



Kolkata Accident Research Study

By

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Kolkata Accident Research Initiative

- Joint collaboration of Kolkata Traffic Police, CII, ITC and JPRI.
- On-site crash investigations by team of trained JPRI crash investigators.



JPRI Accident Response Process

Notification Phase

- Traffic Control Room calls and notifies about the fatal accident.

Response phase

- JPRI team leaves office for the accident location.

Investigation Phase

- JPRI team arrives at the accident spot and checks for accident details and examines available vehicles and scene to have a complete picture of the accident.

Analysis phase

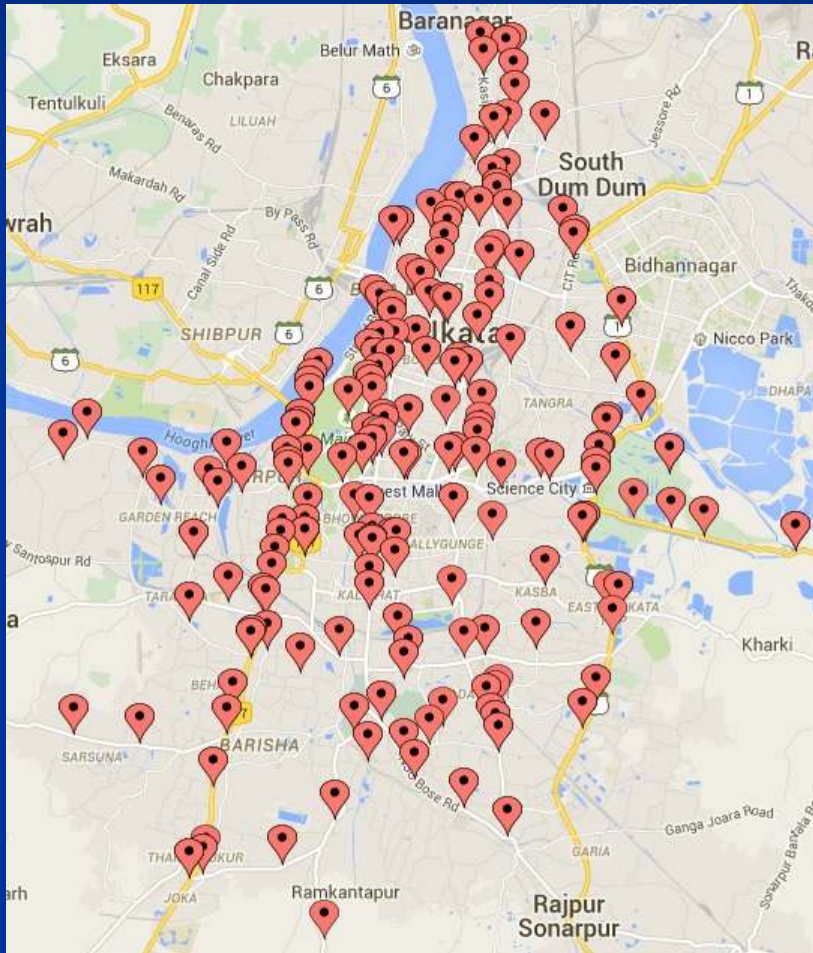
- All investigated cases (excluding no information cases) are considered for analysis.

