



ROAD SAFETY FOR CHILDREN AND ADOLESCENTS IN PUNE DISTRICT AND URBAN AREAS



Report of the Visioning Workshop held on
9 November 2023 under the aegis of the Pune District
Road Safety Committee

November 2023

CEE

Centre for Environment Education



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Road Safety for children and adolescents in Pune district and urban areas: Report of the Visioning Workshop held on 9 November 2023 under the aegis of the Pune District Road Safety Committee

In partnership with the State Disaster Management Authority, Pune Municipal Corporation, Pimpri Chinchwad Municipal Corporation, and Pune District Administration.

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Abbreviations

ADAG – Additional Director General of Police	NSS – National Service Scheme
ADSI – Accidental Deaths and Suicides in India	PTA – Parents Teachers Association
BIGRS – Bloomberg Philanthropy Initiative for Global Road Safety	PCMC – Pimpri Chinchwad Municipal Corporation
CEE – Centre for Environment Education	PDA – Prasanna Desai Architects
CRS – child restraint system	PMC – Pune Municipal Corporation
DRSC – District Road Safety Committee	PMPML – Pune Metropolitan Parivahan Mahamandal Limited
DSTC – District School Transport Committee	PMRDA – Pune Metropolitan Regional Development Authority
EMRI – Emergency Management and Research Institute	PWD – Public Works Department
FIR – First Information Report	RIF – RISE Infinity Foundation
GDCI – Global Design City Initiative	RSP – Road Safety Petrol
GIS – Geographical Information System	RTE – the Right of Children to Free and Compulsory Education Act 2009
GPS – Global Positional System	RTO – Regional Transport Office
GRSP – Global Road Safety Partnership	SDGs – Sustainable Development Goals
GTS – Global Traffic Solutions	SDMA – State Disaster Management Authority
IPC – Indian Penal Code	SKF – Safe Kids Foundation
iRAD – Integrated Road Accident Database	SMC – School Management Committee
IRC – Indian Road Congress	SOP – Standard Operating Procedure
ITC – Infant, Toddler and Caregiver	STC – School Transport Committee
ITDP – Institute for Transportation and Development Policy	STIP – School Transport Improvement Plan
MoRTH – Ministry of Road Transport and Highways	UDCPR – Unified Development Control and Promotion Regulations
MSMES – Micro, Small and Medium Enterprises	UNICEF – United Nations Children’s Fund
MDR – Major District Road	USDG – Urban Street Design Guideline
MVA – the Motor Vehicles Act 1988	VRU - vulnerable road user
NCC – National Cadet Core	WRI – World Resource Institute
NCRB – National Crime Records Bureau	ZP – Zilla Parishad
NGO – Nongovernment organisation	
NHAI – National Highways Authority of India	

1. INTRODUCTION

Unacceptable and Avoidable Deaths

Children and adolescents form the largest vulnerable road users (VRU) group with more than 31% of India's population i.e., 444 million in the age group of below 18 years and 253 million in the age group of 10 to 19 years (UNICEF, 2022). Although age disaggregated data is not available for this group, according to the Ministry of Road Transport and Highways (MoRTH) Road Accidents in India reports 45,315 children lost life in such accidents in five years from 2017 to 2021 in India. Whereas the National Crime Records Bureau (NCRB) Accidental Deaths and Suicides in India (ADSI) reports 77,820 children age below 18 years were killed in road crash fatalities from 2017 to 2021. This means, about 40 children's lives are lost every day. ***These deaths are avoidable.***

Safer Roads - Global and National Commitment

With learnings and output from the previous road safety decade, the UN General Assembly has declared 2021-2030 as the second "Decade of Action for Road Safety" with the target of preventing at least 50% of road traffic deaths and injuries by 2030 through improving road safety.

The Sustainable Development Goals (SDGs) also refer to road safety:

- SDG 3 asks to ensure healthy lives and promote well-being for all at all ages and target 3.6 is to halve the number of deaths and injuries from road accidents by 2030.
- SDG 11 for making cities and human settlements inclusive, safe, resilient, and sustainable has target 11.2 to provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons, by year 2030.

India has reaffirmed its commitment internationally to the goal set under the UN Decade of Action of drastically reducing road accidents by the year 2030 by ratifying the "Stockholm Declaration." The Decade of Action for Road Safety calls for "Rethink Mobility" to reduce the road traffic deaths and injuries by half. Rethinking mobility is a global priority to build better, safer, more resilient, efficient, and sustainable transport systems for all.

In the countries that have adopted the "Safe Systems approach" to road safety, there is a sustained reduction in the number of deaths in road crashes. The "Safe Systems approach" is based on three principles, namely - people make mistakes, people are fragile, and the system should be forgiving. ***The globally accepted Safe Systems Approach takes us away from blaming the driver, and road users, to designing and implementing safer systems.***

The Safe Systems approach has elements such as 'Safe Users', 'Safe Vehicles', 'Safe Speed', 'Safe Road Environment' and 'Emergency Response.' It further includes aspects such as leadership, legislation, promoting, target setting, funding, coordinating monitoring and evaluation, research and development and transferring knowledge for improving road safety.

Road safety for children and adolescents is associated with behavioural risk factors for safe users, infrastructure and environment for safe roads, safe vehicle standards and emergency response service in the event of a crash. The five key behavioural risk factors in road safety are speed, helmet, seat belt, child restraint system (CRS), drink and drive and in the context of adolescents, underage driving, and risk-taking behaviour, and it can be influenced by systems design and management. The Government of India has taken several measures to strengthen the legislation for improving road safety. However, implementation lies at the local level and needs engagement of multiple stakeholders.



Figure 1 Safe Systems Approach (CEE)

NON-MODIFIABLE RISK FACTORS			MODIFIABLE RISK FACTORS		
Age	Sex	Size	Risk taking	Lack Experience	Peer Pressure
Young child do not use road or react to traffic same way as adult	As child get older, more boys are involved in road crash than girls	Child is difficult to see in traffic. They have difficulty seeing above vehicles and infra	Adolescents begin to take risks, seek experiences, ex. alcohol. More common in boys.	Inexperience among novice drivers increases risk of crash occurring.	Peers are most important for teenagers. Often led by what is 'cool', not safe.
Cognition	Development		No safety Equipment	Poor Infrastructure	Unsafe Vehicles
Young child find road traffic situations extremely complex to navigate	Their developmental immaturity and inability to assess risks places children at higher risk of road traffic crashes. Their concentration span is much shorter and have difficulty focusing on more than one issue at a time.		Not using helmet, CRS or seat belt puts children at risk of injuries in case of crash.	Lack of separate lanes for walk & cycle results in vulnerable children	Vehicles without safety features such as pedestrian crumple zones place them at risk.
Hearing and seeing			Lack of knowledge	Inadequate post-crash response	
Young child have difficulty discerning what direction sound is coming from. They have difficulty judging distances between themselves and other vehicles when both are in motion.			Need to be taught basic laws & rules of road & risks	Lack of appropriate prehospital, hospital & rehabilitative facilities for children place them at greater risk.	

Figure 2 Extract from UNICEF, Child and Adolescent Road Safety in East Asia and Pacific nations

Effective road safety interventions	
Intervention	Estimated effectiveness
30 km/h speed zones	70% reduction in fatal child pedestrian injuries
Sidewalks and walking paths	40%–60% reduction in casualties
Separated bike lanes	44% fewer bicycle deaths in cities
Bicycle helmets fitted and worn properly	60% reduction in serious head injuries
Bicycle helmet legislation	45% reduction in rates of bicycle-related head injuries
Motorcycle helmet use	69% reduction in the risk of head injury
Child passenger restraint use	71%–95% reduction of serious injuries for rear-facing restraints
Seatbelts used appropriately	40–50% reduction in the number of deaths

Figure 3 Extract from UNICEF (2022) Technical Guidance for Child and Adolescent Road Safety

Strengthening road safety for children and adolescents in Maharashtra

In 2023-24, UNICEF Maharashtra office has taken up an initiative with RISE Infinity Foundation and the Centre for Environment Education (CEE) to improve road safety for children and adolescents in Pune district. The project objective is to develop a district road safety action plan for Pune district focusing on children and adolescents, demonstrate behavioural change aspects and build capacity of the key institutions and their stakeholders in children and adolescents road safety. It aims to gather experiences and share at the state and the national level in improving road safety for children and adolescents. The major outcome would be strategic and policy recommendations based on experience, field trials and demonstrations.

