CAREC Road Safety and Sustainable Transport Workshop

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NCAP FOR SAFER CARS…WORLDWIDE

Promote a market for safety by raising awareness of the car buying public and encouraging manufacturers to build safer vehicles

Nine NCAPS or similar bodies active in Asia, Australia, Europe, Latin America and the USA

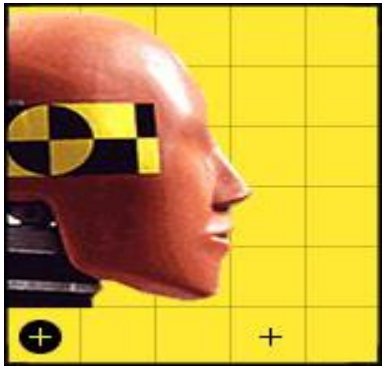
UN General Assembly Resolution – Improving Global Road Safety

The resolution '*proclaims the period 2021-2030 as the Second Decade of Action for Road Safety,* ***with a goal of reducing road traffic deaths and injuries by at least 50 per cent from 2021 to 2030…'***.

Why Vehicle Safety Matters

If every vehicle could be upgraded to the safest vehicle of the same age and market group, fatal & serious injuries could be reduced by a third

(Budd & Newstead, 2020)

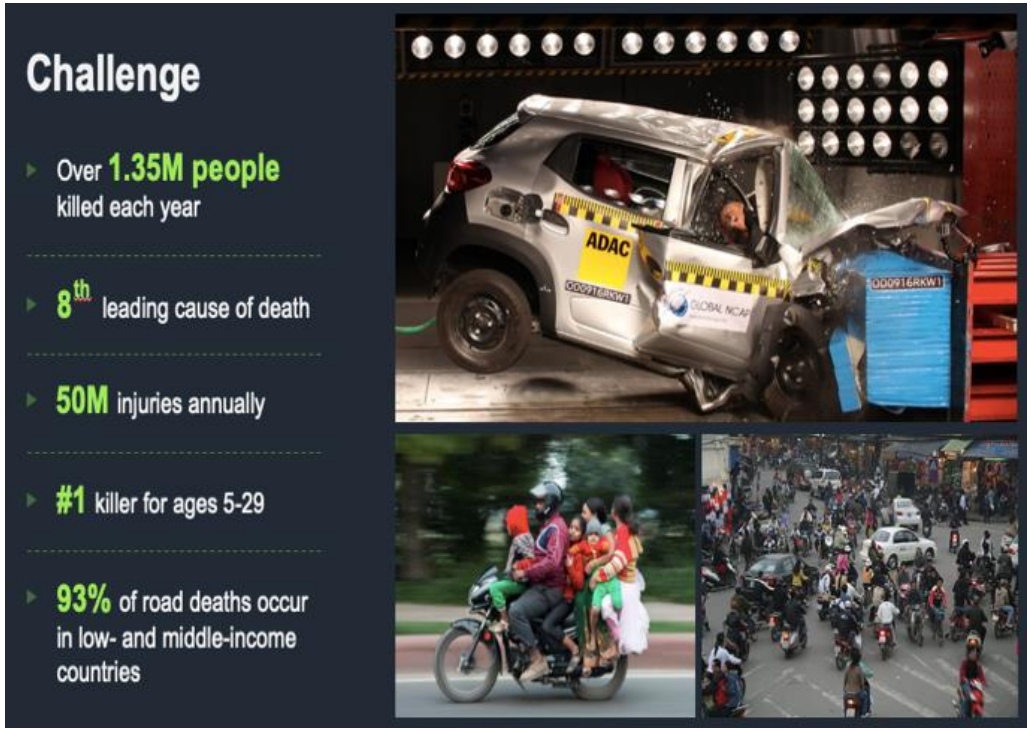


The Urgency of Now

Low & Middle Income Countries:

Motorising rapidly

Account for about half of new car production and sales worldwide



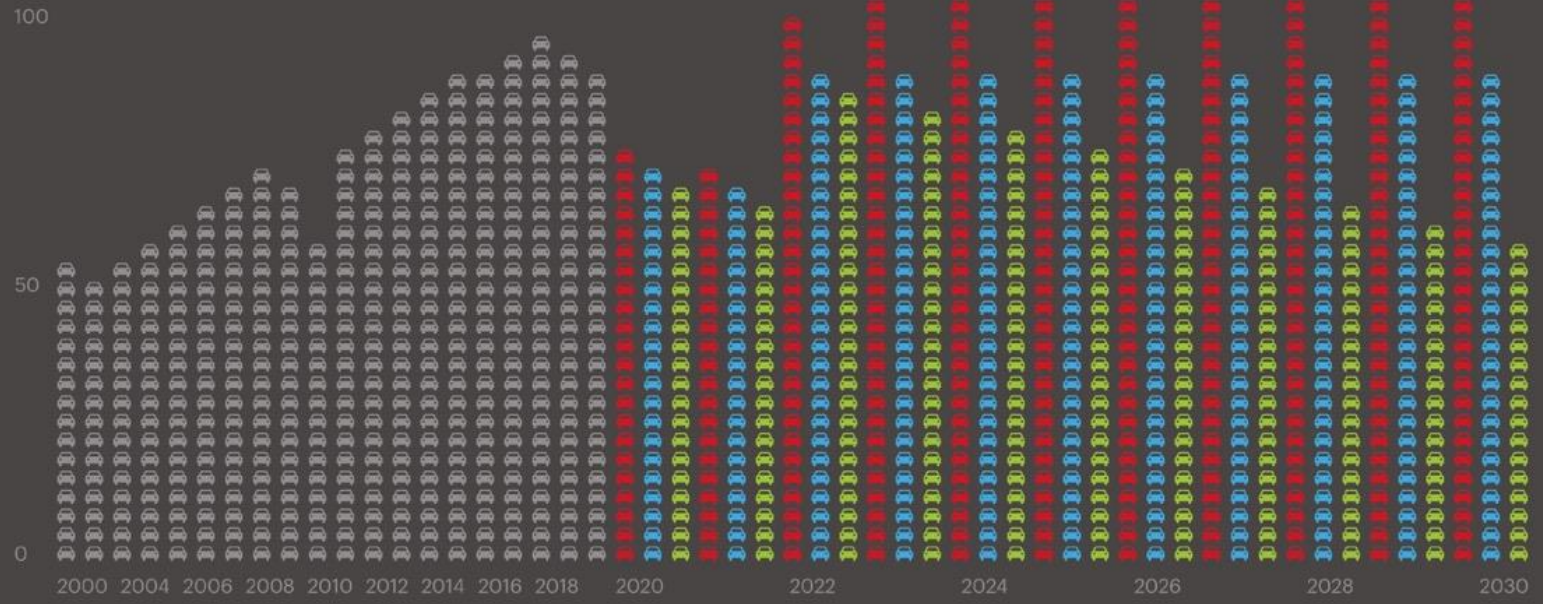
World Motor Vehicle Production 2022

	Country	Cars	Commercial Vehicles	Total
1	CHINA	23836083	3184532	27020615
2	USA	1751736	8308603	10060339
3	JAPAN	6566356	1269163	7835519
4	INDIA	4439039	1017818	5456857
5	SOUTH KOREA	3438355	318694	3757049
6	GERMANY	3480357	197463	3677820
7	MEXICO	658001	2851071	3509072
8	BRAZIL	1824833	544936	2369769
9	SPAIN	1785432	434030	2219462
10	THAILAND	594057	1289458	1883515
	GLOBAL PRODUCTION TOTAL	**61598650**	**23418078**	**85016728**

Source: https://www.oica.net/category/production-statistics/2022-statistics/

GLOBAL NCAP FOR SAFER CARS

NEW MOTOR VEHICLE PRODUCTION SCENARIOS 2030



BUSINESS AS USUAL

Assumes a total car production increase of 2.6% per year, the average car production growth from 2000-2019, and results in a total of 1.4 billion new vehicles.

ZERO GROWTH

Repeats the 2019 car production figure across the next decade and results in a total of 971 million new vehicles.

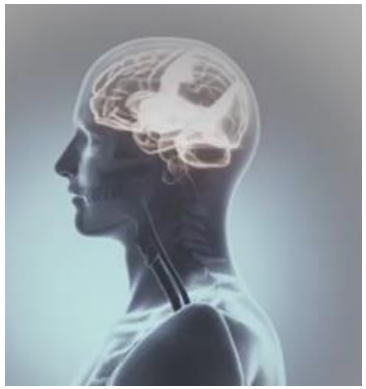
20% DECLINE

Forecasts a reduction of car production figures by 20% by year 2030 compared to 2019 production figures and results in a total of 858 million new vehicles.