On-site crash investigation for scientific research



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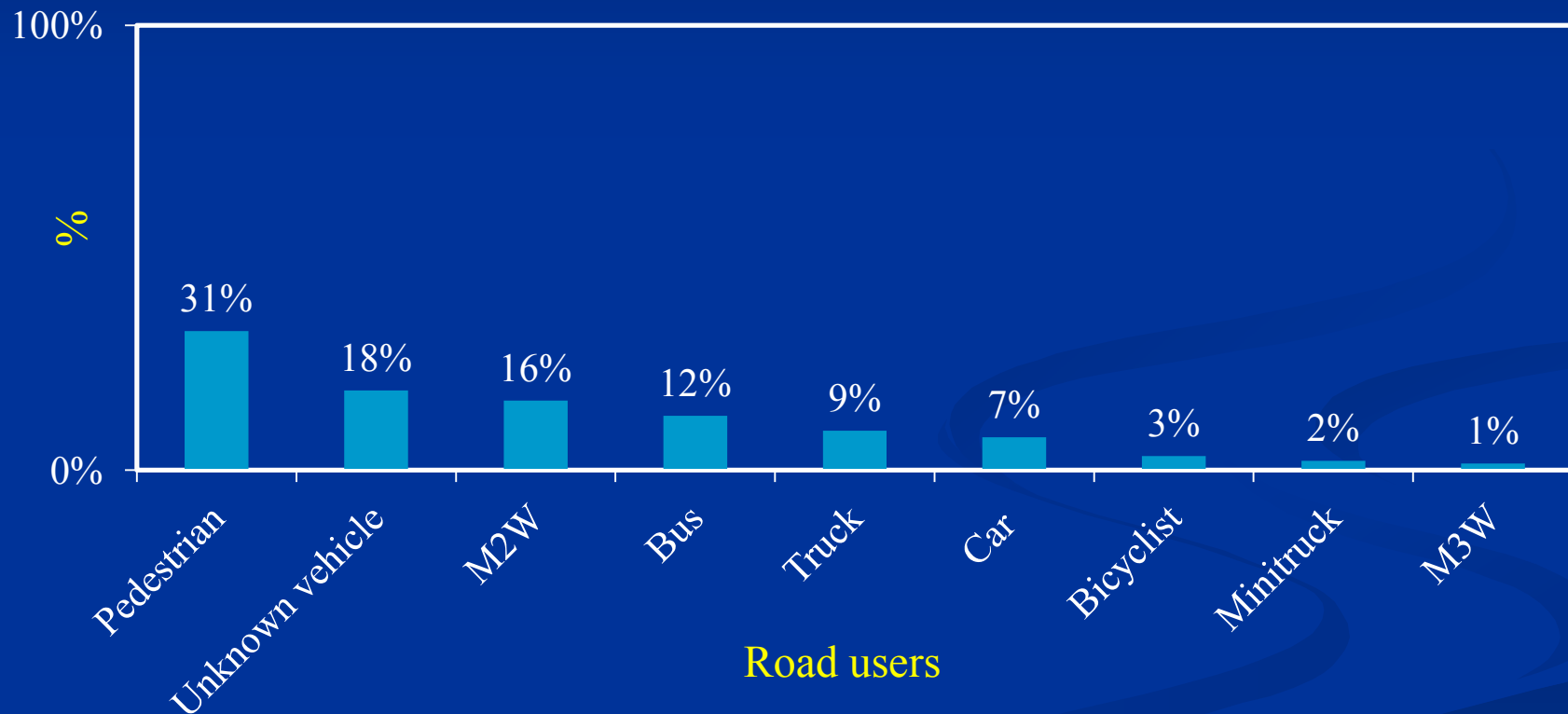
Fatal crash locations



- 229 fatal crashes investigated between 12th November 2014 and 7th September 2015
- Spread of locations of fatal crashes indicate that the problem is prevalent across Kolkata city.

