

10th ATRANS ANNUAL CONFERENCE
"Transportation for A Better Lift"

ANALYSIS OF CHILDREN ROAD TRAFFIC ACCIDENTS AND PROPOSED MEASURES FOR CHILDREN SAFETY IMPROVEMENT IN HO CHI MINH CITY



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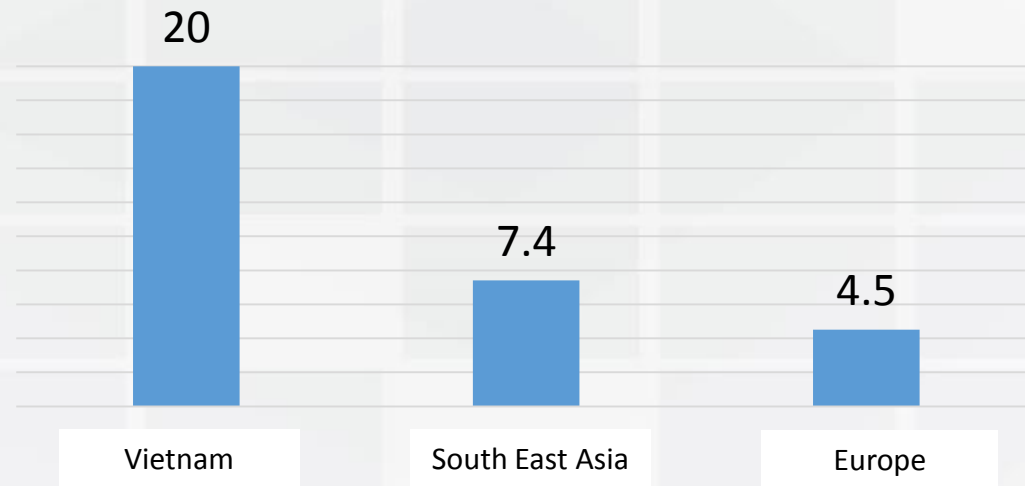
Vietnamese - German University

Road Traffic Safety Problems in HCMC

- ▶ Around the world, an average of 2 minutes a child died in a traffic accident
- ▶ In Vietnam, traffic accidents kill nearly 2,000 children a year (UBATGTQG, 2015).
- ▶ HCMC has the highest number of accidents and deaths due to traffic accidents in Vietnam; Of which 8 ~ 9% relates to children (PC67-BCA, 2015).
- ▶ Lack of in-depth studies on traffic accidents related to children to support the development of policies and measures to improve traffic safety for children.



Rate of RTAs related to children/100.000 children





Research Objective

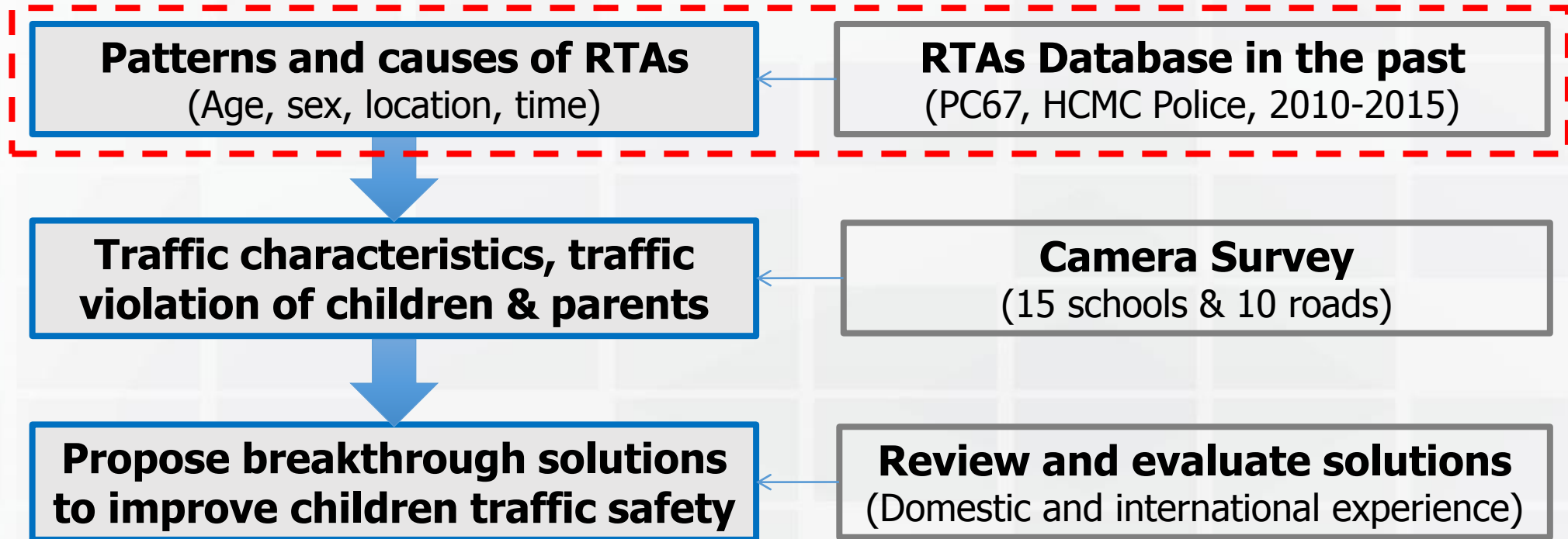


Systematic and in-depth analysis on the **trend, pattern** and **cause** of road traffic accidents involving children



Propose **a package of solutions** to enhance road traffic safety for HCMC children.