Three Collisions in a Crash

1st – Vehicle Collision

2nd – Human Collision



3rd – Internal Collision

What makes a car safe?

Crash protection

How well a car protects its occupants from death and serious injury in the event of a crash

Crash prevention

Technologies that can prevent a car from crashing and/or mitigate the crash outcome

What makes a car safe? Some examples

Crash protection

- Crumple zones
- Front and side impact protection
- Rollover protection
- Airbags – front, side, head
- Three point seatbelts

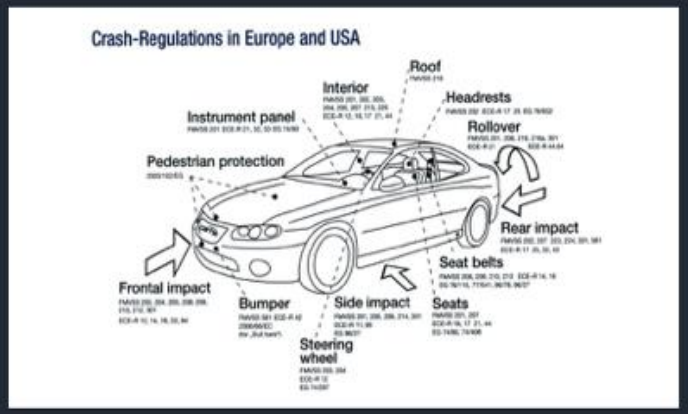
Crash prevention

- Electronic Stability Control (ESC)
- Autonomous Emergency Braking (AEB)
- Motorcycle ABS
- Lane keep assist
- Blind spot detection

Vehicle Safety's Winning Formula

Vehicle Safety's Winning Formula

Government Regulation + Consumer Demand



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Global Road Safety Performance Targets

In April 2018 the UN General Assembly endorsed 12 road safety performance targets for implementation by 2030. Target 5 sets an ambitious goal to achieve 100% fleet coverage of the following recommended UN priority regulations:

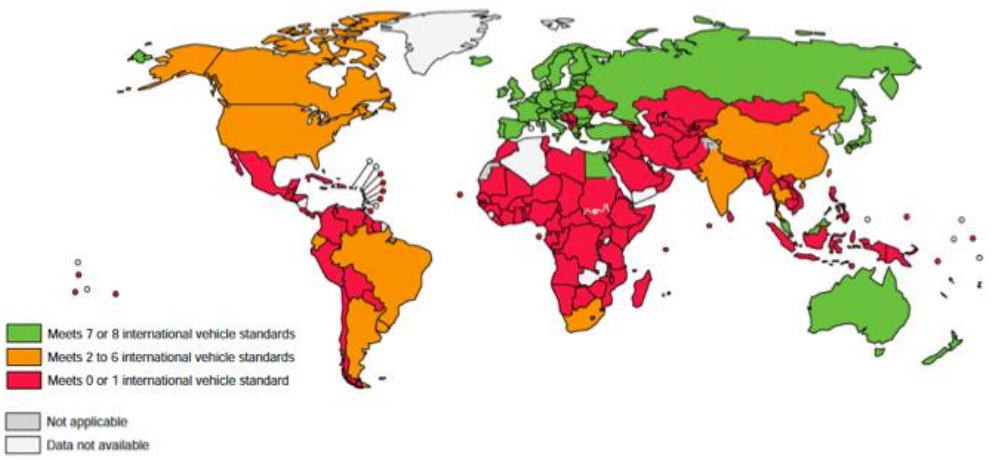
- R94 & 95 Front and Side Impact
- R140 Electronic Stability Control
- R14 & R16 Seat Belt Anchorages & Seat Belts
- R127 Pedestrian Protection
- R44/R129 Child Restraints
- R78 Motorcycle braking (ABS)

The Need for Regulations

UN Priority Safety Standards

- Seat belt anchorages
- Safety belts & restraints
- Frontal collision
- Lateral collision
- Electronic stability control
- Pedestrian protection
- Child restraints
- Motorcycle ABS

*Or equivalent national standards (eg: FVMSSs)



Only 40 out of a total of 193 UN Member States fully apply 7-8 of the most important UN safety regulations and these are overwhelmingly high-income countries

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Nissan Tsuru Vs. Nissan Versa

