fuel-efficient vehicle technologies. It also provides a link to the OEE's *The AutoSmart Guide* and monthly tips on fuel-efficient driving and alternative fuels. In the fall of 2006, EYA launched a contest to boost the interactive element of the Gas Addict Homepage by encouraging youth to post creative content to the Web site, where it will be available for downloading and use by others.

Results of some early "experiments" done by EYA to measure the impact of different driving techniques on fuel consumption are also posted on the Web site. The results, though preliminary and not yet substantiated by repeated experiments, are nevertheless impressive. Fuel efficiency improved by 25 percent when the test vehicle maintained a three-second buffer space behind the car in front, compared with a one-second buffer. A 10 percent improvement in fuel efficiency was achieved by driving at 80 km/h rather than 90 km/h. And fuel efficiency improved by 26 percent when the vehicle was driven at highway speeds with the windows closed, rather than open. The vehicle also recorded a 21 percent improvement in fuel efficiency in stop-and-go traffic when the driver accelerated briskly from a stop but allowed the car to coast to intersections, rather than coming to abrupt stops through hard braking.

EYA now hopes to corroborate these results by taking its monitoring efforts to the next level.

"We will be doing some before-and-after testing from a fuel efficiency perspective," explains Mr. Koernig. "We have a car that has been equipped with a fuel efficiency monitor that can provide instantaneous feedback on how driving habits impact fuel consumption. An individual will take the car for an initial drive, during which we will measure fuel consumption. Then we will give the individual a lesson, after which he or she will drive the car for a day or two, and we will be able to measure the lesson's impact on his or her fuel consumption. We expect to put 10 to 20 people through this process over the next few months."

For more information on the EYA's Fuel Smart Driver Training Program, visit the Gas Addict Homepage at [www.gasaddict.ca](http://www.gasaddict.ca).

Winter tires appear to be making a comeback. After years of believing that all-season radials were sufficient for most vehicles and most road conditions, evidence suggests that more and more Canadians are making the switch to winter tires, with safety being the driving factor.

What makes winter tires safer? At temperatures below 7°C, standard tires begin to lose elasticity, leading to reduced traction. The new generation of winter tires retains elasticity and gripping power at much lower temperatures.

A recent study in Quebec showed that winter tires reduce stopping distance by up to 25 percent, or two to three car lengths, improving a driver's ability to avoid a collision. A separate national study by The Canadian Press and Leger Marketing revealed that in Ontario, where only 29 percent of drivers use winter tires (in 2005), 26 percent of winter accidents are attributed to the absence of winter tires.

Winter tires may not be a necessity in all parts of Canada. But for drivers who live where roads are regularly snow-covered, winter tires will improve traction, reduce tire slippage, improve safety and save fuel.

Here are some winter tire tips to share with your students:

- \* When shopping for winter tires, look for a peaked mountain and snowflake symbol on the sidewall. Tires marked with this symbol meet specific snow-traction performance requirements and have been designed for use in severe snow conditions.
- \* Some tires may be marked "M + S" (Mud and Snow) or "all season," but do not have the peaked mountain with snowflake symbol. These tires may provide safe performance in most weather conditions, but are not designed for snow- and ice-covered roads.

- \* Wide, high-performance tires, other than those designed as winter tires, are not suitable for use on snow-covered roads.
- \* Installing only two winter tires on a vehicle can change the way it handles and make it unsafe on the road. Transport Canada and The Rubber Association of Canada recommend installing snow tires on all four wheels.
- \* Winter tires should be removed as soon as possible after the snow is gone, as they are not designed for driving on roads not covered in ice and snow.

Most importantly, remind your students that even with good-quality winter tires, they should always drive according to road and traffic conditions.

More information on good tire maintenance practices is available at [www.betiresmart.ca](http://www.betiresmart.ca).



# Auto\$mart

## TOP 10 WINTER DRIVING TIPS

Winter is far from over – there is still lots of bad weather ahead, and that means poor driving conditions from time to time. Here are some tips to help keep you and your students safe on the road.