Distribution by Road Users Involved

Number of road users = 474



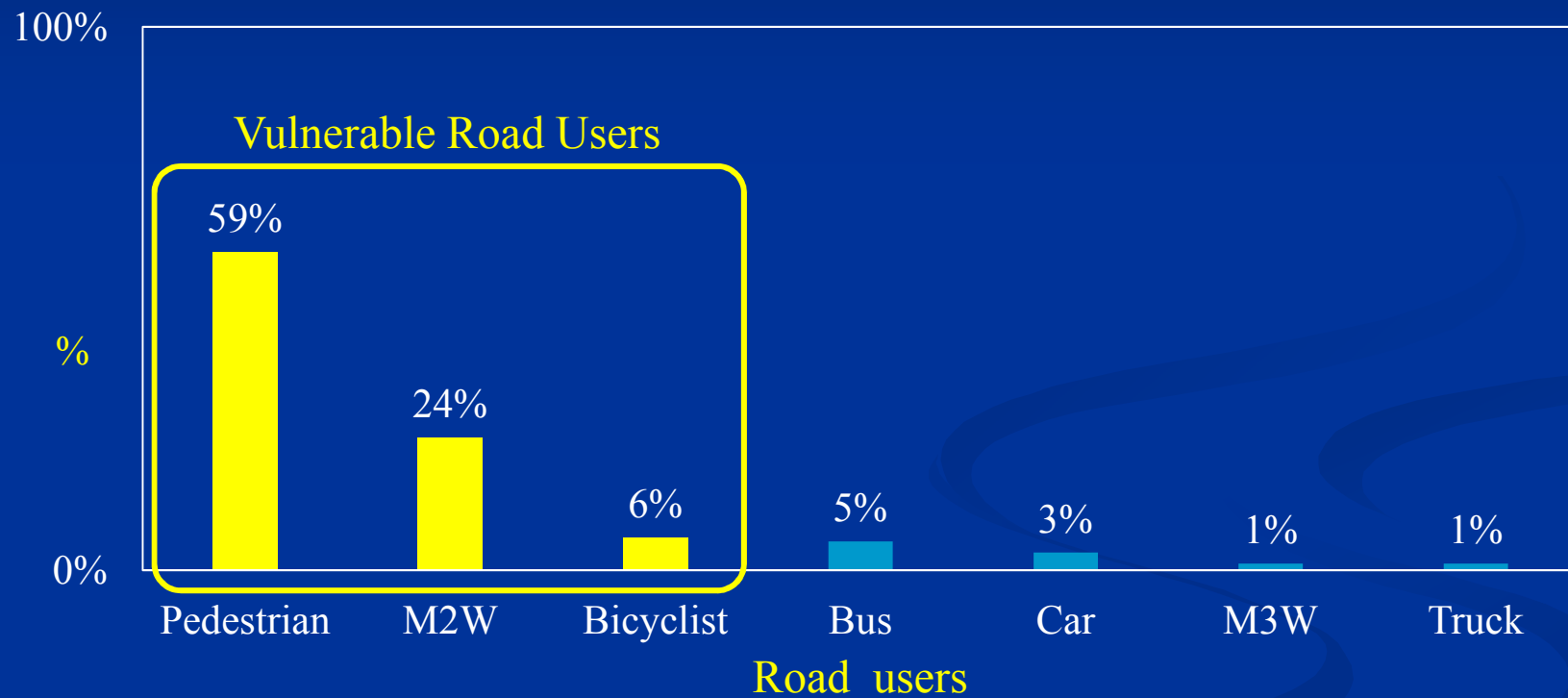
Large mix of vehicles.

Pedestrians, two wheelers, buses and trucks form 68% of involved road users

Number of accidents = 246

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Distribution by Fatal Road Users Affected

