







SAFE SCHOOL PRECINCTS ENCOURAGING ACTIVE MOBILITY AMONG SCHOOLCHILDREN VOLUME II – RESULTS FROM THE STAR RATING ANALYSIS OF SCHOOLS IN COIMBATORE, INDIA







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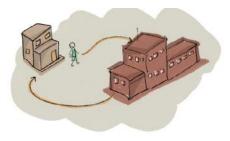
This report as been prepared in partnership with Coimbatore City Municipal Corporation (CCMC), Coimbatore Smart City Limited (CSCL) and Residents Welfare Association of Coimbatore (RAAC)

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ABOUT THE REPORT

The report has been prepared as part of the bilateral technical cooperation project 'Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT)' commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and jointly implemented by Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH and the Ministry of Housing and Urban Affairs (MoHUA), Government of India. The objective of the project is to improve the planning and implementation of sustainable urban transport systems in selected Indian cities. The project also supports the Green Urban Mobility Partnership (GUMP) between the governments of India and Germany.

Providing safe access to all has been an integral feature of the mobility projects taken up by Coimbatore City Municipal Corporation (CCMC) and Coimbatore Smart City Limited (CSCL). To strengthen its objective, a Non-Motorised Transport (NMT) Network Plan was prepared which elaborated the need for prioritising various vulnerable road users including schoolchildren.

The 'Safe School Precincts' study aims at providing a safe commuting ecosystem for schoolchildren. It highlights the issues related to accessibility around schools by analysing travel pattern of schoolchildren and identifying infrastructure gaps through an

evidence-based rating mechanism. As a way forward, it recommends a collaborative approach to achieve the target of safe access to schools.

The study is presented in three volumes:

Volume I – Status Quo Report and Outcome Strategy for Coimbatore, India, presents the status-quo analysis and outcome strategy that covers needs assessment, results from the travel pattern survey, infrastructure gap assessment through iRAP star rating for schools and a strategy for the way forward.

Volume II – Results from the Star Rating Analysis of Schools in Coimbatore, India, presents the detailed results from iRAP star rating for schools to assess the infrastructure gaps around 25 schools with 69 locations in Coimbatore.

Volume III – Guidance Document for Designing Travel Pattern Survey of Schoolchildren presents a step-by-step process for conducting a travel pattern survey of schoolchildren. The survey sheets are divided into three categories to carefully capture the quantitative and qualitative responses from children, parents and school administrators. This document will serve as a ready-to-use guide for engineers, NGOs and academicians while carrying out these surveys.





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01INTRODUCTION

his chapter introduces the process behind carrying out assessment of road safety infrastructure around schools using iRAP star rating tool. It briefly describes the approach towards required data collection and assignment of start ratings.





1.1 BACKGROUND

Creating safe and accessible facilities for schoolchildren does not only benefit the children but also other road users in the city. CCMC realised this need for safer streets in the city and prepared a NMT Network Plan that identified 300 km NMT routes and 26 pedestrian hotspots which will benefit 70% of the schools in the city. As a way forward, the NMT Network Plan proposes safe routes to school as a measure to prioritise schoolchildren as the prime beneficiaries of the NMT Plan. In continuation to this measure, CCMC has initiated a unique project called Safe School Precincts to assess schoolchildren's mobility needs and infrastructure requirements associated with it.

Safe School Precincts is a result-oriented programme that meticulously captures and addresses the accessibility issues of schoolchildren through a study of the travel patterns of the schoolchildren and infrastructure gaps, and then provides measures to overcome the barriers to make accessibility safer for schoolchildren. It is envisaged that this programme will eventually become a partnership activity of CCMC, Coimbatore Smart City Limited, Coimbatore Schools and NGOs. The present study is a preamble to provide a basis and

strong ground for the long-term programme. Safe School Precincts considers accessibility around schools with a buffer of 250 m.

This volume guides CCMC to:

- Establish processes to carry out safety audit for school access using iRAP safe routes for school approach
- Inform decision-making to retrofit or improve the streets in the city for children

It provides an in-depth understanding into the process followed for assessing safety around schools in a star rating, including methods of data collection, analysis and recommendations using 25 schools and 69 locations. The inferences provide detailed insights into various indicators that can impact the accessibility and safety of schoolchildren and how to address them adequately.

For the assessment of the status of infrastructure, the India-wide and readily available iRAP star rating for schools (SR4S) tool was used that enriched the analysis of the simultaneously conducted travel pattern survey.

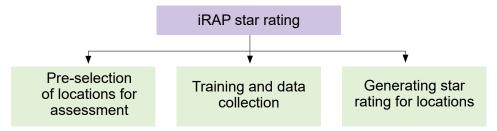


Figure 1: Process for iRAP star rating

1.2 INTRODUCTION TO STAR RATING FOR SCHOOLS (SR4S)

Road traffic injury is now the leading cause of death for children and young adults aged 5–29 years. Each day 500 children are killed in preventable traffic crashes around the world.¹ Star Rating for Schools (SR4S) is the first evidence-based tool for measuring, managing and communicating the risk children are exposed to on a journey to school. It supports quick interventions that save lives and prevent serious injuries from day one.



Image Credit: Gonzalo Rodriguez Foundation

We know the road features and traffic conditions that affect the pedestrian safety on a journey to school.

SR4S allows an easy assessment of each of these features and using evidence-based research of their impact on safety, a star rating can be calculated at spot locations, where 1-star is the least safe and 5-star is the safest.



Image Credit: Gustavo Roth/EPTC-PMPA

SR4S was awarded a prestigious Prince Michael International Road Safety Award in December 2018, recognising the application's huge potential to reduce risk and save the lives of pedestrians worldwide.

STAR RATING FOR SCHOOLS

- Measures safety before and after road improvements.
- Provides an evidence-based rating of road safety.
- Supports education campaigns for students, drivers and the wider community for safe travel around schools.
- Guides decision-makers in prioritizing road upgrades around schools by assessing different options.



¹ https://www.safekids.org/global-road-safety-facts-children-safe-kids-worldwide

1.3 PROCESS IN BRIEF

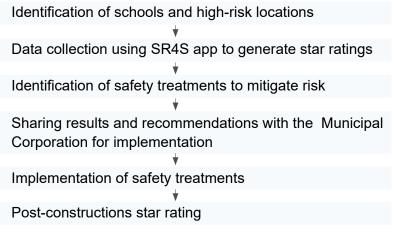
Road features affect the pedestrian safety on a journey to school. Using evidence-based research of their impact on safety, a Star Rating is calculated at spot locations, where 1-star is the least safe and 5-star is rated the safest. SR4S combines a central web application and a data collection Android app that harness the power of the iRAP Star Rating for pedestrians. Once the risk is measured, effective scenarios of road treatments and their impact on safety can be simulated to identify cost-effective solutions. The implementation of the treatments can ultimately be tracked so that the partner and funder can see the benefits of their investment and the school teaching staff can educate the pupils on the correct use of the treatments.

The process involves identification of school and high-risk locations around where pedestrian face the risk of crossing the road and/or walking along. The trained team collected the data using a web-





based app which is used to generate star ratings. Road safety treatments to improve safety are explored and tested to see how they would help to improve star ratings. These star rating results and identified treatments are shared with the implementing authority along with the school for implementation.²



² International Roads Assessment Programme, Star Rating for Schools methodology

Attributes recorded for each segment



shoulder sidewalk Channelization point

Intersection quality Crossing quality flow Intersecting volume Speed management Property access

quality of curve

Median sight distance Delineation grade

Comments

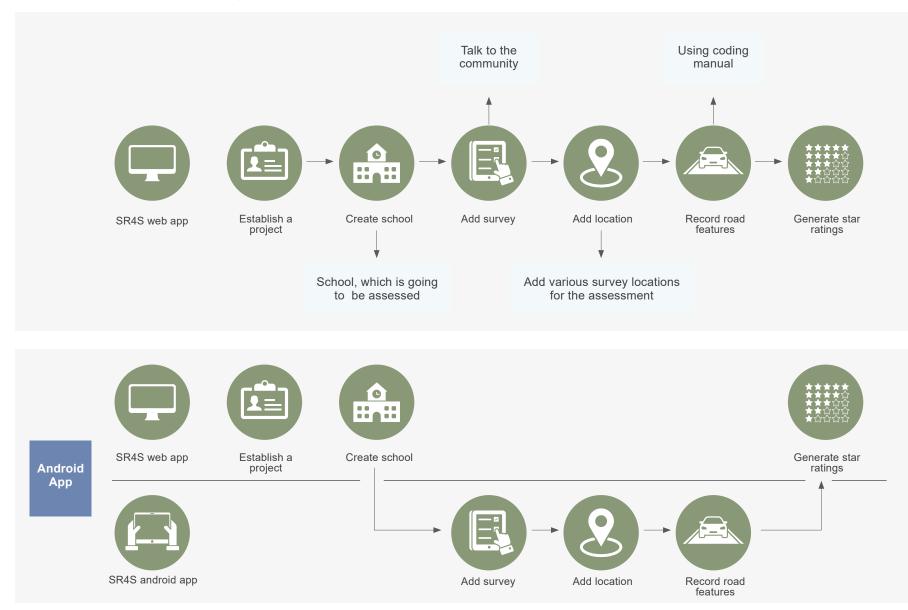
Number of lanes Road condition Skid resistance

Area type Speed Vehicle flow

Street lighting Shoulder Rumble strips Vehicle parking Pedestrian fencing

Image reference Section

Overview of the iRAP rating process



02

LOCATION-WISE RESULTS

This chapter provides detailed assessment of each location around 25 schools assessed for star rating. It also documents the star rating assigned for each school and also improvement measures that will improve the star rating.





