WEBINAR
Enabling Safe Commutes for School Children: Case of Rohtak, Haryana

Tuesday June 25th | 3:00 – 4:00 PM (IST)

Vaibhav Kush - Project Associate, WRI India
Child-friendly City?
“A Good City is one in which children can grow and develop to the extent of their powers; where they can build their confidence and become actively engaged in the world; yet be autonomous and capable of managing their own affairs.”

– Kevin Lynch

“The ideal notion of child-friendliness guides cities to envision and develop sustainable environments where young citizens can live, grow up, develop, socialise and express themselves in the fundamental fulfilment of their rights.”

– Arab Gulf Fund for Development (AGFUND)

“...it is a city, town or community in which the voices, needs, priorities and rights of children are an integral part of public policies, programmes and decisions.”

– UNICEF Child Friendly Cities Initiative
Recreational Environment

Health & wellbeing

Protection from abuse / exploitation

Access to (quality) education

Safe, Secure & ‘Green’ Spaces
1.35 million people die every year due to road traffic crashes

8th leading cause of death for all age groups

SOURCE: WHO GLOBAL STATUS REPORT ON ROAD SAFETY (2018)
81,760 children aged between 5 and 14 die every year

1st cause of death for persons aged 5 - 14

SOURCE: WHO GLOBAL STATUS REPORT ON ROAD SAFETY (2018)
ROAD SAFETY SCENARIO

148,000 people die every year due to road traffic crashes

1st cause of accidental death for all ages

SOURCE: ACCIDENTAL DEATHS & SUICIDES IN INDIA (NCRB 2015), CENSUS (2011)
CHILD ROAD SAFETY SCENARIO

15,600 children below 18 years died due to road traffic crash
(NCRB Accidental Deaths & Suicides in India 2015)

9,400 children below 18 years died due to road traffic crash
(Nissan & SaveLIFE Foundation 2017)

SOURCE: ACCIDENTAL DEATHS & SUICIDES IN INDIA (NCRB 2015)
STUDY ON REAR SEAT BELT USAGE & CHILD ROAD SAFETY IN INDIA (NISSAN, SAVELIFE FOUNDATION, 2017)
Road crash fatalities per 100,000 population

HARYANA

TAMIL NADU 21.1
HIMACHAL PRADESH
GOA
TELANGANA
HARYANA 19.2
KARNATAKA
PUNJAB
CHHATTISGARH
RAJASTHAN
GUJARAT
INDIA (Average) 11.4

5,000 Road Traffic Fatalities
5% In vicinity of schools

HARYANA VISION ZERO
NO MORE DEATHS.
The Safer Commute for School Children – Rohtak, Haryana
In 2016, 521 road crashes led to 241 deaths in District Rohtak

As per Police FIRs - 123 road crashes led to 137 deaths in city in 2016

Estimated population in 2016 = 400,000

Municipal Area = 115 km²

Population below 18 years of age = 36%

About 78,000 students enrolled in schools

Source: Graphics based on National Crime Records Bureau ADSI 2015 data
PROJECT VISION

To transform Rohtak into a city where children can travel safely on the road, either by foot, cycle or transit, and irrespective of whether they are accompanied by an adult or on their own.
OBJECTIVES

1. Reduce crash risk around 5 schools

2. Reduce crash risk for children in Rohtak
Objective 2: To influence a reduction in the crash risk for children across Rohtak by the end of two years

Strategy 2.1
- Workshops for Engineers
- Workshops for Traffic Police
- Capacity building of city officials
Strategy 2.1 – Capacity Building of City Officials

4 workshops
6 departments
153 participants
WORKPLAN

Influence community on prioritizing child road safety

Workshop with school children, community etc.

Community campaigns through Raahgiri

Media outreach

Strategy 2.2
Activity 2.2.1 – Workshops with School Children, community, etc.

2 workshops
350 participants
Activity 2.2.2 – Community Campaigns through Raahgiri

Awareness campaigns during Raahgiri Days and on special occasions like World Remembrance Day, Road Safety Week, etc.
Rohtak selected for school kids' safety project

Rohtak, April 26
Rohtak has been selected for the ‘Safer commute for schoolchildren’ project by Swiss Foundation Botnar as part of its Child Road Safety Challenge. The project, convened by the Indian chapter of the World Resources Institute (WRI), in partnership with Rohtak police, MC and NASSCOM Foundation, is slated to kick off from May 1.

Rohtak SP Pankaj Nain disclosed here on Thursday that Rohtak was among the 12 cities across the world and two from India which have been selected for the project.