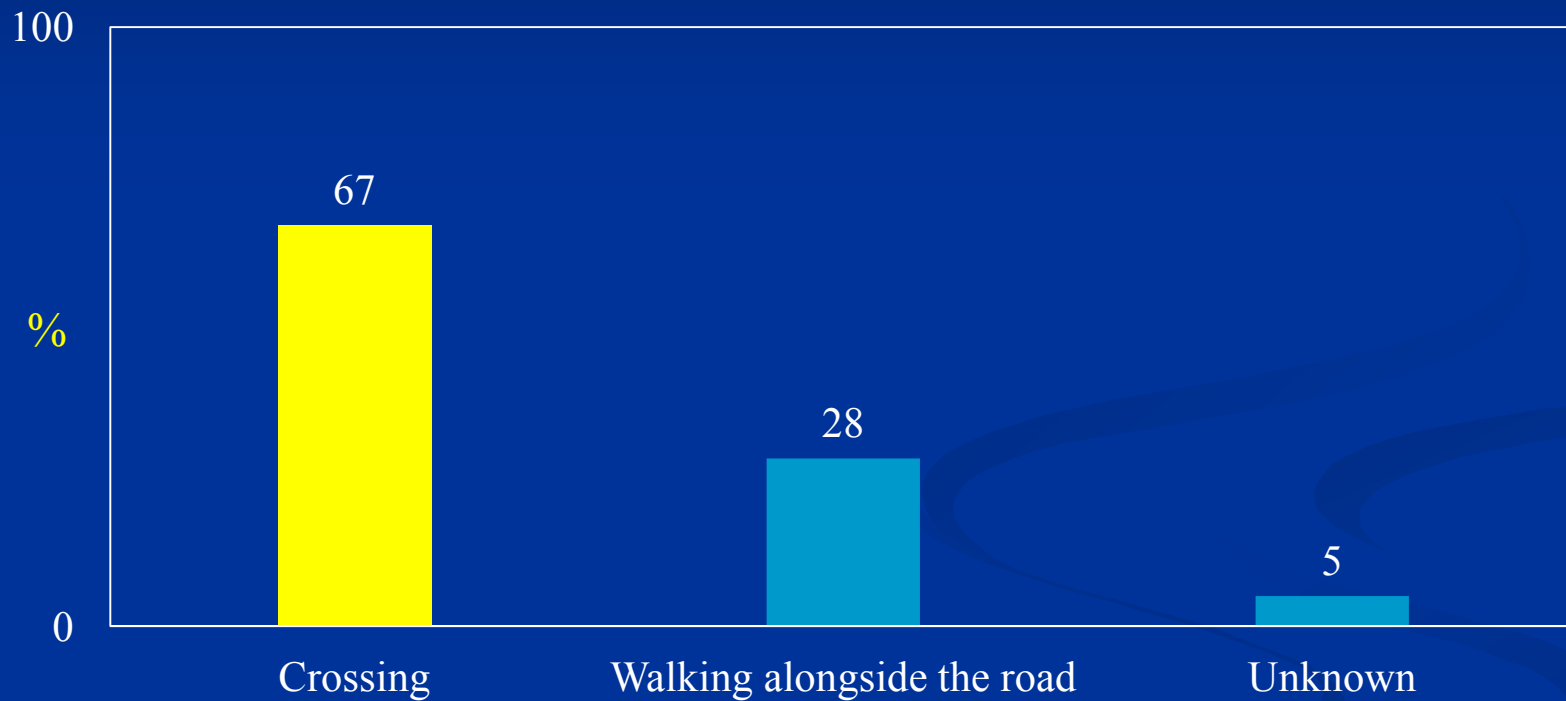


Vulnerable road users (89%) are the most affected fatal road users

Number of accidents = 246

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Pedestrian Fatal Accidents: Pedestrian activity during the crash



Pedestrian crossing accidents indicate poor infrastructure for crossing.

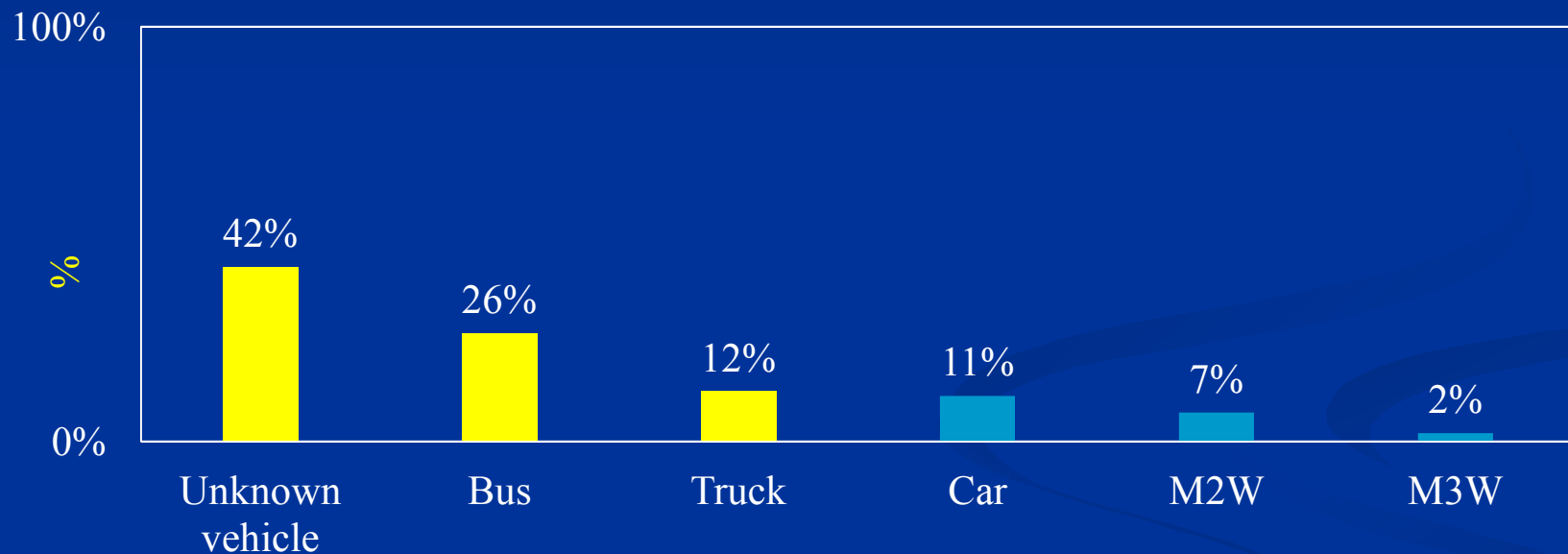
Pedestrian Fatal Accidents: Pedestrian activity during the crash

Contributing factors:

1. Speeding car.
2. Pedestrian crossing when signal is still green for vehicles.
3. Long distance for pedestrian to cross.
4. Improper pedestrian markings and signage.