2.1 GUIDANCE ON HOW TO READ RESULTS FOR EACH SCHOOL

A detailed assessment was carried out to understand the infrastructure gaps around 25 schools in the city. The results presented here define the degree of the safety issues around schools and requisite measures to improve the situation.

- Information of the school, location details and photographs
- Name of high-risk locations identified around school for assessment. For each location,
- Photographs and location description
- Star rating of existing situation
- Suggested improvement options (safety treatments) and star rating if these treatments are implemented

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
STAR RATING	*	$\star\star\star$	$\star \star \star$
Star Rating Score	97.02	16.19	30.27





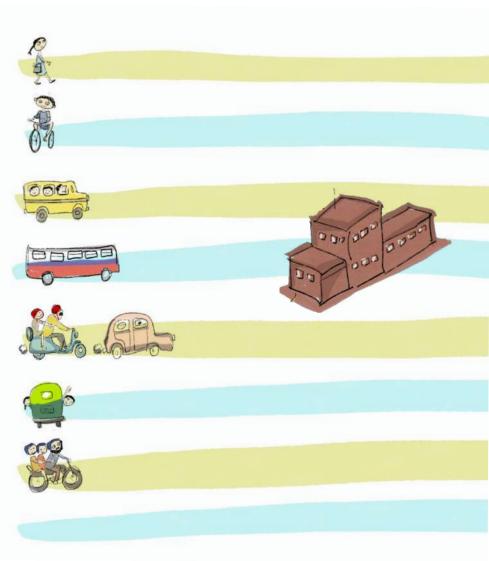
★ ★★ ★★ ★★ ★★★
Lack of infrastructure, high traffic volumes, high speeds-very unsafe
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Figure 2: Star rating in brief

2.2 NAVIGATING THE SCHOOLS ASSESSED FOR STAR RATING

The table below shows the list of schools assessed in Coimbatore using SR4S

SL No.School NamePage No.1CPS Varadharajapuram192CPS Kallimadai223CPS Peelamedu Pudur254CPS Kovilmedu295CPS & CHS Maniyakaranpalayam336CMS &CHS Ramasamy Nagar367CMS Kottai398CMS MNG Street429CMS BB Street4510CMS Masakalipalayam/Uppilipalayam4911CMS Tatabad5212CGHS Selvapuram6014CGHS Puliakulam6315CHSS Ramanthapuram7017CGHSS Oppanakara Street7418CGHSS R S Puram West8720CGHSS R S Puram West8721CHSS North Coimbatore9222CMS Sanganur9623CPS Ramalingam Colony10124CMS Papanaicken Palayam108			
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17CGHSS Oppanakara Street7418CGHSS Ramakrishnapuram7819CHSS Peelamedu8220CGHSS R S Puram West8721CHSS North Coimbatore9222CMS Sanganur9623CPS Ramalingam Colony10124CMS Pappanaicken Palayam105	15	CHSS R S Puram	66
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21CHSS North Coimbatore9222CMS Sanganur9623CPS Ramalingam Colony10124CMS Pappanaicken Palayam105	19	CHSS Peelamedu	82
22CMS Sanganur9623CPS Ramalingam Colony10124CMS Pappanaicken Palayam105	20	CGHSS R S Puram West	87
23CPS Ramalingam Colony10124CMS Pappanaicken Palayam105	21	CHSS North Coimbatore	92
24 CMS Pappanaicken Palayam 105	22	CMS Sanganur	96
	23	CPS Ramalingam Colony	101
25 CMS Ramakrishnapuram 108	24	CMS Pappanaicken Palayam	105
	25	CMS Ramakrishnapuram	108



CPS: Corporation Primary School | CMS: Corporation Middle School | CHS: Corporation High School | CGHS: Corporation Girls High School | CGHSS: Corporation Girls High School | CHSS: Corporation Higher Secondary School

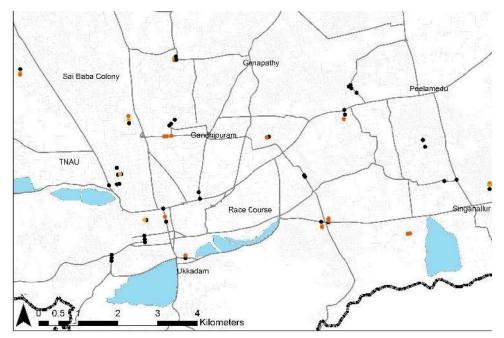
2.3 COIMBATORE CITY MUNICIPAL CORPORATION SCHOOLS ASSESSED USING SR4S



2.4 STAR RATING RESULTS - EXISTING SITUATION

Based on the results from iRAP's SR4S application, the summary of star rating attained by various schools in the city are presented here. The iRAP assessment observed that at several places the existing sidewalks are encroached by parking and illegal encroachments forcing pedestrians to walk on traffic lanes resulting in an increased risk. 87% of the locations assessed are rated 1 and 2-star for pedestrians. This showcases a gap in the existing NMT infrastructure around schools in the city

Star rating	No. of locations	% share
1-star	44	64%
2-star	18	26%
3-star	7	10%
4-star	0	0%
5-star	0	0%
Total	69	100%



Example star rating images



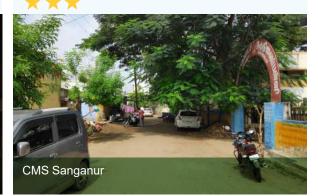
CGHSS R.S.Puram West > Azad Road Junction

No sidewalk | No crossing facility | 4-leg intersection





Informal sidewalk | No crossing facility | Nointersection



No sidewalk | No crossing facility | No intersection | Low speed | Low traffic volume (This location achieved 3-star as speed and traffic volume are low)

School No.	CCMC List No.	Name of School	GPS Coordinates		No. of Locations Assessed
1	69	CPS VARADHARAJAPURAM	11.006072	77.023178	2

CPS Varadharajapuram is a primary school with classes from I to V and has a total strength of 82. The school is located on a subarterial road.

Road safety assessment was done at 2 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in following pages.



Location No.	Location Name	Baseline Star Rating
1	Uppilipalayam Main Rd > School Entrance	*
2	Kamarajar Rd – Uppilipalayam Main Rd > Intersection	\star



Star Rating Map

School No.	Location No.	Name of School	Location Name
1	1	CPS VARADHARAJAPURAM	Uppilipalayam Main Rd > School Entrance
Location Desc	cription	Suggested Safety Measures (option-1)	

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Poor road delineation and signages



- Road delineation improvement with proper signages including School Ahead sign
- · Raised (table-top type) pedestrian crossing facility with proper signages and marking
- · Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable Star Rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved Shoulder right	Not present	Narrow	Narrow
Paved Shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star \star \star$	***
Star Rating Score	119.13	16.19	30.27

School	No. Location No.	Name of School	Location Name
1	2	CPS VARADHARAJAPURAM	Kamarajar Rd – Uppilipalayam Main Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages
- Moderate road surface condition





Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages
- Signalised pedestrian crossing facility with proper signages and marking on main road and
- raised (table-top type) crossing on intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Not present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	\star	$\star\star\star$
Star Rating Score	374.93	28.41	38.74

School No.	CCMC List No.	Name of School	G	PS Coordinates	No. of Locations Assessed
2	65	CPS KALLIMADAI	10.994548	77.015091	2

CPS Kallimadai is a primary school with classes from I to V and has a total strength of 69. The school is located on an arterial road.