“The Botnar Foundation will provide a financial assistance of 12 crore over a period of two years to WRI India for providing evidence-based knowledge and technical support, conducting training for the municipal officers and traffic police personnel and creating awareness. — TNS

The Tribune Fri, *(Harayana Edition)*

Rohtak police giving workshop on safer commute in Jhajjar, Alwar

RUSH HOUR

Rethink road design, enforce rules to make roads safer for children

Killer Roads

13 children killed in road accidents in 2018

Make our roads safe for children

Why is road safety an important concern?

Roads have become a huge concern for many children and their families.

Road safety is important because it helps prevent accidents and injuries.

The most critical aspect of road safety is driver training and education.

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Objective 1: To reduce crash risk of 5 school districts in Rohtak by the end of two years

Strategy 1.1
Develop partnership with 5 school districts
Selection of school districts
Focus group discussions
WORKPLAN

Activity 1.1.1 - Selection of School Districts

Selection Parameters:

- Type of School – (Private / Govt. / Aided/ KV / Navodaya / Other)
- Total Enrollment
- Students below Grade 5
- Students residing within 1 km of school
- Willingness of the schools and their past initiatives around road safety
- Proximity to existing blackspots identified by Police / HVZ
- Proximity of school to Railway line
WORKPLAN

Activity 1.1.1 - Selection of School Districts

Saini Sr. Sec. School
Total = 602
Below 5 = 90

MDN Public School
Total = 1593
Below 5 = 626

Swami Nitanand School
Total = 1050
Below 5 = 200

Model School
Total = 3407
Below 5 = 1706

SRS Public School
Total = 1086
Below 5 = 430

7738
Total direct beneficiaries
WORKPLAN

Activity 1.1.2 – Focus Group Discussions

What?

• What does “safety” mean to the project beneficiary?

Who?

• Students
• Caretakers (Parents + Teachers)
## WORKPLAN

**Activity 1.1.2 – Focus Group Discussions**

### School Profiling

<table>
<thead>
<tr>
<th>School Type</th>
<th>School Type</th>
<th>School Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model School</td>
<td>SRS School</td>
<td>Saini School</td>
</tr>
<tr>
<td>Private School</td>
<td>Private School</td>
<td>Aided School</td>
</tr>
<tr>
<td>Students generally</td>
<td>Students from</td>
<td>Students from poor</td>
</tr>
<tr>
<td>from ‘well-off’</td>
<td>middle-class</td>
<td>families.</td>
</tr>
<tr>
<td>families</td>
<td>families</td>
<td></td>
</tr>
</tbody>
</table>

- Model School: Private School, Students generally from ‘well-off’ families
- SRS School: Private School, Students from middle-class families
- Saini School: Aided School, Students from poor families.

- 45 minutes per session
- 3 - 4 Sessions a day
- 9 Sessions over 3 days
WORKPLAN

Activity 1.1.2 – Focus Group Discussions

Participant Profiling

Students’ Profile
- Age
- Gender
- Mode of Travel to School

Parents’ Profile
- Child studying below Grade 6
- Equal number of fathers & mothers

Teachers’ Profile
- 1 each from Nursery, Primary, Middle, Secondary, Sr. Sec.

1 Boy + 1 Girl each from:
- Grades 6, 7, 8 (Middle School)
- Grades 9, 10 (Secondary)
- Grades 11, 12 (Sr. Secondary)
- Total 6 students per school

Total 3 Schools = 18 students
WORKPLAN

Activity 1.1.2 – Focus Group Discussions

Conduct of the Sessions:

• Ice breaking session
• Consent Forms

• Interactive session
  – How far do you live from School?
  – How do you travel to school?
  – What are the challenges you face when you travel in the city?
## WORKPLAN

### Activity 1.1.2 – Focus Group Discussions

#### Analysis

<table>
<thead>
<tr>
<th>Students</th>
<th>Parents</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>Attitude</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Fear of other road users</td>
<td>2-Wheelers encroach walking space for driving &amp; parking</td>
<td>Wrong side driving</td>
</tr>
<tr>
<td>Opportunities</td>
<td>No regard for rules by</td>
<td>Rash driving by 2-wheelers</td>
</tr>
</tbody>
</table>

#### Key Messages Identified:

- There is a fear of travelling on roads, especially among children.
- It is a general belief that the Traffic Police is responsible for ensuring road safety.
- Motor Vehicle drivers in general have poor driving skills and lack road etiquettes.
- Infrastructure for walking and cycling is required.
- Under-age driving is prevalent.
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Assess mobility pattern & risk profile for school children

Strategy 1.2

Transport data collection & analysis

Survey of all students of the 5 selected schools

City-wide crash data collection for overlay on identified high risk areas

Road safety inspection of high risk areas defined in focus group discussions
WORKPLAN

Activity 1.2.1 – Transport Data Collection & Analysis

- Mobility Plan / Master Plan
- Vehicle registration data
- Land-use and Road Network
- Location of schools, parks, etc.

