

IBTTA, 84th Annual Meeting & Exhibition
Denver, 11-14 September 2016

Road Safety

8:30am – 10:00am ♦ GENERAL SESSION

PREPARING FOR PROGRESS - WHAT'S ON THE MAP AHEAD?

**It's a Commitment,
Not Just a Communication Campaign**

Bill M. Halkias, PE, F. ASCE, F. ITE

President, Hellenic Association of Toll Road Network ♦ HELLASTRON

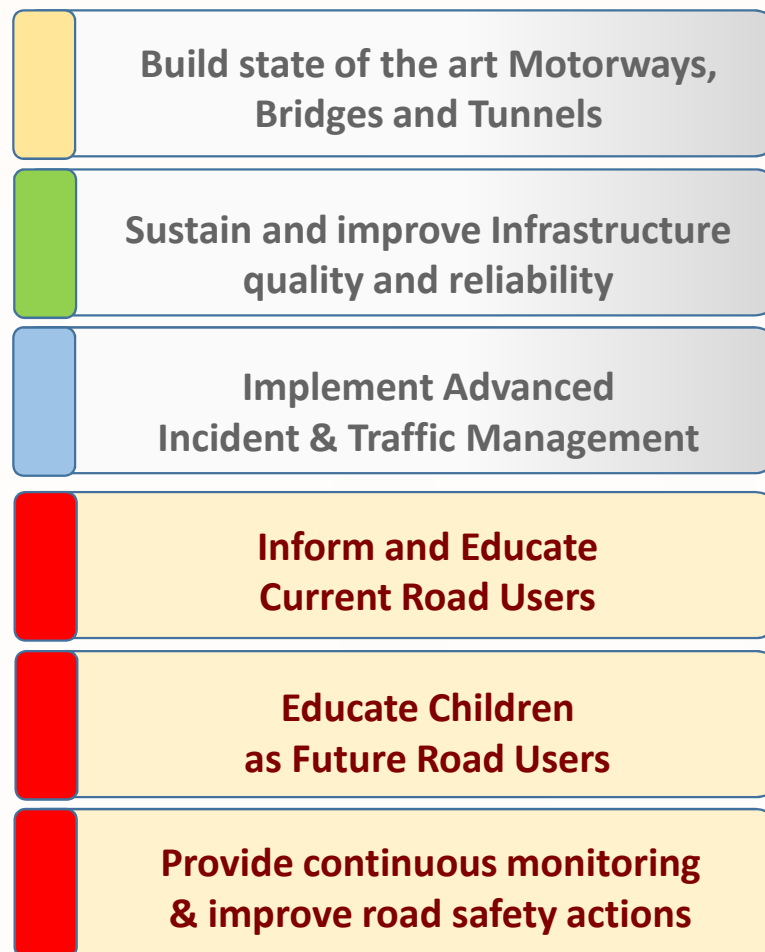
Managing Director & CEO, Attica Tollway Operations Authority ♦ Attikes Diadromes SA

2nd Vice President, Association Européenne des Concessionnaires d'Autoroutes et d'Ouvrages à Péage ♦ ASECAP



Members

Project	Motorway Length (Km) (Including Sections Under Construction)	Completion (As of April 2016)
ATTIKI ODOS	70	Completed
GEFYRA	3.5	Completed
EGNATIA ODOS	1,000 Including vertical axes	Main line completed Balkans axes in the near future
NEA ODOS	380	75%-Fully completed by 2017
MOREAS	205	95%-Fully completed by 2017
AEGEAN MOTORWAY	256	90%-Fully completed by 2017
OLYMPIA ODOS	202	76%-Fully completed by 2017
KENTRIKI ODOS	231	72%-Fully completed by 2017
TOTAL	2,344	



Priorities built on "Lessons Learned" by the first Greek Road Infrastructure Operators:



Attica Tollway
(Attiki Odos)



Gefyra
(Rion-Antirion Bridge)



