MODULE 2

SAFER ROAD USERS:

VULNERABLE ROAD USERS: LESSONS FROM THE FIELD - VIETNAM

September 27, 2021

Greig Craft & Jimmy Tang, AIPF

GLOBAL ROAD SAFETY PARTNERSHIP

iRAP

ADB TRANSPORT

ASIA-PACIFIC ROAD SAFETY OBSERVATORY

WHO WE ARE

Greig Craft

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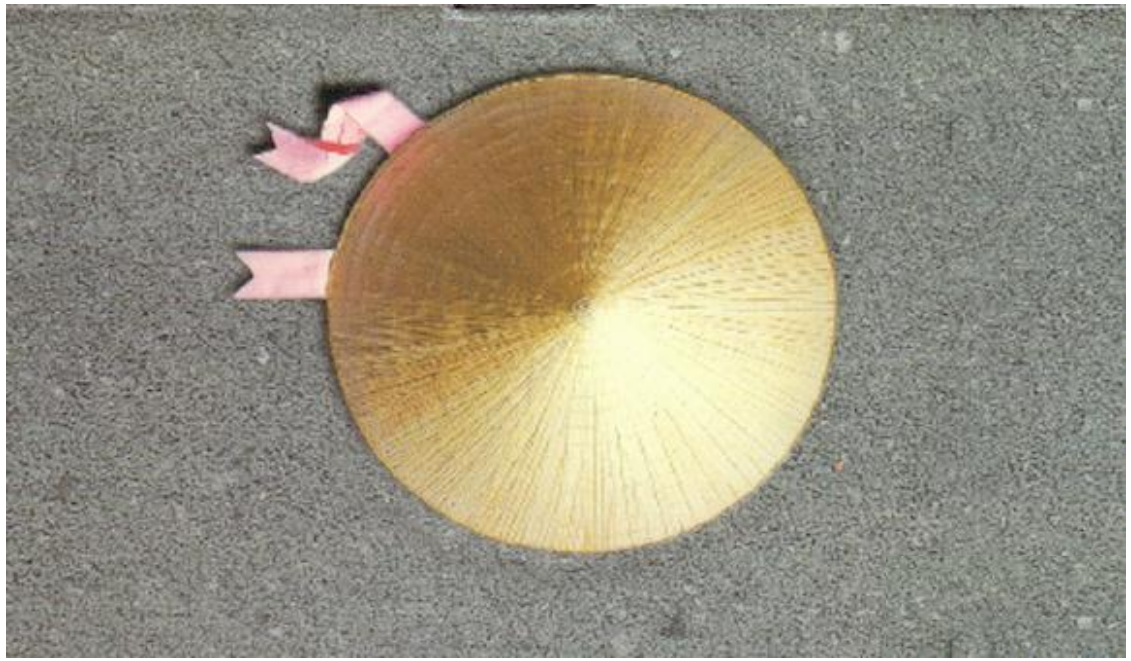
AIP FOUNDATION
SAFE ROADS FOR LIFE



Some traditions never die

1999
AIP Foundation established

ABOUT US

AIP Foundation is a 501(c)3 non-profit organization dedicated to reducing road traffic fatalities and injuries in low-and middle-income countries.

Its 22-years of road safety expertise to deliver comprehensive and evidence-based interventions in high-need communities.

SUSTAINABLE DEVELOPMENT GOALS

DECADE OF ACTION FOR ROAD SAFETY 2021 - 2030

THE GLOBAL CRISIS

1.35 million deaths

50 million injuries

Leading cause of death for children and young adults (5-29)

50%+ deaths are among pedestrians, cyclists, motorcyclists

Rate of road traffic deaths per 100,000 highest in Southeast Asia and Africa

Source: World Health Organization

VULNERABLE ROAD USERS

STUDENTS

CYCLISTS

PEDESTRIANS

TRANSITIONING FROM REACTIVE TO PROACTIVE SOLUTIONS

The solutions to supporting our road users do not always have to be complicated or very costly; collectively, these simple actions can have a dramatic impact on our communities.