Fatal Pedestrian Accidents: Distribution by collision partner



Hit and run cases are a major problem that limits accident research.
More intersection cameras being installed.

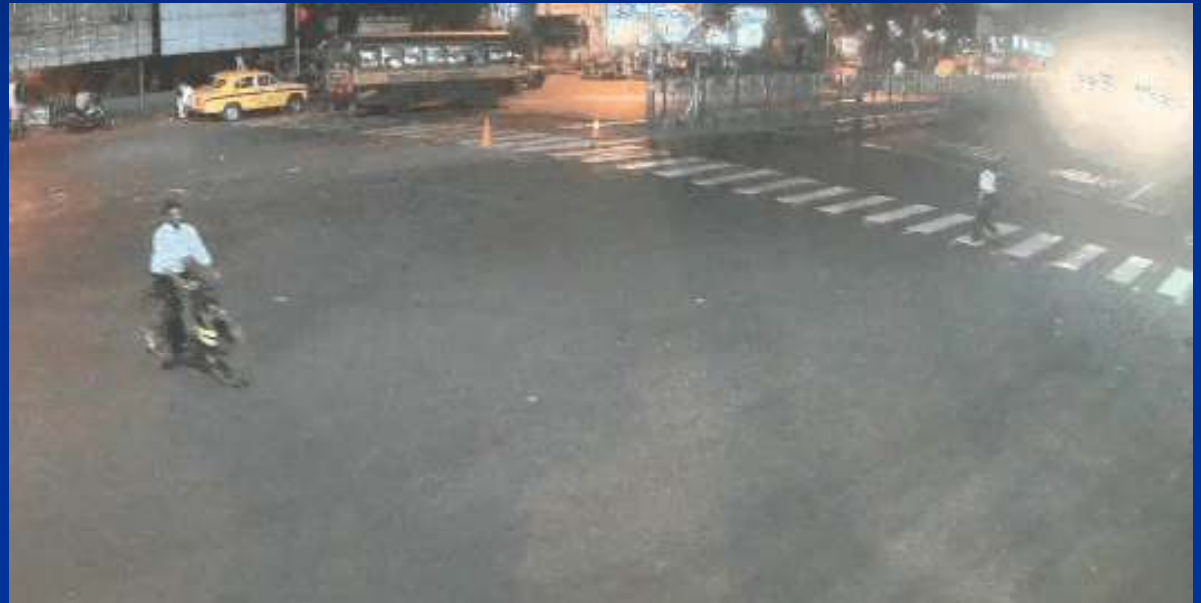
Number of accidents = 246

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Pedestrian Fatal Accidents: Knock down accidents

Contributing factors:

1. Speeding truck. Driver impatience.
2. Pedestrian crossing when signal is red for pedestrians.
3. Long distance for pedestrian to cross.
4. Decision making issues. Whose right of way?



