

# Fine Failure

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- Alternative Mode of Deterrence (AMD) -

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# Outline

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1. Problem Definition
  2. Measuring Magnitudes
  3. Key Determinants
  4. Aim
  5. The Ajman Intervention (Alternative Mode of Deterrence- AMD)
  6. Implementing and Evaluating the Intervention
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***“Speeding is one of the main killers on our roads. [But] ignorance seems to have been replaced by ambivalence, with too many young motorists disregarding the clear risks and habitually speeding.”***

–Brian Reilly, chief executive of Zurich Insurance Middle East.



# Problem Definition



Fact	Source
Road accidents are the second major cause of death in the UAE.	World Health Organization (WHO)
UAE has 12.7 deaths due to RTA's per 100,000 population.	Pulitzer Centre in the USA
The U.S. showed a close range to the UAE, with a rate of 11.4 deaths due to RTA's per 100,000 population.	Pulitzer Center in the USA

# Problem Definition

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Road accidents in general are the primary cause of death of children in the UAE.	Health Authority of Abu Dhabi (HAAD)
Around 53% of traffic violations were due to speeding in the UAE in 2008.	Ministry of Interior (2008)
Around 63 % of all traffic accidents in Abu Dhabi in the first nine months of 2015 were caused by young people aged 18-35.	Ministry of Interior (2015)

# Problem Definition

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<p>“29 per cent of 18 to 24-year-olds [surveyed from across the UAE] admitting to speeding on a quarter or more of their trips.”</p>	<p>Survey from the National (2015)</p>
<p>The GDP per capita of the UAE, which is an indicator of standard of living, is \$ 43,048.85. Therefore, the standard of living is high.</p>	<p>World Bank</p>

Reason behind speeding	Rate (%)
Tardiness	67
For fun or to impress other	53
Out of habit	45
Knowledge of speed camera sites	39
The belief that roads were designed for speed.	27
A desire to test the cars' abilities	22
Speeding is more culturally accepted in the UAE than at their home country.	21