Towards adopting the “Safe Systems Approach” in Pune, Pimpri-Chinchwad, Pune District the project seeks the following:

- Strengthening the ecosystem and multi-stakeholder’s collaborations for the safety of children and adolescents
- Identifying the roles of different institutional stakeholders
- Building on existing experiences and capabilities of street design already taken up by the district administration and municipal authorities
- Promoting convergence for road safety with public health and education department for wellness and capacity building initiatives
- Activating institutional arrangements within the school community such as the School Management Committee, School Transport Committee and Bal Sansad for road safety addressing the mandate of the School Health and Wellness programme
- Working with the adults responsible for the well-being of children and adolescents in lieu of directly instructing children to follow road traffic rules, etc.

The following activities will be undertaken to achieve these objectives:

- Rapid assessment of road safety with Children and Adolescents’ perspective in the Pune district with urban and rural geographies

- Preparation of a road safety action plan for the district with Children and Adolescents focus
- Development of training and behaviour change communication module,
- Trainings of master trainers on children and adolescents' road safety and behaviour change communication and practice,
- Demonstrations of Safe Systems, behavioural and infrastructural aspects to improve road safety in and around schools for children and adolescents at three sites i.e. one each in urban (PMC and PCMC) and rural settings,
- Deliberations to formulate Advocacy and Policy recommendations with submission to the state government.

A rapid assessment of road safety scenarios with children and adolescents' perspectives will be done for the district. The assessment will help in mapping the existing situation with regard to road accidents, black spots identified by traffic police near schools, implementation of safe School Zones, need for improvements in infrastructure for children and adolescents' road safety, enforcement of behavioural risk factors, underage driving, emergency response system and trauma care and rehabilitation facility, with the need to strengthen these and communication about the trauma care centres, etc. It will further assess access to schools, playgrounds, public transport, public places and public institutions with regard to safety for children and adolescents.

A road safety action plan will be developed based on the assessment for the district. The action plan will identify the measures required to be taken as per the assessment for improving the road safety along with road safety governance in the district for its implementation. The action plan will also identify the mechanism and agencies to implement along with the timeframe.

A demonstration will be undertaken at or around one school each in PMC, PCMC and Pune district (rural) to test some of the infrastructure, behavioural and institutional measures in the action plan. The learning from the demonstration will be assessed for its effectiveness and documented and inputs for policy inclusion will be identified for road safety action plan and shared at the state government level for implementation. This can be adopted in the State Action Plan for Road Safety focusing on children and adolescents' road safety.

Master trainers and concerned personnel from key institutions and departments will be trained and oriented on road safety and behaviour change communications along with the institutional requirements based on specifically designed training and communication modules. This will sensitise and build their understanding about the need and measures for children and adolescents' road safety.

The key stakeholders for the project are State Disaster Management Authority (SDMA), Pune District Collector Office along with District Road Safety Committee, Pune Municipal Corporation (PMC), Pimpri Chinchwad Municipal Corporation (PCMC), relevant department such as Public Health Department, Emergency services, State Transport Departments, RTOs, Traffic Police, Public Works Department (PWD), Education Departments, Highways Authority, Pune Metropolitan Regional Development Authority (PMRDA), Pune Metropolitan Parivahan Mahamandal Ltd. (PMPML), and other key stakeholders including road safety experts, auditors and research organisations, civil society organisations, NGOs, school community including teachers, parents and school management, architects, urban planners and designers, transport service providers and media.

Visioning Workshop on Road Safety for Children and Adolescents in Pune District and Urban Areas

The project inception includes a Visioning Workshop with the key stakeholders including from Pune District authority and departments, PMC and PCMC to:

- Introduce the project objectives,
- Map key issues in road safety for children and adolescents,
- Understand the views of key concerned departments, ongoing programmes and synergies,
- Develop a shared vision to strengthen road safety for children and adolescents in Pune district through concerted efforts,
- Gather inputs on strategies and actions to realise this vision, in line with national and state government policies and seeking convergence with existing programmes and schemes, where possible, and,
- seek support and inputs for the project.

The Visioning Workshop was organised on 9 November 2023. The workshop was facilitated by UNICEF, CEE, and RISE Infinity Foundation (RIF) in collaboration with the State Disaster Management Authority (SDMA), Pune District Collectorate, PMC and PCMC under the aegis of the Pune District Road Safety Committee (DRSC), on 9th of November 2023, at the VVIP Circuit House, Green Building, Pune with support from the Public Works Department.

The report of the workshop is presented in the following sections.

2. CONTEXT SETTING AND KEYNOTE ADDRESS

CONTEXT SETTING

UNICEF, CEE, and RIF introduced the project objectives, the agenda and expectations from the visioning workshop. The key points of the presentation were:

- Children and adolescents' road safety is a major concern for the country with very high, increasing, and unacceptable situations depicted by the numbers of fatalities and injuries in this age group,
- Children cannot be treated as little adults and cannot be held responsible for their own safety on roads and needs special attention and measures to improve their safety,
- The Safe Systems approach with multi-stakeholders' engagement are seen to be working in countries and places, where applied,
- Children and adolescents being more vulnerable due to the inherent risk factors associated with them, and form a large group, are focus of this project and the learnings from the project can be helpful at the state and the national levels,
- UNICEF has identified some effective road safety interventions for this vulnerable road user groups backed by global scientific evidence for the improvement of road safety of children and adolescents,
- The Government of India and other institutions are committed for reduction of road traffic injuries and fatalities with a defined target of halving road crash fatalities by 2030.

The project aims to draft a road safety action plan with specific focus on children and adolescents' road safety for Pune district, and demonstrate road safety improvements through institutional, infrastructural and communication with multi-stakeholders' involvement of "Safe Systems" approach.

Shri B N Bahir, Superintending Engineer, Public Works Department, Pune District and Member Secretary Pune District Road Safety Committee, gave further context to the workshop:

"I welcome all the members of the DRSC to this workshop on child road safety which has been arranged under the aegis of the DRSC and I thank everyone for their participation. We welcome this initiative for strengthening road safety for children. All the agencies are part of the DRSC and participate for the purpose of improving road safety. The DRSC has recently assessed black spots in the district and provided their feedback. The Chair of the DRSC has also written to the PMC and PCMC to form teams to assess the roads and list out the measures to be taken. I request the Chair, DRSC to provide guidance to the workshop."

KEYNOTE ADDRESS

Dr Rajesh Deshmukh, IAS

District Collector, Pune District and Chair, District Road Safety Committee, Pune

I welcome and thank all the stakeholders participating in this workshop, including PMC, PCMC, UNICEF, RIF, and CEE. Road safety for children is the need of the hour, and especially in Pune, due to the high level of motorization and speeds.

While we are developing an excellent road network, speeds are increasing and travel time is reducing, the number of vehicles is also increasing, but we see that the number of accidents is also increasing. We have roads like Samruddhi, and on Mumbai-Pune Expressway, we are also seeing an increase in the number of accidents. Even if some measures are being taken, we are not able to eliminate road accidents. For this a scientific approach is needed, and we cannot work in silos. If an assessment of road crashes is done, it reveals that a multi-dimensional approach is necessary to improve road safety and different agencies need to be involved. On locations such as the Katraj to Navale Bridge stretch, we visited several times, and NHAI, PMC, Police and Save Life Foundation which helped provide scientific inputs on road safety and were able to mitigate the accidents primarily by following a scientific approach. I mention this example to show that we must analyse the cause of crashes and address the issues.

After the workshop and information sharing and discussions, we will have a draft plan for road safety for children. In the workshop, each department should identify their specific roles and responsibilities. The highest number of accidents happen in the urban areas of Pune, even as compared to Mumbai. It is indeed a matter of deep concern for us as the population of Pune district is over 1.15 crore, and the number of vehicles is over 80 lakhs. In not only India, but in the Asia region, it is Pune that is seeing a very high rate of urbanisation and industrialization, with more than 6000 MSMEs and over 37 industrial areas and these also attract a lot of freight traffic, Pune has the highest number of two-wheelers and auto rickshaws.