Analysis Results



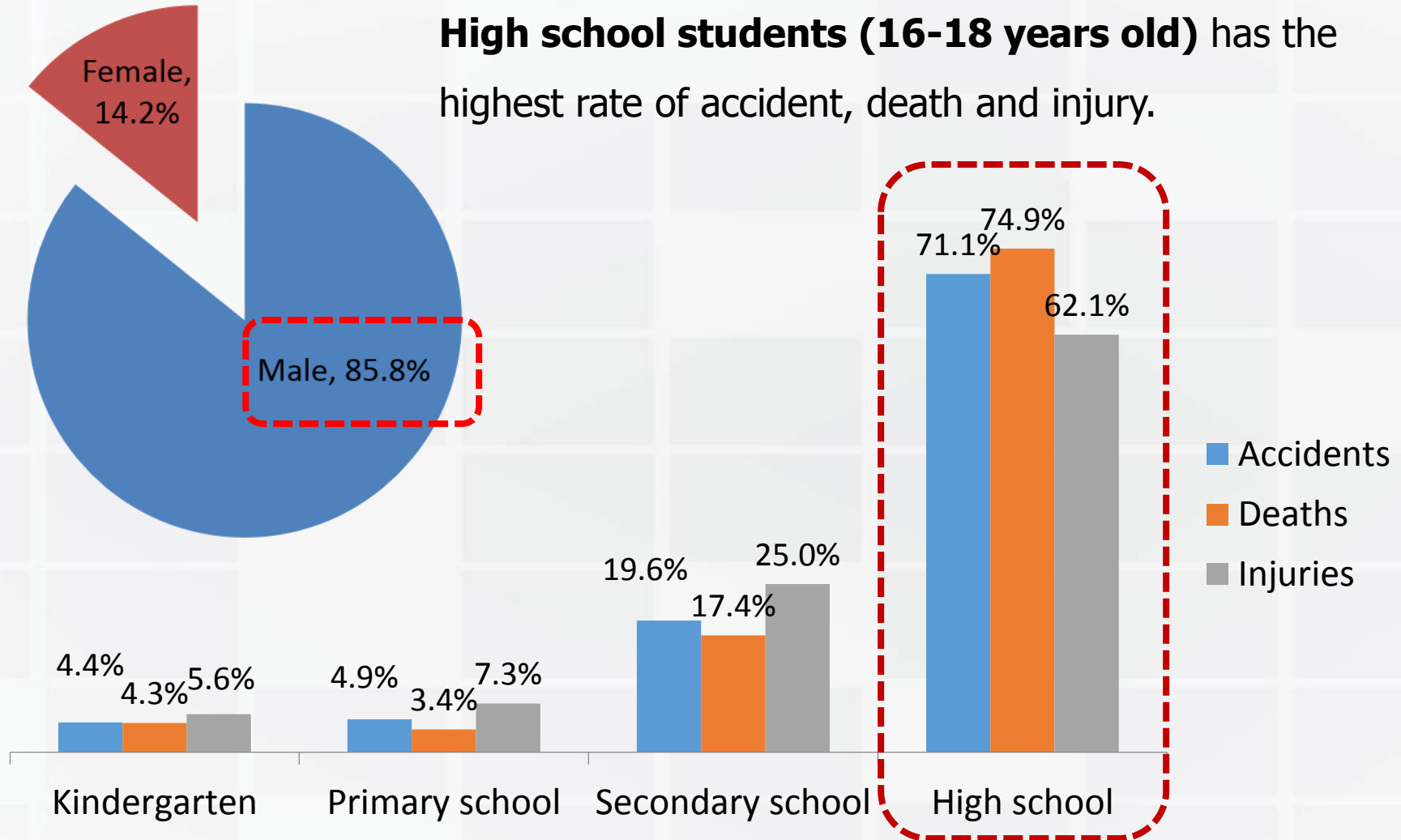
TREND OF RTAs IN HCMC

While the number of traffic accidents, deaths, injuries are declining, **traffic accident involving children tend to increase rapidly.**

Year	Total Accidents	Total Deaths	Total Injuries	Child Accidents	Child Deaths	Child Injuries
2010	1101	837	432	n.a	n.a	n.a
2011	1042	887	495	n.a	n.a	n.a
2012	958	824	388	n.a	n.a	n.a
2013	941	775 ↓	349	36	35 ↑	15
2014	850	701 ↓	322	85	61 ↑	55
2015*	771	692 ↓	268	104	111 ↑	54
Total 2013-2015	2562	2168	939	225	207	124