QUALITY HELMET USE

- reduces risk of death by **42%**
- serious brain injury by **69%**

REDUCED SPEED

- **5%** speed reduction minimizes risk of death by **30%**

SAFE INFRASTRUCTURE

- **critical to reducing risk of injury and death**

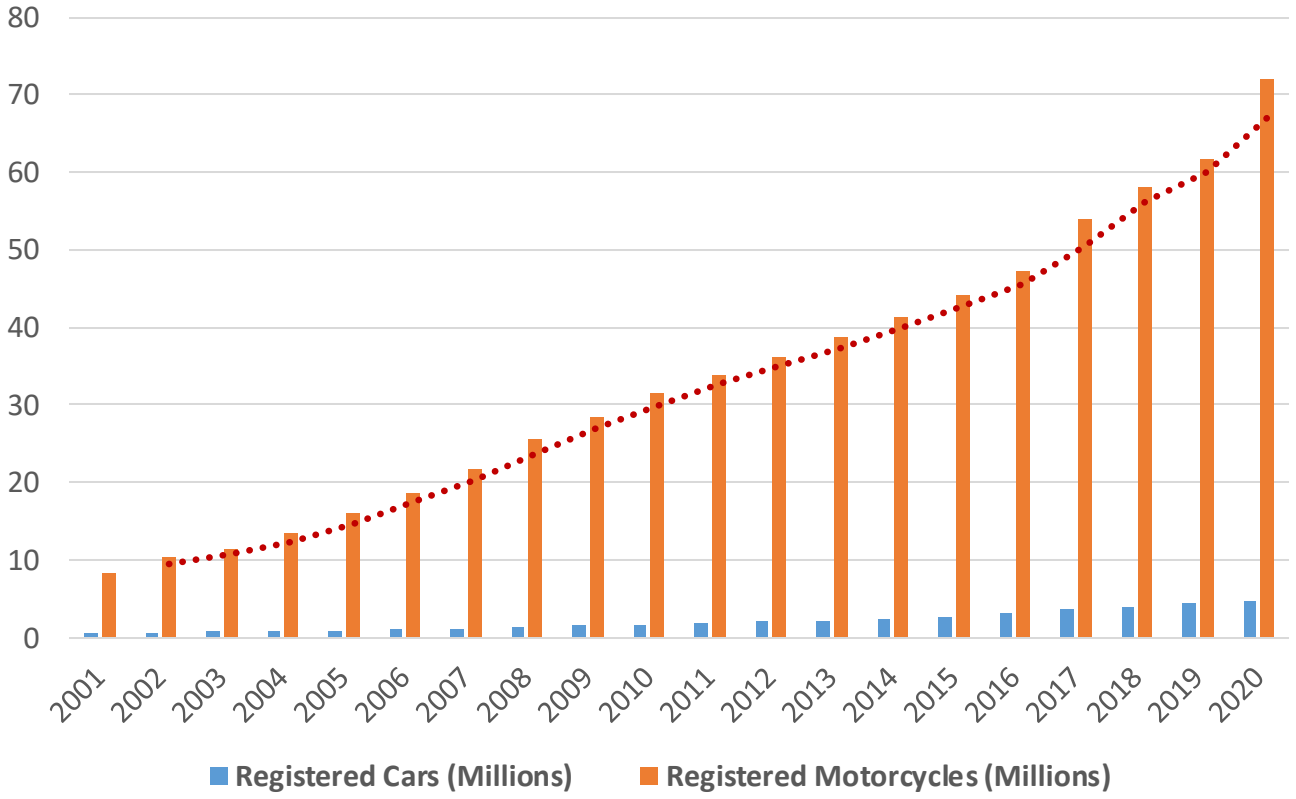
ECONOMIC IMPACTS

- economic loss of a countries' annual GDP by **3-6%**

Source: World Health Organization

RAPID MOTORIZATION IN VIETNAM

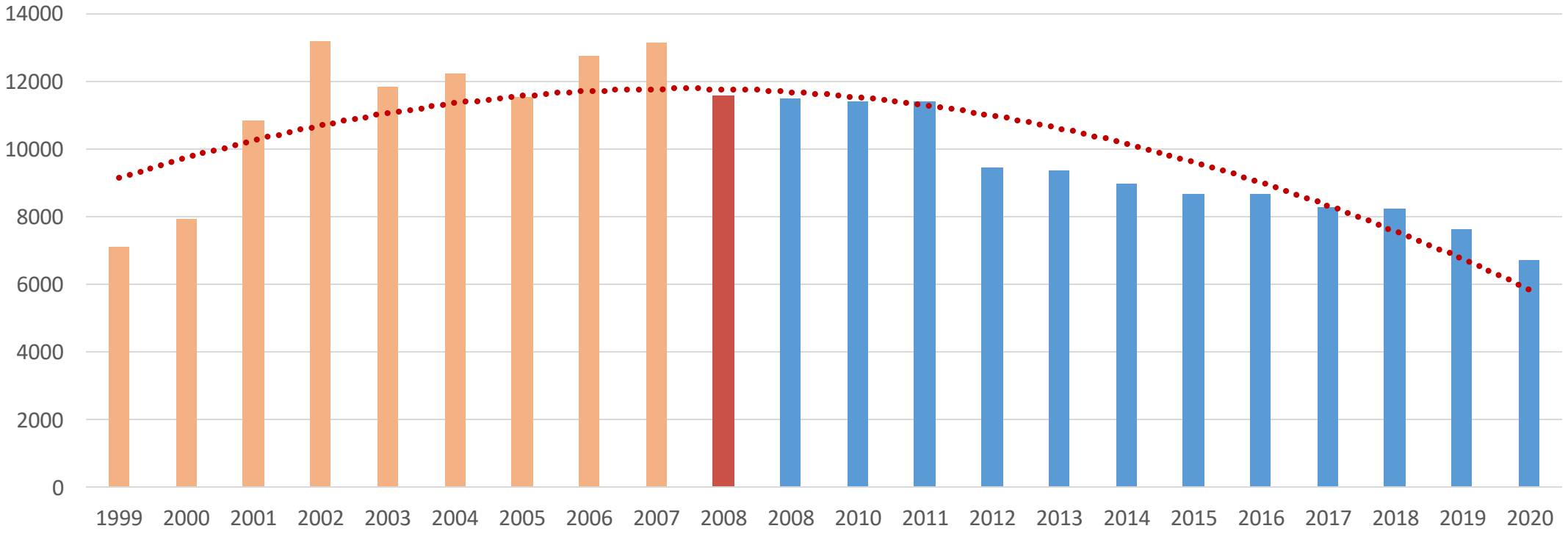
- Rapid economic development influences the country's rapid motorization and increase in road safety hazards.