Seeking the right balance in
Road Traffic Safety

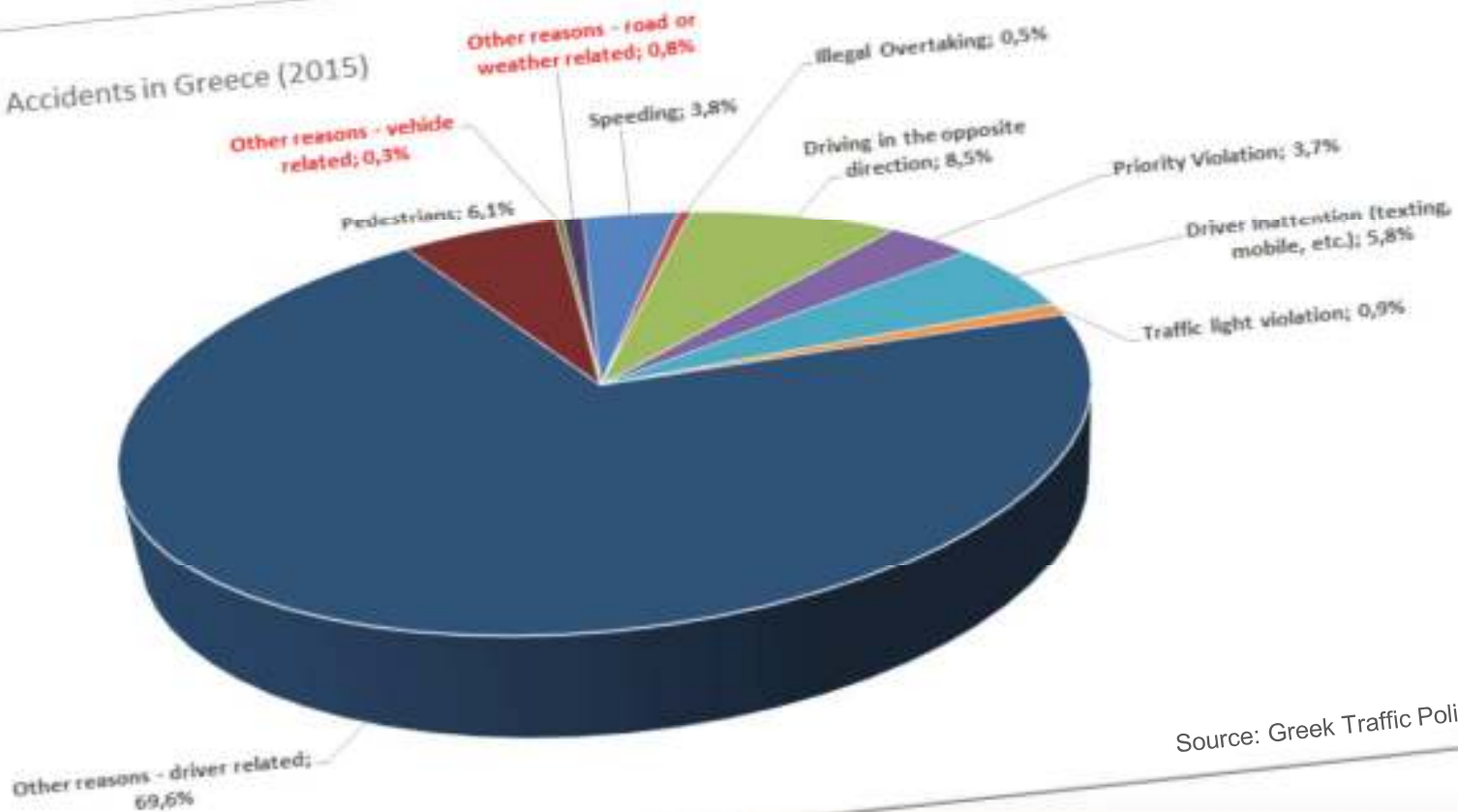
we invest in...

The Human "factor"
changes the balance...