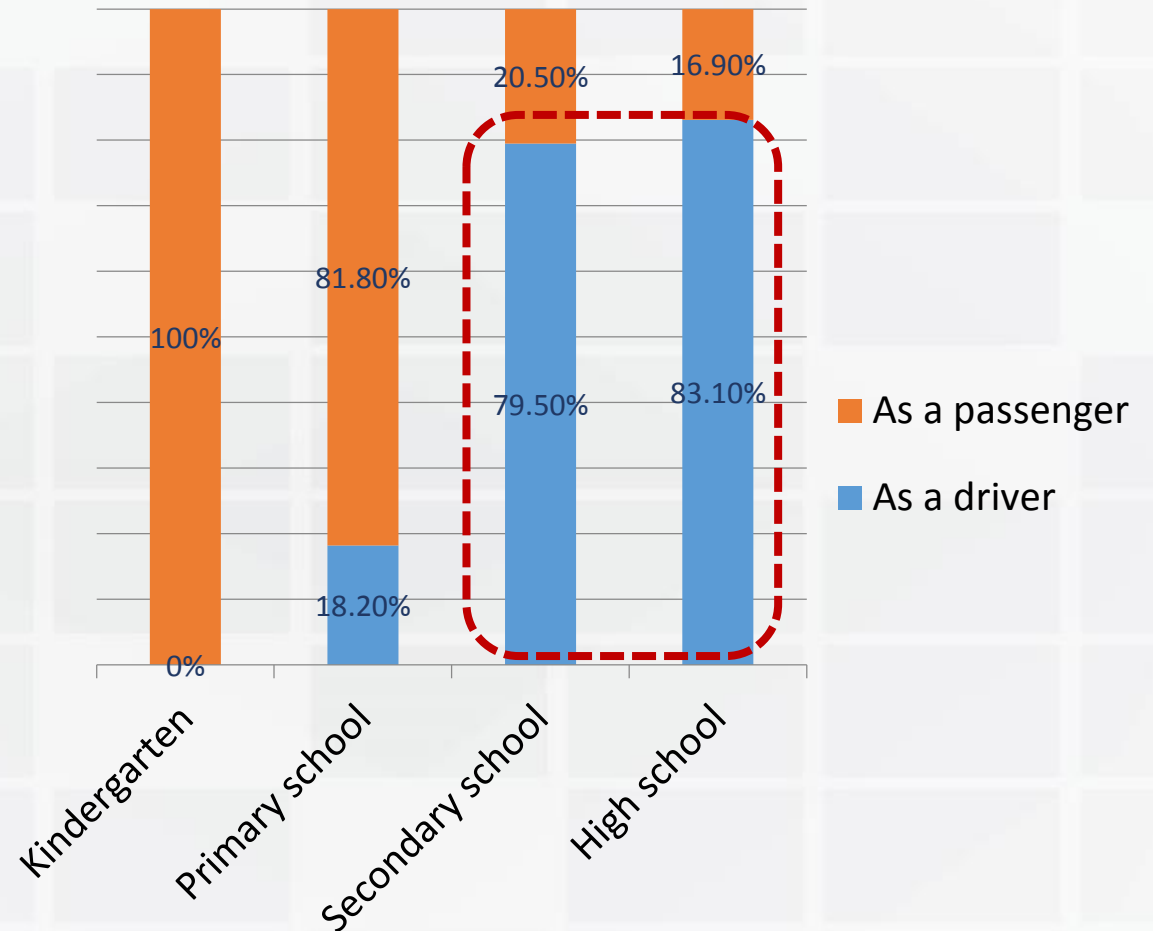
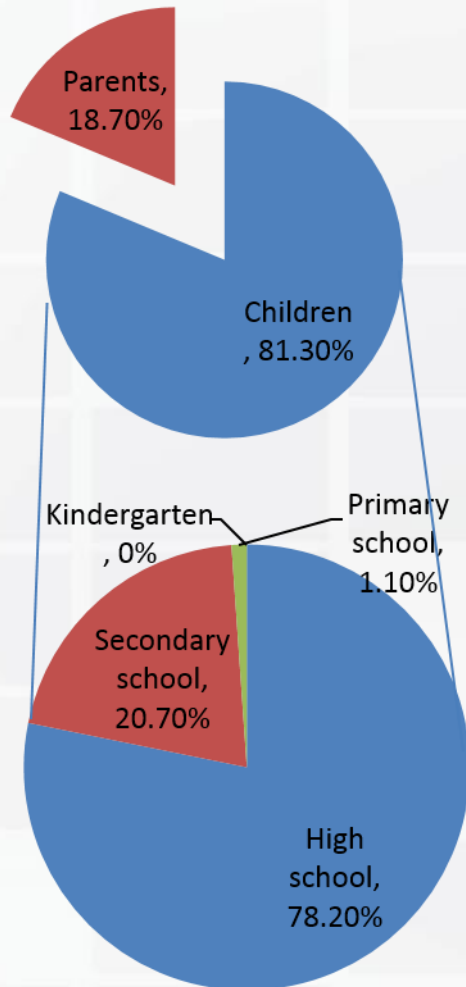
Data source: Highway and Railway Police Division, HCMC Police Dept. (PC67), 2015
 (*): Accounted until 15/11/2015