# Current Effects of Speeding Fines

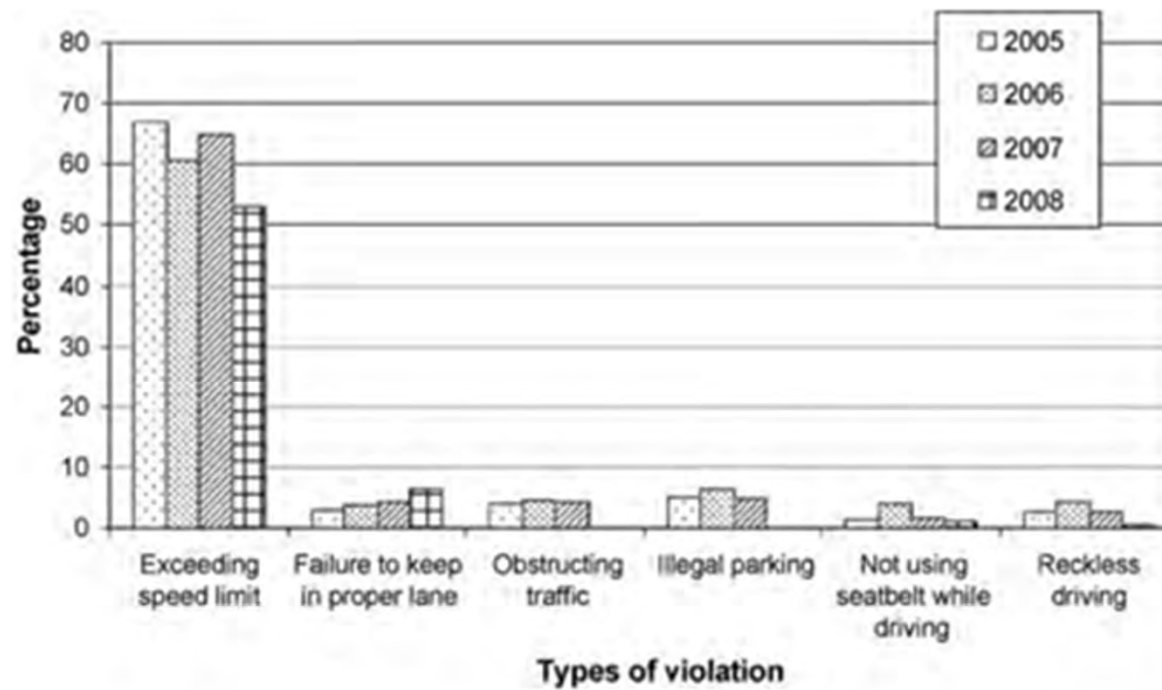
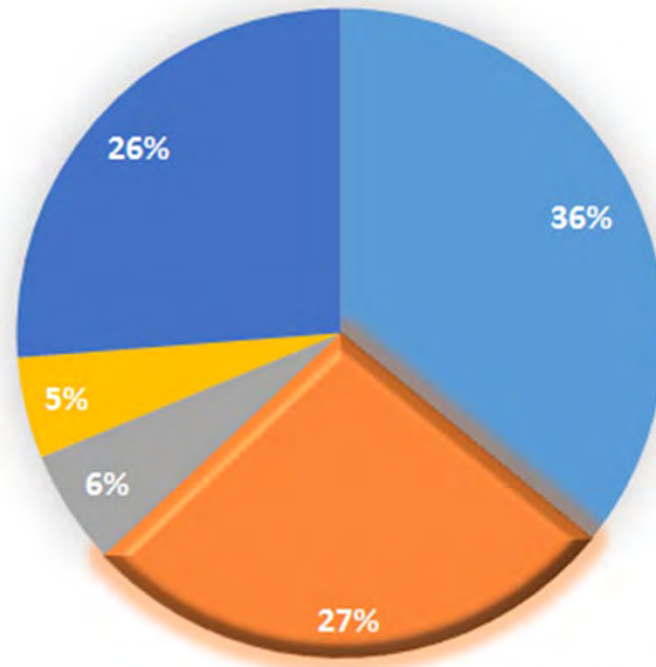


Fig. 4. Distribution of major traffic violations by type in the UAE from 2005 to 2008.



### Percentage Distribution of RTAs and Fatalities in the UAE (2000).



- Carelessness
- Excessive speed
- Incorrect overtaking
- Disallowing priority pedestrian
- Others

*Road Traffic Accidents in the United Arab Emirates compared to Western countries.* A. Bener, D. Crundall. 2005

# Further Definition

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Age Group

Translated to university Campus

Reckless driving on Campus

The Environment is different from highways

# Measuring Magnitudes

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Two Deaths near Campus (University City)

On Campus Death



# Key Determinants

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Traffic at the Gate

Already Late to class

Familiarity with the Environment

Psychology of Bad Drivers





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*“Ensuring safety on Campus-  
decreasing incidences of speeding in  
universities in the UAE.”*

# Past Intervention- Spain



**Table 1**

**Traffic offences criminalized under the reformed Spanish penal code (2007) and their associated penalties**

Offence	Prison term	Fine <sup>a</sup>	Community service	Licence suspension
Exceeding speed limit <sup>b</sup>	3–6 mo <sup>b</sup>	6–12 mo <sup>b</sup>	31–90 d	1–4 y
Driving under the influence of alcohol (BAC > 1.2 g/l) or other drugs	3–6 mo <sup>b</sup>	6–12 mo <sup>b</sup>	31–90 d	1–4 y
Reckless driving <sup>c</sup> and risking the lives or safety of others	6–24 mo			1–6 y
Reckless driving <sup>c</sup> showing contempt for the lives of others and risking their lives or safety	2–5 y	12–24 mo		6–10 y and vehicle requisition
Reckless driving <sup>c</sup> showing contempt for the lives of others without risking their lives or safety	1–2 y	6–12 mo		6–10 y and vehicle requisition
Criminalized offences and injury to others	2.5–4 y			Definitive suspension
Refusing to undergo alcohol or other drugs tests	6–12 mo			1–4 y
Driving without a licence	3–6 mo <sup>b</sup>	12–24 mo <sup>b</sup>	10–40 d	
Generating road traffic risk <sup>d</sup>	6–24 mo <sup>b</sup>	12–24 mo <sup>b</sup>	10–40 d	

BAC, blood alcohol concentration; d, days; mo, months; y, years.