- 1** Choose the best tire for winter conditions in your area (see the article on page 7). The more your vehicle slips and slides and spins its wheels on snow-covered or icy roads, the more fuel you waste and the greater the chance of a collision.
- 2** Increase the distance between you and the vehicle you are following, to avoid collisions and the need for hard braking or sudden lane changes. In winter conditions, vehicles often need more room to manoeuvre and stop.
- 3** Avoid fast and excessive acceleration – it guzzles gas and can lead to a loss of control and a collision.
- 4** Use a block heater to warm the coolant, engine block and lubricants before you start the vehicle. A warm engine will start more easily, consume less fuel and produce fewer pollutants. Two hours is enough time to warm an engine using a block heater.
- 5** Once a vehicle is running, the best way to warm it up is to drive it. Assuming your windows are defrosted, anything more than 30 seconds of idling on winter days wastes fuel and increases emissions.
- 6** To prevent your car windows from fogging up, open a window as soon as you enter the vehicle. And clear snow from the air intake on top of the hood. Otherwise, the defroster will draw moisture into the system and fog the windshield.
- 7** For safety and fuel economy, clear snow off your vehicle and out of wheel wells before you drive away.
- 8** Measure tire pressure regularly, especially after a sharp drop in temperature. Cold temperatures decrease the air pressure in tires, which adds to the rolling resistance caused by snow and slush. Each tire that is under-inflated by 2 psi (14 kPa) causes a 1 percent increase in fuel consumption.
- 9** Plan ahead to combine several errands in one trip. Fuel consumption and pollution output are higher in the first minute or two after a cold start than when the engine has achieved normal operating temperatures – so the fewer cold starts you make, the better.
- 10** Give yourself extra time to get to your destination. When road conditions are bad, use public transit whenever possible. This will be cheaper than driving your own vehicle and can be less stressful.



Natural Resources Canada's Fuel Consumption Calculator can be a great tool to help reinforce lessons you teach in the classroom and on the road – **and we'd be more than happy to send you enough FREE copies for your entire class!**

A copy was included with this newsletter. Take a few minutes to look it over. The calculator allows drivers to track fuel consumption, estimated costs and carbon dioxide emissions. The calculator is available for gasoline- and diesel-powered vehicles. Then visit [vehicles.gc.ca](http://vehicles.gc.ca) to order your classroom set – your students (and their parents) will love this addition to your materials.

**FUEL  
CONSUMPTION  
CALCULATOR**





This edition of the *Auto\$mart Driver Educator's Newsletter* includes a free copy of the Auto\$mart buying poster, the third and final in this series. The poster encourages young Canadians to purchase the most fuel-efficient vehicle that meets their everyday needs and reminds them about the tools offered by Natural Resources Canada to help them make wise and informed purchasing decisions.

# Road safety is a concern – *but who is at fault?*

Canadians have serious concerns about road safety, ranking it on par with the health care system and pollution as one of today's more important social issues, according to a national survey. While they are convinced that more needs to be done to improve safety, most Canadians believe they are not part of the problem.

*The Road Safety Monitor* is an annual public opinion survey to “take the pulse of the nation on key road safety issues.” It is conducted on behalf of the Traffic Injury Research Foundation (TIRF), a national road safety institute whose mission is to reduce traffic-related deaths and injuries.

The survey examines

- ▷ what Canadians see as priority road safety issues and how concerned they are about them
- ▷ their views about how to deal with these problems
- ▷ what they know and don't know about safe driving practices
- ▷ how they behave on the highways

According to Transport Canada, 2730 people were killed in road crashes across the country in 2004, the most recent year for which complete data are available. A further 212 347 people were injured, 17 533 of them seriously. The annual cost of road crashes in terms of health care expenditures, property losses and related costs has been estimated at more than \$25 billion.

Results from the most recent *Road Safety Monitor*, completed in September 2005, confirm a widely held belief among traffic safety researchers that Canadians are not well informed about road safety issues – but with an interesting twist. Although public knowledge about the extent of the problem is inaccurate, Canadians, rather than minimizing the problem, generally overestimate its magnitude. Survey respondents estimated on average that more than twice as many people are killed on Canadian roads each year than is actually the case.

