



Research Project:

**Safer cars for India** by







**GLOBAL NCAP**  
[www.globalncap.org](http://www.globalncap.org)

*Alejandro Furas*  
*WP29, March 12<sup>th</sup>, 2014*





## Research Project: Safer cars for India - highlights

-  The most basic safety equipped version available in the market was selected for testing.
-  The same model, same equipment, was tested according to: United Nations Regulation 94 and to Latin NCAP 2013 assessment protocols.
-  5 popular and important models were selected for testing
-  1 of the selected manufacturers changed production of its car and sponsored an extra test to show its improvements.

# Models tested for this Research Project: Safer cars for India

Hyundai i10

**NO Airbags**



TATA Nano

**NO Airbags**



Maruti Suzuki Alto 800

**NO Airbags**



VW Polo

**NO Airbags**



Ford Figo

**NO Airbags**



VW Polo

**2 Airbags**





# SAFER CARS FOR INDIA *by*



## UN-R94 RESULTS



 Volkswagen POLO	✗	NOT PASS
 Maruti Suzuki ALTO 800	✗	NOT PASS
 Ford FIGO	✗	PASS
 Hyundai i10	✗	NOT PASS
 Tata NANO	✗	NOT PASS
 Volkswagen POLO	✓ 2	PASS <input type="text"/>



# Research Project: Safer cars for India

## Summary of NCAP results

**RESULTS**  
2013

Volkswagen POLO	✓ 2	★★★★☆	★★★☆☆
Volkswagen POLO	✗	☆☆☆☆☆	★★★☆☆
Maruti Suzuki ALTO 800	✗	☆☆☆☆☆	★★☆☆☆
Ford FIGO	✗	☆☆☆☆☆	★★☆☆☆
Hyundai i10	✗	☆☆☆☆☆	★☆☆☆☆
Tata NANO	✗	☆☆☆☆☆	☆☆☆☆☆

# VW Polo + 2 Airbags



**12.54** max. 17.00 - Adult



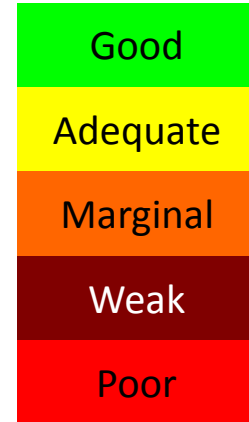
**29.91** max. 49.00 - Child



Front passenger



Driver



# Hyundai i10 - NO Airbags



0.00 max. 17.00 - Adult



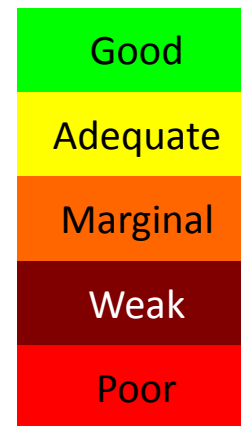
10.97 max. 49.00 - Child



Front passenger



Driver



# Maruti Suzuki Alto 800 - **NO** Airbags



**0.00** max. 17.00 - **Adult**



**17.57** max. 49.00 - **Child**



Front passenger



Driver

Good
Adequate
Marginal
Weak
Poor





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**MARUTI SUZUKI ALTO 800 - NO AIRBAGS**

August | 2013



0.00 max. 17.00 - Adult



17.57 max. 49.00 - Child

**64**  
km/h

Valid for: Indian Market  
Car made in India





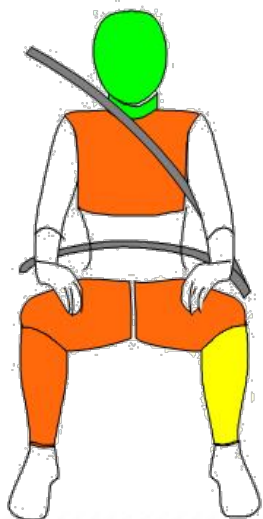
# TATA Nano - **NO** Airbags



**0.00** max. 17.00 - Adult



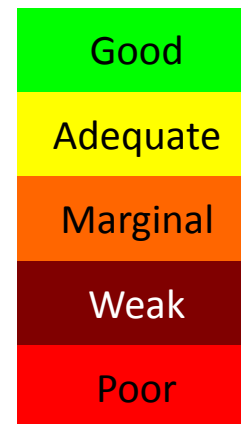
**0.00** max. 49.00 - Child



Front passenger



Driver





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## TATA NANO - NO AIRBAGS

December | 2013



0.00 max. 17.00 **Adult**



0.00 max. 49.00 **Child**

**64**  
km/h

Valid for: Indian Market  
Car made in India





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# Conclusions



## Conclusions: Adult Occupant protection

- ✈ Bodyshell integrity is critical for the protection of occupants even in cars fitted with airbags. Three of the five cars selected by Global NCAP for the Research project showed unstable body shells in the NCAP crash test. Polo and Figo showed stable structures
- ✈ The absence of airbags showed high risk of life threatening injuries for the passengers in a crash.
- ✈ The tested cars showed low scores in the leg areas of the adult occupants.



Bodyshell integrity is critical for the protection of occupants even in cars fitted with airbags.



# Indian cars reach 4 stars in Latin America (Suzuki Celerio)









## Conclusions: Child Occupant protection

- ✿ Protection of child occupants is low because of the marginal to poor protection offered by the CRS, the incompatibility car-CRS and the poor CRS *installation* instructions.
- ✿ Acceptable dynamics in child protection performance was also found in cars with weak structures and less developed restraint systems. Body shell deformation in the front reduces energy transfer to the rear seat passengers.





# General Conclusions - Recommendations

-  Global NCAP recommends to implement Regulation UN R-94 mandatory for all cars.
-  Global NCAP recommends all governments to make CRS use and technical standard approval for CRS mandatory.
-  Global NCAP promotes the use of CRS in cars and strongly recommends closer cooperation between car manufacturers and CRS manufacturers.
-  Global NCAP recommends Automobile clubs, Consumer organizations, car and CRS manufacturers as well as governments to work on better adult and child occupant protection in road vehicles.



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Thank you very much  
for your attention.

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Ford FIGO	✗	☆☆☆☆☆	★★☆☆☆
Hyundai i10	✗	☆☆☆☆☆	★☆☆☆☆
Tata NANO	✗	☆☆☆☆☆	☆☆☆☆☆