How can we ensure that apart from measures such as proper road engineering, managing encroachments, and scientific traffic planning, that we are able to prevent traffic violations, and ensure self-discipline among drivers. We have tried several times to increase enforcement measures. However, whenever we tried, the media has not been supportive, saying first improve the conditions of roads and then ask the public to wear helmets. This needs to be addressed, and the understanding for why we are asking for these safety measures needs to be permeated through society, through this conference, and by developing approaches that involve parents to disseminate this understanding.

We are committed as the district administration to the cause of road safety, not only for children and adolescents, and for all. I extend my best wishes for the workshop and reiterate the district administration's commitment and all the concerned departments.

Link to the inaugural speeches <https://photos.app.goo.gl/rAs46jNiiEHB2Two6>



Figure 4 District Collector, Pune & Chair of Pune DRSC gave the Keynote Address

3. INPUTS ON CHALLENGES & SUGGESTIONS TO STRENGTHEN ROAD SAFETY FOR CHILDREN & ADOLESCENTS

WORKSHOP PROCESS

The workshop discussion was organized in plenary mode for setting the vision and to consider the status and improvements on the information base about road safety and risks. Next, facilitators gathered suggestions from participants in groups, with all groups providing their inputs on all topics:

- Safe conditions for children walking and cycling to school
- Preventing underage driving and risk-taking behaviour among adolescents
- Enabling a shift to walk, cycle and shared transport modes to school
- Safety of children as vehicle occupants (use of helmets, CRS)
- Emergency response

Considerations for rural areas and enforcement were also discussed.

1. VISION

Considering the national commitment to halve road crash fatalities by 2030, made by the Government of India and Hon'ble Union Minister of Road Transport and Highways, the Chair of the Pune District Road Safety Committee envisioned that Pune district should fully support this commitment and should aim to achieve at least the same target, if not more.

Accordingly, the vision for road safety of children and adolescents in Pune is:

“Halve the number of death and injuries from road accidents in Pune district by 2030 by implementing district-wide safe systems approach for road safety.”

2. INFORMATION BASE

This session discussed the information base available with regard to road traffic injuries and fatalities in Pune district including age disaggregated data for children and adolescents, causes of crashes, mapping of locations where crashes have happened, identification of black spots, and availability of this data on a platform for further analysis. Participants shared about present practice of reporting, data management and information about analysis initiatives undertaken by some of the organisations. Some challenges regarding data collection, reporting and analysis were also shared by the participants.

- The accident reporting is done by the traffic police as the First Information Report (FIR).
- There is limited scope and understanding regarding how the accident/crash reporting is done. Whenever a crash happens the first thing done is an FIR. Right now, FIR does not always acknowledge some details such as gender, age group, reason for accident, how the accident happened, etc. Sometimes in some areas it is done like in urban areas but in peripheral areas it

is not captured. SOPs or guidance on reporting of road crash and facilities as well as data management needs are not strengthened. Also, the person who collects the data in traffic police needs to be trained on accident/crash data collection.

- The actual reasons along with detailed information about victims of the accidents are not always mentioned properly in the accident/crash reports.
- The World Resource Institute (WRI) has done an analysis of FIR data in Bangalore. Wherein FIR data was analysed for more information. The FRI should collect gender information first, followed by the age group and the reason for the accident/crash i.e. whether it is a vehicle-to-vehicle collision or a crash where a vehicle has struck the footpath, divider, or other road element, whether it was signal jumping, etc. so the procedure for establishing the reason for the crash can be made. Each FIR is looked manually and based on the written description information is gathered. It is a very tedious process and not the most accurate method. It is suggested that the FIR process collect the information and data points required for analysis.
- The Integrated Road Accident Database (*iRAD*) system is adopted for accident reporting and data management. The National Informatics Centre (NIC) maintains the *iRAD* system. Pune district has *iRAD*, but the data session has not happened. Data analysis for PCMC is based on the data of year 2019. Data compilation has not been done for PCMC after 2019.
- The School GIS portal has district and school attribute level information including the school level (primary/secondary), standards present, number of students enrolled, etc. The website is <https://schoolgis.nic.in/> which can be referred for school related data.
- The process for documentation of accident data is well prescribed in *iRAD*. If the city starts documenting the data the way it should be done using *iRAD*, then data can be directly used for analysis and decision support. It has the fields for gender, age, type of accident, location, and other important data points.
- The Pune Traffic Police analyses the traffic conditions. It is not accident data though. They have a list of traffic hot spots, congestion points, pain/pinch points, etc. that are identified for Pune based on traffic conditions. 41 traffic hotspots are identified by Pune Traffic Police in 2023.
- The Traffic Police gets the accident FIR data. But if it is fatality data it goes to the crime branch of the police. So, it needs to collect data from multiple sources and correlate which is another barrier. So that compilation of data is also not there at present.
- Mumbai has a Mumbai Accident Research Cell, based at the office of Additional Director General of Police (ADGP) which collects accident data, does analysis of the data and publishes the report. These data come from all over the district, and it is analysed by the Research Cell.
- The BIGRS team is analysing FIR data for PMC and PCMC city areas for the present period. They have digitised the data and done analysis for different parameters such as the four key risk factors, age profile and locations of accidents, etc. It is not in public domain and waiting for confirmation from the Office of the Commissioner of Police.
- The boundaries of Police jurisdiction and cities' urban jurisdiction do not match and overlap. Therefore, the accident data of the police stations and the cities data does not match. Again, Pune city and Pune rural area's data are different. Therefore, the data of the FIR records and the data logged does not match.

- Accident/crash data collection and FIR recording persons, Police Hawaldars, are not trained properly for scientific data collection and mapping of these data correctly.
- Many times, reasons especially drunk and drive and helmets are not mentioned in the FIRs because it may cause rejection of insurance claims and make it a complicated and even more difficult situation for the victims and their families. Hence, the reason put up in the FIR is mostly over-speeding, but that is not the real reason for accidents/crash.
- Many times, only the Indian Penal Code (IPC) Sections are mentioned, and the Motor Vehicles Act (MVA) Sections are not mentioned in the FIR reporting. Therefore, the cause of the accident cannot be known from the FIR data. Pune data for 2023 shows zero accidents due to speeding, which may not be correct. Hence, this data collection becomes crucial and critical.
- The scientific analysis of existing accident-related FIR data is difficult, and its accuracy depends on the quality and source of information.
- Fatalities related cases and data are reported but injuries related cases and data are often not reported by the victims. Therefore, this data is not present in police records.
- Absence of students from schools should be traced back for any road traffic related injuries. PMC, PCMC and District authority can ask to find out what is the reason for the students to be absent from the school. This can help in recording accident-related absence data among students in future. Currently, injuries, especially the minor ones, are not recorded. School teachers have the responsibility to find out reasons for absence in case a student is absent for 2 days. They are supposed to visit the parents and find out why the student is absent in case the student is absent from school for a week. This register is required to be maintained in schools. This needs to be operationalised and integrated for road traffic related injuries under the School Health and Wellness programme.



Figure 5 Group Consultations

3. SAFE CONDITIONS FOR CHILDREN WALKING AND CYCLING TO SCHOOL

No	Issues	Suggestions
1.	No continuous footpaths, and encroachments on footpaths where present	<ul style="list-style-type: none"> PMC and PCMC should make 1 to 1.5 km long uninterrupted footpaths in the areas around schools and not just within the school zones. Budget provision should be made by the authorities for construction and maintenance of encroachment free footpaths. Budget should also be allocated for making and implementing Guidelines for School Zone.
2.	No cycle tracks	<ul style="list-style-type: none"> Make norms for Cycle tracks / Cycle lanes in 500 metres around the school zone and on major roads connecting schools
3.	Lack of mandate to implement School Zone Guidelines	<ul style="list-style-type: none"> Need to institutionalise the safe School Zone approach Train teachers, School Management Committee (SMC), School Transport Committee (STC) and all the concerned stakeholders Traffic wardens should be present at school joining and departure hours
4.	Improper junction design and zebra crossing markings	<ul style="list-style-type: none"> Zebra crossing and other marking and painting should be priority Also include junctions, zebra crossings, signages, traffic calming in the School Zone Guideline.
5.	Lack of proper signages for School Zone and about speed limit	<ul style="list-style-type: none"> School zone should be marked on road with thermoplastic paints Signages exist, but there is lack of compliance and proper visibility Guidelines for School Zone need to be there in the IRC. There is a draft IRC guideline available which need to finalise immediately. It should not only include signages but also include infrastructural alternatives for the School Zone like colour, cobble stones, etc which can make the Zone clear to one entering in the school zone. Unified Development Control and Promotion Regulations (UDCPR) should notify the School Zone Guidelines
6.	Traffic calming measures not present	<ul style="list-style-type: none"> Traffic calming measures are required even on national and state highways and district roads near schools Colored cobble stones could be used There is a need to implement this on major roads where there usually are many problems commonly observed like on highways and major district roads with heavy and high-speed traffic on those roads poses a huge problem for children who are walking or cycling to schools.
7.	No cycle parking	<ul style="list-style-type: none"> Providing free and secure cycle parking in the school should be made mandatory.