Activity 1.2.3 – City-wide crash data collection for overlay on identified high risk areas

- Crash + Fatality Data
  - From Police
  - From HVZ
- Injury Reporting from Schools

Challenges

- Biggest challenge has been unavailability of child-specific data – Age not mentioned in FIRs
- Injury Reporting made mandatory in selected 5 schools – formats shared, but not maintained
WORKPLAN

Activity 1.2.2 – Survey of all students of the 5 selected schools

Route Mapping
WORKPLAN

Activity 1.2.2 – Survey of all students of the 5 selected schools

Mobility Mapping

- Home / Tuition Zones
  - Grouping colonies on the basis of distance from school

- Mode of Travel to/from School
  - Based on responses received in FGDs, Techniques 1 & 2 and observation

- Destination after school

- Underage Driving
WORKPLAN

Activity 1.2.2 – Survey of all students of the 5 selected schools
## ANALYSIS

### Average Trip Length (for all trip purposes)

<table>
<thead>
<tr>
<th>Distance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 2 km</td>
<td>68%</td>
</tr>
<tr>
<td>2 - 5 km</td>
<td>23%</td>
</tr>
<tr>
<td>&gt; 10 km</td>
<td>2%</td>
</tr>
</tbody>
</table>

### Location of Home from School

- **Within 2 km**: 63%
- **More than 2 km**: 37%

### Mode of Travel to School

- **Walking**: 12%
- **Bicycle**: 12%
- **Motorcycle**: 15%
- **Rickshaw**: 16%
- **Bus**: 27%
- **Car**: 7%
- **Tricycle**: 2%

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Primary Survey (2019)
ANALYSIS

Concentration of Home Zones for students living within 2 kms of their respective schools

Legend
% of Total Surveyed
- 0.0% - 1.0%
- 1.1% - 2.0%
- 2.1% - 3.0%
- 3.1% - 4.0%
- 4.1% - 5.0%
- 5.1% - 6.0%
- 6.1% - 7.0%
- 7.1% - 8.0%

Primary Survey (2019)
ANALYSIS

45% students said they drive / ride vehicles

75% students said they know how to drive / ride

76% Students travel within 2 kms of their school

21% Students use a different mode of travel after school
WORKPLAN

Improve road infrastructure & traffic management to mitigate crash risk

Strategy 1.3

Selection of priority locations

Detailed survey of identified locations

Preparation of preliminary designs

Trial of preliminary designs

Installation of soft infrastructure

Preparation of final designs

Permanent execution

Analysis of Impact
Activity 1.3.1 – Selection of Priority Locations

13.6 Kilometers

11 Major Intersections
Activity 1.3.2 – Detailed Survey of Identified Locations

Total station survey, traffic and pedestrian volume counts, speed survey,
Activity 1.3.2 – Detailed Survey of Identified Locations
Activity 1.3.3 – Preparation of Preliminary Designs
Activity 1.3.3 – Preparation of Preliminary Designs

1st Priority Location Identified – 150m from MDN School

Existing

Area of Intersection = 1550 sqm.
Crossing Distance = 60 m

Proposed

Area of Intersection = 150 sqm.
Crossing Distance = 15 m
Activity 1.3.6 – Preparation of final designs & traffic management solutions

Design Interventions

- Low-height vertical separators between motorized and non-motorized users. (Railings, hedges, etc.)

- Painting signages, and other information on road surface for easy viewing by children

- Lower kerb heights
Activity 1.3.6 – Preparation of final designs & traffic management solutions

Traffic Management & Zonal Interventions

500m before/after school boundary
• 20 km/hr speed limit

Assisted pedestrian crossing

Different pick and drop timings for older and younger students
CHALLENGES

• Government
  – Officials getting transferred
  – Priorities
  – Lack of resources –
    • barricades

• Schools
  – Overburdened students & teachers
  – Staff / Resource crunches
  – Understanding of younger students

• Data
  – Child-specific data
    • Fatalities
    • Injuries
    • Incidents involving children
    • Commute pattern
    • Challenges faced
QUESTIONS