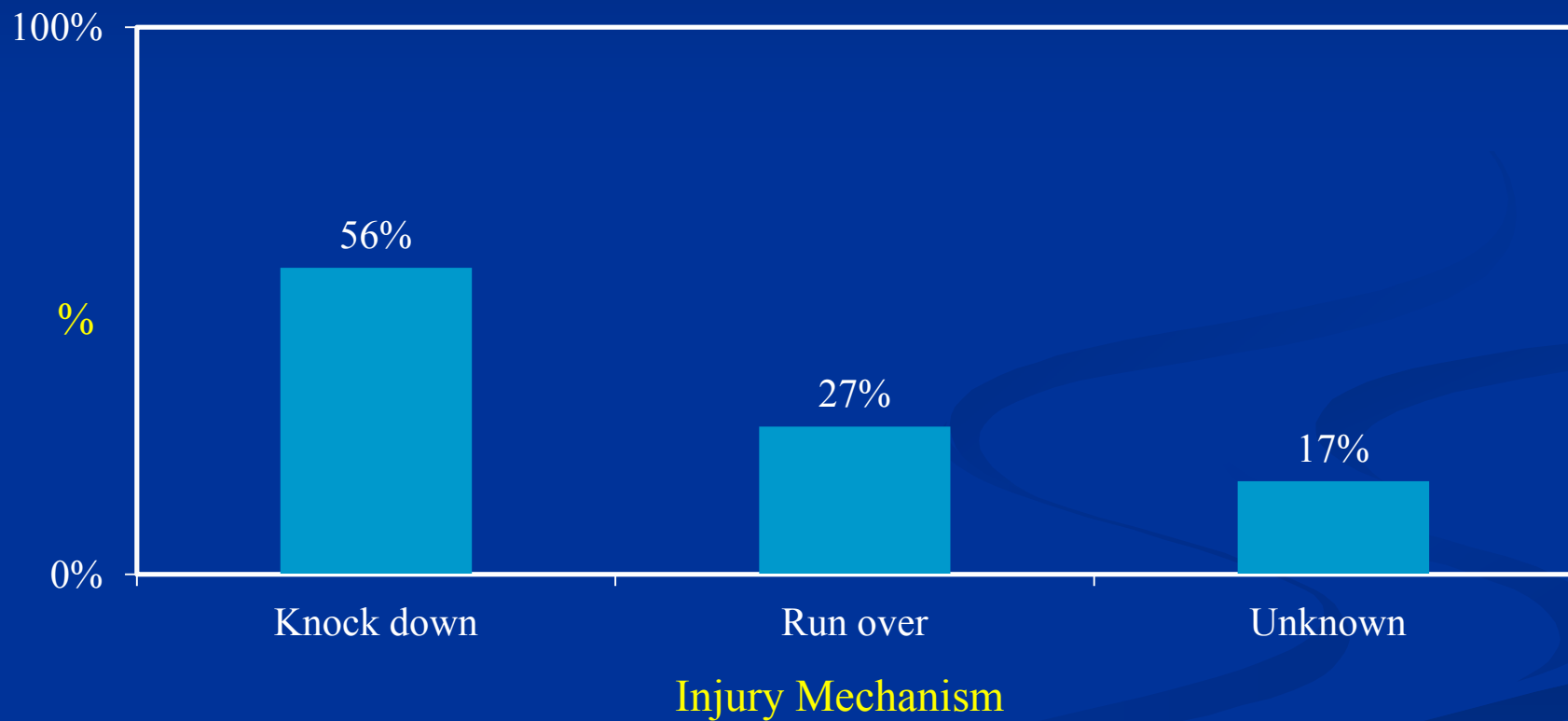
Pedestrian Fatal Accidents: Run over accidents

Contributing factors:

1. Driver decision overload.
2. Driver vision obstruction due to vehicle design.
3. Pedestrians are walking on the road.
4. Poor traffic movement control – road markings, etc.