The TIRF report is available on-line at [www.trafficinjuryresearch.com/publications/PDF\\_publications/RSM\\_Public\\_Awareness\\_and\\_Concern\\_About\\_Road\\_Safety.pdf](http://www.trafficinjuryresearch.com/publications/PDF_publications/RSM_Public_Awareness_and_Concern_About_Road_Safety.pdf).

According to the report's authors, this suggests that increasing public knowledge about the issue might, in fact, lead to a decline in concern about road safety.

Another interesting finding, particularly from the perspective of driver educators, is that while “the public is anything but indifferent about the problem of road crashes,” it typically believes the fault lies with others.

The survey revealed that most Canadians claim they do not drink and drive, run red lights or take other unnecessary risks. Nearly three quarters of the public rate their driving skills as good or excellent, and only 1.4 percent rate them as poor or not very good.

Nevertheless, the report concludes, “the magnitude of the road crash problem in Canada remains substantial, and the annual toll in terms of deaths and injuries cannot be ascribed solely to those who are unconcerned or likely to engage in risky driving. The challenge then is to communicate the right information effectively to the right target groups.”

That is a familiar challenge for driver educators, who play a crucial role in improving road safety. By focusing on the links between safety and fuel efficiency, the Auto\$mart Driver Education Kit can help you teach techniques to reduce collisions, save money and help the environment.



# Buying a new vehicle? Consider this ...



As a driver educator, safety is, no doubt, top-of-mind when you are purchasing a new training vehicle. The *AutoSmart Driver Educator's Newsletter* came across some tidbits of information, courtesy of the Insurance Institute for Highway Safety (IIHS), that you might find interesting.\*

## Technology that really works

A recent edition of the IIHS *Status Report* provides solid evidence that *electronic stability control* (ESC) – an extension of anti-lock brake technology that can help drivers retain control of their vehicles during high-speed manoeuvres on slippery roads – could prevent nearly one third of all fatal crashes in the United States and reduce the risk of rolling over by as much as 80 percent.

Anti-lock brakes have speed sensors and independent braking capability. ESC adds sensors that continuously monitor how well a vehicle is responding to a driver's steering wheel input. These sensors can detect when a driver is about to lose control because the vehicle is straying from the intended line of travel. ESC responds by braking individual wheels automatically to keep the vehicle under control.

IIHS reports that ESC – which is also known as StabiliTrak or Active Handling – is standard on 40 percent of 2006 passenger vehicle models sold in the United States and optional on another 15 percent. As a stand-alone option, ESC costs anywhere from US\$300 to US\$800.

## Remember to buckle up!

Evidence is also accumulating that *safety belt reminders* are effective in encouraging people to buckle up, especially among motorists who say they use seatbelts, but not all the time. A new IIHS study indicates that reminder devices increased safety belt use among Honda drivers from 84 to 90 percent. Only 6 percent of unbuckled drivers who encountered the reminder systems reported ignoring them.

When shopping around, however, keep in mind that not all reminder systems are created equal. According to the IIHS, some chime for only 30 seconds after the vehicle is started, then go silent. Others will continue to remind the driver to buckle up for at least nine minutes! Some don't chime at all, but have only a light to remind motorists to fasten their seatbelts.

## Top safety picks

IIHS has evaluated cars and minivans to determine which models offer the best protection in front, side and rear crashes (sport utility vehicles and pickup trucks will be added later). And the winners of the 2007 Top Safety Pick Awards are ...



IIHS Top Safety Pick Award Winners 2007	2007 Fuel Consumption Ratings (litres/100 km)	
	HIGHWAY	CITY
<b>MID-SIZE CAR WINNERS</b>		
Audi A4 Quattro	10.2	6.3
Saab 9 <sup>3</sup>	10.8	7.1
Subaru Legacy 2.5i	10.7	7.5
<b>LARGE CAR WINNERS</b>		
Audi A6 Quattro	12.1	8.0
<b>MINIVAN WINNERS</b>		
Hyundai Entourage	13.2	8.8
Kia Sedona	13.2	8.8
<b>SMALL SUV WINNERS</b>		
Honda CRV	10.2	7.3
Subaru Forester (with optional ESC)	10.4	7.7
<b>MID-SIZE SUV WINNERS</b>		
Acura RDX	12.5	9.3
Honda Pilot	13.3	8.5
Subaru B9 Tribeca	13.3	9.5
<b>LUXURY SUV WINNERS</b>		
Mercedes M Class	16.7	11.6
Volvo XC90	13.9	9.7

\* The information in this article is courtesy of the IIHS, a U.S.-based non-profit scientific and educational organization dedicated to reducing deaths, injuries and property damage from crashes on the nation's highways.

