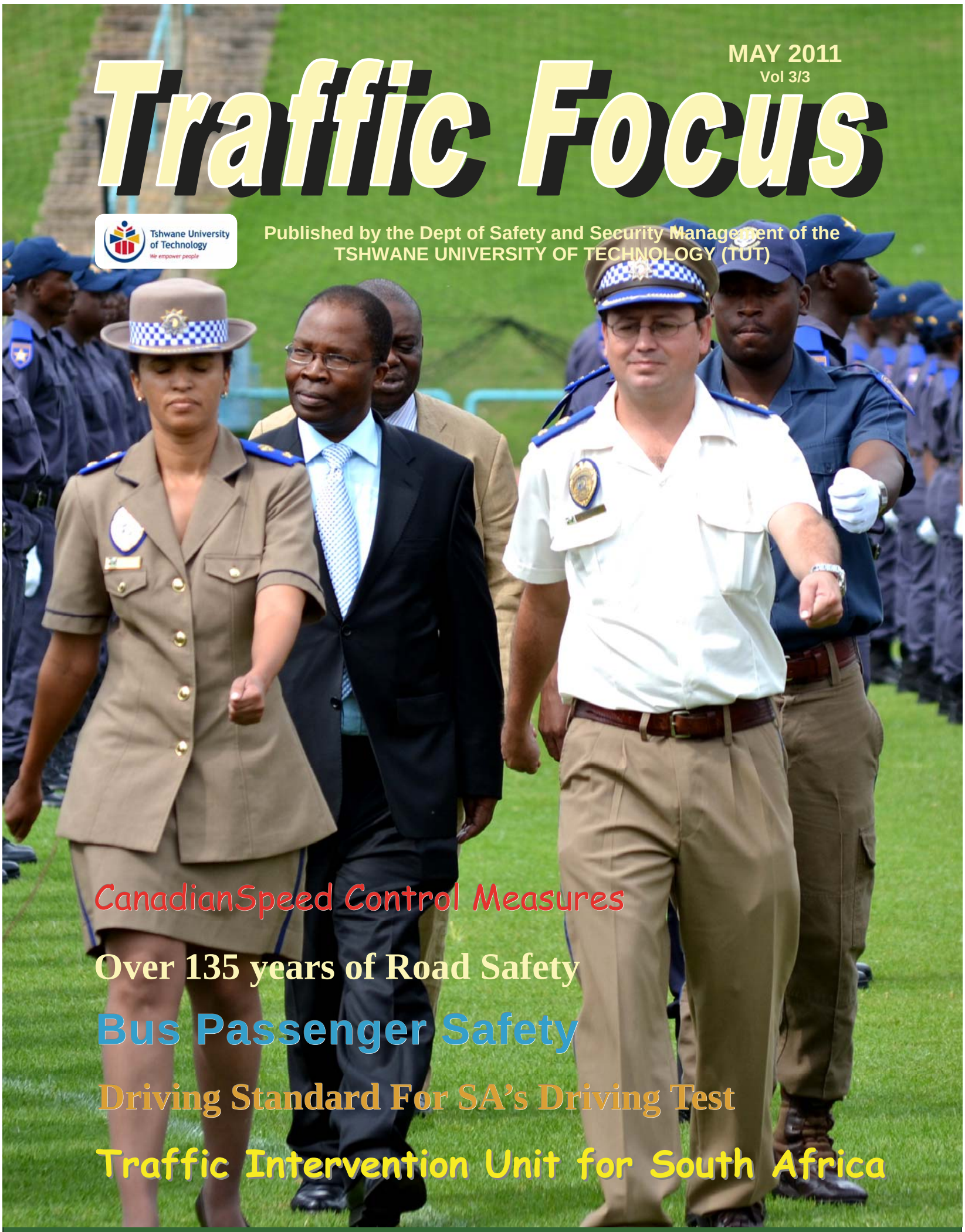

Traffic Focus

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CanadianSpeed Control Measures

Over 135 years of Road Safety

Bus Passenger Safety

Driving Standard For SA's Driving Test

Traffic Intervention Unit for South Africa

TRAFFIC 2011... AND BEYOND...