Road safety assessment was done at 2 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Kallimadai Rd > School Entrance	**
2	Kallimadai Rd > Intersection	**

Star Rating Map



School No.	Location No.	Name of School	Location Name
2	1	CPS KALLIMADAI	Kallimadai Rd>School Entrance

- No pedestrian crossing facility
- No footpath
- Speed calming measure present
- Undivided road with centre-line median
- 3-leg intersection



Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- School Ahead sign

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes Current Situation Improvement Improvement Option-1 Option-2 Delineation and signages Adequate Adequate Adequate Paved shoulder right Narrow Narrow Narrow Paved shoulder left Narrow Narrow Narrow Traffic calming Present Present Present Pedestrian crossing facility Marked crossing No facility Raised crossing Sidewalk left Not present Formal sidewalk Formal sidewalk Sidewalk right Not present Formal sidewalk Formal sidewalk Pedestrian fencing Not present Not present Not present Street lighting Present Present Present Road surface condition Adequate Adequate Adequate Intersection quality Poor Good Good One side Vehicle parking One side One side STAR RATING Star Rating Score 42.19 7.63 11.42

School No.	Location No.	Name of School	Location Name
2	2	CPS KALLIMADAI	Kallimadai Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

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Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star\star$	$\star \star \star \star$
Star Rating Score	59.83	7.63	14.28

School No.	CCMC List No.	Name of School	GPS Coordinates		No. of Locations Assessed
3	81	CPS PEELAMEDU PUDUR	11.020516	77.000302	3

CPS Peelamedu Pudur is a primary school with classes from I to V and has a total strength of 21. The school is located on a Local or collector road.

Road safety assessment was done at 3 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Pudur Main Rd > School Entrance	
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2	Pudur Main Rd > Intersection	\star
3	Avinashi Rd - Pudur Main Rd > Intersection	*

Star Rating Map



School No.	Location No.	Name of School	Location Name
3	1	CPS PEELAMEDU PUDUR	Pudur Main Rd > School Entrance

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Medium road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star \star$	$\star \star \star \star$
Star Rating Score	47.69	6.54	12.22

School No.	Location No.	Name of School	Location Name
3	2	CPS PEELAMEDU PUDUR	Pudur Main Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	***	$\star\star\star$
Star Rating Score	126.5	19.03	35.61

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RESULTS FROM THE STAR RATING ANALYSIS OF SCHOOLS IN COIMBATORE, INDIA

School No.	Location No.	Name of School	Location Name
3	3	CPS PEELAMEDU PUDUR	Avinashi Rd - Pudur Main Rd > Intersection

Location Description

- Marked pedestrian crossing facility
- Informal sidewalk on one side
- No speed calming measure
- Divided road with 3+3 lanes
- 3-leg unsignalized intersection



Suggested Safety Measures (option-1)

- Signalized pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking

Option-2 shows the achievable star rating with table-top type crossing instead of signalized crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder left	Miduam	Miduam	Miduam
Paved shoulder right	Narrow	Narrow	Narrow
Traffic calming	Not present	Not Present	Present
Pedestrian crossing facility	Marked crossing	Signalised crossing	Raised crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	**
Star Rating Score	580.97	33.05	48.77

School No.	CCMC List No.	Name of School	GPS Coo	rdinates	No. of Locations Assessed
4	57	CPS KOVILMEDU	11.031571	76.925146	3

CPS Kovilmedu is a primary school with classes from I to V and has a total strength of 268. The school is located on an arterial road.

Road safety assessment was done at 3 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Pudur Main Rd > School Entrance	*
2	Pudur Main Rd > Intersection	$\star \star \star$
3	Avinashi Rd - Pudur Main Rd > Intersection	$\star\star$

Star Rating Map



School No.	Location No.	Name of School	Location Name
4	1	CPS KOVILMEDU	Kovilmedu - Onampalavam > Intersection

- No pedestrian crossing facility
- No footpath
- Speed calming measure present
- Undivided road with centre-line median
- 4-leg intersection
- Poor road surface condition and delineation





Intersecting road

Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Miduam	Miduam
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Present	Present	Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Poor	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star$	$\star\star\star$
Star Rating Score	197.78	23.79	35.62

School No.	Location No.	Name of School	Location Name
4	2	CPS KOVILMEDU	Venkittapuram road > School Entrance

- No pedestrian crossing facility
- Formal sidewalk on one side
- No speed calming measure
- Undivided road with centre-line median
- Moderate road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Formal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	One side	One side	One side
STAR RATING	$\star \star \star$	$\star\star\star\star\star$	$\star \star \star \star$
Star Rating Score	25.72	4.18	7.81

School No.	Location No.	Name of School	Location Name
4	3	CPS KOVILMEDU	Venkittapuram road > Intersection
Location Des	cription	Suggested Safety Measures (ontion-1)	

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages



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- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	**	$\star\star\star\star$	$\star\star\star\star$
Star Rating Score	58.82	7.63	14.27

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School No.	CCMC List No.	Name of School	GPS Coo	rdinates	No. of Locations Assessed
5	49, 62	CPS & CHS MANIYAKARANPALAYAM	11.047421	76.96929	2

CPS & CHS Maniyakaranpalayam has primary and high school sections with classes from I to X and has a total strength of 535. The school is located on a sub-arterial road.

Road safety assessment was done at 2 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Tagore Road > School entrance	*
2	Sangaralinganar Road – Tagore Road > Intersection	*



Star Rating Map

School No.	Location No.	Name of School	Location Name
5	1	CPS & CHS MANIYAKARANPALAYAM	Tagore Road > School entrance

- Marked pedestrian crossing facility
- Informalsidewalk
- No speed calming measure
- Undivided road with centre-line median
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with good quality zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	Marked crossing	Raised crossing	Marked crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	\star	$\star \star \star$
Star Rating Score	110.36	19.89	37.19

School No.	Location No.	Name of School	Location Name
5	2	CPS & CHS MANIYAKARANPALAYAM	Sangaralinganar Road - Tagore Road > Intersection

- No pedestrian crossing facility
- Informal sidewalk
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages
- Very-sharp curvature





Suggested Safety Measures (option-1)

- Road and curvature delineation improvement with proper signages including, warning signs, chevron signs and School Ahead sign
- Raised (table-top type) pedestrian crossing facility on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Medium	Medium
Paved shoulder left	Not present	Medium	Medium
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star \star \star$	*
Star Rating Score	331.75	36.38	156.39

School No.	CCMC List No.	Name of School	GPS Coo	rdinates	No. of Locations Assessed
6	45, 63	CMS & CHS RAMASAMY NAGAR	11.046881	76.949683	2

CMS & CHS Ramasamy Nagar has primary and high school with classes from I to X and has a total strength of 357. The school is located on a sub-arterial road.

Road safety assessment was done at 2 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Nallampalayam Road > Nallampalayam - School Road Junction	*
2	School Road > School Entrance	$\star\star$

Star Rating Map



School No.	Location No.	Name of School	Location Name
6	1	CMS & CHS RAMASAMY NAGAR	Nallampalayam Road > Nallampalayam - School Road Junction

- No pedestrian crossing facility
- No footpath
- Speed calming measure present
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Medium	Medium	Medium
Paved shoulder left	Medium	Medium	Medium
Traffic calming	Present	Present	Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star\star\star$	$\star\star\star$
Star Rating Score	103.85	18.84	28.22

School No.	Location No.	Name of School	Location Name
6	2	CMS & CHS RAMASAMY NAGAR	School Road > School Entrance

- No pedestrian crossing facility
- No footpath
- Speed calming measure present
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages
- Poor road surface condition



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Present	Present	Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Poor	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	**	$\star\star\star\star$	$\star\star\star\star$
Star Rating Score	82.18	5.04	7.54

School No.	CCMC List No.	Name of School	GPS Coo	rdinates	No. of Locations Assessed
7	15	CMS KOTTAI	10.98917	76.963185	2

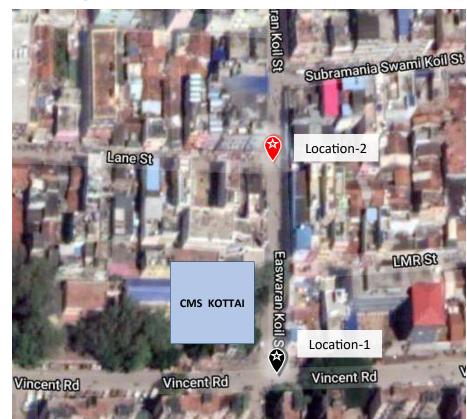
CMS Kottai is a middle school with classes from I to VIII and has a total strength of 240. The school is located on a subarterial road.