	Nissan Tsuru
MADE IN	MEXICO
SOLD IN	MEXICO
STAR RATING	ZERO

	Nissan Versa
MADE IN	MEXICO
SOLD IN	UNITED STATES
STAR RATING	★★★★★

Nissan Tsuru VS. Nissan Versa

https://www.youtube.com/watch?v=i5xYsDhhA1M

https://youtu.be/N9_2PJuoHic

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Impact: Nissan Tsuru Discontinued

NISSAN
innovation that excites

Nissan News USA

Official Newsroom

Nissan announces end of production date for the Tsuru in Mexico

CONSUMERS INTERNATIONAL

CAMPAIGN SUCCESS: NISSAN REMOVE THE 'ZERO STAR' TSURU CAR FROM PRODUCTION

07 November 2016

FORTUNE AUTOS - AUTO SAFETY

Why Nissan Is Killing One of Its Most Famous Auto Models

npr

Crash Test Dummies Show The Difference Between Cars In Mexico And U.S.

November 20, 2016 · 10:00 AM ET

Mexico News Daily

New safety standards mean no more Tsurus

Nissan announces the model's termination after nearly three decades

Published on Wednesday, June 15, 2016

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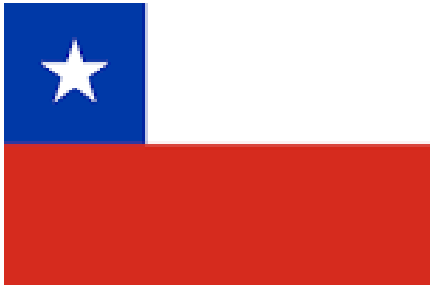

A Case Study

If Argentina, Brazil, Chile & Mexico were to apply the UN Regulations for seat belts, anchorages, occupant protection in frontal collision and occupant protection in side or lateral collisions

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Over 34,000 lives could be saved and 440,000 serious casualties prevented between 2016 -2030

=

143 Billion US Dollars saved

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How Safe Is This Car?

No airbag and poor body shell integrity gives zero stars. But just adding an airbag makes no difference…

The combination of good body shell integrity and an airbag results in a survivable crash.

Why Pick a 5 Star Car?

★★★★★ vs. ★★ = ↓ risk of serious and fatal injuries*

23%

AND

↑ of each ★ = 20% - 25% ↓ risk of serious injury to the driver**

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*Based on Euro NCAP results
**Based on ANCAP results

Fleet Safety

- Public and private fleets dominate new car sales
- Fleet managers choices will raise demand for safer motor vehicles

The Importance Of Fleet Decisions

- Duty of care & OHS
- Reducing the likelihood of crashes
- Corporate social responsibility
- Supporting the aims of the UN Decade of Action for Road Safety/Global Goals/ ISO standard for *Road Traffic Safety Management System (*ISO 39001)

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DID YOU KNOW….?

Used Vehicles

+ OTHER COUNTRIES

Cannot assume new cars are safer than secon hand cars

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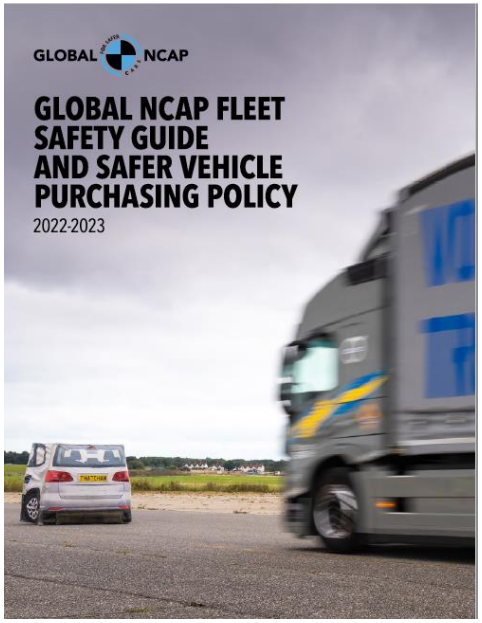
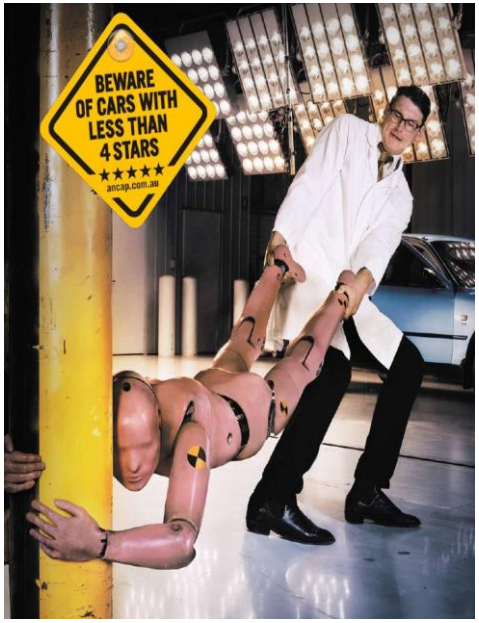
FLEET SAFETY GUIDELINES & SAFER CAR PURCHASING POLICY 2022-2023