98,9% of fatal road accidents are attributed to human factors

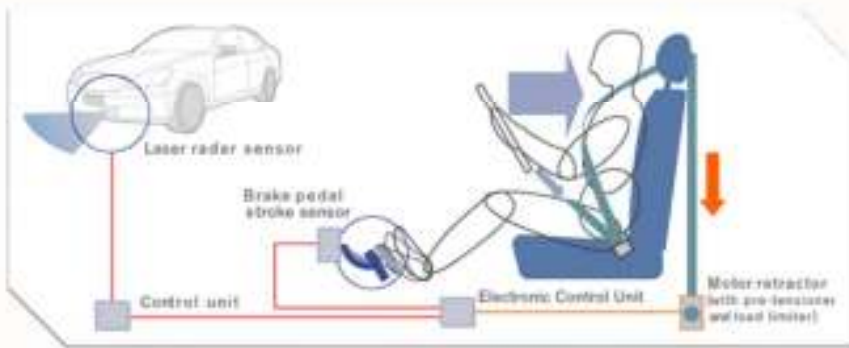
Fatal Accidents in Greece (2015)



Source: Greek Traffic Police

The Automobile Industry:

- Improves the Efficiency and the effectiveness of Seat Belts and Air Bags
- Employs Space and Nano technologies to design and produce "Active" and "Smart" seat belt mechanisms to protect vehicle passengers
- Follows International legal framework regulations and integrates "Not wearing seat belts" Warning Systems in all vehicle models...



And the Human Ingenuity:



**Invents...
the Seat Belt Buckle
Alarm Stopper!**



Available Worldwide...



**At a cost of
99 cents !!!**



And a global sales turnover more than 150 Million USD!

**The Added Value of the
device....**

**You can use it as
a bottle opener!
(While driving)?**



Apparently,
Buyers of the
"Seat Belt Buckle Alarm Stopper"
think their body has been built to look like

Mr Graham
(Australia's Superman)



"...Graham project: A reminder of just how vulnerable our bodies really are when speed and impact forces *as low as 30km/h* are at play. Graham becomes a catalyst for conversation and ultimately an educational tool. Graham shows us, what we might look like if we were built to survive on our roads..."



<http://www.meetgraham.com.au>

The Motorway Industry:

After thousands of scientific studies and papers,
hundreds of methodologies and case studies used
to design and implement vertical and horizontal signage to guide
and inform the road users...



...and the Human Reaction:



I will go where I want to go, ... "no mater what"



Attica Tollway 2016

Q: What can be done to restore the balance and achieve a real improvement in road traffic safety?

A: Invest in the Human factor.



Nowadays, this investment...





..and a Key European issue for Corporate Social Responsibility (CSR)

- Corporate social responsibility (CSR) actually embraces corporate issues such as occupational safety and health. Road safety is nowadays one of the key issues in CSR. In Europe, *six over ten fatal work accidents are road accidents*, including both accidents while driving for work and commuting accidents. (*)
- Recent estimates of the **cost of road traffic crashes** in the European Union indicate that health care costs are in the range of 9.000 euros per fatality and 16.000 euros per serious injury and the cost of road traffic injuries is an estimated 2% of a country's gross domestic product. (**)

"In Europe, non-financial reporting (CSR) is expected to become a reality in 2017 for all corporations employing more than 500 employees, according to the EU Directive 2014/95/EU"

(*) The work-related road risk in Europe: which extent? which prevention? February 2004 – Eurogip (<http://www.eurogip.fr/en/publications/index.htm>)

(**) "Preventing road traffic injury: a Public Health Perspective for Europe", WHO, 2004 (http://www.mobilityweek-europe.org/IMG/pdf/who_mobility_2.pdf) – Adjusted to 2015 prices

So, our commitment at HELLASTRON is to...

**Inform and
Educate
Current Users**



"Charon"
Driving School

**Educate
Children**
(Invest in future Road Users)

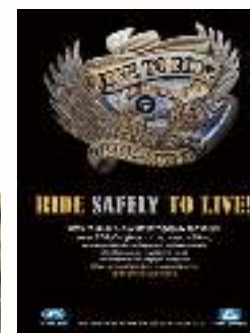
Okay. Now...., you have to drive into this modern motorway,
while talking on your cell phone and changing songs on your smart phone...