By Johan Jonck

During the start of 2011 there have been horrific and alarming bus crashes across the globe. Studies have however revealed that the transportation of school children is safest in buses and in fact significantly safer than transporting school children in minibuses, vans or other passenger motor vehicles.

Professional bus service operators spend significant amounts of time, money and expertise in the management and safety of fleets of vehicles. This includes training and real time monitoring of the bus operations and the performance of well qualified drivers.

In this guide we would like to focus on the safety of bus passengers and pay special attention to the following aspects:

- Planning your trip and selecting a bus service
- Safety before climbing on the bus
- Boarding the bus
- Safety from crime and confrontation
- Safety on the bus
- Safety in emergency situations
- Safety as you disembark the bus
- Safety getting home from the bus stop

Planning your trip and selecting bus transport

Even though price is always an important consideration, price should not be the only deciding factor used when chartering a bus. Do not allow the price of the ticket to compromise your expectations of professionalism and safety!
Allow yourself the time and effort to enquire about safety:

- Bus companies should always be willing to answer any questions you have about their safety practices.
- You might be advised not only to ask about routes and estimated time of arrival –but also about whether the operator is fully licensed.
- Enquire about the policy with regards to driving time, relief drivers etc.
- Enquire about safety at the ticket office or tour operator.
- You might be able to find more information on the bus operators' website.
- Do not go only on bus service marketing material – ask friends and family about their customer experiences.
- The transportation experts in your area might have additional information about a specific service, the company's record of regulatory violations and roadside out-of-service violations and the company's highway crash history.
- Does the company have its buses inspected regularly?
- Does the company have notification procedures for roadside emergencies and breakdowns?

Is the driver equipped with a wireless communications device?
If you have to arrange bus travel for sports groups, school sides etc, also find more info on the following:

- What are the policy with regards to carrying and storage of baggage and sports equipment?
- Are there external storage capacity? External storage areas on a bus are usually lockable.
- How long will the trip be and is it necessary to arrange for rest stops and meal stops?
- Are safe/clean facilities available along the planned route for rest stops?

While at the destination, will the bus (and its contents) be in an area where it will be secure from theft or vandalism?

Safety before climbing on the Bus

Safety starts long before you climb on the bus. With the correct preparation you will enhance your safety and be able to avoid accidents while waiting for the bus.

- Determine your route of travel well ahead of time.
- Choose appropriate clothing and footwear for the journey with caution – This should be comfortable but not pose additional risks.
- Be careful with loose fitting clothing and backpacks. Ensure there are no drawstrings or other hanging objects that could get caught as you enter or exit the bus.
- Ensure that you have a fully charged cellular phone with you and that family and friends are alerted to estimated times of arrival.
- It is sound advice to carry a bottle of water with you for emergencies, thirst or dehydration.
- Do not plan to take on the bus weapons or any dangerous, flammable, hazardous or illegal items that can cause a hazard or inconven-

ience, including car batteries or gasoline.

- You should know exactly where to board the bus and what time it will be at your stop.
- Bus stops prevent passengers having to board in hazardous situations such as intersections, or where the bus is turning and is not using the curb lane.
- Go to the bus stop well before time of departure and if possible, have someone with you to assist if needed.
- Walk safely facing oncoming traffic.
- Don't run. Stay on the sidewalk, or if there is no sidewalk, stay as far as possible away from the traffic.
- If crossing the road to the bus stop you should be aware of other traffic, especially that which may overtake the bus if it is already in the bay.
- Don't play around at bus stops – other traffic might be easily distracted and collide with people running across the road.
- Use the proper receptacles to extinguish and dispose of cigarettes or other smoking materials prior to boarding the bus. Do your part to prevent fires and littering.
- Stay well clear from the kerb as the bus arrives - Make sure you have a clear view of the driver at all times.
- Remember, if you are cannot see the driver's eyes, the driver cannot see you.
- Once the bus arrives, wait for the driver to come to a complete stop and the door of the bus to open before you move forward to the bus.