DISTRIBUTION OF RTAs RELATED TO CHILDREN BY AGE AND SEX



PEOPLE WHO DROVE WHEN ACCIDENTS OCCURED

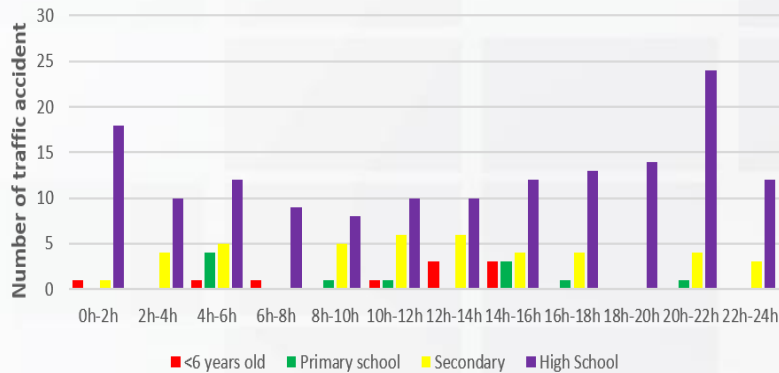
There are more than 80% of traffic accidents involving children occur when high school student are riding motorbike or bicycle.



DISTRIBUTION OF CHILD-RELATED RTAs BY TIME

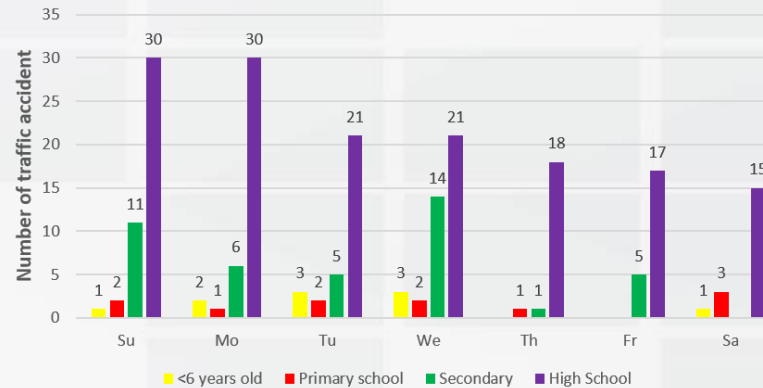
- RTAs related to secondary school student occurs from 10am to 2pm
- RTAs related to high school student happen from 6pm to 2am of the next day.
- RTAs involving children increase on weekend
- RTAs involving children rise up on summer months

Child-related traffic accident distribution by hour



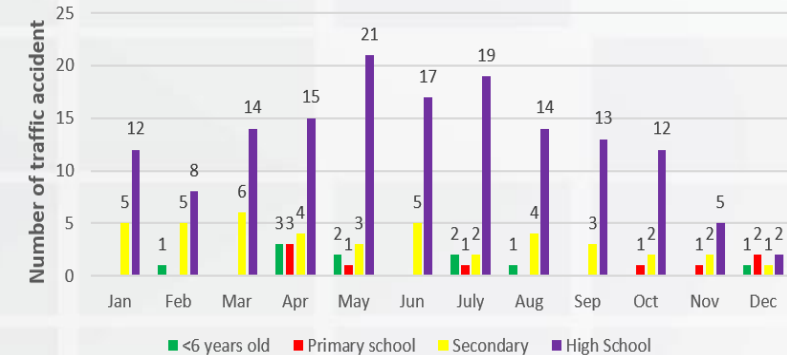
Child-related traffic accident distribution by hour

Child-related traffic accident distribution by weekdays



Child-related traffic accident distribution by weekdays

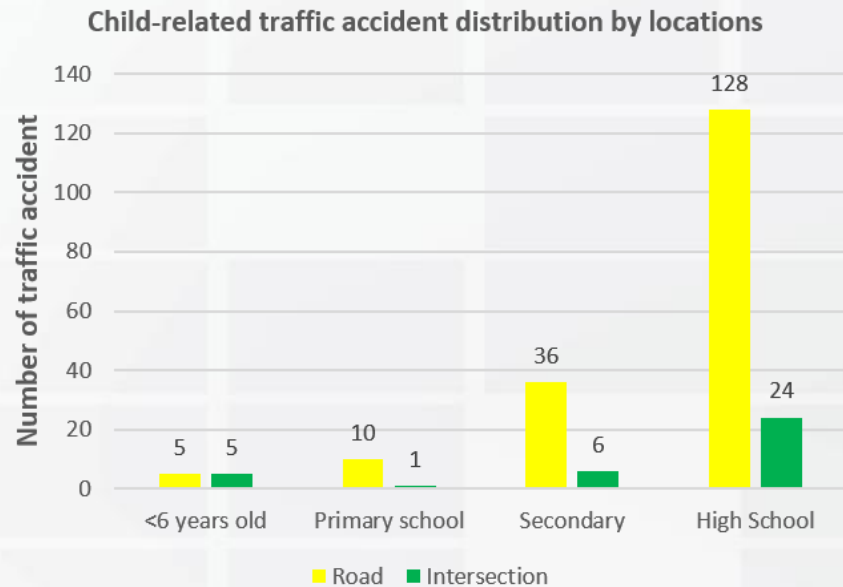
Child-related traffic accident distribution by month