Inform and
Educate
Current
Users

Road Traffic Safety Campaigns

Actions to increase awareness and change dangerous habits of users.

More than 300 road traffic safety campaigns
and articles by HELLASTRON members
during the last ten years !



Inform and
Educate
Current
Users

Road Traffic Safety Campaigns

Actions to increase awareness and change dangerous habits of users.

The numerous campaigns,
Increase the probability of success



Although humans tend to make systematic errors in judgment and bad decisions due to ingrained ways of thinking and thoughts or preconceived notions,
continued education and intensive road traffic safety campaigns are used to change the balance...



Road Traffic Safety Campaigns

Actions to increase awareness and change dangerous habits of users.

- In 2004, only 10% of the Greek motorway users knew the purpose of the Hard Shoulder Emergency Lane
- In 2016, 81% of motorway users know the purpose of the Hard Shoulder Emergency Lane



And this action has made a positive impact throughout the country!





HELLASTRON members are focusing on the education of "future users" aiming to create:



...to leave the seeds of the importance of road safety...

Using:

- ❖ Experiential educational programs
- ❖ Interactive theatrical plays



Educate
Children
(Invest in future
Road Users)

More than 1,000 activities have been implemented for the education of "future users" during the last ten years.

"Little Atticus" Theatrical Play

ΕΡΩΤΗΜΑΤΟΛΟΓΙΟ ΓΙΑ ΕΠΙΔΕΥΤΙΚΟΥΣ

1. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)
2. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)
3. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)
4. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)
5. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)
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8. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)
9. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)
10. Ποια είναι η ουσία της οδού; (1 βαθμ. 5 sec. for guess)



48.000 School Children

More than 400 Schools



Safe Cycling

KentrikiOdos

67 Schools



NeaOdos

2.014 School Children

Educate
Children
(Invest in future
Road Users)

In total more than 100,000 **"future users"** have been educated on road safety during the last ten years.





"Eyes on the Road"