		<ul style="list-style-type: none"> • Make cycle helmets compulsory, sensitization of parents about this is necessary
8.	<p>There is no recognition for students who walk or cycle</p> <p>Awareness about it is lacking in school management also</p>	<ul style="list-style-type: none"> • Make provisions in the academic calendars to organise recognition of students travelling by walking to bicycles in annual events. Recognised students can also participate in routine road safety awareness activities organised by various departments • Also, schools to recognise children who are walking or cycling to schools telling them why it is important and to encourage other children. • School competition for model school with school zone to recognise them.
9.	School drop-off vehicles obstruct walking and cycling	<ul style="list-style-type: none"> • There should be designated drop off and pick up zone within school
10.	Parent drop and pick by vehicles can cause threat to walk and cycle	<ul style="list-style-type: none"> • There should be some management of traffic of other vehicles including possibly traffic diversions, no vehicle zones / time restrictions for management of drop off and pick up so that children walking and cycling can be safer. • Send communications to parents to discourage drops and pick-ups by vehicles citing road safety issue.
11.	In the morning time signal violations are quite common	<ul style="list-style-type: none"> • Strict and continuous CCTV camera-based enforcement • School time signal management, more time should be given for pedestrians to cross the road • Traffic diversion or no vehicle zone should be enforced near schools, during opening and closing times
12.	Higher signal violations or lack of compliance in morning hours, and few police staff or enforcement	<ul style="list-style-type: none"> • Need for special interventions at chronic spots during that time and recognition of the need for something specific to be addressed
13.	Age-appropriate road safety education and training for students	<ul style="list-style-type: none"> • School syllabus and practical sessions to be done by schools having model or demo about safe crossing, walking, cycling, signages, etc. in the school and in the school zones for children to know what these signages mean. • They can also look at the things which are required for road safety, take note of that and inform local ward office.
14.	Lack of other safety near school (e.g. wine shop)	<ul style="list-style-type: none"> • Within 200 metres from school there should be no liquor or unwarranted establishments • PMC/PCMC or police should remove such encroachments near schools. • School should inform police about such spots

4. PREVENTING UNDERAGE DRIVING AND RISK-TAKING BEHAVIOUR AMONG ADOLESCENTS

A large proportion of students in secondary schools or junior college/ adolescents drive motorized two wheelers.

No	Issues	Suggestions
1.	Admission protocol	<ul style="list-style-type: none"> • Students staying within 1-3 km catchment to avoid use of vehicles. • Colleges that provide parking should ask students to fill a request form for parking or include in their admission forms for parking needs by students. It will help identify underage drivers. • Responsibility of high schools/colleges about safety of student should be beyond their boundaries (campus). • Disincentives for schools, if kids are found driving.
2.	No monitoring	<ul style="list-style-type: none"> • School Transport Committee to monitor and report such incidents in Parent-Teacher meetings • Fine / disciplinary actions against students. • Road safety or transport committee should involve parents or can be managed by parents and teachers. • Schools should promote meditations classes, counselling, awareness, sensitization. • Restrict entry at gate for vehicles. CCTV camera at college gates.
3.	High proportion of school dropout youth are vulnerable due to underage driving, with aggressive driving behaviour.	<ul style="list-style-type: none"> • Consider school dropouts for sensitization programs on road safety, and mentor/ engage them in positive activities • Focus on public schools, ZP schools, rural areas and areas of economically weaker sections • Consider Language and media barriers in promotion campaigns.
4.	Lack of counselling facilities specific to adolescents	<ul style="list-style-type: none"> • Counselling for underage adolescents and their parents. • Dedicated school and college counsellors and frequent counselling programmes for senior students on risk-taking behaviour and camming aggression through channelizing and engaging in positive actions and recognising them.
5.	Higher rate of underage and without licence driving	<ul style="list-style-type: none"> • Enforcing fines on spot, charging way of penalization. • Punishment should be in the form of social service as a traffic police assistant, road safety wardens, road safety ambassadors, campaigning activity, etc.
6.	Underage driving has become a status symbol for the adolescents as well as parents to show off	<ul style="list-style-type: none"> • Vehicle restrictions based on age (based on CC/type of vehicle) • Creating awareness among adults and parents about it • Some ultralight vehicles (e-cycles, bike of 50CC/ below 25kmph speed) should be allowed for students

7.	Weak enforcement of helmets, without licence and underage driving	<ul style="list-style-type: none"> • Enforcement should be done at the gate of all campuses. Without a proper licence and safety gears/ helmet, no entry to campus. • Zero Tolerance campaigns for road safety, use of helmets, seat belts and underage, illegal driving. • Penalties and awareness for children and parents - Safe Teen driving programme • Increase fines and its enforcements in accordance with the laws. Also, serious penalties to frequent/ repeat offenders. • Strict punishment and digital visibility of punishments • Digital record of traffic violations to be provided to schools and colleges.
8.	Weak licencing and lack of safety lessons for training and licencing for two wheelers	<ul style="list-style-type: none"> • Putting more terms and conditions while getting a licence • Increase age limit for licence, strict norms for licence, make it difficult to get through stringent norms. • Refresher training and re-exam or testing should be there after every 2-3 yrs.
9.	Lack of awareness about underage driving, use of safety gears	<ul style="list-style-type: none"> • Corporates to be engaged, who are part of everyday services movement delivery boys, vehicular for delivery operations. • Posters, campaigns for high visibility at prominent places
10.	Lack of awareness about juvenile traffic offence and parents' responsibility by MVA	<ul style="list-style-type: none"> • Awareness sessions for parents' sensitivities at PTA meetings about offences by juveniles, responsibility and penalties by law. Also, awareness in parents that the liability of any traffic rule violation by their child legally lies with them.
11.	Lack of engagement and awareness	<ul style="list-style-type: none"> • Road safety and civic sense to be included in school curriculum. Include road safety as a part of the curriculum at school and college levels. • Practical trainings should be done in schools and colleges. • Student school/college become part of the voluntary system, become traffic warden and road safety ambassador for managing traffic and monitoring behaviours of other students around their school/college. • Encouraging NSS, NCC and other students as volunteers, traffic wardens for traffic management

5. ENABLING A SHIFT TO WALK, CYCLE, AND SHARED SCHOOL TRANSPORT MODES

- Enable a shift to walk, cycle
 - Safe, separate walk, cycle facilities, as currently these are unsafe at many school locations.
- Facilitate shift to shared modes
 - Restrictions should be there on personal vehicle drop off and pick up at the school gate. This facility should be arranged 100 to 200 metres away from the school gate to make this option undesirable. Whereas, the school bus drop offs to be inside campus
 - Schools should designate a space for school buses and shared modes to drop off / pick-up
 - School bus may be subsidised as needed
 - School bus fleet / system should comply with existing guidelines for school transport vehicles, including the presence of female attendants.
 - School bus fleet should have a child-friendly design, including low-level boarding, and rear camera for reversing.
 - PMPML school bus service may be explored and optimised for cluster. It should have a separate officer for aligning school timings.
 - DRSC may ask for funds for school bus subsidies from the Road Safety Fund showing its action plan.
 - Municipal corporations and district administration may identify zone wise parking for school buses.
 - There should be a high fine for overcrowded vehicles.
- Supporting sustainable modes
 - Schools need to prioritise / prefer students living close by; the rule for enrollment within 5 km radius exists, and should be implemented and monitored
 - School Zone to be designed and enforced.
 - School Zone design norms may be reviewed for private modes drop offs and pick-ups and shared modes/ bus drop off / pick up.
 - Arrival / departure timing to be staggered
 - Students who walk, cycle, or use shared modes should be recognized / incentivised.
 - If drop off / pick-ups by personal cars are unavoidable, then guardians should try to car-pool 4 students.
- Promotion
 - School Transport Committee should be activated and given the mandate for road safety for children and coordinating with the concerned district departments for improving the road safety
 - Schools and guardians may be rewarded for shifting to sustainable modes, such as with a fee discount or tax rebate; likewise, penalties and levies charged for private transport and parking fee may be used as a Road Safety Fund.
 - It should be mandatory / strongly encouraging that parents travel by public transport or shared modes for PTA meetings.