<sup>a</sup> Between 60 and 1200 euros a month depending on economic and personal circumstances. Offenders can choose between a prison term and a fine.

<sup>b</sup> Driving at > 60 km/h on urban roads and at > 80 km/h on non-urban roads.

<sup>c</sup> Punishable speeding or driving under the influence of alcohol or other drugs.

<sup>d</sup> Includes leaving obstacles on the road, spilling slippery or flammable substances, modifying or destroying road signs or not restoring road safety when responsible for altering it.

# Past Intervention- Spain

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Penal code reform that criminalizes infractions

Effectiveness proven

World Health Organization (WHO) report

12% of injuries prevented\* in 18-29 year old males

4.9% of injuries prevented in 18-29 year old females



\*prevented in comparison to predictions from previous years

# The Ajman Intervention- AMD

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*Why?* Objective- decreasing incidences of speeding in universities in the UAE.

*What?* Alternative mode of deterrence- Mandatory community service

*Who?* All student drivers using roads on campus

*Where?* All universities in the UAE.

*How?* Security officers equipped with speedometers





# The Ajman Intervention- AMD

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Pilot program in AUS (American University of Sharjah)

Dynamic speed traps

Accessibility of Data

Comparison with Status Quo



# Where and why?

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## American University of Sharjah

Common occurrence of speeding on campus (target group)