- Wherever possible***, choose a five star car*** (and ***never less than four stars***) as rated by a recognised New Car Assessment Programme and/or minimum safety regulations
- Passenger Vehicles
- Commercial Vehicles
- Heavy Vehicles
- Motorcycles

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Framework for Second Hand Imports

- Should not just be based on age of vehicle alone
- Age + adherence to UN Regulations eg. maximum of 5 years old + adherence to UN 94, 95 and 127 at the bare minimum
- Verify via Vehicle Identification Numbers (VIN) and crash records from insurance companies

Used Vehicles – New Zealand example

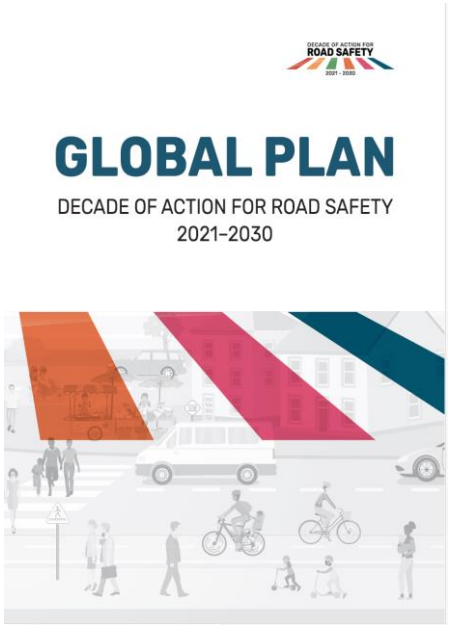
All cars imported for private use or sale must meet a set number of standards/regulations (including frontal impact standards, overall standards, emission standards etc.) depending on the class of vehicle being imported and the year of manufacture (https://www.nzta.govt.nz/vehicles/importing-a-vehicle/)

The onus is on the importer to prove that the imported vehicle meets all the relevant requirements and the required evidence may be dependent on which country the vehicle is coming from (https://www.nzta.govt.nz/vehicles/importing-a-vehicle/step-2-evidence/)

http://www.nzta.govt.nz/assets/resources/factsheets/44/docs/44-importing-motor-vehicle.pdf

Technical Inspections

- Inspection and maintenance to be undertaken by accredited bodies
  - Need to be inspecting for the right aspects eg. tyres, brakes
    - Develop a system that minimizes the risk of corruption



Box 3

Recommended actions to ensure vehicle safety

- Require high-quality harmonized safety standards for new and used motor vehicles, safety belts, child-restraint systems and motorcycle helmets, including:
  - standards on front and side impact to ensure that occupants are protected in a front and side-impact crash;
  - safety belts and safety belt anchorage for all seats to ensure that safety belts are fitted in vehicles when they are manufactured and assembled;
  - ISOFIX child-restraint anchor points to secure the child-restraint systems attached directly to the frame of the vehicle to prevent misuse;
  - electronic stability control to prevent skidding and loss of control in cases of oversteering or understeering;
  - advanced emergency braking to reduce collisions;
  - pedestrian protection standards to reduce the severity of impact with a motor vehicle;
  - motorcycle helmets certified according to international harmonized standards;
  - anti-lock braking system and daytime running lights for motorcycles;
  - intelligent speed assistance systems to help drivers keep to speed limits;
  - eCall or Accident Emergency Call Systems (AECS) to trigger an emergency response by an in-vehicle sensor.

- Ensure that high-quality, harmonized safety standards are kept throughout the full lifecycle of the vehicle. This can be done, for example, through:
  - mandatory certification and registration systems for new and used vehicles based on established safety requirements and combined with routine inspections;
  - regulations for the export and import of used vehicles that are accompanied by inspections at entry and exit points, and mandatory periodic technical inspection of vehicles; and
  - building demand for safer vehicles by encouraging independent new car assessment programs.

THANK YOU!