- Schools should be recognized and incentivised with annual awards for Walk/Cycle/bus/shared mode usage.
- Guardians found not following traffic rules, child road safety measures may be penalised, and on the other hand, there should be concessions in school fee for those who arrange for walking, cycling or shared modes.

It is important to create public recognition of the idea that PMPML must be adequately funded by the municipal corporations to enable it to improve bus services, which will in turn improve road safety.



Figure 6 Group Consultations

6. SAFETY OF CHILDREN AS VEHICLE OCCUPANTS

The use of proper safety gear is important to enhance safety of children who are occupants of vehicles. Drivers need to ensure that children occupants are provided and wear safety helmets while traveling by two wheelers and children are seated in a child seat/Child Restraint Systems (CRS) in four wheelers.

Education

1. Education and awareness should be done about all the road safety rules in the schools and colleges of Pune district. It should be relevant for the students of 13 to 18 years as well as parents of children of 3 to 18 years. It should be done through syllabus, co-curricular and extra-curricular activities, etc. e.g. under the School Health and Wellness Programme (Education can also be done by demonstration activity of how to choose the correct safety gear/products and how to use them for the safety of children including correct size selection, standards and fastening of strap, etc.)
2. Mandatory training should be done of all the employees of all graders in all offices including government and private corporate about the child road safety and use of safety gears. There should be a campaign on this in Pune district.
3. Automobile dealers should communicate the rules, importance of use of child safety equipment and gears and give the required instructions and guidelines for the safety of children to users at the time of purchase. Also give demonstrations and printed materials (brochures) specifically focused on the process for use of road safety equipment for children.

4. Need to create awareness among road users in Pune district about the speed limit that if a child is on board. Driving speed limits to be followed as a good practice is 30 kmph for a two-wheeler.

Enabling Factors

5. Availability of child helmets and child seat/child restraint systems (CRS) should be made in the markets and shops of Pune district to enable and improve access of safety gears for users.
6. Child helmet should be provided at the time of penalty. It can be done as a product or in terms of coupon to be redeemed by the users at linked shops, dealers, or kiosks at govt. offices, schools and colleges.
7. Scenario for not using the road safety gears should be made comparatively more difficult than using the safety gears.
8. Dealers of two wheelers and four wheelers should compulsorily provide the coupons for helmets and CRS to buyers covered as compulsory vehicle user safety accessories.
9. The rule for child seat/Child Restraint Systems (CRS) should be set according to the height or weight of the child.
10. Automobile dealers should provide child safety helmets and child restraint systems at the time of purchase.
11. Suggest to mandate adding a device to control the speed in safe limits when a child is travelling inside the car.
12. Design information/guidelines for School Rickshaw should be provided including number of children to be carried, speed limit, door and other safety features and equipment.
13. Design intervention to check overloading in school vans and rickshaws as per the rule of passenger capacity and monitoring and enforcement for seating capacity.

Enforcement

14. The rules for use of child helmets and child seat/child restraint systems (CRS) should be enforced effectively in Pune district and penalty should be imposed for noncompliance.
15. Schools/colleges/educational institutions should monitor use of safety helmets by their students and mark absences if found not using.
16. The enforcement of rules related to safety helmets should be done for both the riders of two wheelers including for children in Pune district.
17. Use of child seat/child restraint systems (CRS) should be made mandatory in Pune district for age up to 5 years to start with.
18. No more than one child and not standing in front of scooter or sitting on fuel tanks on motorcycle should be enforced strictly and only sitting on proper seat in the back of the driver should be allowed.
19. For seeking help in the enforcement of the road safety rules traffic police should collaborate with NGOs and civil society and resident welfare organisations in a formal way authorising them in reporting violations and penalising the non-compliance through some formal arrangement.

Similarly, NGOs and resident organisations should come forward and help traffic police in enhancing the enforcement and implementation of road safety rules for Pune district.

20. Use/recommend AI/advance technology for helmet compliance.
21. Bicycle helmets should be made mandatory and checked at the school, college and public facilities gates.
22. School Road Safety Task Force should be set up/there which can engage for example the Home Guards, Ex-Servicemen, etc. for enforcement.



Figure 7 Group Consultations and presentation of group work

7. EMERGENCY RESPONSE FOR CHILDREN IN CASE OF ROAD CRASHES

Awareness

1. Need to create awareness about the new Good Samaritan Rule and Guidelines which has come recently. Awareness about the Good Samaritan and the awards and rewards given will help in getting the first response, emergency and health care professionals.
2. Awareness creation about Tall Free Emergency Number (108) of EMRI, children, schools and parents should know this.

Preparedness

3. Students' ID cards if integrated with GPS tracker parents can track them if required.
4. Student ID cards should have an emergency contact number. Basic information about students for emergency like emergency contact, blood group, etc should be there with students on a card to be carried always. Make the practice for ID cards to be mandatorily worn by the students.
5. An officer can be designated for school safety who can be contacted as emergency officer for child safety in case of emergency.
6. Schools provide an almanack or diary to all the students. It should have all the emergency contact numbers including Child Trauma Care Centres' numbers. All local hospital contact numbers should be printed in it. Emergency contact numbers of parents/family members should also be collected in it.
7. Schools should provide safety kits to students that will have all the contact details at the time of admission or in the beginning of the academic year. The kit can contain SOP for emergency, and has a GPS chip.

8. Safety kit in schools including contact numbers of nearest child trauma care facility, emergency numbers can be with school, SMC.
9. Display of nearby child trauma care centre number and address in the school, for in case of emergency in / around the school. Hospital and emergency number database should also be with the schools.
10. There should be a dedicated contact number for children in case of mishap or accidents.
11. Conduct demonstrations about emergency responses in schools to students engaging all the classes (class to class) through extra-curricular activities.
12. There is a lack of understanding about how to handle a child in case of a crash. So, there should be training about First Aid and first respondent among students in schools.
13. All schools in the district should be tagged with the nearest health care/emergency care/child trauma care centres in the beginning of the academic year.

Capacity

14. All Trauma Care Centres should reserve some beds for such road crash emergency needs especially for child trauma and emergency.
15. Increase capacity specifically for post trauma rehabilitation for a child.
16. Upgrade trauma care centres for children with medical professionals linking with the paediatric intensivists and child trauma care equipment.
17. Emergency vehicles and ambulances needs to be specifically designed for children or upgrade existing ambulances for children with childcare equipment, and medical staff trainings.
18. Capacity building of trauma care paramedic intensivists for child specificity.
19. Refresher training should be conducted for the medical and paramedic staff of trauma care centres on a periodic basis.
20. Compulsory panic buttons for school buses and vans with a backend system set up as a first response team to respond to the call of panic buttons.
21. The places identified as black spots, hot spots, accident-prone areas and high-speed junctions and corridors should have the first response team available to assist.
22. Specific helpline number should be operationalised for child road safety as Child Road Safety Helpline Number.
23. Capacity building of EMRI (108) for child specific information and guidance and its integration with child road safety helpline number
24. Orientation training and SOP preparation for School Transport Committees on trauma / emergency management for child
25. Creation of school road safety committee in schools
26. Training on first respondents for stand byers, drivers of school bus, public auto rickshaws, NSS, NCC and youth groups in urban and rural areas and supply first respondent kits.
27. Schools should be trained as a first respondent team. School transport committee can be trained as first respondent to respond in case of any accidents happening in the school zone.
28. Engagement and training of volunteers, civil society groups, resident groups, PTA, NGOs, local people, NCC and NSS youth, etc through the schools to act and manage the school gate traffic or school zone areas who are available there on sport at traffic times when school starts or closes.