# Register a friend Receive a free *Auto\$mart* DVD!



The Auto\$mart video series – one of the most popular elements of the Auto\$mart Driver Education Kit – is now available in DVD format.

The video series follows four main characters from different backgrounds as they go through driver training. A classroom hit with novice drivers and educators alike, the video is an entertaining way to inform Canadians about the environmental, safety and financial impacts of their driving, maintenance and vehicle-purchasing practices.

Are you interested in receiving a copy? Encourage a friend or colleague to register with Auto\$mart, and we'll send you both a free copy of the DVD. For information on how to request your copy, contact us at [autosmart@nrcan.gc.ca](mailto:autosmart@nrcan.gc.ca).

## Where does your jurisdiction stand?

Has your province or territory made progress in implementing the Auto\$mart five-step approach to promoting safe, fuel-efficient driving?

As explained in previous editions of the *Auto\$mart Driver Educator's Newsletter*, the Office of Energy Efficiency is working closely with provincial and territorial departments responsible for driver education and licensing. They aim to encourage motorists to

adopt fuel-efficient driving practices that will save them money, increase road safety and contribute to Canada's environmental goals.

The table below illustrates the phased approach and shows where each jurisdiction stands. Some jurisdictions continue to make progress (light blue boxes indicate recent developments), but much work remains to be done.

Province or Territory	PHASE I	PHASE II	PHASE III	PHASE IV	PHASE V
Alberta	X	X	X		
British Columbia	X		X	X	X
Manitoba	X	X		X	
New Brunswick	X				
Newfoundland and Labrador	X	X		X	X
Nova Scotia	X		X		
Northwest Territories					
Nunavut					
Ontario	X				
Prince Edward Island	X			X	X
Quebec	X				
Saskatchewan	X		X		
Yukon	X			X	X

### PHASE I

Include fuel efficiency messages in handbooks for new drivers.

### PHASE II

Include questions about fuel efficiency on exams for new drivers.

### PHASE III

Add a mandatory component on fuel efficiency to their driver training curriculum.

### PHASE IV

Make other Office of Energy Efficiency materials available to the public through licensing bureaus.

### PHASE V

Provide a link from their driver training and licensing Web sites to the Auto\$mart Web site.

# List your school on the Auto\$mart Web site

Is your driving school listed on the Auto\$mart Web site? If not, you could be missing out on a huge marketing opportunity.

Between August 2005 and August 2006, the Auto\$mart Web site received 44 245 hits from parents and teens looking for a driving school in their area that offers Auto\$mart training. If your school isn't on the list, you may be losing business to your competitors.

As an Auto\$mart registrant, you automatically qualify to have your school listed on the site. The listing will include your name, address and contact information, as well as a link to your own Web site. In other words, it's free advertising!

To verify that your school is listed, visit [oee.nrcan.gc.ca/transportation/business/driversed-find.cfm?attr=16](http://oee.nrcan.gc.ca/transportation/business/driversed-find.cfm?attr=16) and select your province or territory and city. If your school isn't on the list, you can make sure it gets added by creating a profile of your school.

For more information, e-mail Auto\$mart at [autosmart@nrcan.gc.ca](mailto:autosmart@nrcan.gc.ca).

## Auto\$mart

### Let Us Know

Need help ordering Auto\$mart classroom materials?

Require additional information about our fuel efficiency messages?

Have any suggestions to improve our driver education kit?

Interested in hosting an Auto\$mart workshop at your driving school?

**Please contact us.**

#### Natural Resources Canada – Auto\$mart

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Natural Resources Canada's Office of Energy Efficiency

*Leading Canadians to Energy Efficiency at Home, at Work and on the Road*

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