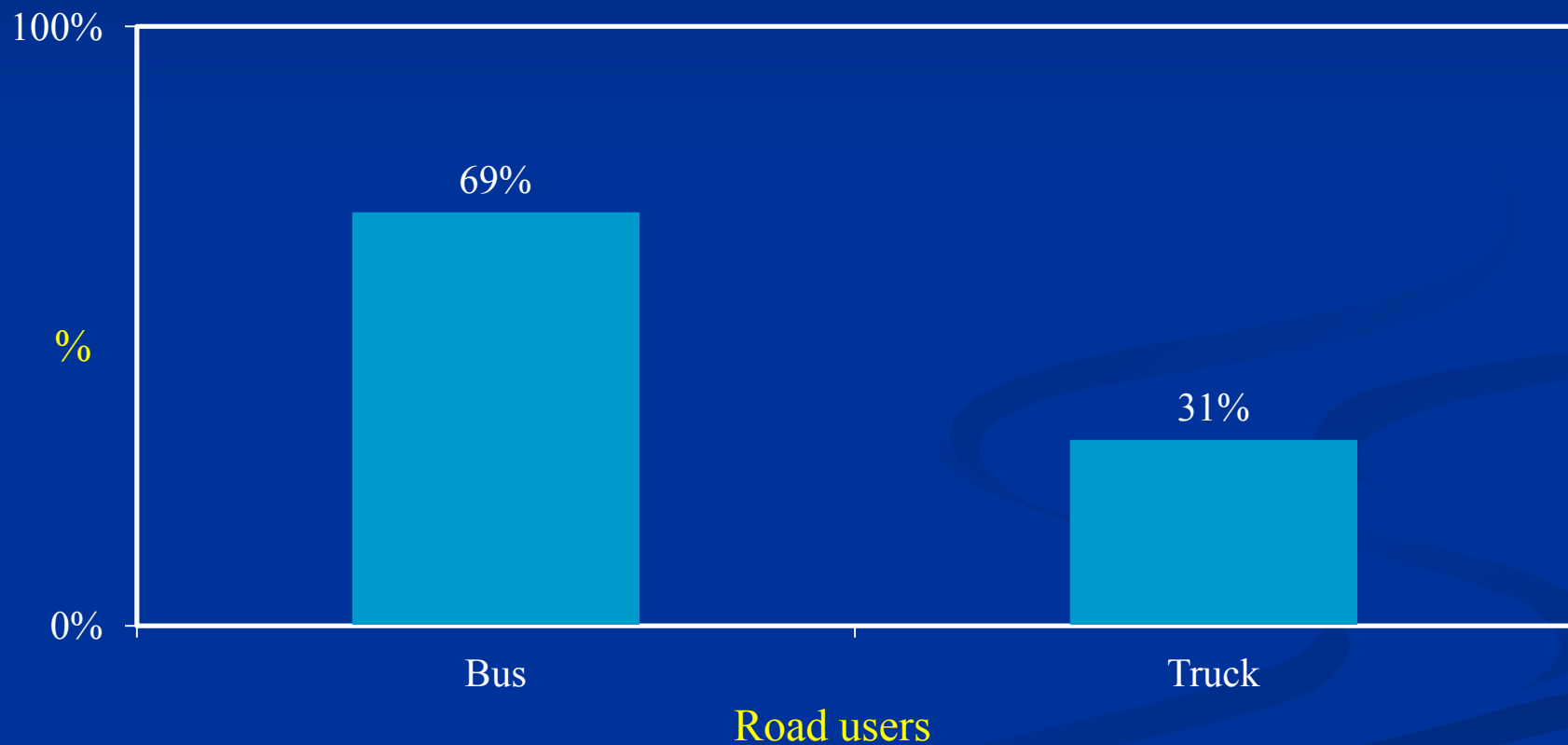
Fatal Pedestrian Accidents: Knock down and Run over



Number of accidents = 144

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Fatal Pedestrian Accidents: Collision partner – Run over



Number of accidents = 26

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Problems identified:

- Vulnerable road users – pedestrians, two wheeler riders and bicyclists – constitute 89% of the fatal accident victims.
- Safe road infrastructure for vulnerable road users is required
 - Intersections – alignment, signage, visibility and traffic control.
 - Pedestrian crossings.
 - Pedestrian separation from vehicular traffic (footpaths).
- Run over accidents involving buses and trucks.
- Road and vehicle engineering interventions required.