Road Safety Training Program by Attica Tollway



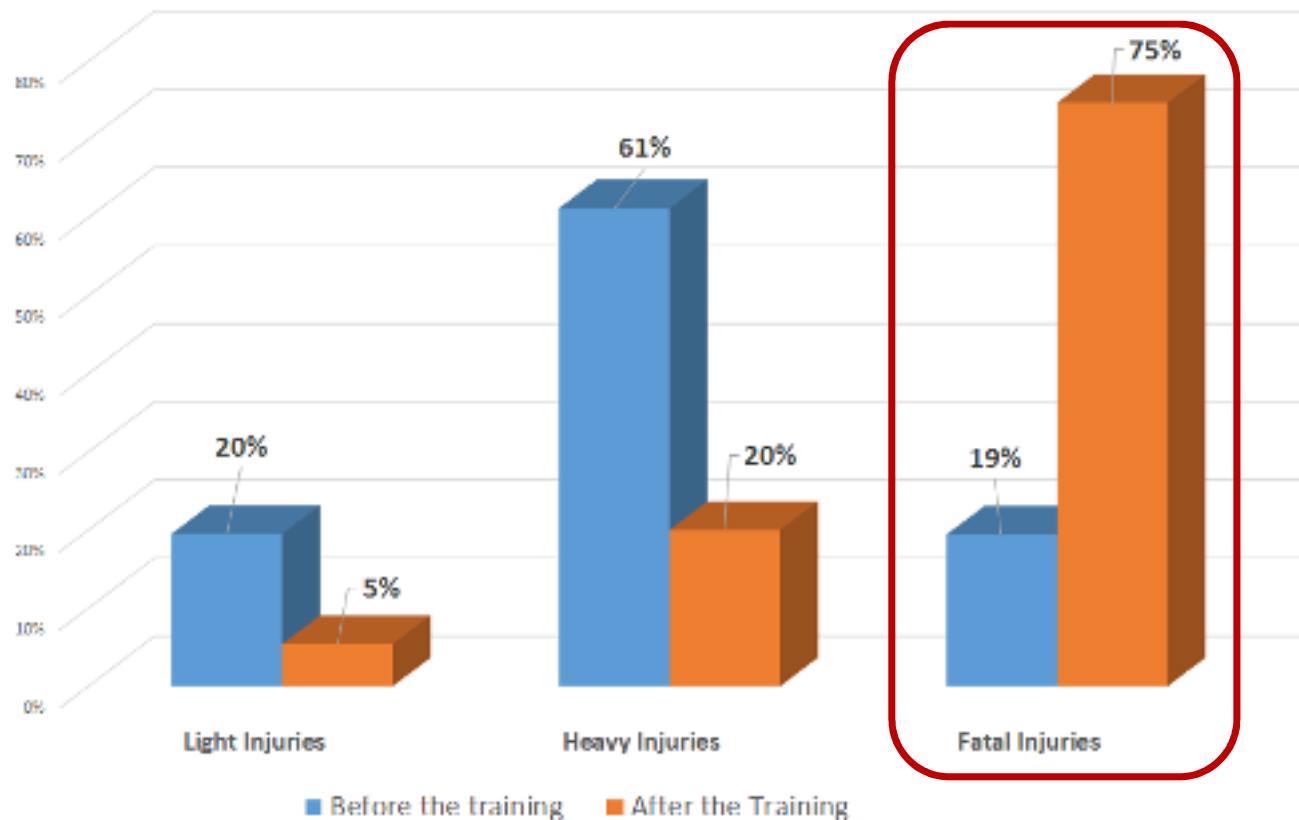
- For students aged 14 – 18 (near future users)
- A two hours training program, accredited by psychologists, teachers and physicians
- It Covers basic principles of road safety and road safety for motorcyclists (both as drivers and passengers).
- Participants complete an evaluation form before and after the program about their habits and thinking regarding road safety.





The impact of the program is shown by the change of thinking and the preconceived notions of "future users"

Possible consequences of a "head on" crash with a speed of 60 Km/h



Based on the answers of 2,100 high-school student participants in the "Eyes on the Road" Program of Attica Tollway.

And the success of the "Eyes on the Road" Program of Attica Tollway, was acknowledged throughout Europe!!!

The "Excellence in Road Safety" prize for 2015, was awarded to Attica Tollway (Attikes Diadromes) for:

"The Best road safety actions and initiatives undertaken within the framework of the European Road Safety Charter"



The European Commissioner for Mobility and Transport Mrs Violeta Bulc, handed out the award to Attikes Diadromes CEO, Mr Bill Halkias, in a special ceremony in Brussels on February 4, 2015.

Road Traffic Safety

Requires continuous monitoring and improvement of the effectiveness of operations, especially when this "effectiveness" relates to the safety and convenience of 500,000 users driving daily on HELLASTRON's Network!



Key Performance Indicators (KPI's)



Key Performance Indicators, Dedicated to Road Traffic Safety

Road Traffic Safety indicators

(per 100 million vehicles x Kms)

Results	2009	2010	2011	2012	2013	2014	2015	2016
Total Crashes	72,30	56,70	65,60	55,80	48,60	46,20	35,40	39,10
Crashes due to object on the road	6,60	6,30	6,50	7,10	5,60	5,10	4,00	4,30
Crashes due to moving hazard	0,00	0,10	0,20	0,20	0,30	0,00	0,00	0,30
Crashes due to other incidents	10,20	7,20	5,60	5,30	4,40	3,80	3,20	3,50

KPI



Based on Attica Tollway (Attiki Odos) KPI monitoring system-2016 results



At **"HELLASTRON"**
we believe that the continuous
Improvement of Road Traffic Safety

CREATES and **RETURNS**
the appropriate **"VALUE"**

for the **TOLL** paid by the user.

THANK YOU!



Bill Halkias, P.E., F.ASCE, F.ITE

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