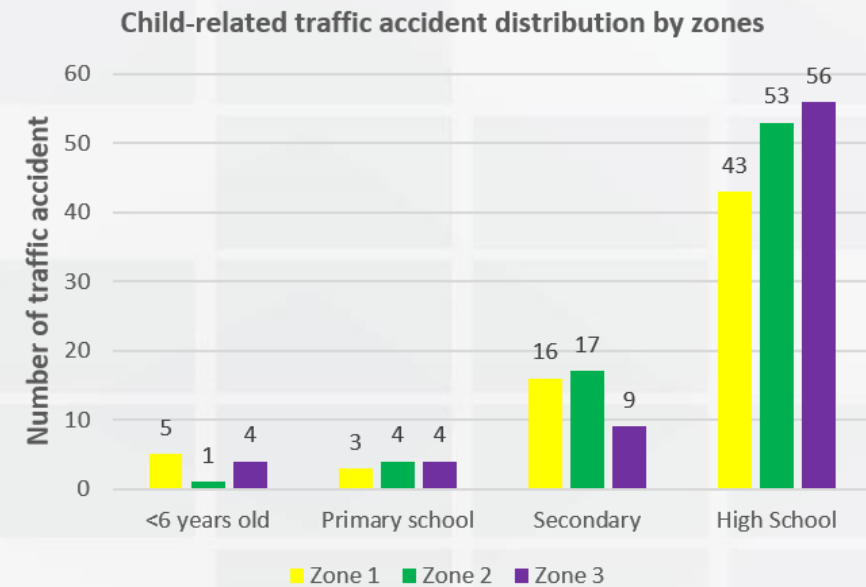
Child-related traffic accident distribution by month

DISTRIBUTION OF CHILD-RELATED RTAs BY LOCATION

- Child-related traffic accidents occur **82% on roads**, and **18% at intersections**.
- Traffic accidents have no difference in the number of cases between regions.