8. SPECIAL NEEDS OF RURAL AREAS

1. In rural areas, enrolment of students is from very far off places not necessarily from the nearby areas. They have to travel very long distances, sometime even more than 20 km.
2. Distance is not a criterion in the Right to Education (RTE) act. Enrolment cannot be denied based on any criteria including distance. They have to be enrolled in the school even if they are coming from long distances. Parents need to understand this, and the safety aspect related to daily long-distance travel for school.
3. At some villages students are transported from more than 40 km in Trax kind of vehicles taken only for transport of students and about 30-40 students travel in such vehicles.
4. Some villages do not have roads to go to schools. Some students go walking over the wall of the dam to go to school or walk through the forest areas. If there is no elder to take them to school, then they remain absent from the school.
5. In rural area, about 80 to 90 percent are already using walk and cycle as a mode and we may not have to promote that in rural areas. We just need to focus on ensuring their safety. For their safety it may need to create safe infrastructure like for crossings at or near schools or for schools near any high-speed corridor or road where students need to cross the road to go to their schools. The crossings are not always safe and can cause accidents and fatalities.
6. On high-speed road like national or state highways and district roads, safety infrastructure for crossing as well as for walking or cycling along must be created between the school and the areas from which students are coming. Often, there is inadequate speed management in the vicinity of schools on highways, with lack of signage and zebra crossings.
7. Signage for schools need to be placed prominently with adequate warning signs on high-speed roads passing through rural areas.
8. Sections of highways or Major District Roads passing through villages or habitation need to be made safer. A village in Khadakwasla Road is facing similar concern. A major district road (MDR) to Khadakwasla passes through the village dividing the habitation, and vehicle speeds are quite high. The school is also on that road. Safety interventions need to be done in such situations, including orientation for the Gram Panchayat members, construction agencies and contractors, on the relevant IRC guidelines and safety measures, including for ease of access, footpath design, railings, road shoulders, street lighting, etc. Usually, highways do not have streetlights, but in such sections, lighting is required. The bus stops on these roads in rural areas also do not have the required infrastructure like sheds, lights, settings, etc.
9. Buses going in interior parts of rural areas are also in very poor conditions.
10. In some villages, settlements are on one side of the hills and schools are on the other, and children climb the hills to go to schools.
11. School Parivahan Samiti (STC) should have the data of students coming from which areas and the modes of transport they take for school travel. It will be helpful to contact or communicate in case of emergency.
12. Level railway crossings are also a road safety challenge in the rural areas.

13. Even in urban areas for schools at about 2 to 4 km, students walk to schools due to lack of family budget for school bus or motorised transport modes.
14. Rural areas also face lack of public funding for school transport compared to urban areas. It needs commitment from the state government to provide funds for school transport in the rural areas as an enabler for education.
15. State government has initiated a programme for school infrastructure including transport for rural areas.

9. INSTITUTIONAL STRUCTURES

- The District School Transport Committee (DSTC) should be an integral part of the District Road Safety Committee (DRSC).
- A school road safety SOP should be developed under the District Road Safety Committee and the District School Transport Committee and provided as a guideline for schools and other concerned institutional stakeholders.
- A comprehensive third-party audit should be done periodically of the school transport zone and management including measures and provisions for walking, cycling, crossing, shared modes, arrival-departure management, training, SOPs adoptions, etc, and a plan for such audits should be made under the DRSC/ DSTC, and budget provisions be made by the respective institutions.
- Implementation of child road safety measures at the school level should be done by the School Transport Committee and monitored through Pune District School Transport Committee. In Pune district, there are about 7200 schools, and the Transport Committee exists in all the schools.
- Students in schools managed by the district administration may need special attention as they may not have a bus facility, and the schools may be located along high-speed roads like national or state highways or major district roads.
- School transport committee may prepare a roster of guardians / volunteers to be traffic wardens and manage school arrivals and departures.
- Schools should ensure that the staff members who are given the responsibility to manage arrivals and departures, and the School Transport Committee members are oriented about child road safety and adopt a school road safety SOP.

4. INITIATIVES UNDERWAY FOR SCHOOL ROAD SAFETY

Several initiatives are already being undertaken by the district and the municipal authorities, concerned departments, research organisations, NGOs and civil society groups in Pune district for improving the safety of children on road and in making their travel to school safer and convenient. The participating departments and organisations were invited to share the initiatives that are being engaged both institutionally as well as in collaboration with the authorities in the Pune district, PMC and PCMC. The main points shared by them as a summary of their initiatives are captured here.

Dr Cinthia Pinto, Safe Kids Foundation

Safe Kids Foundation is working in Pune since 2015 to promote fire safety, road safety for pedestrians, passenger, and driver safety. SKF has:

- Developed modules on road safety of school students for training of teachers.
- Conducted educational programmes on road safety for children, for teachers of schools in Pune
- Trained about 400 master trainers for fire safety in a three-day training programme.
- Trained about 6 lakh students in 1600 schools in Pune
- Conducted road safety training for the school students in Pune working with PMC.

Ms Kanchan Awate, Bloomberg Philanthropy Initiative for Global Road Safety (BIGRS)

BIGRS started work in Mumbai to improve pedestrian safety, which has led to a 43% decline in pedestrian fatalities in those areas. BIGRS is working in Pune district, Delhi, and Bangalore since 2020, to

- Provide technical assistance through government-led initiatives with an MoU with the Ministry of the Ports and Transport.
- Strengthening surveillance systems, scientific data collection, analysis, and digitisation of FIRs; crash data analysis includes risk factor related data, time specific data, location specificity, etc and observational studies to create an intelligence for identification of road safety management interventions. For example, in Pune, over-speeding is observed at night-time and such fatalities are higher at night.
- Create content for mass media awareness on four key risk factors - speed, drink driving, and use of helmets and seat belts.
- Identify and eliminate black spots with PMC and PCMC under the Safer Street and Safer Mobility program, and work is on at 3 junctions in PMC area.
- Organize enforcement related capacity building for police department and RTO officials on speed enforcement through training and orientation in Pune with partners of BIGRS including International Police Organisation (IPO), Red Cross and Global Road Safety Partnership (GRSP).
- Conduct trainings of master trainers on fundamentals of safer streets, assessment of school zones, and asking students to map their needs and experience in terms of road safety.



Figure 9 Sharing of the initiatives already underway by the representatives of different organisations

Ms Anushree Patil, World Resource Institute (WRI) India

WRI has an MoU with the municipal corporations and works to improve road safety for young children (0 to 6 years) and caregivers' friendly mobility, considering the child and caregiver as a unit. WRI is working with anganwadi centres, education centres, schools, primary health care centres, health care centres, maternity homes, etc. The specific areas of work include:

- Improve walking facilities and footpaths in Pune.
- GIS-based analysis and safety improvement of areas visited by children, including 25 sites in PMC
- Development of a Mobility Action Plan for Pune city in which 19 areas are identified with accessibility issues for pedestrians, such as inadequate footpath, inappropriate placement of bus stop; the infrastructure is not yet developed in many areas newly added to municipal limits; lists have been prepared of the works to be taken up, considering the Pune Urban Street Design Guidelines (USDG) and Pedestrian Policy.

The training module may highlight important planning aspects to improve road safety of children and adolescents, mapping their mobility needs, travel routes, and suggesting what needs to be done on the ground level. The core city and peripheral areas are different in terms of mobility needs, etc so context specific solutions should be part of the module. The master trainer programme should be conducted in a multi stakeholder environment, with each stakeholder made aware of their role in the road safety.

Shri Aditya Chawande, Parisar

Parisar has been working on sustainable mobility, transport and air quality in Pune, and is presently helping facilitate the preparation of a policy for Infant, Toddler and Caregiver (ITC) mobility in Pune. Parisar has worked with PMC on developing guidelines for School Transport Improvement Plan (STIP) for Pune that included which school can be selected zone wise, how to select the school, how can school travel be made safer and more convenient and encouraging for walking and cycling. Current work:

- Cycle to School project for school students to understand problems they face by interactions and experience sharing
- Applying the approach of Safe by Design, using infrastructure design to address road safety issues

For master trainers training, they should be oriented to the problem specificity of children and adolescents' safety and taking inputs of the users and stakeholders.