Boarding the Bus

- Follow the instructions of the bus driver at all times – There is a good reason for the sequence in which you have to board the bus!
- Present any passes or identification cards clearly to the bus operator.
- Allow passengers to leave the bus before you attempt to board.
- If the bus is not close to the curb, be careful when climbing the first step because it may be higher than you realize.
- Board the bus one-at-a-time and try not to push.
- Passengers should exercise care when boarding or exiting the bus and use the handrail when ascending or descending steps
- If you drop something , never go under or near the bus to retrieve papers or other objects. The driver may not be able to see you. Alert the driver and ask for assistance
- During inclement weather, especially snow and ice, be careful and watch your step. It is wise to wear rubbers or boots at these times. They will not only keep your feet warm and dry, but they will add more traction that will help prevent slips and falls.
- Strollers should be folded prior to boarding. Always leave the bus with children in front of you, never behind you.
- Unfortunately bus stops and lots of absent minded people in close proximity might also invite opportunity for criminal activity. Be alert to the following safety suggestions:
- If you are jostled in a crowd, be aware that pickpockets might also see an opportunity.
- Stay alert and be aware of your surroundings.
- Pay attention to the safekeeping of your wallet, keys and cellular phones.
- Hold your purse tightly, close to your body. Keep your wallet in a front or inside coat pocket, or in a buttoned hip pocket.
- Even when on the bus, enjoy your ride but see to it that your purse or other belongings do not become unguarded.
- If you are travelling with small children, it is important that they are well supervised.
- To prevent separation from children, be sure to board together.

Passengers Safety on the Bus

- Allow the elderly and people with disabilities to use the priority seating in the front of the bus.
- If a passenger in a wheelchair boards the bus and you are seated at a wheelchair lock-down location, please move to another area.
- Passengers should remain seated as much as possible while the bus is in motion.
- Do not switch seats; do not reach across the aisle or to seats around you.
- The safest place in an accident is within the framework of the seats which are well padded to protect you.
- If it is necessary to stand or walk while the bus is moving, passengers should always use handrails.
- Hold on to the railings and steady yourself to prevent falls when standing or walking through the bus.
- Always stand behind the line that is located on the floor opposite the driver.
- Do not talk to or distract the bus operator while he or she is driving.
- Remain silent at all railroad crossings. The bus driver needs to listen for oncoming trains.
- Never block the centre aisle and stand clear of doorways whenever possible.
- Do not extend your legs or other personal belongings into the aisle. This can present a tripping hazard.
- Nothing should be in the aisle, no legs, arms, book, bags, or other objects that someone could trip over.
- Do not put any part of your body outside the bus window.
- Ask the bus driver before opening any windows [Luxury buses should have air conditioning.]
- Use the seat belt if one is fitted. You may be spared death or serious injury in the event of an accident.
- Approach eating with caution - if you choke, or have food allergies, you may die before the driver can do anything about it.
- Avoid opening or tampering with emergency windows, except during an emergency.
- Avoid tampering with or operating equipment intended for the bus driver's exclusive use.

Courtesy to other passengers on the bus

On the bus you are sharing a small space with several passengers. You need to avoid conduct that could lead to physical and verbal confrontation with other passengers, thereby endangering your safety, the safety of other passengers and distracting the driver.

- Be courteous at all times to both fellow passengers and the driver.
- The best passengers are the ones who tend to keep to themselves and quietly enjoy the ride home.
- Smoking will be prohibited on most passenger buses.
- Radios and tape recorders may be used for your listening pleasure, but earphones must be used and the volume should be low enough so that others cannot hear it.
- Do not commit any act or engage in any behaviour that may cause harm, damage, or disturbance to any person or property.
- Refrain from having loud and/or vulgar conversations on the bus,

BUS PASSENGER SAFETY

including cellular phone conversations.

- Avoid unwanted conversation with other passengers tending to interfere with the other passengers' use and enjoyment of the bus; or using obscene, threatening, offensive or "hate" speech.
- Don't throw things inside the bus. This could hurt other passengers or the driver.
- Report any suspicious items or activities immediately to the operator - do not confront passengers on your own.
- Do not create unsanitary conditions on the buses or at bus stops.
- Help keep buses and bus stops clean by using trash and recycling receptacles.

In Case of Emergency

What do you have to know in the event of an accident or emergency?