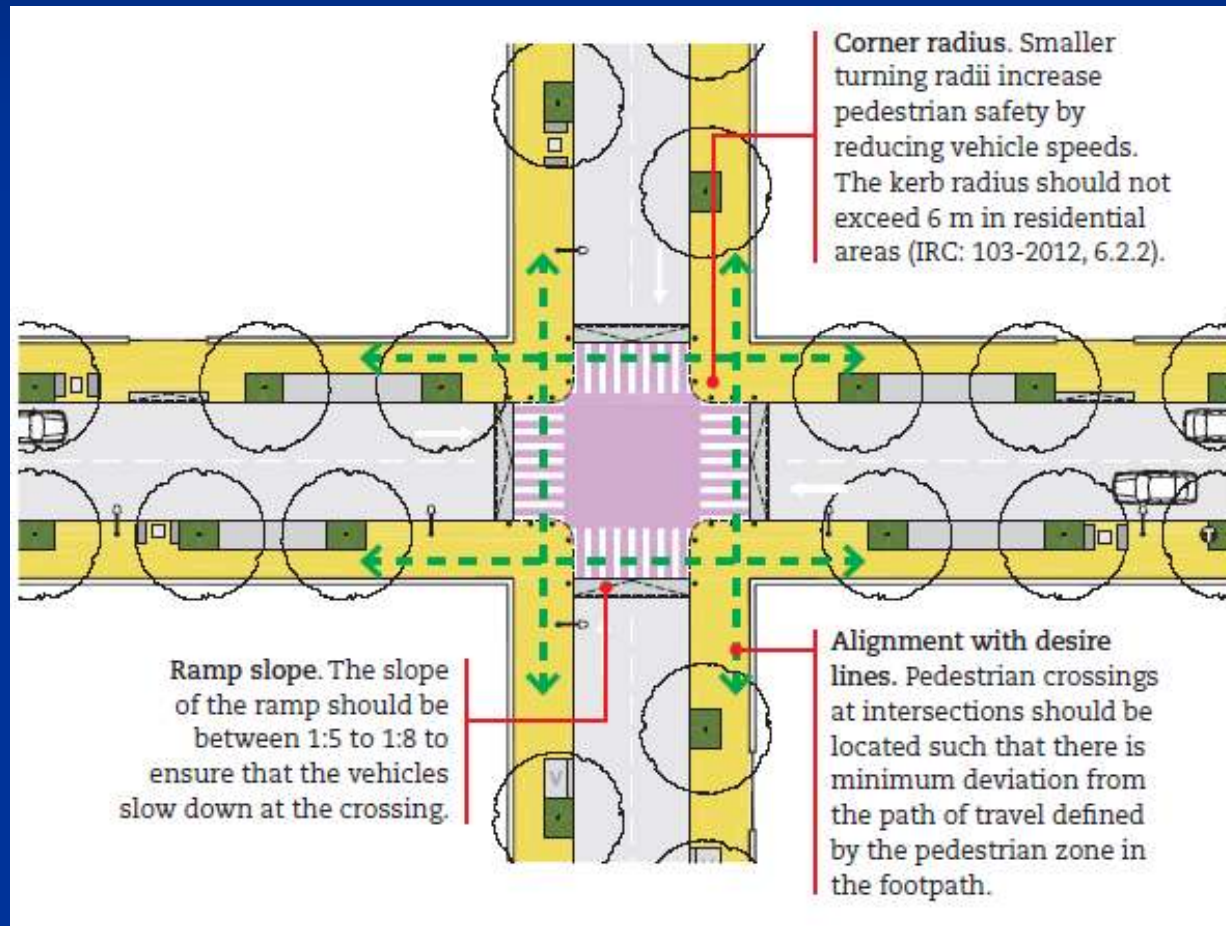
Pedestrian Fatal Accidents: Knock down accidents

Contributing factors:

1. Pedestrian impatience.
2. Driver vision obstruction due to vehicle design.
3. No proper pedestrian crossing infrastructure.
4. Poor traffic movement control – road markings, etc.



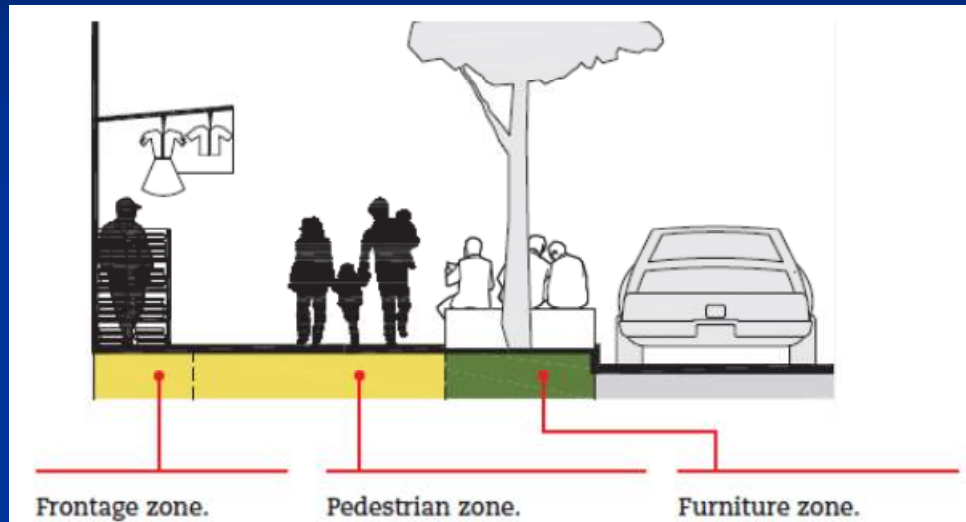
Safer intersection designs



Raised pedestrian crossing



Pedestrian pavements



S1Gard run over prevention device



Thank You!

*We look forward to your continued support in this joint initiative
towards safer roads.*

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