Ms Sai Veeker, Prasanna Desai Architects (PDA)

PDA is working with the principle of safe and convenient walking and cycling design for people and implementing projects for Pune Smart City and PCMC. PDA has developed the Pune Cycle Plan as a comprehensive master plan for the Pune city. Currently, PDA is working on

- Harit Setu project in PCMC, which is also called Connecting Greens, and aims to create a sustainable mobility network to connect neighbourhood areas including gardens, educational institutes, public spaces, entertainment, and recreational areas, etc. A master plan is being prepared for PCMC for Nigdi Pradhikaran as pilot area which can then be replicated in other areas of PCMC.
- Educational institutes are an important stakeholder in Harit Setu, with 18 schools and 6 college campuses in Nigdi Pradhikaran. Of these, 4 schools and college clusters are identified for implementation of safe School Zones. PDA has mapped the school and college locations, surveyed modes of travel used by the students, safety issues at traffic junctions and near schools and colleges. Alongwith CEE, surveyed mode share, how students travel, where they travel and catchment areas of each school, entry and exit at schools.
- Conducted a consultation with school representatives to map road safety concerns of the schools in the Nigdi Pradhikaran area with CEE, PCMC officials and Global Design City Initiative (GDCI).

Ms Riya Sadawarte, Pune Municipal Corporation (PMC)

PMC is implementing a School Transport Improvement Plan (STIP) in Pune. PMC has worked on a school priority zone guideline. The basic objective was to ensure independent and safe access for children from their home to school. A competition was organised to create 9 school priority zones. Urban designs were invited to participate in the competition and 3 entries were selected for implementation. Guidelines were created through a consultation on design approaches suggested by the urban designers.

The school priority zone guideline included a school zone template having measures for identification of school entrance, junction designs for safe crossings, etc as design guidelines. Institutional guidelines

included training of bus drivers for children' safety, on training for students about road traffic rules, etc. Traffic safety workshops were conducted by Safe Kids Foundation in various schools. STIP and the school priority zone guidelines are available on PMC's website.

Dr Trupti M Sagale, Senior Medical Officer, Sanghvi Hospital, Pimpri Chinchwad Municipal Corporation

- Emergency kits should be made available with all the schools.
- Emergency numbers should be put on display in schools and school transport vehicles including buses, vans and rickshaws.
- Awareness training should be done for school-teachers, school bus drivers, attendants and school transport committees.
- Schools should be tagged with the nearest emergency trauma care centres.
- Health protocols should be followed for school bus drivers and health check-up should be done for the drivers.
- Health check-up should be done for the students to prevent any health issues.
- CCTV cameras should be installed in school campuses, at gates and school buses.
- There should be specific discipline and regulation in schools regarding implementation of road safety rules.

Ms Rajashri Gund, Assistant Road Transport Officer (Asst. RTO), Pimpri Chinchwad

- RTO is responsible for enforcement work for road safety rules and applying 4 E approach for road safety improvement.
- School bus safety guidelines are prepared and being implemented. RTO monitors the implementation of school bus safety guidelines by the operators. Drives for checking are conducted regularly to check the school bus safety guidelines compliance.
- School Transport Committees are there in schools and RTO is a part of that committee.
- Different suggestions are given to schools by the RTO through the School Transport Committee. Awareness programmes are also conducted by RTO for schools through the School Transport Committee.
- An initiative is taken for schools called "Samwad - Road Safety Starts with You!" to have behavioural aspects by creating responsibility among students about road safety and safe behaviour.
- In PCMC, RTO officials conduct road safety awareness sessions visiting various colleges and schools. Earlier RTO used to conduct this programme during Road Safety Week but now it is being implemented throughout the year.
- Drivers' trainings are conducted by RTO officials for the school bus drivers.



Figure 10 Government officials shared initiatives already underway for the safety of children in Pune district.

Shri Narayan Karde, Pune Mahanagar Parivahan Mahamandal Ltd. (PMPML)

- PMPML has about 2050 buses in its city bus fleet, of which about 1780 to 1800 buses of the fleet are running on road on daily basis.
- About 80 buses of PMPML are being run as buses to provide student service, and about 4800 students are transported by PMPML buses daily run for student service.
- The drivers operating the PMPML student service buses are given fixed duties. They are senior most drivers and experienced with over 50 plus years of age.
- Alcohol testing is done every day before they go for operating the student service buses.
- Health check-ups of drivers are done every three months including eyesight check-ups.
- Senior age driver of (about 55 to 58 years) are sent to Sassoon Hospital for health check-ups for their fitness to drive on road.
- Every driver is given half an hour for the inspection of buses before taking it on road, to check brakes, etc.
- Every three months all the drivers are trained at PMPML or CIRT.
- PMPML has identified 14 black spots in PMC and 10 black spots in PCMC. Passenger bus drivers are given information about the black spots and instructed to drive slowly and carefully in those areas.

Shri Chandrakant Raghatwan, Pune Traffic Police

- Pune Traffic Police runs Road Safety Petrol (RSP) in schools of Pune. Students' clubs are formed in schools as Road Safety Petrol.
- Educational sessions are conducted for students at schools on road safety and traffic rules by the traffic police.

Shri Raosaheb Mirgane, Department of Education

- School Management Committees (SMC) are formed and active in all the schools.
- Parents Teachers Association (PTA) is formed in all the schools and functional.
- School Transport Committees (STC) (*Shala Parivahan Samiti*) are there in all schools.
- At the moment, fee structure etc and other topics are discussed but road safety is not being discussed in the STC.
- Training module is very important for the STC and other stakeholders of STC including parents, teachers, operators, drivers, attendants, etc an SOP booklet in Marathi on child road safety can be prepared and provided for training purpose.
- PMC, PCMC and Zillah Parishad have five resource persons, they can be trained as master trainers and can further conduct trainings in scheduled monthly trainings of teachers organised at the resource centres.
- A resource book on road safety, the facilities, rules, roles, etc should be prepared to share at school headmaster, centre heads, resource persons, master trainers and teachers' level to make it reach up to the school level.
- In rural areas private vehicles are run as school transport vehicles. They do not comply with the school transport vehicle rules. It needs to enforce those rules on them through the RTO officers as school or education department cannot enforce that. These vehicles cannot be stopped, otherwise education will get hampered. So, they should be supported to comply with the rules rather than stopping them from operation.
- Students bringing their own vehicles to school also need to be educated and convinced for safer practices rather than stopping them, so it can be improved.

Dr Tashin Khan, Aundh District Hospital Pune

- In rural areas, RDSK team is taking care of various health issues, and they are visiting hospitals twice in a year. They are screening for various disease conditions. So simultaneously education regarding various high-risk ailments among teenagers and adolescents can be addressed at school and college levels. That can be the part of counselling.
- Training can be done on what can be done as first respondents in case of a crash.
- There are different programmes on health for children and adolescents but there is no programme specific to road safety for them.
- The School Health and Wellness Programme is a connecting factor for the education and health department. Road safety is one of the themes in the programme which has two indicators for

overall assessment. First is the number of teachers trained on road safety aspects and second is the procedures followed.

- There is a need for training on SOP for schools and parents on how to manage situations when any mishap happens in and around schools or with children, adolescents, and young people.
- Trauma centres may not be available in the rural set up.
- Certain existing health care facilities and hospitals with appropriate skills and resources may be identified and partnerships made with them especially in the rural areas and near highways, so that they can reserve some beds for such cases.
- District or civil hospital has casualty centres, and all types of causality cases are brought there. For child road crash victims, a separate facility within the causality centre is needed.

Feedback

Feedback was sought from participants on the workshop and to help plan the next steps.