Road safety assessment was done at 2 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Vincent Rd – Easwaran Koil St > Intersection	*
2	Eswaran Koil St – Lane St > Intersection	$\star\star$



School No.	Location No.	Name of School	Location Name
7	1	CMS KOTTAI	Vincent Rd - Easwaran Koil St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure on inspected road
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages



Inspected road



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star$	$\star\star\star$
Star Rating Score	104.36	14.50	27.14

School No.	Location No.	Name of School	Location Name
7	2	CMS KOTTAI	Eswaran Koil St - Lane St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	**	$\star\star\star\star$	$\star \star \star$
Star Rating Score	63.41	9.15	17.13

School No. C	CMC List No.	Name of School	GPS Coo	rdinates	No. of Locations Assessed
8	2	CMS MNG STREET	10.997983	76.954022	2

CMS MNG Street is a middle school with classes from I to VIII and has a total strength of 124. The school is located on a local or collector street.

Road safety assessment was done at 2 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Thiyaki Kumaran Rd - Marakkara NanjappaGowder St > Intersection	*
2	Marakkara Nanjappa Gowder St > School Entrance	$\star \star \star$



School No.	Location No.	Name of School	Location Name
8	1	CMS MNG STREET	Thiyaki Kumaran Rd – Marakkara Nanjappa Gowder St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection



Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- School Ahead sign

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	***	$\star\star\star$
Star Rating Score	106.3	15.92	29.79

School No.	Location No.	Name of School	Location Name
8	2	CMS MNG STREET	Marakkara Nanjappa Gowder St > School Entrance

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Medium road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	$\star \star \star$	****	$\star\star\star\star$
Star Rating Score	25.38	3.30	6.18

School No.	CCMC List No.	Name of School	GPS Coord	dinates	No. of Locations Assessed
9	37	CMS BB STREET	10.993297	76.95412	3

CMS BB Street is a middle school with classes from I to VIII and has a total strength of 47. The school is located on a subarterial road.

Road safety assessment was done at 3 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Karuppa Goundar St – Pavizham 2nd St >School Entrance – Intersection	*
2	Big Bazar St – Karuppa Goundar St > Intersection	\star
3	Raja St – Karuppa Goundar St > Intersection	*



School No.	Location No.	Name of School	Location Name
9	1	CMS BB STREET	Karuppa Goundar St - Pavizham 2nd St > School Entrance - Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages



Inspected road



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	$\star \star \star$
Star Rating Score	168.01	21.00	39.26

School No.	Location No.	Name of School	Location Name
9	2	CMS BB STREET	Big Bazar St – Karuppa Goundar St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One sides	One side
STAR RATING	*	$\star\star\star$	**
Star Rating Score	256.86	22.74	48.44

School No.	Location No.	Name of School	Location Name
9	3	CMS BB STREET	Raja St – Karuppa Goundar St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Signalized pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with table-top type crossing instead of signalized

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	**
Star Rating Score	389.19	32.10	68.39

School No.	CCMC List No.	Name of School	GF	PS Coordinates	No. of Locations Assessed
10	64, 73	CMS MASAKALIPALAYAM / UPPILIPALAYAM	11.013705	77.018757	2

CMS Masakalipalayam / Uppilipalayam is a middle school with classes from I to VIII and has a total strength of 388. The school is located on a local or collector.

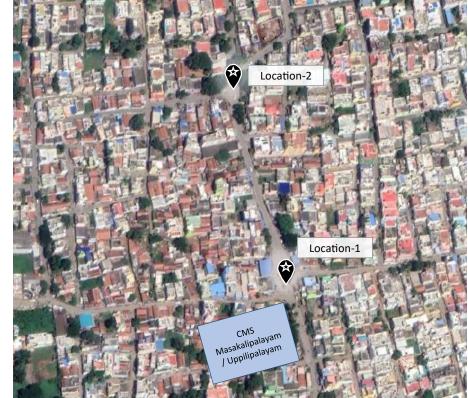
Road safety assessment was done at 2 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



ocation No.	Location Name	Baseline Star Rating
1	Varadharaja Puram Main Rd – Subbakonar St> School entrance – Intersection	*
2	Varadharaja Puram Main Rd – Ramasamy konar St > Intersection	*





School No.	Location No.	Name of School	Location Name
10	1	CMS MASAKALIPALAYAM / UPPILIPALAYAM	Varadharaja Puram Main Rd - Subbakonar St > School entrance - Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not Present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star\star\star$	$\star \star \star$
Star Rating Score	171.01	20.55	38.48

School No.	Location No.	Name of School	Location Name
10	2	CMS MASAKALIPALAYAM / UPPILIPALAYAM	Varadharaja Puram Main Rd – Ramasamy konar St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages
- Moderate road surface condition
- Moderate curvature



Suggested Safety Measures (option-1)

- Roads surface improvement and delineation including curvature marking with proper warning signs, chevron etc.
- Raised (table-top type) pedestrian crossing facility on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)
- Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Current Situation	Improvement Option-1	Improvement Option-2
Poor	Adequate	Adequate
Not present	Narrow	Narrow
Not present	Narrow	Narrow
Not present	Present	Not present
No facility	Raised crossing	Marked crossing
Not present	Formal sidewalk	Formal sidewalk
Not present	Formal sidewalk	Formal sidewalk
Not present	Not present	Not present
Present	Present	Present
Moderate	Adequate	Adequate
Poor	Good	Good
One side	One sides	One side
*	$\star\star\star$	$\star\star\star$
255.64	17.53	32.75
	Poor Not present Not present Not present Not present Not present Not present Not present Present Moderate Poor One side	PoorAdequateNot presentNarrowNot presentNarrowNot presentPresentNot presentPresentNo facilityRaised crossingNot presentFormal sidewalkNot presentFormal sidewalkNot presentNot presentNot presentPresentPresentPresentPresentPresentModerateAdequatePoorGoodOne sideOne sides★★ ★ ★ ★

School No.	CCMC List No.	Name of School	GPS Cool	rdinates	No. of Locations Assessed
11	13	CMS TATABAD	11.020003	76.95972	3

CMS Tatabad is a middle school with classes from I to VIII and has a total strength of 119. The school is located on a subarterial street. The road safety assessment of 3 locations are shown in the Star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Dr Alagappa Chettiar Rd > School Entrance	*
2	Power House Road > Intersection	*
3	Dr Alagappa Chettiar Rd – 4th Street > Intersection	*



School No.	Location No.	Name of School	Location Name
11	1	CMS TATABAD	Dr Alagappa Chettiar Rd > School Entrance

Location Description

- No pedestrian crossing facility
- Footpath on one side
- No speed calming measure
- Undivided road with centre-line median
- 2+2 lanes
- Moderate road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)
Road surface and delineation improvement with proper signages including School Ahead sign
 Signalised pedestrian crossing facility with proper signages and marking
 Formal and obstruction free sidewalk on both sides of the road
 Narrow (<1m wide) paved shoulder (edge line marking)
Option-2 shows the achievable star rating with Table-top type crossing instead of signalised
crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Not present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star\star\star\star$	$\star \star \star$
Star Rating Score	133.14	12.86	26.21

School No.	Location No.	Name of School	Location Name
11	2	CMS TATABAD	Power House Road > Intersection

- No pedestrian crossing facility
- Informal footpath
- No speed calming measure
- Divided road with 2+2 lanes
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Signalised pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk on both sides of the road (with pedestrian fencing)
- Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder on left side

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder left	Narrow	Medium	Medium
Paved shoulder right	Narrow	Narrow	Narrow
Traffic calming	Not present	Not present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not Present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	**
Star Rating Score	310.18	34.33	44.60

School No.	Location No.	Name of School	Location Name
11	3	CMS TATABAD	Dr Alagappa Chettiar Rd – 4th Street > Intersection

- No pedestrian crossing facility
- Informal footpath on one side
- No speed calming measure
- Undivided road with centre-line median
- 2+2 lanes
- 4-leg intersection





Suggested Safety Measures (option-1)

- Signalised pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk on both sides of the road (with pedestrian fencing)
- Intersection quality improvement with proper signages and marking
- School Ahead sign

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Not present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star \star \star$	**
Star Rating Score	392.27	30.27	47.59

School No.	CCMC List No.	Name of School	GPS Cool	rdinates	No. of Locations Assessed
12	38	CGHS SELVAPURAM	10.989157	76.945888	3

CGHS Selvapuram is a high school with classes from VI to X and has a total strength of 218. The school is located on a subarterial street.