Source: NTSC

TRAFFIC FATALITY RATES IN VIETNAM

- Fatality rates were generally on the rise in the midst of Vietnam's rapid economic development and motorization
- 2007: Government passes an amended Road Traffic Law – including an improved universal helmet law and began enforcement in 2008



Source: NTSC

A TURNING POINT FOR HELMET SAFETY IN VIETNAM

1997
Vietnam establishes the National Traffic Safety Committee (NTSC)

2001
Vietnam adopts narrow child and adult helmet standards

2002
National Policy on Accident and Injury Prevention and Control is implemented.

2003
Vietnamese government sets up helmet quality test centers in Da Nang, Hanoi, and Ho Chi Minh City

2006
The Vietnam Helmet Wearing Coalition is established by AIP Foundation

2007
Vietnam passes its comprehensive helmet law: Resolution 32. Helmet wearing rates in major urban cities surge to 90%.

2008
Vietnam experiences a 24% decrease in road injuries and 12% decrease in fatalities.

Public awareness raising activity, organized by the Vietnam Helmet Wearing Coalition.

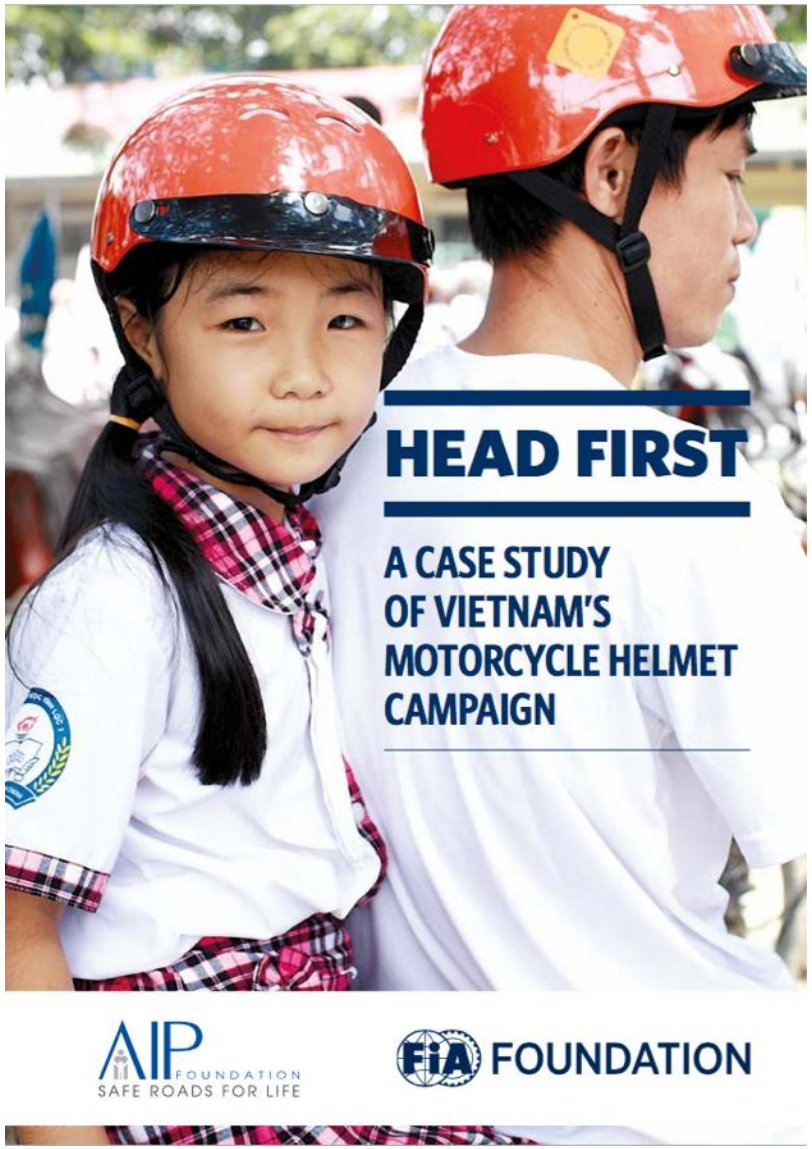
Increased helmet enforcement in Vietnam following the passage of its universal helmet law in 2007.

Source: Head First Report (AIP Foundation)

TEN YEARS OF IMPACTFUL LEGISLATION

In 2017, ten years after the passage of Vietnam's compulsory helmet law, the country had saved an estimated **$3.5 billion USD** in medical costs, lost output, and pain and suffering.

An estimated **500,000 head injuries** and **15,000 fatalities** have been prevented due to increased helmet use.



Source: 'Head First' Case Study (AIP Foundation/FIA Foundation)

TARGETED ROAD SAFETY: SCHOOL ZONES

Our work with the Vietnamese government continues as we collaborate to protect students and improve school zones across Vietnam.