Previous fatalities

Speeders on campus tracked and fined

Established framework

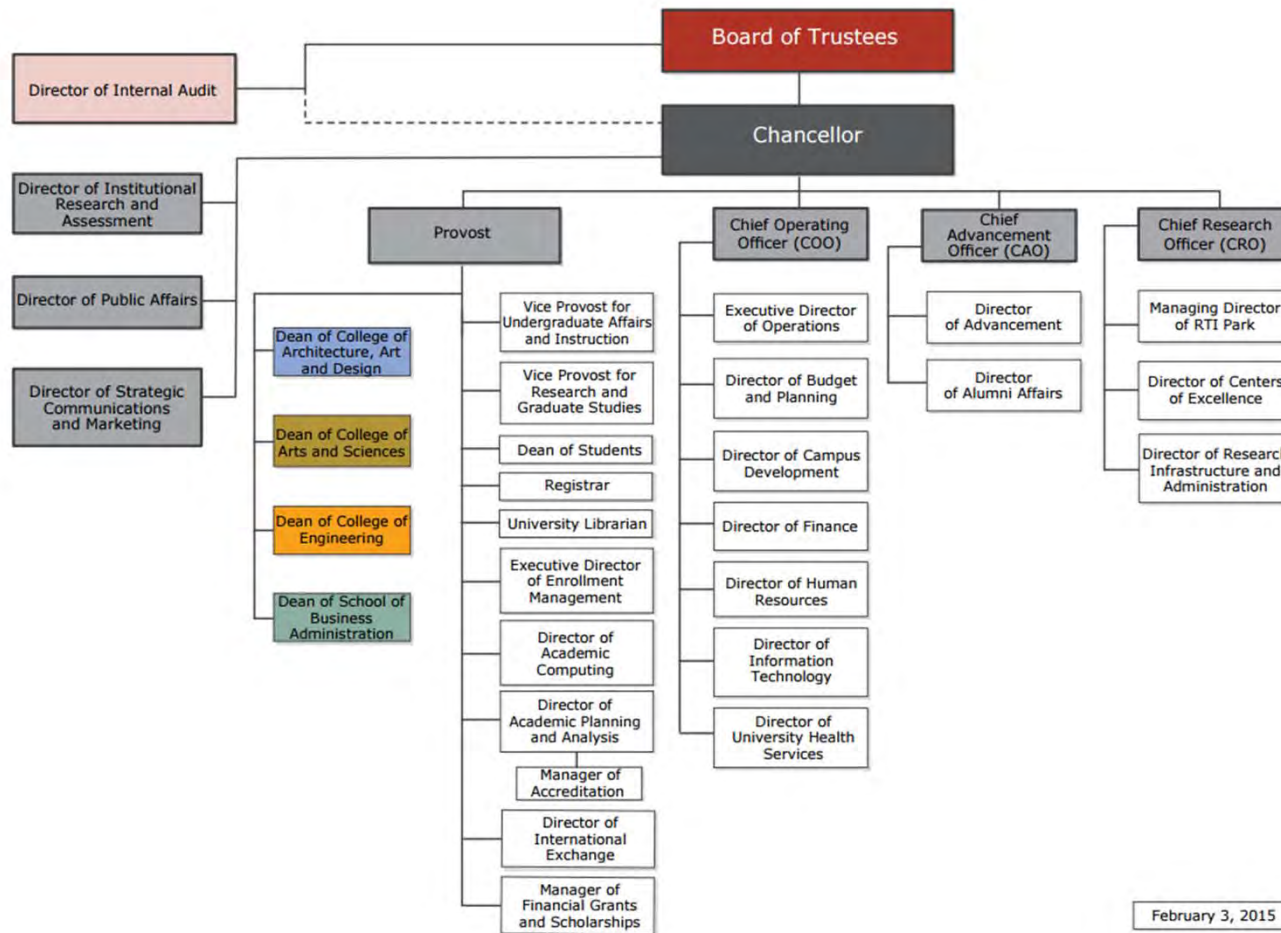
AUS Rules of Conduct

Primary aim: deter speeding on a single university campus (AUS) through implementation of community service

Stepping stone

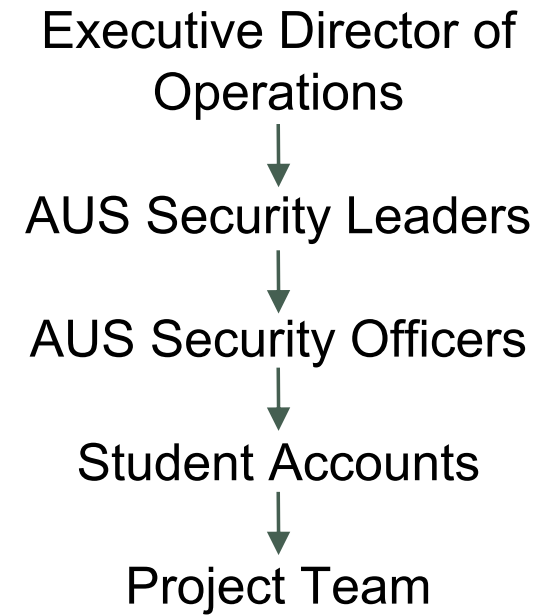


<http://www.sharjahupdate.com/wp-content/uploads/2015/06/aus-30Jun15.jpg>



February 3, 2015

## Flow Chart of Events



# Limitations and Evaluation

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Necessary to obtain and analyse data from AUS implementation

*Objective:* To scale up this intervention to encompass all university campuses (where applicable)

Regular evaluation of effectiveness- keeping audience in mind

Comparing data for penal systems (fine-based/community-service-based)

2 semester period

Data:  $\text{percentage} = \frac{\text{no. speeders}}{\text{total no. vehicles in given area}}$

Limitations: non-compliance, up-scaling, applicability

# Bibliography

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AUS professor hit by car, dies while cycling

<http://www.emirates247.com/news/aus-professor-hit-by-car-dies-while-cycling-2015-03-03-1.582949>

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