The road safety assessment of 3 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Perur Main Rd – Sundakkamuthur Bypass Rd > Intersection	*
2	Sundakkamuthur Bypass Rd – Thirunagar 1st Street > Intersection	*
3	Sundakkamuthur Bypass Rd > School entrance – Intersection	*



School No.	Location No.	Name of School	Location Name
12	1	CGHS SELVAPURAM	Perur Main Rd – Sundakkamuthur Bypass Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder on both sides (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Medium	Medium
Paved shoulder left	Not present	Medium	Medium
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star$	*
Star Rating Score	236.93	35.31	149.91

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School No.	Location No.	Name of School	Location Name
12	2	CGHS SELVAPURAM	Sundakkamuthur Bypass Rd – Thirunagar 1st Street > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Moderate road surface condition
- Poor road delineation and signages



Inspected road



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star$	$\star\star\star$
Star Rating Score	127.44	14.79	27.65

School No.	Location No.	Name of School	Location Name
12	3	CGHS SELVAPURAM	Sundakkamuthur Bypass Rd > School entrance - Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Moderate road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star\star$	$\star \star \star$
Star Rating Score	176.4	20.87	39.02

School No.	CCMC List No.	Name of School	GP	S Coordinates	No. of Locations Assessed
13	29	CORPORATION HIGH SCHOOL ANUPPARPALAYAM	11.00419	76.966635	2

CHS Anupparpalayam is a high school with classes from VI to X and has a total strength of 130. The school is located on an arterial street.

The road safety assessment of 2 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Dr. Nanjapaa Rd > School entrance - Intersection	*
2	Avinashi Rd > Intersection	*





School No.	Location No.	Name of School	Location Name
13	1	CORPORATION HIGH SCHOOL ANUPPARPALAYAM	Dr. Nanjapaa Rd > School entrance - Intersection

- No pedestrian crossing facility
- Footpath on one side
- No speed calming measure
- Divided road with 2+2 lanes
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Signalized pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Delineation and signagesPoorAdequateAdequatePaved shoulder rightNarrowNarrowNarrowNarrowPaved shoulder leftNot presentNarrowNarrowNarrowTraffic calmingNot presentNot presentNot presentNot presentPedestrian crossing facilityNo facilitySignalised crossingRaised crossingSidewalk leftInformal sidewalkFormal sidewalkFormal sidewalkSidewalk rightNot presentNot presentNot presentPedestrian fencingNot presentNot presentNot presentStreet lightingPresentPresentPresentRoad surface conditionAdequateAdequateAdequateIntersection qualityPoorGoodGood	ent :
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Intersection quality Poor Good Good	
Vabials applies One side One side One side	
Vehicle parking One side One side One side	
STAR RATING \bigstar \bigstar \bigstar	
Star Rating Score 104.09 15.27 24.20	

School No.	Location No.	Name of School	Location Name
13	2	CORPORATION HIGH SCHOOL ANUPPARPALAYAM	Avinashi Rd > Intersection

- No pedestrian crossing facility
- Informal footpath
- No speed calming measure
- Divided road with 2+2 lanes
- 3-leg intersection





Suggested Safety Measures (option-1)

- Signalized pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk with pedestrian fencing
- Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder along road edge

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Medium	Medium
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Not present	Not present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	**
Star Rating Score	280.92	33.58	54.43

School No.	CCMC List No.	Name of School	GPS Coord	dinates	No. of Locations Assessed
14	26	CORPORATION GIRLS HIGH SCHOOL PULIAKULAM	11.007924	76.991125	2

CGHS Puliakulam is a high school for girls with classes from VI to X and has a total strength of 64. The school is located on a subarterialstreet.

The road safety assessment of 2 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.Location NameBaseline Star
Rating1Puliakulam Rd > School Entrance*2Puliakulam Rd - Street Number 34 > Intersection*





School No.	Location No.	Name of School	Location Name
14	1	CORPORATION GIRLS HIGH SCHOOL PULIAKULAM	Puliakulam Rd > School Entrance

- No pedestrian crossing facility
- Informal footpath
- speed calming measures present
- Divided road with 2+2 lanes



Suggested Safety Measures (option-1)

- Signalized pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk with pedestrian fencing
- Medium (1-2.4m wide) paved shoulder (edge line marking)
- School Ahead sign

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Medium	Medium
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Present	Present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star$	***
Star Rating Score	107.09	8.60	21.66

School No.	Location No.	Name of School	Location Name
14	2	CORPORATION GIRLS HIGH SCHOOL PULIAKULAM	Puliakulam Rd - Street Number 34 > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Divided road with 2+2 lanes
- 3-leg intersection



Inspected road



Suggested Safety Measures (option-1)

- Signalized pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk with pedestrian fencing
- Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder (edge line marking)
- School Ahead sign

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Medium	Medium
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Not present	Not present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	$\star \star \star$
Star Rating Score	257.19	19.89	37.86

School No.	CCMC List No.	Name of School	GPS Coo	rdinates	No. of Locations Assessed
15	23	CORPORATION HIGHER SECONDARY SCHOOL R.S. PURAM	11.004989	76.947038	3

CHS R.S Puram is a higher secondary school with classes from VI to XII and has a total strength of 317. The school is located on an arterial road.

The road safety assessment of 3 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Arokiasamy Rd W > School Entrance	*
2	Thadagam Main Rd – Arokiasamy Rd W $ ightarrow$ Intersection	*
3	Arokiasamy Rd W - Azad Rd > Intersection	*



School No.	Location No.	Name of School	Location Name
15	1	CORPORATION HIGHER SECONDARY SCHOOL R.S. PURAM	Arokiasamy Rd W > School Entrance

- No pedestrian crossing facility
- Footpath present on one side but width isinsufficient and seem to be partially obstructed
- No speed calming measure
- Undivided road with centre-line median



Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Pedestrian fencing
- School Ahead sign

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Informa sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	***	$\star \star \star$
Star Rating Score	111.48	15.58	29.12

School No.	Location No.	Name of School	Location Name
15	2	CORPORATION HIGHER SECONDARY SCHOOL R.S. PURAM	Thadagam Main Rd - Arokiasamy Rd W > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Divided road with 2+2 lanes
- 3-leg intersection





Suggested Safety Measures (option-1)

- Signalised pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk with pedestrian fencing
- Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder left	Narrow	Medium	Medium
Paved shoulder right	Narrow	Narrow	Narrow
Traffic calming	Not present	Not present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	**
Star Rating Score	367.82	37.90	48.38

School No.	Location No.	Name of School	Location Name
15	3	CORPORATION HIGHER SECONDARY SCHOOL R.S. PURAM	Arokiasamy Rd W - Azad Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection





Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder (edge line marking)
- School Ahead sign

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Medium	Medium
Paved shoulder left	Narrow	Medium	Medium
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star\star\star$	**
Star Rating Score	209.16	30.96	57.95

School No.	CCMC List No.	Name of School	GPS Coordi	nates	No. of Locations Assessed
16	28	CORPORATION HR SEC SCHOOL, RAMANATHAPURAM	10.996981	76.995032	3

CHS Ramanathapuram is a higher secondary school with classes from VI to XII and has a total strength of 384. The school is located on a an arterial road.

The road safety assessment of 3 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Trichy Rd – Subramaniam St > Intersection	*
2	Subramaniam St > School Entrance	\star \star
3	Subramaniam St - Street Number 53 > Intersection	**



School No.	Location No.	Name of School	Location Name
16	1	CORPORATION HR SEC SCHOOL, RAMANATHAPURAM	Trichy Rd - Subramaniam St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Divided road with 2+2 lanes
- 3-leg intersection
- Poor road surface condition
- Poor road delineation and signages
- Road has construction work in progress



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Signalised pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- · Formal and obstruction free sidewalk with pedestrian fencing
- · Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder along left & narrow (<1m) shoulder along median

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Medium	Medium
Traffic calming	Not present	Not present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Poor	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	$\star\star\star$
Star Rating Score	183.22	18.89	24.95

School No.	Location No.	Name of School	Location Name
16	2	CORPORATION HR SEC SCHOOL, RAMANATHAPURAM	Subramaniam St > School Entrance

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder left	Not present	Narrow	Narrow
Paved shoulder right	Not present	Narrow	Narrow
Traffic calming	Not present	Not present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	***	$\star \star \star \star$	$\star \star \star \star$
Star Rating Score	31.06	6.16	9.20

School No.	Location No.	Name of School	Location Name
16	3	CORPORATION HR SEC SCHOOL, RAMANATHAPURAM	Subramaniam St – Street Number 53 > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Not present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star$	$\star \star \star$
Star Rating Score	47.87	10.13	15.16

School No.	CCMC List No.	Name of School	GPS	S Coordinates	No. of Locations Assessed
17	34	CGHSS OPPANAKARA STREET	10.99851	76.958358	3

CGHSS Oppanakara Street is a higher secondary school for girls with classes from VI to XII and has a total strength of 1966.

The school is located on an arterial road.