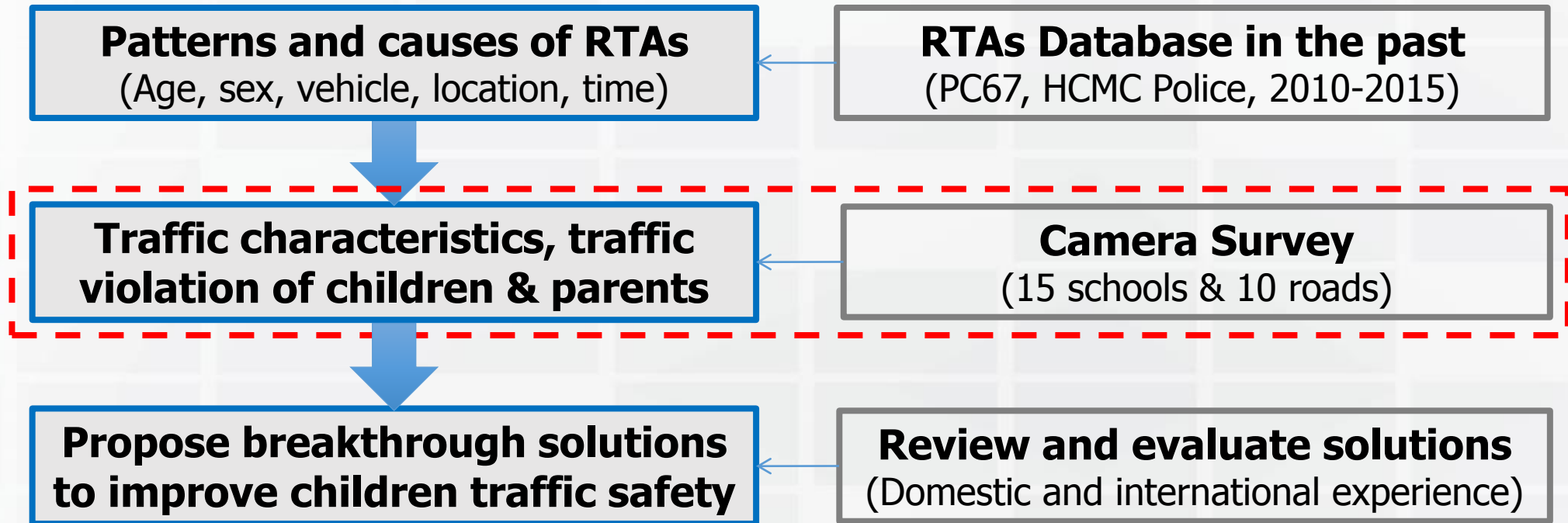


Child-related traffic accident distribution by locations



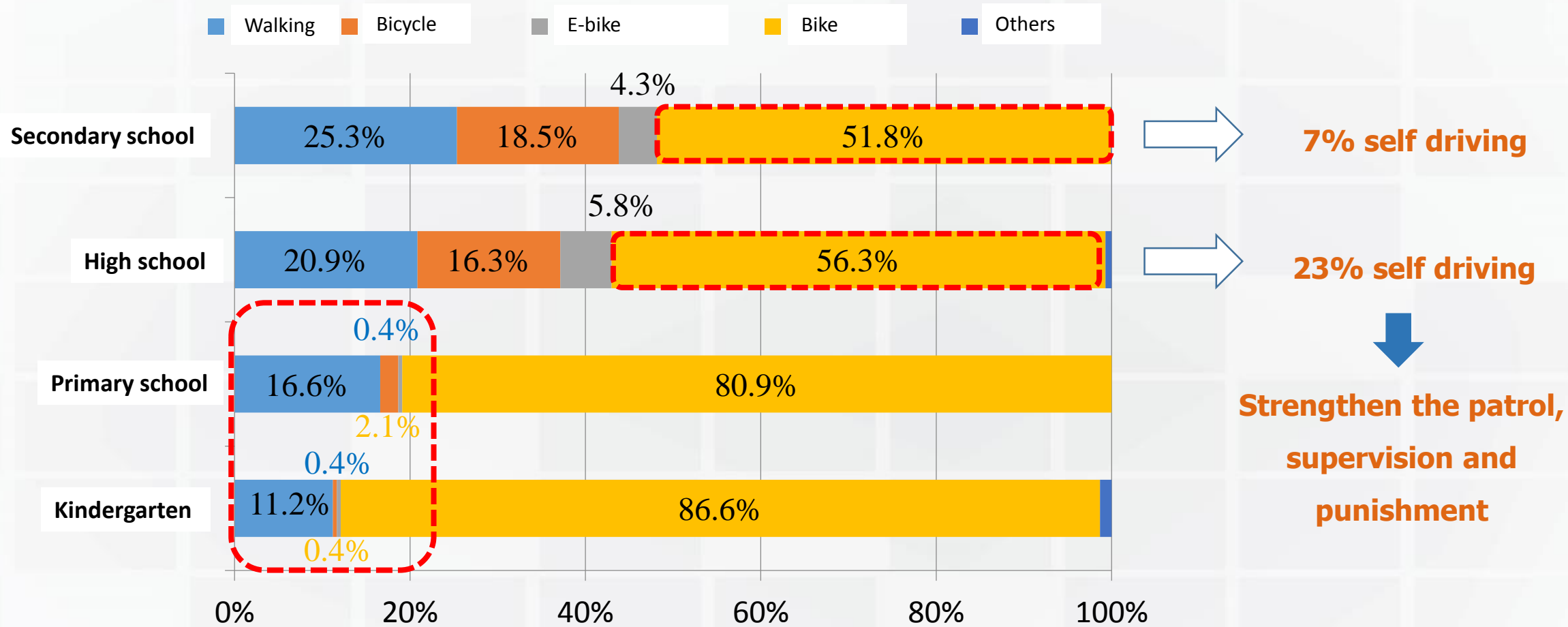
Child-related traffic accident distribution by zones

Analysis Results



MEANS OF TRANSPORT TO SCHOOL

(Observed 6,800 students at 15 schools in HCMC)

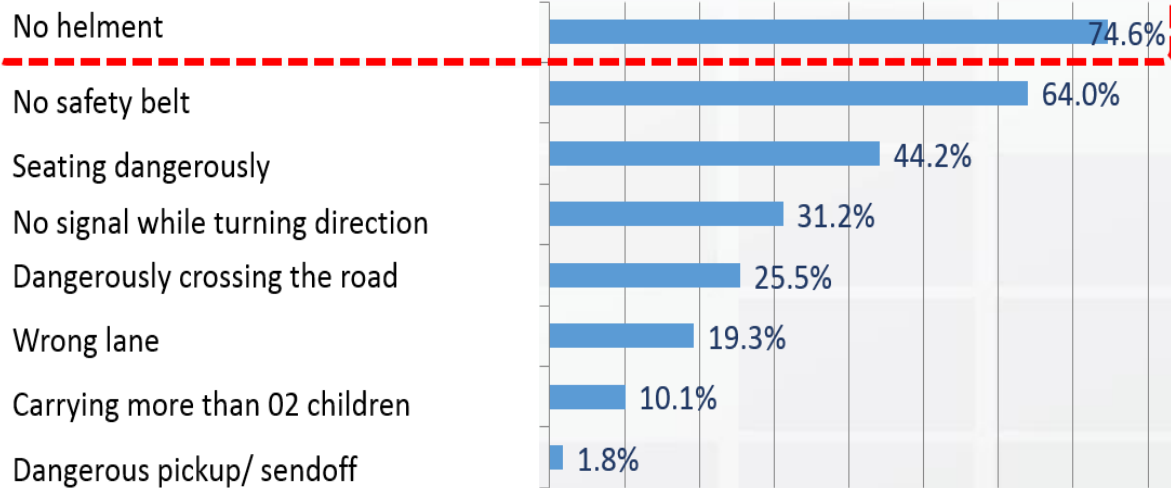


→ How to encourage primary & secondary school walking or cycling to school?