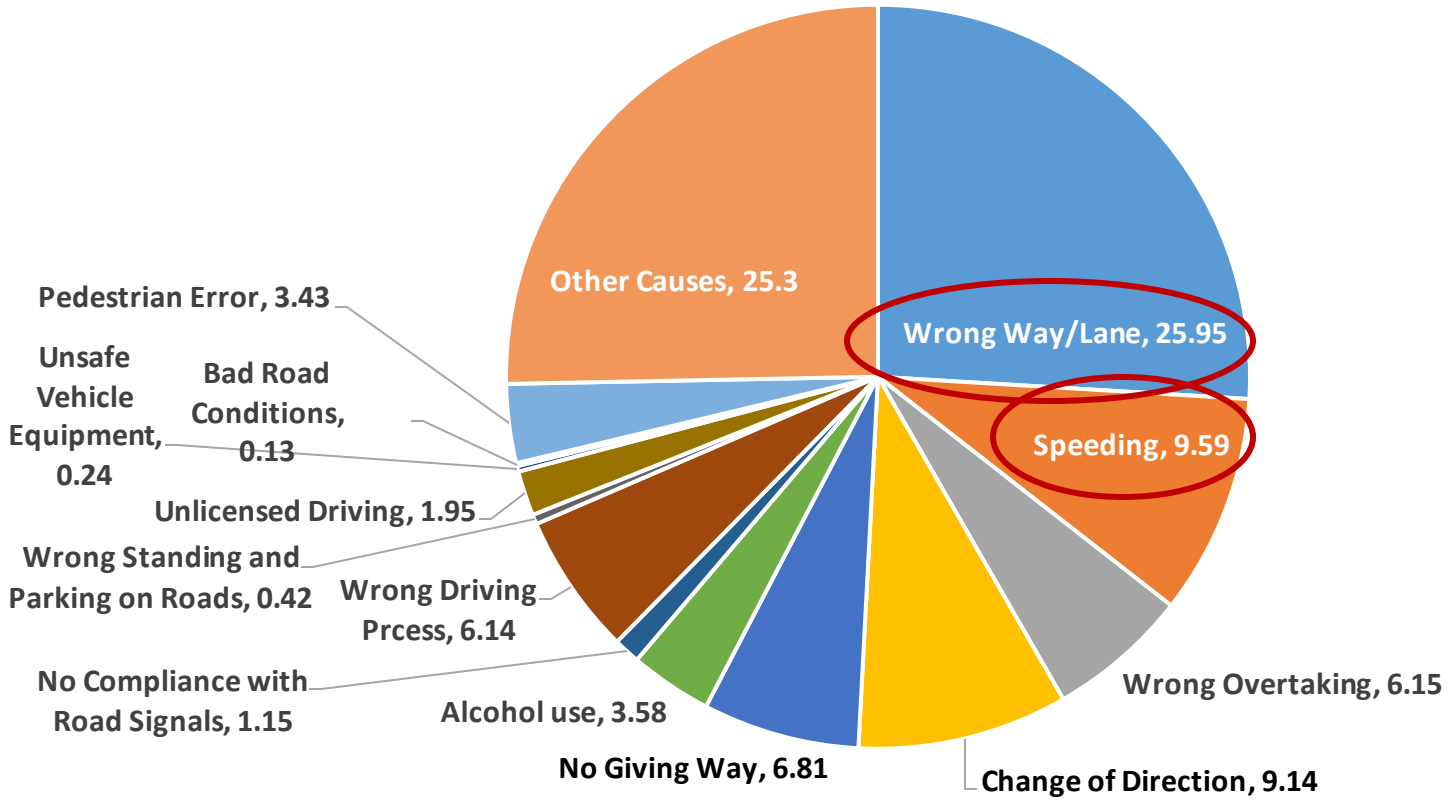
THE ISSUE: DANGEROUS DRIVING IN SCHOOL ZONES

Dangerous driving behaviors including **driving in the wrong lanes** and **speeding** are the leading contributors of road crashes in Vietnam.

A survey of Vietnamese drivers found that **64%** of surveyed drivers felt it was acceptable to drive over the posted speed limit.

Furthermore, **road crashes** account for the **second leading cause of death among children** ages 5-14.

Causes of Road Crashes – Vietnam (2016)



Source: Department of Traffic Police | Khuat and Le (2011) | Institute for Health Metrics and Evaluation (2019)

SLOW ZONES, SAFE ZONES: PROJECT SUMMARY

Location: Pleiku City, Gia Lai province, Vietnam

Project Period: April 2018 – June 2020

Goal: Reduce road crash injuries and fatalities among students through a series of mutually-reinforcing interventions focused on speed reduction around schools.

Project Partners:

BAN AN TOÀN GIAO THÔNG TỈNH GIA LAI

BOTNAR Child Road Safety Challenge

FIA

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NISSAN

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Gia Lai Traffic Safety Committee, Gia Lai Department of Education and Training, Gia Lai Provincial Police, Pleiku City Police, Pleiku City Bureau of Education and Training

SLOW ZONES, SAFE ZONES: PROJECT SUMMARY

Slow Zones, Safe Zones is a collaborative initiative between the Vietnamese government, AIP Foundation, and international stakeholders to reduce road deaths and injuries among children. From 2018-2020, the program incorporated interventions focused on speed reduction around schools:

Constructing **tailored school-zone modifications** to reduce speed and improve pedestrian safety at target schools.