The road safety assessment of 3 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



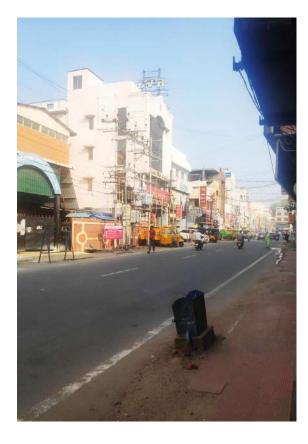
Location No.	Location Name	Baseline Star Rating
1	Oppanakara Street > School Entrance	**
2	Oppanakara Street - Edayar Street > Intersection	*
3	Oppanakara Street - Mill Rd > Intersection	*

Star Rating Map



School No.	Location No.	Name of School	Location Name
17	1	CGHSS OPPANAKARA STREET	Oppanakara Street > School Entrance

- No pedestrian crossing facility
- Informal footpath (poor quality) on one side
- No speed calming measure
- One-way road



Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)
- School Ahead sign

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	One side	One side	One side
STAR RATING	**	$\star\star\star\star\star$	**
Star Rating Score	62.08	11.11	62.03

School No.	Location No.	Name of School	Location Name
17	2	CGHSS OPPANAKARA STREET	Oppanakara Street – Edayar Street > Intersection

- No pedestrian crossing facility
- Footpath on one side
- No speed calming measure
- One-way road
- 4-leg intersection
- Poor road delineation and signages



Inspected road



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Formal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Not present	Not present	Not present
STAR RATING	*	$\star\star\star$	*
Star Rating Score	153.25	27.60	179.89

School No.	Location No.	Name of School	Location Name
17	3	CGHSS OPPANAKARA STREET	Oppanakara Street - Mill Rd > Intersection

- No pedestrian crossing facility
- Informal footpath on both sides
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Not present	Not present	Not present
STAR RATING	*	$\star \star \star$	**
Star Rating Score	110.33	20.88	88.53

School No.	CCMC List No.	Name of School	GPS Coordinates	No. of Locations Assessed
18	27	CORPORATION GIRLS HSS RAMAKRISHNAPURAM	10.997412 76.997212	3

CGHSS Ramakrishnapuram is a higher secondary school for girls with classes from VI to XII and has a total strength of 748.

The school is located on an arterial road.

The road safety assessment of 3 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.Location NameBaseline Star Rating1Trichy Rd - Street Number 47 > Intersection★2Street Number 47 > School Entrance★ ★3Street Number 47 - Narayanan Street >Intersection★ ★

Star Rating Map



School No.	Location No.	Name of School	Location Name
18	1	CORPORATION GIRLS HSS RAMAKRISHNAPURAM	Trichy Rd - Street Number 47 > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Divided road with 2+2 lanes
- 3-leg intersection
- Moderate road surface condition
- Poor road delineation and signages
- Road has construction work in progress



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Signalised pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk with pedestrian fencing
- · Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder along left & narrow (<1m) shoulder along median
- Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder left	Not present	Medium	Medium
Paved shoulder right	Not present	Narrow	Narrow
Traffic calming	Not present	Not present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Not present	Not present
Pedestrian fencing	Not present	Present	Present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	$\star \star \star$
Star Rating Score	156.73	23.42	29.69

School No.	Location No.	Name of School	Location Name
18	2	CORPORATION GIRLS HSS RAMAKRISHNAPURAM	Street Number 47 > School Entrance

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	**	$\star\star\star\star$	$\star \star \star$
Star Rating Score	88.1	11.46	21.44

School No.	Location No.	Name of School	Location Name
18	3	CORPORATION GIRLS HSS RAMAKRISHNAPURAM	Street Number 47 - Naravanan Street > Intersection

- No pedestrian crossing facility
- No footpath
- speed calming measures present
- Undivided road with centre-line median
- 3-leg intersection
- Moderate road surface condition
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)
- Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Present	Present	Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star$	$\star \star \star$
Star Rating Score	67.88	17.45	26.13

School No.	CCMC List No.	Name of School	GPS Coc	ordinates	No. of Locations Assessed
19	82	CHSS, PEELAMEDU	11.026786	77.003562	4

CHSS Peelamedu Street is a higher secondary school with classes from VI to XII and has a total strength of 468. The school is located on a sub-arterial road.

The road safety assessment of 4 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Pioneer Mill Rd > School Entrance	*
2	Pioneer Mill Rd > Intersection	*
3	Pioneer Mill Rd – Peelamedu Railway Over Bridge> Intersection	*
4	Peelamedu Railway Over Bridge > Intersection	*

Star Rating Map



School No.	Location No.	Name of School	Location Name
19	1	CHSS, PEELAMEDU	Pioneer Mill Rd > School Entrance

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Poor road delineation and signages



Suggested Safety Measures (option-1)

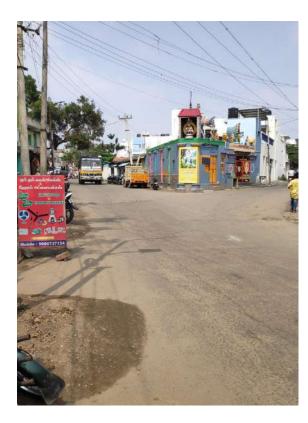
- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star\star\star\star$	$\star\star\star$
Star Rating Score	94.01	12.77	23.87

School No.	Location No.	Name of School	Location Name
19	2	CHSS, PEELAMEDU	Pioneer Mill Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	***
Star Rating Score	129.78	19.28	36.08

School No.	Location No.	Name of School	Location Name
19	3	CHSS, PEELAMEDU	Pioneer Mill Rd – Peelamedu Railway Over Bridge > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star\star\star$	**
Star Rating Score	199.83	30.72	57.52

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School No.	Location No.	Name of School	Location Name
19	4	CHSS, PEELAMEDU	Peelamedu Railway Over Bridge > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Poor road delineation and signages
- 4-leg intersection
- Moderate curvature



Suggested Safety Measures (option-1)

- Road and curvature delineation improvement with proper signages
- Signalised pedestrian crossing facility with proper signages and marking on main road and raised (table-top type) crossing on intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with Table-top type crossing instead of signalised

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Medium	Medium
Paved shoulder left	Not present	Medium	Medium
Traffic calming	Not present	Present	Present
Pedestrian crossing facility	No facility	Signalised crossing	Raised crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	**
Star Rating Score	462.21	26.89	59.89

School No.	CCMC List No.	Name of School		GPS Coordinates	No. of Locations Assessed
20	22	CORPORATION GIRLS HIGHER SEC. SCHOOL R.S. PURAM WEST	11.008607	76.948351	4

CGHSS R.S Puram West is a higher secondary school for girls with classes from VI to XII and has a total strength of 886. The school is located on a sub-arterial road.

The road safety assessment of 4 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	W Sambandam Road > W Sambandam Road - Azad Road Junction	*
2	W Sambandam Road > W Sambandam Road – Sir CV Raman Road Junction	*
3	W Sambandam Road > School Entrance	$\star \star \star$
4	W TV Swamy Rd - Azad Rd > Intersection	\star

Star Rating Map



School No.	Location No.	Name of School	Location Name
20	1	CORPORATION GIRLS HIGHER SEC. SCHOOL R.S. PURAM WEST	W Sambandam Road - Azad Road Junction

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Poor road delineation and signages



Inspected road



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star\star\star$	***
Star Rating Score	139.27	18.99	35.55

School No.	Location No.	Name of School	Location Name
20	2	CORPORATION GIRLS HIGHER SEC. SCHOOL R.S. PURAM WEST	W Sambandam Road – Sir CV Raman Road Junction

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not Present
Street lighting	Present	Present	Present
Road surface condition	Poor	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star$	***
Star Rating Score	125.69	14.27	26.71

School No.	Location No.	Name of School	Location Name
20	3	CORPORATION GIRLS HIGHER SEC. SCHOOL R.S. PURAM WEST	W Sambandam Road > School Entrance

- No pedestrian crossing facility
- No footpath
- Speed calming measure present
- Undivided road with centre-line median
- Poor road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Present	Present	Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Poor	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	One side	One side	One side
STAR RATING	$\star \star \star$	$\star\star\star\star$	$\star\star\star\star$
Star Rating Score	34.99	6.21	9.29

School No.	Location No.	Name of School	Location Name
20	4	CORPORATION GIRLS HIGHER SEC. SCHOOL R.S. PURAM WEST	W TV Swamy Rd - Azad Rd > Intersection

- No pedestrian crossing facility
- Footpath on one side
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk
- Intersection quality improvement with proper signages and marking
- Medium (1-2.4m wide) paved shoulder (edge line marking)
- Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Medium	Medium
Paved shoulder left	Not present	Medium	Medium
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Formal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	*	$\star \star \star$	**
Star Rating Score	127.18	21.88	40.95

School No.	CCMC List No.	Name of School	GPS Cod	ordinates	No. of Locations Assessed
21	33	CORPORATION HSS, NORTH COIMBATORE	11.01659	76.958577	3

CHSS North Coimbatore is a higher secondary school with classes from VI to XII and has a total strength of 311. The school is located on a sub-arterial road.