- Always follow the guidance from the driver or employees from the bus service.
- In an emergency it is up to you to stay calm. Listen to the bus driver and follow instructions carefully.
- If you observe an incident that could jeopardize someone's health and safety, report it to the bus operator immediately. Your swift action could possibly prevent serious injury
- Most buses are equipped with a two-way radios and cellular phones. When an emergency occurs that requires response by Police, Fire or Emergency Medical Services, the operator can call for assistance immediately.
- If you have any questions about the safety procedures, ask the driver.
- It is best to be alert to emergency procedures when embarking on the bus – and not only when it has happened!
- It is best to carry with you identification which will inform emergency rescue personnel of your identity, your next of kin and contact numbers, allergies, medical fund details, etc.
- This is even more important for young children and the elderly who might struggle to communicate.
- Have a look around when you are seated on the bus - please take a moment to locate the emergency exits nearest to you.
- The fire extinguisher on a bus is usually located behind the driver's seat, or beneath the front row passenger's seat, or in the front-most overhead compartment.
- Remember: the primary exit from the vehicle is the same door at the front through which you entered.
- In an extreme emergency situation, the windows can also serve as exits. Follow the instruction markings on the windows or the window frames.
- Also note that there is most likely an emergency exit hatch in the roof above the center aisle.
- Evacuate the bus ONLY when told to do so by the driver. Follow the driver's instructions.
- Do not crowd the aisle. Keep moving toward the exit.
- Secure loose clothing so it won't get caught on door or any other part of the bus.
- Leave ALL belongings on the bus.
- Duck your head and bend your knees if you must jump from an exit. Move to a safe location well away from the bus.

Safety as you leave the Bus

The need for safety does not stop when the bus comes to a standstill! Many injuries occur through absent mindedness and pedestrian distractions when disembarking the bus.

- Be ready to leave the bus before it arrives at your bus stop. - don't keep the driver and others waiting while you gather your belongings.
- Wait until the bus has come to a complete stop and the front door has opened, before getting up from your seat.
- Wait until the people in the seats in front of you leave, before you get up from your seat.
- Be sure to use the handrails when going down the steps.
- Be especially careful when stepping off the low step and onto the curb or street.
- After leaving the bus move quickly away from the bus and out of the danger zone.
- The most dangerous times of any bus trip is when you are outside of the bus.
- There is also the danger of passing cars when you must cross the street.
- If you intend to cross the street after you get off the bus, watch for traffic moving around the bus.
- If possible, go to the sidewalk and wait for the bus to leave the area.
- Cross streets only in designated crosswalks, and be sure to obey all traffic signals.
- Children, even older ones can find it difficult to cross busy roads and are often seen crossing in front or behind the bus they've just got off.
- Don't cross the road from in front of the bus!

Transport from the Bus Stop

You are never safe till you are safely at home! As you disembark from the bus – be alert and pay close attention to getting home safely.

It is always best to have friends and relatives pick you up at the bus stop, but sometimes you have to use additional public transport to take you home. We would like to advise the following:

- Plan in advance for the transport to take you home.
- If you are unsure of which taxi companies are acceptable, inquire at the information desk at the bus stop, hotel concierge desk, etc.
- Take a business card with the phone number of a reputable mini-cab or taxi company, phone for the taxi when you need it.
- Do not trust anyone to be your taxi driver and your lift home.
- Do not accept rides from drivers who randomly approach you.
- If you have ordered a taxi, wait for the driver to approach you. Do not approach a car that you think is your taxi.
- Ask the driver the name and destination he has been given to check he is your driver. Don't get into a taxi you haven't ordered.
- If you must hail a taxi, spot one from a well known and reliable company. This requires some advanced knowledge of taxi companies in the area.
- Before getting into the taxi, make sure the driver agrees to take you to your destination.
- When you get into the taxi, note the company name, code number displayed, driver's name, ID and photograph if possible.
- Sit in the back seat.

The above safety guidelines will contribute towards increased safety and enjoyment for all bus passengers! We would like to invite the public to share their advice on how to further improve on passenger safety!

Drivers and Pedestrians

ROAD SAFETY AND FLOOD RISKS

The last months have seen an increased focus on flooding and the risks of heavy rains, fast flowing rivers and floods have been discussed on several forums. We would like to discuss in this section a few more facts about flood risks and advise how all our road users can protect themselves from harm on the roads.