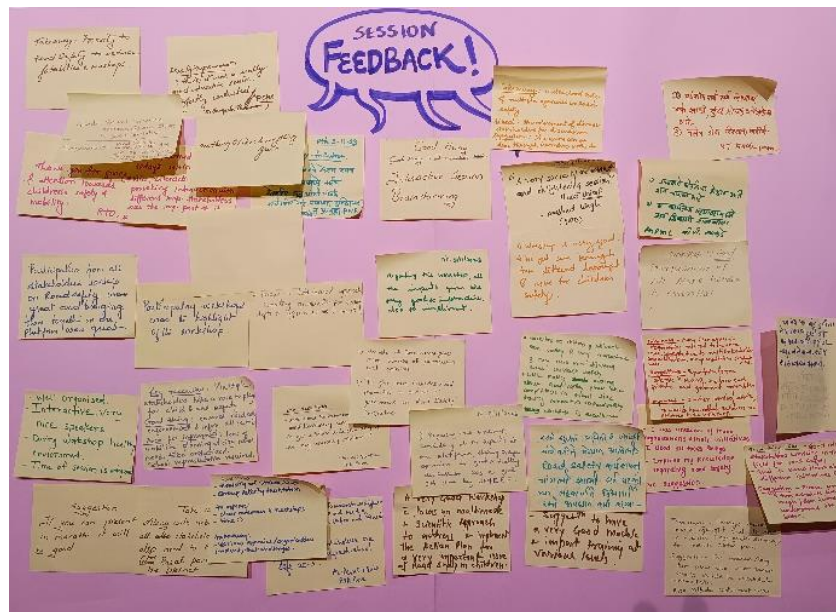


Figure 11 Feedback by participants

5. NEXT STEPS

The following activities and steps will be undertaken as next step for the visioning workshop:

- An assessment report of the road safety for children and adolescents in Pune district will be compiled in consultation with key departments and stakeholders.
- An orientation module for the master trainers from different departments including road, transport, traffic, police, health, and education is to be prepared. A module development meeting will be conducted with the representatives of concerned departments and institutional actors to understand the specific needs for training, the present practice of training and seek nomination of master trainers.
- Orientation programme for 75 master trainers will be conducted.
- One school each in Pune rural, PMC and PCMC will be identified in consultation with the education department and local authority. Reconnaissance survey of these schools will be done jointly to finalise the same in agreement with the principal of the school.
- Road safety audit of the selected schools will be conducted with a road safety expert.
- Demonstration of institutional and behavioural aspects will be done at these three schools in the month of January 2023.
- A child and adolescent road safety action plan for Pune district will be drafted and tabled to the DRSC. DRSC will own this plan and the approach will be to take implementation of this action plan through the institutional actors and the members of the DRSC.
- Learnings and experiences from the project and the demonstration will be documented to share at the state transport department, Govt of Maharashtra.



Figure 12 Thanks to the groups and participants to share their inputs and spare time for the workshop.

1 LIST OF PARTICIPANTS

No	Name	Designation	Department / Organisation
1.	Aditya Chawande	Programme Associate	Parisar
2.	Amar Karan	Senior Programme Coordinator	CEE
3.	Anushree Patil	Sr Programme Associate	WRI
4.	Avadhut Abhyankar	Project Officer	CEE
5.	Avani Gurjar	Senior Project Associate	RISE Infinity Foundation
6.	B Mansoor Ali	Team Leader	URBAN95, EGIS India
7.	B N Bahir	Superintending Engineer & MS	PWD, Pune DRSC
8.	Baban Pandharinath Kakre	ATI 76	PMPML
9.	Balaji Vharkat	Program Officer (Climate, Environment and DRR)	UNICEF
10.	Bapusaheb K Gaikwad	Executive Engineer	PCMC, Pune
11.	Chandrakant Raghatwan	PSI Traffic Pune	PSI Traffic Pune (RSP)
12.	Cinthia Pinto	Executive Director	Safe Kids Foundation
13.	Deepali Bhagwate	Sr.Impact Lead-Programs	RISE Infinity Foundation
14.	Ganga Jawlekar	Asst Motor Vehicle Inspector	RTO Pune
15.	J A Mulla		Road Project, PWD, Pune
16.	Kanchan Awate	Initiative Coordinator	BIGRS
17.	Karon Shaiva	Managing Trustee	RISE Infinity Foundation
18.	Kiran Moghe	District Information Office	Pune District
19.	Kunal Jaiswal	Project Officer	CEE
20.	Mahesh A Tagade		NHAI, Sub-division Pune
21.	Milind S Barbhai	Executive Engineer	PW (Project) Pune
22.	Momin Asmabegum	Dy Education Officer	Z P Pune (Primary), Education Dept
23.	Mr Wagh	Asst	SE Office, PWD
24.	Narayan J Karde	Dept Manager	Pune Mahanagar Parivahan Mahamandal Ltd
25.	Nikhil Mijar	Urban Planner	Road Dept, PMC
26.	Omkar R Jadhav	S E Office (ASE)	PWD
27.	Pallav Bhinge	Safety Consultant	NHAI
28.	Pranjal Kulkarni	DEP Manager	ITDP

29.	Pranjali Deshpande	Sustainable Mobility Expert	Pune
30.	Prashant B Pawar	Superintending Engineer	PWD Pune
31.	Pratapsingh Bhonsle	Founder & Principal Engineer	Global Traffic Solutions
32.	Priyanka D Kudle	Asst Motor Vehicle Inspector	Dy RTO Baramati
33.	R S Gavade	Info Asst	District Information Officer, Pune
34.	Raghvendra Gajeli	Highway Engineer	NHAI
35.	Rahul Kadam	Sub-Divisional Engineer	Public Works Project Division Pune
36.	Rajashri Gund	Asst RTO	Pimpri Chinchwad RTO
37.	Rajashri S Kumbhar	Asst Motor Vehicle Inspector	RTO PCMC
38.	Rajesh Deshmukh	District Collector and Chair, DRSC	Pune District Road Safety Committee (DRSC)
39.	Ranjit Gadgil	Programme Director	Parisar
40.	Raosaheb Mirgane	Dy E I	Director of Education
41.	Revati Korale	Urban Designer	Prasanna Desai Architects
42.	Riya Sadawarte	CM Fellow	PMC
43.	Rohit Salunkne	Safety Consultant	NHAI
44.	Rozina I Bagwan	Junior Engineer	National Highway Sub-division Narayangaon
45.	Rutuja Nivate	Associate	ITDP
46.	S D Telavi		PW Project Division, Pune
47.	Sachin R Chavan	Resident Medical Officer	Sassoon Govt Hospital
48.	Sai Veeker	Urban Designer	Prasanna Desai Architects
49.	Sandeep Tendolkar	State Consultant WASH	UNICEF
50.	Sandip Ranaware	Executive Engineer	Road Dept, PMC
51.	Sangeeta Thimmani		Talera Hospital PCMC
52.	Sanjeev Bhan	RTO	RTO Pune
53.	Sanskriti Menon	Senior Programme Director	CEE
54.	Shabbir Lalu Shaikh	Extension Education Officer	Education Dept
55.	Sukanya Kaujvan	Asst Inspector Motor Vehicle	RTO
56.	Sunita Chintalapudi	Executive Engineer	Road Project Division Pune
57.	Tashin Khan		District Hospital Pune
58.	Trupti M Sagale	Senior Medical Officer	Sanghvi Hospital PCMC
59.	Vishal Bandpatte	Engineering Expert	URBAN95, EGIS India

2. AGENDA AND PROGRAMME SCHEDULE

Visioning Workshop: Pune District Road Safety Plan Strengthening road safety for children and adolescents in Pune District

9th November 2023 (Thursday) | VVIP Circuit House, Camp, Pune
Facilitated by UNICEF, RISE Infinity Foundation and Centre for Environment Education (CEE)
In collaboration with State Disaster Management Authority (SDMA), Pune District Collectorate, Pune Municipal Corporation (PMC) and Pimpri Chinchwad Municipal Corporation (PCMC)

Objective of the workshop

1. Introduction to the project goals, objectives, activities, and timeframe
2. Map key issues in road safety for children and adolescents
3. Develop a shared vision to strengthen road safety for children & adolescents in Pune district
4. Gather inputs on strategies and actions to realise this vision, in line with national and state government policies and convergence with existing programs and schemes, where possible.

Programme Schedule

Time	Sessions	Facilitator
10.00 - 10.30	Registration	RIF, CEE
10.30 - 11.30	Welcome & Introduction by Shri Balaji Vharkat, UNICEF Mumbai Programme Introduction and Workshop Objectives by Dr Sanskriti Menon and Shri Amar, CEE Address by Dr Rajesh Deshmukh, District Collector, Pune and Chair, District Road Safety Committee (DRSC) Pune Vote of Thanks	UNICEF
11.30 - 11.45	Tea	
11.45 - 13.15	Visioning for Child and Adolescent Road Safety in Pune Dist Safe conditions for children walking and cycling to school Ensuring children are safe as vehicle occupants, and wear safety helmets and Child Restraint Systems (CRS) Preventing underage driving and risk-taking behaviour among adolescents Enable a shift from parent drop to walk, cycle, shared modes Emergency response for children in road crashes	CEE, RIF, UNICEF with the participants
13.15 - 14.00	Lunch	
14.00 - 14.50	Sharing of experiences and existing initiatives by respective administration representatives and technical partners	Partners
14.50 - 15.00	Valediction and Vote of Thanks	RIF

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