The road safety assessment of 3 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Cross Cut Rd > School Entrance	**
2	Cross Cut Rd - E Power House Rd > Intersection	**
3	Cross Cut Rd - Swarnambika Rd > Intersection	**

Star Rating Map



School No.	Location No.	Name of School	Location Name
21	1	CORPORATION HSS, NORTH COIMBATORE	Cross Cut Rd > School Entrance

- No pedestrian crossing facility
- Footpath present on one side
- No speed calming measure
- One-way road



Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- · Formal and obstruction free sidewalk on both sides of the road
- School Ahead sign

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Medium	Medium	Medium
Paved shoulder left	Medium	Medium	Medium
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Formal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	NA	NA	NA
Vehicle parking	One side	One side	One side
STAR RATING	*	***	*
Star Rating Score	69.33	18.10	168.51

Scho	ol No.	Location No.	Name of School	Location Name
2	21	2	CORPORATION HSS, NORTH COIMBATORE	Cross Cut Rd - E Power House Rd > Intersection

- No pedestrian crossing facility
- Formal footpath present on one side and informal footpath on otherside
- No speed calming measure
- One-way road
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Formal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	**	$\star\star\star$	*
Star Rating Score	73.93	21.65	202.02

School No	b. Location No.	Name of School	Location Name
21	3	CORPORATION HSS, NORTH COIMBATORE	Cross Cut Rd - Swarnambika Rd > Intersection

- No pedestrian crossing facility
- Informal footpath on one side
- No speed calming measure
- One-way road
- 3-leg intersection



Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Adequate	Adequate	Adequate
Paved shoulder right	Medium	Medium	Medium
Paved shoulder left	Medium	Medium	Medium
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	**	***	*
Star Rating Score	89.01	22.75	212.41

School No.	CCMC List No.	Name of School	GPS Coo	rdinates	No. of Locations Assessed
22	65	CMS SANGANUR	10.994548	77.015091	4

CMS Sanganur is a middle school with classes from I to VIII and has a total strength of 602. The school is located on a subarterial road.

The road safety assessment of 4 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	School Road > School Entrance	$\star \star \star$
2	Sanganoor Rd – School Road > Intersection	**
3	Sanganoor Main Rd – Sanganoor Road > Intersection	*
4	Sanganoor Main Rd – Samy Gounder St $ ightarrow$ Intersection	*

Star Rating Map



S	School No.	Location No.	Name of School	Location Name
	22	1	CMS SANGANUR	School Road > School Entrance

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- Moderate road surface condition
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking
- Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not Present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	Na	NA	NA
Vehicle parking	One side	One side	One side
STAR RATING	$\star \star \star$	****	****
Star Rating Score	26.07	2.22	4.15

School No.	Location No.	Name of School	Location Name
22	2	CMS SANGANUR	Sanganoor Rd - School Road > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	**	$\star \star \star \star$	$\star\star\star$
Star Rating Score	71.82	10.05	18.81

School No.	Location No.	Name of School	Location Name		
22	3	CMS SANGANUR	Sanganoor Main Rd - Sanganoor Road > Intersection		

- No pedestrian crossing facility
- Informal footpath on one side
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Informal sidewalk	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not Present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star$	**
Star Rating Score	140.78	23.04	43.12

School No.	Location No.	Name of School	Location Name
22	4	CMS SANGANUR	Sanganoor Main Rd - Samy Gounder St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages



Inspected road



Suggested Safety Measures (option-1)

- Road and curvature delineation improvement with proper signages including chevron sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Informal sidewalk	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star \star \star$	$\star\star\star$
Star Rating Score	147.15	16.86	31.47

Name of School		GP	S Coordinates	No. of Locat	ions Assessed
CPS RAMALINGAM COLONY	11.0	02032	76.950008		3
chool with classes from I	Location No.		Location Name		Baseline Star

School Road > School entrance - Intersection

Bharathi Park Rd Number 2 > Intersection

Bharathi Park Rd > Intersection

CPS Ramalingam Colony is a primary school with class to V and has a total strength of 79. The school is located on a subarterial road.

CCMC List No.

9

School No.

23

The road safety assessment of 3 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Star Rating Map

1

2

3



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RESULTS FROM THE STAR RATING ANALYSIS OF SCHOOLS IN COIMBATORE, INDIA		
SCHOOLS IN		
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School No.	Location No.	Name of School	Location Name
23	1	CPS RAMALINGAM COLONY	School Road > School entrance - Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Moderate road surface condition
- Poor road delineation and signages



Inspected road



Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Moderate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	$\star\star\star$	$\star\star\star\star\star\star$	****
Star Rating Score	31.33	2.84	5.31

School No.	Location No.	Name of School	Location Name
23	2	CPS RAMALINGAM COLONY	Bharathi Park Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection





Suggested Safety Measures (option-1)

- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- · Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- School Ahead sign

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2	
Delineation and signages	Adequate	Adequate	Adequate	
Paved shoulder right	Narrow	Narrow	Narrow	
Paved shoulder left	Narrow	Narrow	Narrow	
Traffic calming	Not present	Present	Not present	
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing	
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk	
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk	
Pedestrian fencing	Not present	Not present	Not present	
Street lighting	Present	Present	Present	
Road surface condition	Adequate	Adequate	Adequate	
Intersection quality	Poor	Good	Good	
Vehicle parking	One side	One side	One side	
STAR RATING	*	***	**	
Star Rating Score	186.42	27.48	51.42	

RESULTS FROM THE STAR RATING ANALYSIS OF SCHOOLS IN COIMBATORE, INDIA

School No.	Location No.	Name of School	Location Name
23	3	CPS RAMALINGAM COLONY	Bharathi Park Rd Number 2 > Intersection

Location Description

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Moderate road surface condition
- Poor road delineation and signages





Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	Both sides	Both sides	Both sides
STAR RATING	**	$\star \star \star \star$	$\star\star\star\star$
Star Rating Score	68.08	6.29	11.77

School No.	CCMC List No.	Name of School	GPS Coordinates		No. of Locations Assessed
24	20	CMS PAPPANAICKEN PALAYAM	11.016805	76.982593	2

Star Rating Map

CMS Pappanaicken Palayam is a middle school with classes from I to VIII and has a total strength of 160. The school is located on a local/collector road.

The road safety assessment of 2 locations are shown in the star rating map and details are given in the table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	Parameshwaran Layout Rd – Bharatiyar Rd > Intersection	*
2	Bharathiyar Rd – Rangammal Kovil St > Intersection	$\star\star$



Bha Location-2

School No.	Location No.	Name of School	Location Name
24	1	CMS PAPPANAICKEN PALAYAM	Parameshwaran Layout Rd - Bharatiyar Rd > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Moderate curvature
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road and curvature delineation improvement with proper signages including, chevron sign, School Ahead sign etc.
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Narrow	Narrow	Narrow
Paved shoulder left	Narrow	Narrow	Narrow
Traffic calming	Not present	Present	Not Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star$	$\star\star\star$
Star Rating Score	167.64	19.51	36.47

School No.	Location No.	Name of School	Location Name
24	2	CMS PAPPANAICKEN PALAYAM	Bharathiyar Rd – Rangammal Kovil St > Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Poor road delineation and signages



Suggested Safety Measures (option-1)

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current situation	Improvement Option-1	Improvement Option-2	
Delineation and signages	Poor	Adequate	Adequate	
Paved shoulder right	Narrow	Narrow	Narrow	
Paved shoulder left	Not present	Narrow	Narrow	
Traffic calming	Not present	Present	Not present	
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing	
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk	
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk	
Pedestrian fencing	Not present	Not present	Not Present	
Street lighting	Present	Present	Present	
Road surface condition	Adequate	Adequate	Adequate	
Intersection quality	Poor	Good	Good	
Vehicle parking	One side	One side	One side	
STAR RATING	**	$\star\star\star\star$	$\star \star \star$	
Star Rating Score	71.74	9.26	17.32	

School No.	CCMC List No.	Name of School	GPS Coordinates		No. of Locations Assessed
25	40	CMS RAMAKRISHNAPURAM	11.005437	77.033196	4

CMS Ramakrishnapuram is a middle school with classes from I to VII and has a total strength of 322. The school is located on a local/ collector road.

Road safety assessment was done at 4 locations. Star ratings for the locations are shown in the map and table.

SR4S assessment shows potential to improve pedestrian infrastructure at each of the locations. Details of existing infrastructure conditions and improvement options showing suggested safety measures and achievable star rating for each of the locations are presented in the following pages.