By Allen Versteeg (Transnet)

Danger of flowing water over roads and low water bridges
We need to be aware of the following facts:

- Flowing water applies pressure to contact areas. The higher the speed the higher is the pressure.
- With water that is one meter high it will flow out at a speed of 4.47 meters per second or 16 km/h. The pressure is one metric tone per square meter.
- With a wheel half under water is the area 0.4 sq m and the force 0.4 tonne per wheel. For the four wheels it becomes one and a half tons and for 2m of water it becomes 2 ton per sq m.
- Be careful, water that has fallen only 0.4m reached a speed at 3.2 km/h and can sweep your car off a road bridge.
- When the side of the body of a vehicle makes contact with the water the force increases rapidly but the water now also acts on the underside of the vehicle as well and starts to lift it. It is now able to float like as ship. The weight of the vehicle will not be able to hold it on the road. Every cubic meter of space in a vehicle can lift one tonne.
- Be careful, 0.6 meters of water can float a car. Only vehicles that are open and let the water through will behave differently. Establish the body area of the vehicle and its mass. From this calculate the how deep will the vehicle sink in the water before it floats. For a truck that is 8.5 meters long and 2.5 meters wide and with a mass of 12 tonne it will float at a level of .532 meters above the body base and be able to float down the river.

Danger of standing water
Standing water does not exert side pressure but will also lift the vehicle and float it. Then it will be impossible to move it forward.

Speeding vehicles and aquaplaning
When vehicles are moving fast over a layer of water the vehicle can start to aquaplane. If the tyres are worn, it is easier to happen. Under these conditions an untrained driver may easily loose control over the vehicle.

Pans and marshes
This is treacherous as it may appear solid but may only have a thin dry crust. The vehicle may disappear before your eyes in a marsh. The more you struggle the faster it will sink. Stay on the road.

Floods and Debris

- When rivers are overflowing their banks the flow of water will cause light objects like trees to float. This could block the flow of water at obstructions and channels the water and cause rapids to form. Avoid these rapids.
- Every river has a catchment area. When it starts to rain at the top of the catchment area and the storm is moving along with the flow of the river the water in the river it is going to build up. It will start to avalanche on its way to the sea. This front wave will be full of debris (like trees plants and other floating material).
- This will also happen when a dam wall breaks. The higher the water drop the faster it will run. It will run 16 km/h times the square route of the height of the water in meters, max. It will appear like a broken wave on the sea shore.

Destruction of surfaces and structures
The might of the water is very destructive, walls may fall over and road surfaces may be carved away. It may appear solid. It

also forms the places where vortexes may form that will suck objects to the bottom. Stay away from eddy currents.

Low water bridges
Low water bridges are designed without rails, as it will collect some excessive amount of debris. The small pillars sticking out are designed to give the driver of the vehicle an indication of the height of the water over the bridge surface. If you can't see the small pillars do not attempt to cross the bridge. If there is a causeway underneath the bridge do not attempt to cross the bridge if there is water flowing over it. The extent of the damage to the bridge can not be seen due to the muddy water and the water is flowing at a higher speed over the bridge.

Lack of visibility through muddy water
Due to the mud and debris in the flooding water it becomes impossible to see the condition of the bottom of the surface. Divers may not venture into this water to come and search for you.

Rescue methods and assisting rescue teams
Rescue is often performed via helicopter. This is extremely expensive - To search for you by helicopter costs about R32 000 per hour.
Boats, foot patrols, divers, ropes can be used to try and rescue you. Families normally gather abd create search teams and comb the area. They normally won't stop until your body has been found.

Wear your safety vest with bright colours and reflective strips. Move into the open and put your wet clothes in an arm upraised position. Pack white stones in a SOS format. Or three short, three long and three short signs. Make smoke if you can, use a mirror to flash to rescuers.

To describe your position: Try to establish north as best as you can, work out the direction of the river flow and say it is flowing so many degrees from north in a wind direction.. Indicate how far you are from large objects and its direction from you. Give the direction to three very large prominent mountains. It makes it very easy to plot your position on a map. The direction of roads you can see from where you are and how far are they. Describe the easiest route to get to you. To save the life of your the cell phone batteries, send these messages by sms. If they phone don't talk long. Give facts only. To find North with your watch is to keep a thin stick at 12 and let the shade fall on 6, halfway between the hour pointer and 12 is North.