Implementing a **public awareness campaign** to improve public knowledge on speed reduction practices.

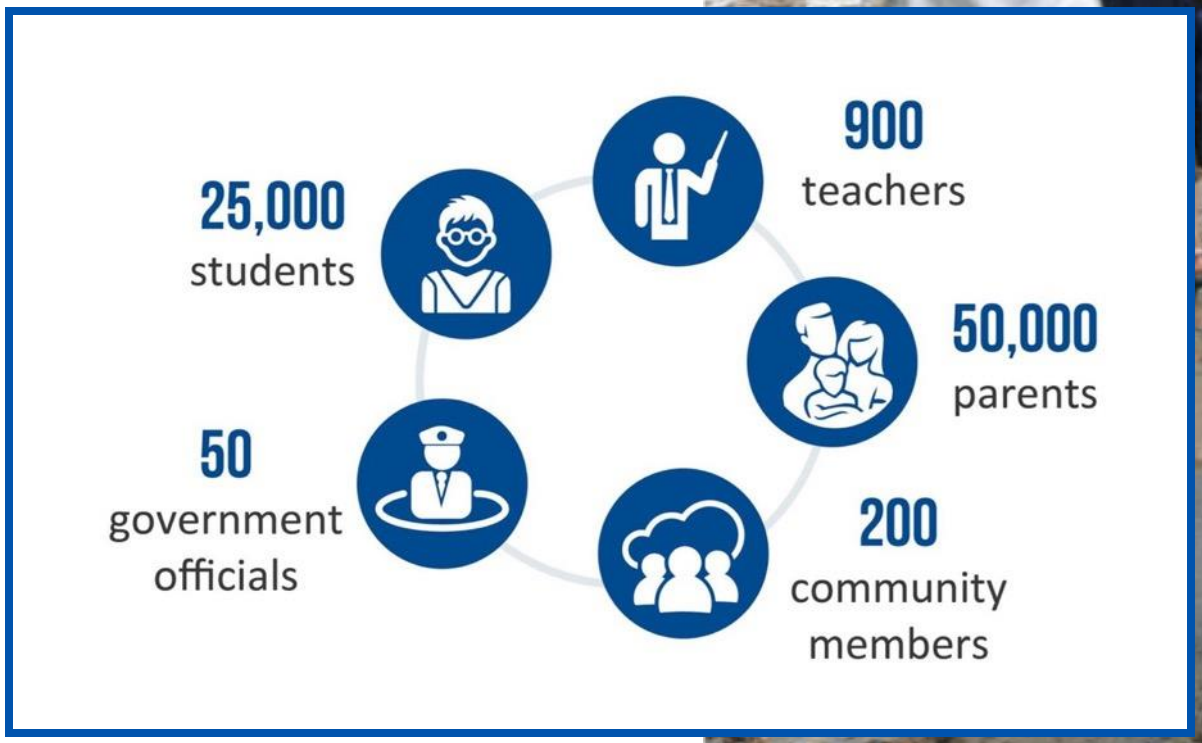
Developing and piloting a **nationally-applicable road safety e-curriculum** to improve the quality of road safety education.

Enforcing reduced speed limits in target school zones at the local level among target schools.

Collaborating with the Vietnamese government to **strengthen speed reduction legislation in school zones**.

SLOW ZONES, SAFE ZONES:

BENEFICIARIES



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SLOW ZONES, SAFE ZONES: PRE-INTERVENTION

The photo below was taken at one of our project sites in Gia Lai province, Vietnam prior to our interventions in 2017. The school is located along a provincial road and exposes pedestrians and students to numerous risks as outlined below:

Lack of safe pedestrian infrastructure:

- Sidewalks
- Crosswalks

No national designation for school zone speed limits

No school zone signage

Lack of speed-calming road infrastructure:

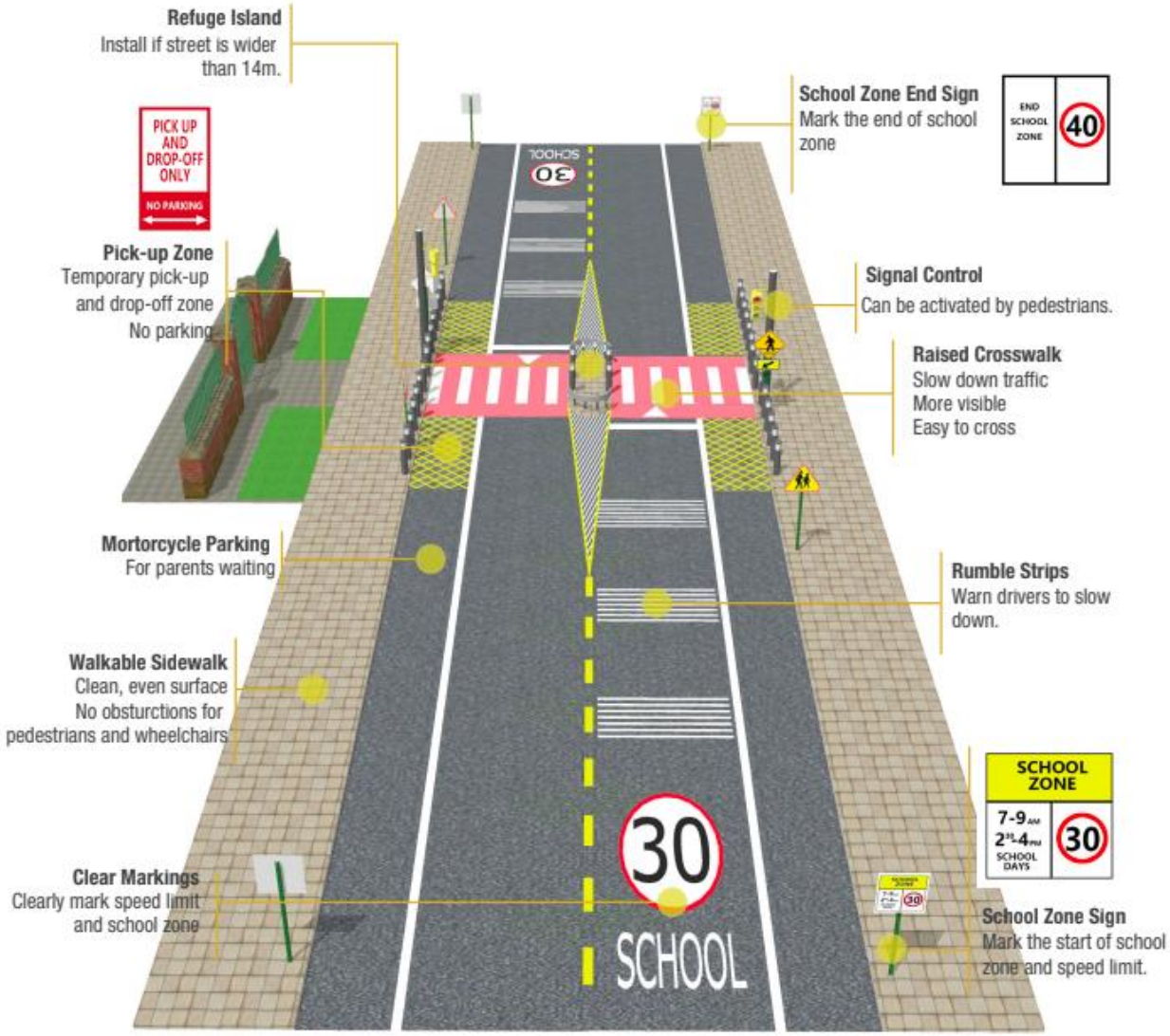
- Speed Bumps
- Speed Limit Signs

★★

STAR RATING FOR SCHOOLS iRAP

SLOW ZONES, SAFE ZONES : SAFE SCHOOL ZONES

According to the World Resources Institute, the following model contains the minimum requirement for safe school zones.



SLOW ZONES, SAFE ZONES: ENVIRONMENTAL MODIFICATION PROCESS

ASSESSMENT

- Utilized the iRAP SR4S application to assess safety of road infrastructure at project sites
- Established a Working Committee and organized meetings to develop a plan for infrastructure modifications
- Obtained approval from the Department of Transport to install the modifications

MODIFICATION

- Installed environmental modifications based on school zone assessment and design plan of road safety engineers (i.e. traffic warning lights, school zone signs, speed limit signs, etc.)

EVALUATION

- Conducted a post-assessment using the iRAP SR4S application
- Conducted a post-assessment to measure changes in pedestrian and driver behaviors

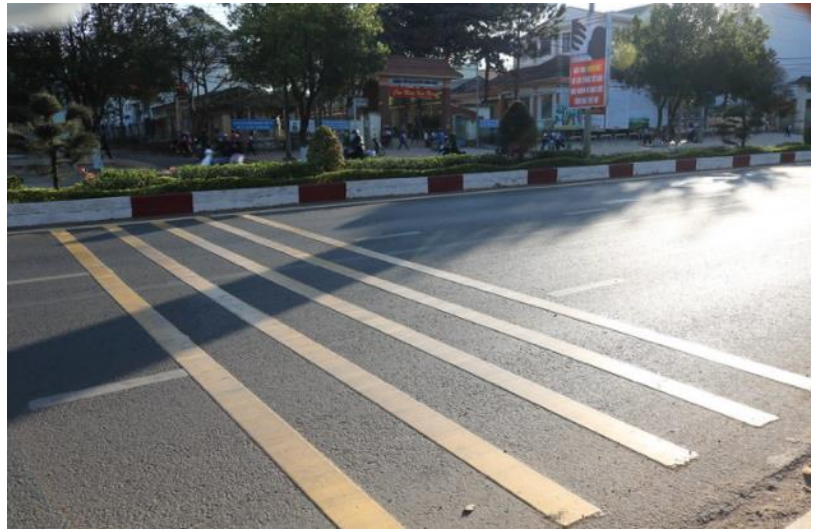
SLOW ZONES, SAFE ZONES: SAFE SCHOOL ZONES

This photo was taken after infrastructure modifications were installed through the collaboration and co-investments from the provincial government and private sector.

A post-assessment of the site using the iRAP Star Rating for Schools application found that the school had improved from a 2-star to a 5-star classification.