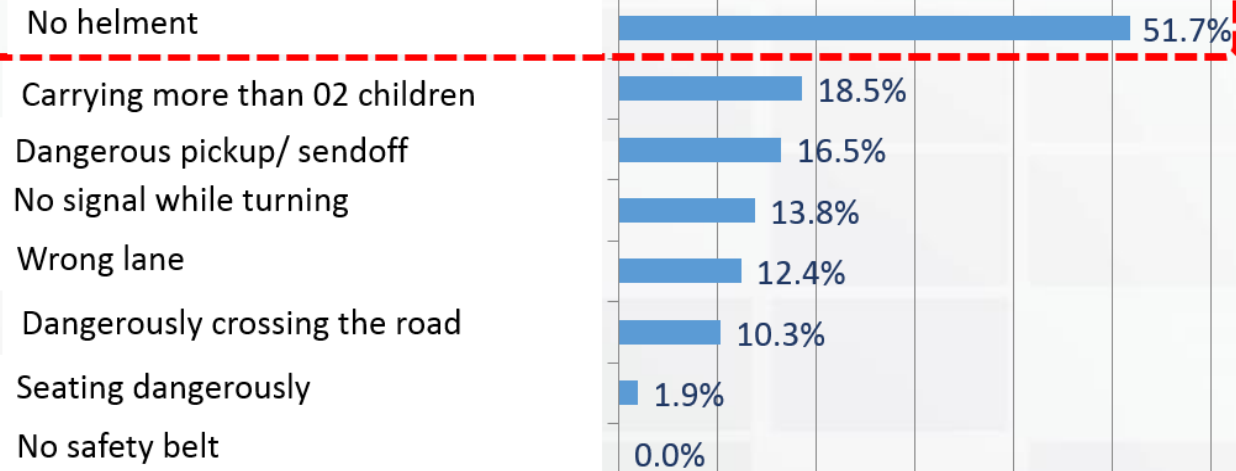
RATE OF VIOLATION OF REGULATIONS ON TRAFFIC SAFETY

(Observed 6,800 students at 15 schools in HCMC)

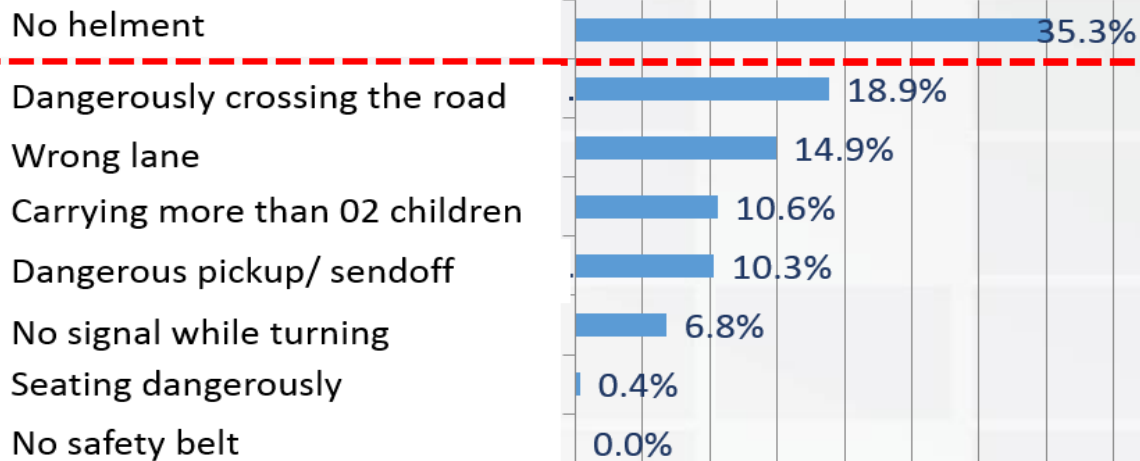
Kindergarten (N=1.605)



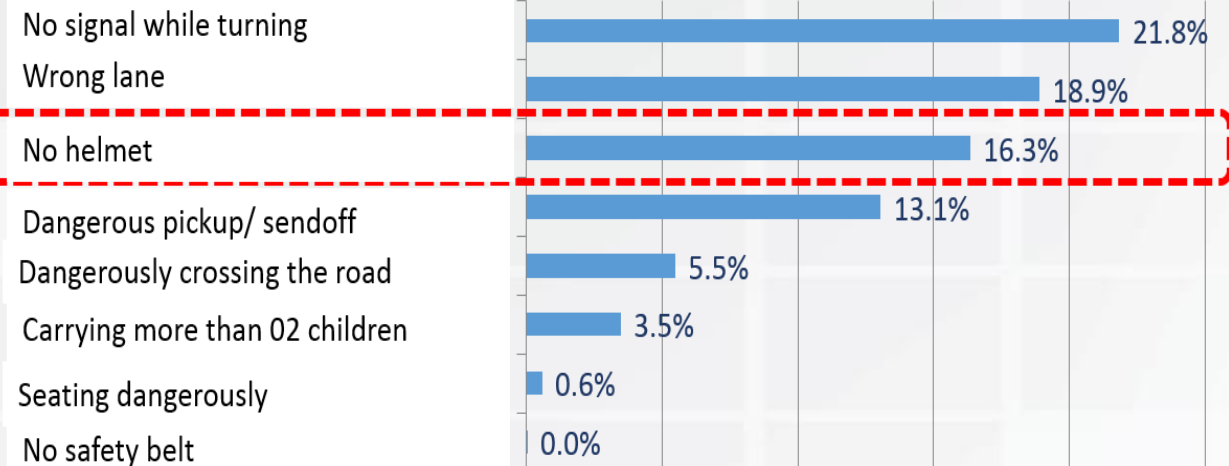
Primary School (N=1.591)