If you are injured inform the rescuers of the nature of the injury so that the rescuers can come prepared. If you have lost a lot of blood, advise your blood type as well.

Protecting from dangers and saving your phone

- Avoid flooded areas at night. To try your luck at night time makes your chance for survival very slim. No one can see you as it normally raining as well, you can't see in these conditions and you normally become very disorientated.
- When your body is exposed to some cold temperatures, which is a shock to your system, it goes into survival mode and cut the blood flow to the limbs. It goes into shaking mode to generate heat and you feel horrible due to the adrenaline overdose. Treat yourself for shock, meaning, calm down, relax and start to warm up the body gradually. Normally another person's body heat helps in emergencies. A fire will also help.
- The cause of death is normally drowning. At all costs keep the airways open. That means keep your face downstream.

Your cellular phone can be the biggest help to save you if you are still alive. If you have the chance, wrap it in a plastic bag and save it in your underpants or in your bra. Try to ensure that it do not get wet.

What to do if you can't swim
It remains best to avoid water if you can't swim. If you cannot avoid getting in the water - there are a few things to keep in mind:

- Do not try to stand in fast flowing water. Should a foot become trapped in the rocks the river will force you over usually in a face down position, try to always face up stream if you are forced to stand in fast flowing water.
- Make yourself as light as possible, remove your heavy boots, the dark muddy water will make you float higher. Stay away from white foaming aerated water, it is soft and you will sink deeper into the water. Keep your lungs inflated.
- Try to get into a back-float on your back with your feet in front of you and your head up facing down river. Make use of the water rushing past you to push you up. Keep your back at 45 degrees with the water. With your elbows out, and hands down 45 degree you take up a 'Lazy boy' position. This will give you the maximum lift and keep your head above water.
- The river usually flows fastest in the middle and by maintaining a slight angle to the flow the river will steer you to the side. By opening and closing your hands you can steer yourself to the inside bend of the river where you will be washed out on the sand. The closed hand will feel more water force. With this you have used the least amount of energy and are able to use the force of the water that is around you. This will calm you and you will stay in control.
- Stay away from rocks and vegetation. Rocks normally injure you easily and the river may raise more and the vegetation may keep entrap you as the water flow through it. The flow will be slower on the inside of a bend in the river. Go for the white sand. There is also wood for fire. In the wild be careful for crocodiles, as these banks are also their resting area. If you find that the water is slowing down and your head is getting lower into the water try to move your closed hands in and out, all on your back, lifting and pushing you to the shore.

Vehicle and Insurance Telematics

Technology is changing everything around us. It affects how we live our lives, communicate, drive and even manage our financial affairs. It is only fair to expect that technology will have a significant impact on both road safety and on how much we pay to travel our roads. It has been said that the automotive world is trying to integrate more vertically with the driver. Vehicle telematics have the ability to speed up real information about driving behaviour. This in turn opens a world of opportunity for car insurance companies across the globe!

What is Telematics and Why Should We Take Note?

Definition: The etymology of telematics, as determined by Automotive Telematics author and academic Dennis Foy, is from the Greek "tele" ('far away', especially in relation to the process of producing or recording) and ~Matos (a derivative of the Greek machinari, or contrivance, usually taken in this context to mean 'of its own accord'). As combined, the term "telematics" describes the process of long-distance transmission of computer-based information. Under the broader meaning of telematics we could include the following:

- The technology of sending, receiving and storing information via telecommunication devices in conjunction with effecting control on remote objects.
- The integrated use of telecommunications and informatics, for application in vehicles and with control of vehicles on the move.
- Telematics includes, but is not limited to Global Positioning System technology integrated with computers and mobile communications technology in automotive navigation systems.
- Most narrowly, the term refers to the use of such systems within road vehicles, in which case the term vehicle telematics may be used. This use includes emergency warning system for vehicles, GPS navigation, integrated hands-free cell phones, wireless safety communications and automatic driving assistance systems, etc.