SLOW ZONES, SAFE ZONES : SAFE SCHOOL ZONES

The initiative installed low-cost, sustainable infrastructure around target schools to improve pedestrian walkability and reduce speed.



SLOW ZONES, SAFE ZONES: PUBLIC AWARENESS CAMPAIGN

To complement the environmental modifications, we organized a series of public awareness raising activities to educate the public on the importance of speed reduction in school zones.

TELEVISION PSA: *THE WHEEL*

BILLBOARDS AND BANNERS

PHOTO CONTEST

RADIO PSA

VOV1

FLYER DISTRIBUTIONS

SLOW ZONES, SAFE ZONES: SPEED ENFORCEMENT CAMPAIGN

The traffic police of Pleiku City conducted 2 campaigns on speed enforcement around the school zone during the student's arrival and departure time.

Time Frames:	Morning: 6:00 – 7:00 & 10:30 – 11:15 Afternoon: 12:15 – 13:00 & 16:30 – 17:30
Phase 1: **April 22 – June 30**	• 1,315 inspections • 69 speed violations
Phase 2: **September 23 – December 31**	• 4,615 inspections • 126 speed violations

SLOW ZONES, SAFE ZONES : POLITICAL WILL AND INTER-AGENCY COORDINATION

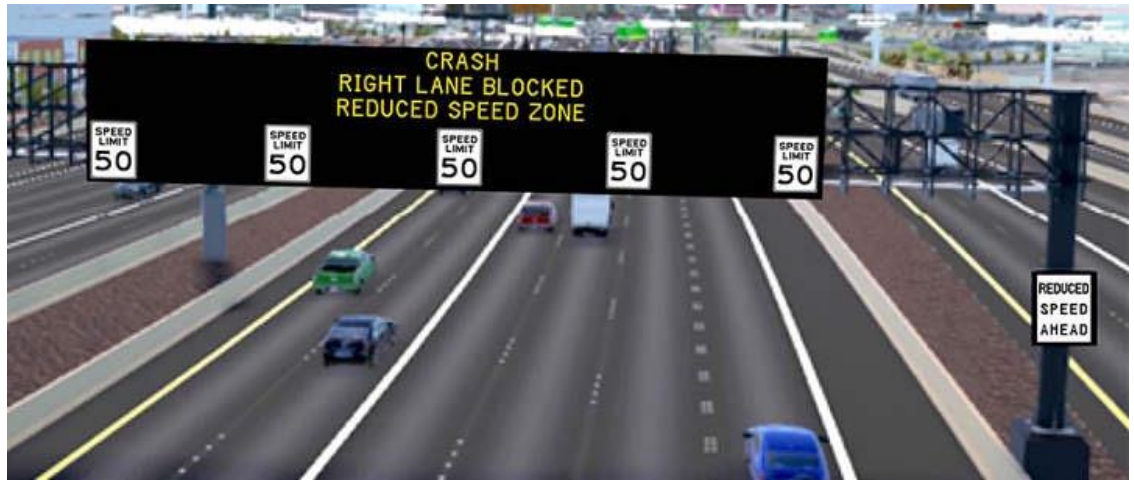
The initiative included a diverse consortium of public, private, non-profit, and philanthropic stakeholders; however, it was the commitment, leadership, and coordination of the consortium's represented government agencies that drove project progress forward.

Through the initiative, an inter-agency Working Committee was convened on a quarterly basis to:

- Assign departmental leads and define agency roles to support with project implementation
- Review project deliverables (i.e. road modification plans, e-curriculum) and provide feedback prior to requests for formal approval
- Receive updates on project outcomes/outputs to assess any opportunities for follow-up actions or discussions around policy improvements.

Working Committee Agencies: Gia Lai Traffic Safety Committee, Gia Lai Department of Education and Training, Gia Lai Provincial Police, Pleiku City Police, Pleiku City Bureau of Education and Training

A convening of the inter-agency Working Committee under Slow Zones, Safe Zones to review various project initiatives; including the nationally-applicable road safety e-curriculum developed under the project.



SLOW ZONES, SAFE ZONES : POLITICAL WILL AND INTER- AGENCY COORDINATION

2019: Vietnamese government passes **Circular 31**, requiring that: installation of **speed signs must be based on the actual situation of the road sections** and routes on traffic infrastructure, on the flow, types of vehicles and the time of day" (In Clause 1, Article 10).

DYNAMIC SPEED LIMITS

- Adjustable to unexpected and changing situations such as traffic volume, time of day, weather, crashes – fitted to circumstances
- Allows road authorities to make adjustments accordingly without time demanding procedures
- Only when needed: no unnecessary delays for drivers
- Generally more understandable by road users: better acceptance of speed limits

Source: Transport Research Arena Europe

SLOW ZONES, SAFE ZONES: RESULTS

Prior to the installation of our school zone modifications, some vehicles were recorded at speeds of 70-80 km/h. The following statistics below represent a selection of post-intervention results from across the various objectives:

Average driving speeds at target schools were reduced by as much as **18-21 km/h**.