Secondary School (N=1.543)



High School (N=2.038)



INADEQUATE TRAFFIC ORGANIZATION IN THE SCHOOL AREAS

▪ Infrastructure

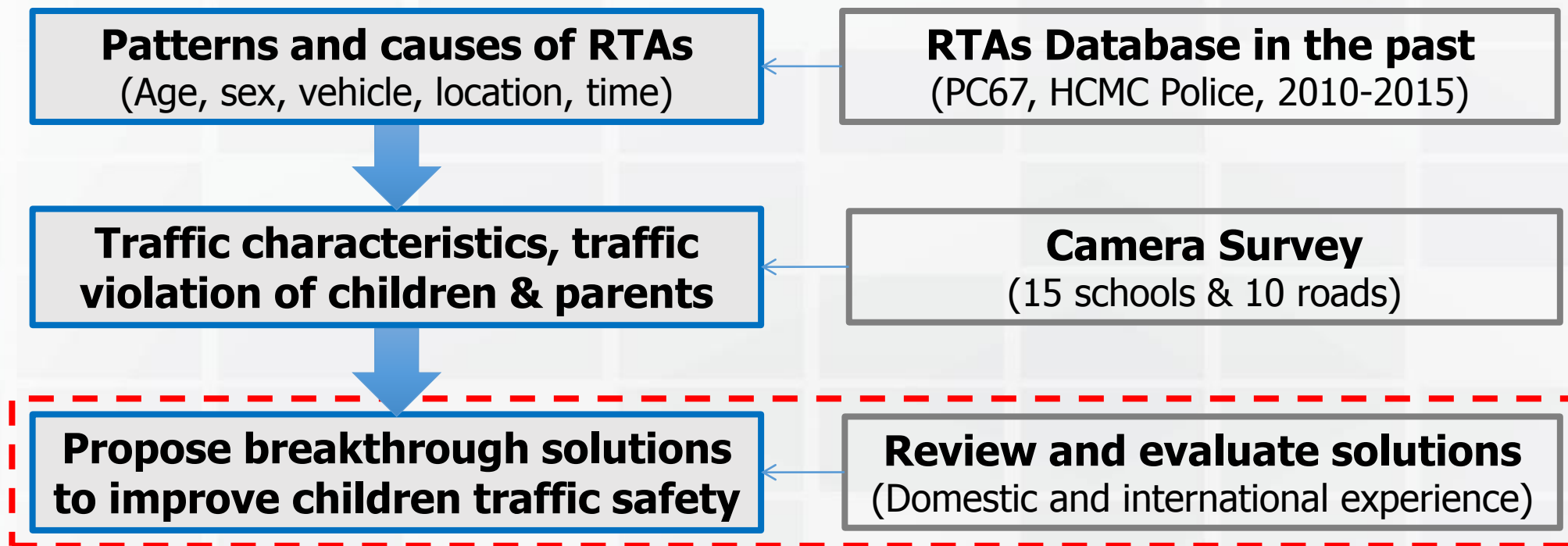
- The pavement is damaged;
- Parking is not available or limited, causing parents park on road and cause traffic disruption;
- There have no waiting area for student

▪ Traffic organization

- No regulator, no signal lights, no zebra-crossing, no road humps;
- Inadequate planning: the zebra-crossing for students and parents is not reasonable;
- Encroaching on sidewalks to do business (street vendor) makes students and pedestrians have to go down the road, ...



Analysis Results



03 GROUPS OF BREAKTHROUGH SOLUTIONS TO IMPROVE TRAFFIC SAFETY FOR CHILDREN FOR HCMC

1. Amend the traffic law, strengthen surveillance patrols to dramatically reduce traffic safety violations in children and parents

- Strengthen punishment of risk-taking behaviors of children when riding,
- Amending the road traffic law so that helmets may be required for 3-5 year olds.

2. Promote culture of walking and cycling for children, especially primary and secondary school students:

- Reestablish the pavement order, to renovate the sidewalk pavement
- Study and build bicycle lanes so that children can ride bicycles safely and comfortably to school.

3. Implementing the School Zone Safety Project:

- Set up the traffic safety board at the school level headed by the headmaster
- Divide the entrance, reorganize the sidewalks, design the waiting areas and pick up children in the different grades, arrange safety equipment (signboards, humps, ect)
- Arrange staff to regulate and supervise traffic order and safety in the area of school gates ; and arranges bus routes for students while enhancing public transport services that connect to schools.

ACTION TO KEEP KIDS SAFE