Applications and Benefits of Vehicle Telematics

Vehicle Telematics are used extensively in both commercial and personal use. It has proven to be a powerful and valuable tool to improve the efficiency within organizations and businesses. Herewith find a brief reflection on the wide range of applications:

- GPS anti-theft systems reduce car thefts: GPS tracking devices are now widely recognized and required by motor insurers on high-end car models.
- Crash data reporting: Reports can provide insurers and vehicle owners with the necessary guidance to what caused an accident.
- Fraud prevention: Vehicle telematics can assist in exposing attempted fraud and provide answers in the sudden disappearance of vehicles.
- Improved risk management for commercial fleets: Information provided by state of the art vehicle telematics solutions provides insurance companies and their agents with the tools to reward fleet operators who maintain a high standard in traffic safety.
- Research assistance: Floating car data can provide motor insurers with valuable statistical data about driving behaviour that can be used for fine-tuning their complex insurance models for premium calculation.
- Creating incentives for high-risk drivers: Male drivers aged 18-25 pay premiums several times higher than older drivers because they are more frequently involved in accidents. By installing a telematics device they have a chance to save on insurance as they prove that they are more careful than the average.
- Vehicle Tracking: Tracking of vehicles is done by way of monitoring the location, movements, status and behaviour of a vehicle or fleet of vehicles. This is achieved through a combination of a GPS(GNSS) receiver and an electronic device (usually comprising a GSM GPRS mo-

dem or SMS sender) installed in each vehicle, communicating with the user (dispatching, emergency or co-ordinating unit) and PC- or web-based software. The data are turned into information by management reporting tools in conjunction with a visual display on computerised mapping software.

- Trailer tracking: The technology of tracking the movements and position of an articulated vehicle's trailer unit, through the use of a location unit fitted to the trailer.
- Cold storage freight: Cold store freight trailers are increasingly incorporating telematics to gather time-series data on the temperature inside the cargo container, both to trigger alarms and record an audit trail for business purposes. An increasingly sophisticated array of sensors, many incorporating RFID technology, are being used to ensure that temperature throughout the cargo remains within food-safety parameters.
- Fleet management: The management of a company's vehicle fleet and can include functions such as vehicle financing, vehicle maintenance, vehicle telematics (tracking and diagnostics), driver management, fuel management and health & safety management.
- Satellite navigation: The technology of using a GPS and electronic mapping tool to enable the driver of a vehicle to locate a position, then route plan and navigate a journey.
- Wireless vehicle safety communications: This is telematics installed with the purpose of exchanging safety information, about such things as road hazards and the locations and speeds of vehicles etc.

Emergency warning system for vehicles: “Intelligent vehicles” are equipped with technology intended to accord (blend, or mesh) warning information with surrounding vehicles in the vicinity of travel, intra-vehicle, and infrastructure.

What is Insurance Telematics?

There is a clear and direct relationship between vehicle telematics and the benefits they are able to provide to the insurance industry in measuring and reporting on driving behaviour. Insurance is all about measuring and calculating risk. Insurance companies evaluate the level of risk and then set premium rates and coverage per the measurement in question. Vehicle telematics is the best, most effective and scientific way to limit risk.

What knowledge about driver behaviour would be most important to insurers?

- Insurers would be better able to measure risk by knowing what kind of driver is driving the vehicle.
- Do they drive the speed limit or race around town? How many times are they guilty of exceeding the speed limit?
- Do they gun it when they see a yellow light or slow down and stop?
- Is the driver prone to excessive cornering or braking?
- Where is the driver driving? Does he travel on the main roads or does he frequently enter hazardous areas? How far is the driver driving and at what time is he driving the vehicle?

An insurance company seldom knows the answers to these questions. With insurance policies developed with vehicle telematics in mind insurers can gain access to this information.

Usage Based/Pay As You Drive / Insurance Telematics

In the past car insurers only asked basic information to be disclosed. This included questions on driver and vehicle characteristics, use of the vehicle and geographical location. Premium calculation depended simply on type of vehicle, horsepower, sales price, age and sex of the driver, and

where he or she lives. Vehicle telematics now allows for usage based car insurance where technology is an important component in calculating insurance premiums. With vehicle telematics car insurance premiums are determined by actual performance on the road. Telematic devices transmit real-time driving data to insurers, who can then gain a more accurate picture of driving behaviour and use this to set fairer rates for law-abiding, fuel-conscious drivers.