Self-reported student crashes at target sites decreased from **34.1% to 30.4%.**

Respondents correctly identified the current speed limit across all target sites increased from **15.9% to 65.8%.**

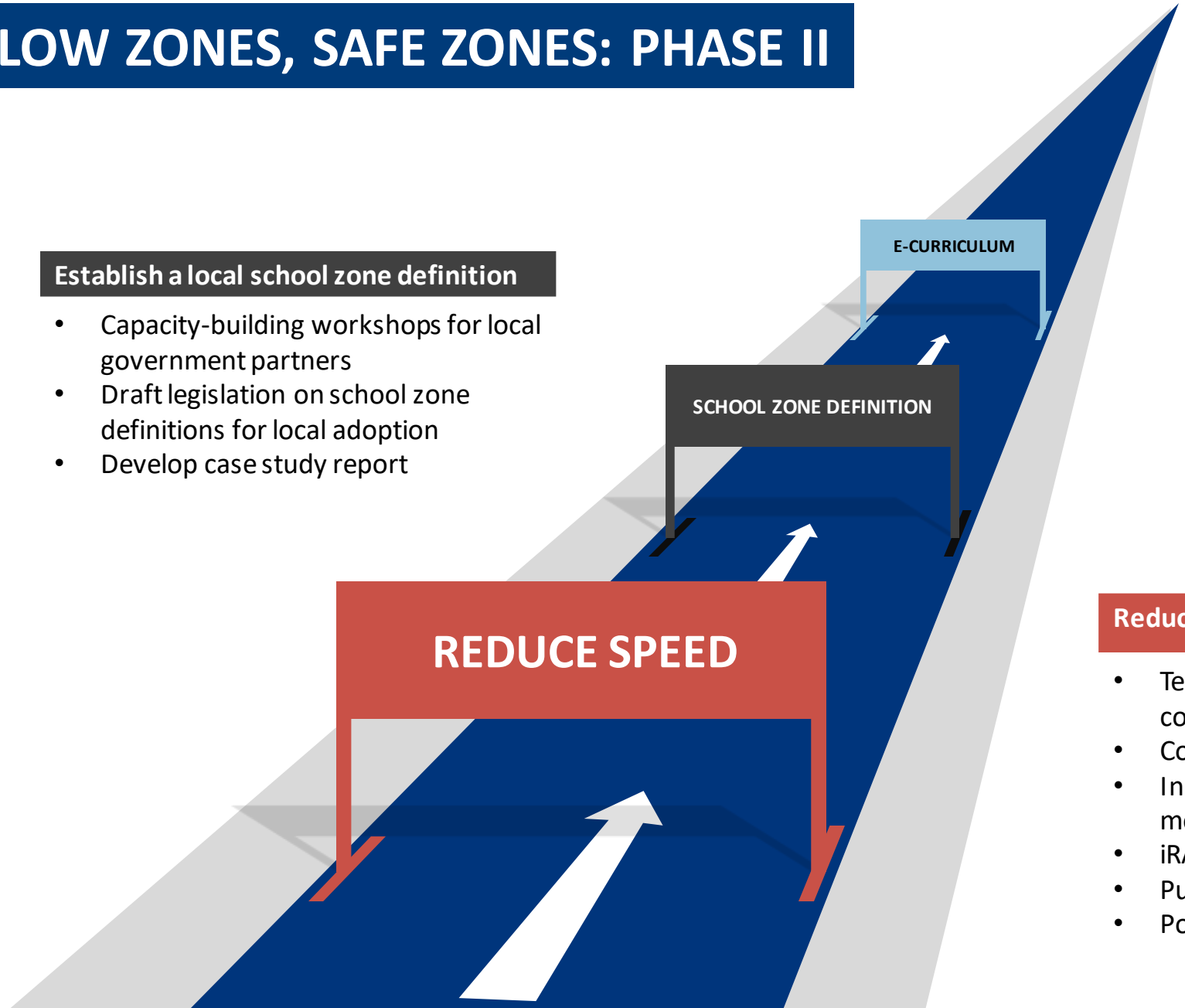
Co-funding from the provincial Gia Lai Traffic Safety Committee in the amount of **17,000 USD** was invested into installing environmental modifications at 26 additional primary schools, following the successful results of the pilot modifications.

All target schools achieved a 5-star rating from the iRAP SR4S assessment tool following the installation of environmental modifictions.

CHALLENGES

1	Limited evidence-base for speed reduction in school zones in the Vietnamese context
2	Lack of adequate resources to continuously enforce speed reduction efforts
3	Timeline of approval process to reduce speed limits in target areas

SLOW ZONES, SAFE ZONES: PHASE II



Establish a local school zone definition

- Capacity-building workshops for local government partners
- Draft legislation on school zone definitions for local adoption
- Develop case study report

Scale pilot testing of e-curriculum for national adoption

- Test e-curriculum across Vietnam (North, Central, and South)
- Teacher trainings
- Focus group discussions
- Explore options for national adoption

Reduce speed at 30 remaining city schools

- Technical Steering Committee coordination
- Community listening sessions
- Installation of speed-calming modifications
- iRAP SR4S assessments
- Public awareness campaigns
- Police enforcement campaigns

KEY TAKEAWAYS

School zone safety is built upon community education, pedestrian-focused infrastructure, and proper legislation and enforcement.

Proactive government leadership, commitment, and interagency coordination are key foundations to sustainable reform.

Reducing speed in school zones to 30 km/h is a proven solution to reducing fatalities and injuries.

THANK YOU

CONTACT US

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