Three Types of Usage Based Insurance

- Coverage is based on the odometer reading of the vehicle.
- Coverage is based on the number of minutes the vehicle is being used as recorded by a vehicle-independent module transmitting data via cell-phone or RF technology.
- Coverage is based on other data collected from the vehicle, including speed and time-of-day information in addition to distance or time travelled. Other data could include where you are driving and driving behaviour such as speeding, excessive braking, etc.

The formula can be a simple function of the number of miles you drive, or can vary according to the type of driving or the identity of the driver. Once the basic scheme is in place, it is possible to add further details, such as an extra risk premium if someone drives too long without a break, uses their mobile phone while driving, or travels at an excessive speed. By installing or embedding telecommunications devices into cars, insurers can now measure and price premiums more accurately, provide customized services, improve safety, and reduce claim costs.

Benefits in a Challenging Economic Climate

One of the driving forces behind the growing interest in insurance telematics is the need to survive in a challenging economy. With the cost of living at a high, vehicle owners are searching for potential savings – and the highly price competitive car insurance industry is the first point of call!
Insurers who have designed insurance products to align pricing with driving behaviour are especially attractive to those safety conscious drivers who are, through their driving, reducing the risks on the road!
With these products the driver's behaviour is monitored directly while he drives and this information is transmitted to an insurance company. The insurance company then assesses the risk of that driver having an accident and charges insurance premiums accordingly. A driver who drives long distance at high speed, for example, will be charged a higher rate than a driver who drives short distances at slower speeds. Telematics should therefore help you find cheaper motor cover if you are a good driver.

Challenges to Insurance Telematics

Despite the significant growth in the insurance telematics industry, one of the major challenges remains the concerns pertaining to privacy. Some drivers and vehicle owners believe that the technology to monitor driving behaviour from under their dashboard oversteps their right to privacy.
This is especially so when the “black box” belongs to insurance companies that often struggle in the customer trust department. Industry experts have recommended that insurers will need to be as transparent as possible to address these fears. By making a full disclosure of value-added services to customers, and carefully positioning the offerings with the right messages they will succeed in winning over consumers. The concerns and challenges are however insignificant when compared with the benefits and overall impact of insurance telematics!

Road Safety and Insurance Telematics

How will insurance telematics impact on the efforts to enhance road safety? By providing the incentive of cheaper car insurance premiums for responsible driving behaviour, the insurance industry is also promoting road safety! Telematic usage based insurance requires that vehicle information is automatically transmitted to the tracking system. This provides a much more immediate feedback loop to the driver, by changing the cost of insurance dynamically with a change of risk. This means drivers have a stronger incentive to adopt safer practices. For example if a commuter switches to public transport or working at home, this immediately reduces the risk of rush-hour accidents. With usage based insurance, this reduction would be immediately reflected in the cost of car insurance for that month. Trials conducted by Norwich Union as early as 2005 have found that young drivers (18 to 23 year olds) signing up for telematic auto insurance have had a 20% lower accident rate than average.

Conclusion

Insurance telematics has been recognized for more than the benefit it provides of increasing safe driving behaviour. Traffic Congestion and the impact that CO2 emissions and green house gases have on the environment have received the attention of governments and world health and environmental protection agencies. Insurance telematics and GPS technology such as TomTom HD Traffic are regarded as some of the important tools to reduce unnecessary travel and traffic congestion. The New York Department of Transportation recently put out a request seeking ideas on how to use “mileage-based insurance pricing signals to trigger change in driver behavior.”
According to a 2008 study by the Brookings Institution, these incentives could reduce driving by as much as 8 percent, reduce emissions by 2 percent, oil consumption by 4 percent, and provide an average savings of $270 per car.
“A one-size-fits-all approach doesn’t make a lot of sense when it comes to pricing insurance,” Transportation Commissioner Janette Sadik-Khan told The Post. “Paying based only on how much you drive is a potentially innovative way to make it less expensive for New Yorkers to get around.”

As technology becomes even more advanced and accessible we can expect an increased focus on product design in the insurance telematics industry!!