Location No.	Location Name	Baseline Star Rating
1	School Road > School Entrance	**
2	School Road > Left Intersection	**
3	School Road > Right Intersection	$\star \star \star$
4	School Road > Intersection	*

Star Rating Map



School No.	Location No.	Name of School	Location Name
25	1	CMS RAMAKRISHNAPURAM	School Road > School Entrance

- No pedestrian crossing facility
- Informal footpath on one side
- No speed calming measure
- Undivided road with centre-line median
- Inadequate road delineation and signages
- Moderate road condition



Suggested Safety Measures

- Road surface and delineation improvement with proper signages including School Ahead sign
- Marked pedestrian crossing facility with proper signages and marking (Zebra crossing)
- · Formal and obstruction free sidewalk on both sides of the road
- Narrow (<1m wide) paved shoulder (edge line marking)

Road Attributes	Current situation	Improvement option
Delineation and signages	Poor	Adequate
Paved shoulder right	Not present	Narrow
Paved shoulder left	Not present	Narrow
Traffic calming	Not present	Not present
Pedestrian crossing facility	No facility	Marked crossing
Sidewalk left	Informal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk
Pedestrian fencing	Not present	Not present
Street lighting	Present	Present
Road surface condition	Medium	Adequate
Intersection quality	NA	NA
Vehicle parking	One side	One side
STAR RATING	**	$\star\star\star\star$
Star Rating Score	46.96	11.62

School No.	Location No.	Name of School	Location Name
25	2	CMS RAMAKRISHNAPURAM	School Road > Left Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 4-leg intersection
- Moderate road surface condition
- Inadequate road delineation and signages



Inspected road



Intersecting road

Suggested Safety Measures (option-1)

- Road surface and delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Medium	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	**	$\star\star\star\star\star$	$\star\star\star$
Star Rating Score	73.95	9.97	18.66

School No.	Location No.	Name of School	Location Name
25	3	CMS RAMAKRISHNAPURAM	School Road > Right Intersection

- No pedestrian crossing facility
- No footpath
- No speed calming measure
- Undivided road with centre-line median
- 3-leg intersection
- Inadequate road delineation and signages





Suggested Safety Measures

- Road delineation improvement with proper signages including School Ahead sign
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- · Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Not present	Present	Not present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	$\star \star \star$	$\star\star\star\star$	$\star\star\star\star$
Star Rating Score	31.12	5.13	9.60

School No.	Location No.	Name of School	Location Name
25	4	CMS RAMAKRISHNAPURAM	School Road > Intersection

- No pedestrian crossing facility
- No footpath
- Speed hump present
- Undivided road with centre-line median
- 3-leg intersection
- Very sharp curvature with no signages
- Inadequate road delineation and signages



Suggested Safety Measures (option-1)

- Road markings and curve delineation with proper signages such as chevron, warning signs, etc.
- Raised (table-top type) pedestrian crossing facility with proper signages and marking on inspected road and intersecting road
- Formal and obstruction free sidewalk on both sides of the road
- Intersection quality improvement with proper signages and marking
- Narrow (<1m wide) paved shoulder (edge line marking)

Option-2 shows the achievable star rating with zebra marking instead of raised crossing

Road Attributes	Current Situation	Improvement Option-1	Improvement Option-2
Delineation and signages	Poor	Adequate	Adequate
Paved shoulder right	Not present	Narrow	Narrow
Paved shoulder left	Not present	Narrow	Narrow
Traffic calming	Present	Present	Present
Pedestrian crossing facility	No facility	Raised crossing	Marked crossing
Sidewalk left	Not present	Formal sidewalk	Formal sidewalk
Sidewalk right	Not present	Formal sidewalk	Formal sidewalk
Pedestrian fencing	Not present	Not present	Not present
Street lighting	Present	Present	Present
Road surface condition	Adequate	Adequate	Adequate
Intersection quality	Poor	Good	Good
Vehicle parking	One side	One side	One side
STAR RATING	*	$\star\star\star\star$	$\star \star \star \star$
Star Rating Score	153.63	9.94	14.72



03

PROPOSED DESIGN MEASURES

his chapter details out classification of assessed schools into different groups, proposed design interventions and associated schematic layouts for improving the status quo. It also lays out the improved star ratings post implementation of proposed measures.





R

3.1 CLASSIFICATION OF LOCATIONS FOR IMPLEMENTATION OF SAFETY TREATMENTS

The locations assessed are grouped into 3 categories based on ease of implementation of suggested treatments. Treatments such as road surface improvement, road delineation improvement, shoulder marking, intersection and curve quality improvement, school ahead sign etc. are suggested at locations under all groups as required.

Group-1	Group-2	Group-3
Group-1 includes locations on low traffic streets or local roads with low pedestrian flow. Low cost safety treatments as listed below can be provided at these locations	Group-2 includes locations on medium-high traffic roads (mostly collector / distributor roads) having moderate to high pedestrian flow. Treatments listed below can be considered here	Group-3 locations are mostly on divided high traffic arterial or sub-arterial roads and have high pedestrian flows. Safety treatments suggested for these locations are shown below.
Marked pedestrian crossing (zebra marking)	Raised (table-top) crossing or combination of zebra marking and speed humps	Signalized pedestrian crossing (Pelican type)
Obstruction free space for pedestrians to walk (informal footpath). Provide formal footpath if feasible	Formal footpath on both sides	Formal footpath on both sides with pedestrian fencing

Example location image:



CPS Kallimadai (Location 2)





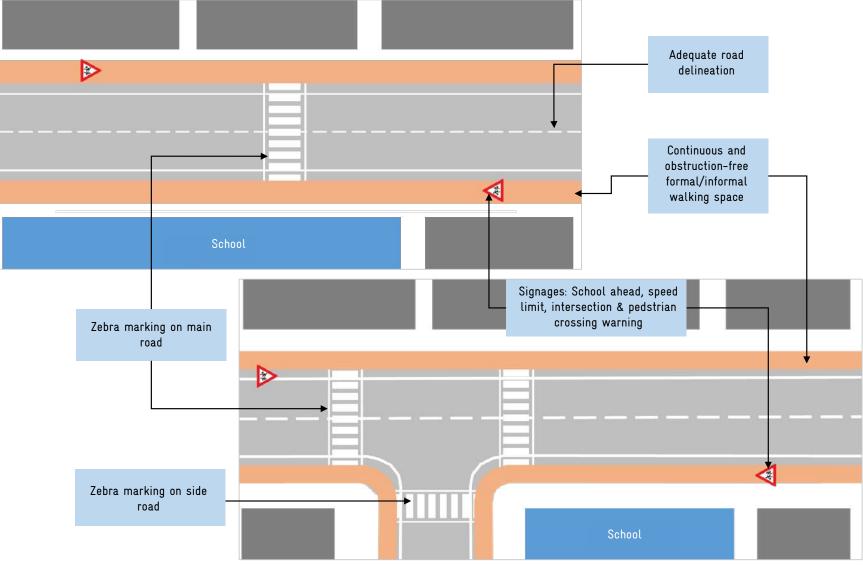
School locations under each group

List of school locations under each group is presented below:

	GROUP 1				
Scho	School No. and Name Location No				
2	CPS Kallimadai	1, 2			
3	CPS Peelamedu Pudur	1			
4	CPS Kovilmedu	2, 3			
6	CMS & CHS Ramasamy Nagar	2			
7	CMS Kottai	2			
8	CMS MNG Street	2			
16	CHSS Ramanathapuram	2			
22	CMS Sanganur	1, 2			
23	CPS Ramalingam Colony	1			
24	CMS Pappanaicken Palayam	2			
25	CMS Ramakrishnapuram	1, 2, 3			

GROUP 2			
Scho	ol No. and Name 1	Location No.	
1	CPS Varadharajapuram	1, 2	
3	CPS Peelamedu Pudur	2	
4	CPS Kovilmedu	1	
5	CPS/CHS Maniyakaranpalayam	1, 2	
6	CMS & CHS Ramasamy Nagar	1	
7	CMS Kottai	1	
8	CMS MNG Street	1	
9	CMS BB Street	1	
10	CMS Masakalipalayam	1, 2	
11	CMS Tatabad	1	
12	CGHS Selvapuram	1, 2, 3	
15	CHSS R S Puram	1, 3	
17	CGHSS Oppanakara Street	1, 2, 3	
18	CGHSS Ramakrishnapuram	2, 3	
19	CHSS Peelamedu	1, 2, 3	
20	CGHSS R S Puram West	1, 2, 3, 4	
21	CHSS North Coimbatore	1, 2, 3	
22	CMS Sanganur	3, 4	
23	CPS Ramalingam Colony	2, 3	
24	CMS Pappanaicken Palayam	1	
25	CMS Ramakrishnapuram	4	

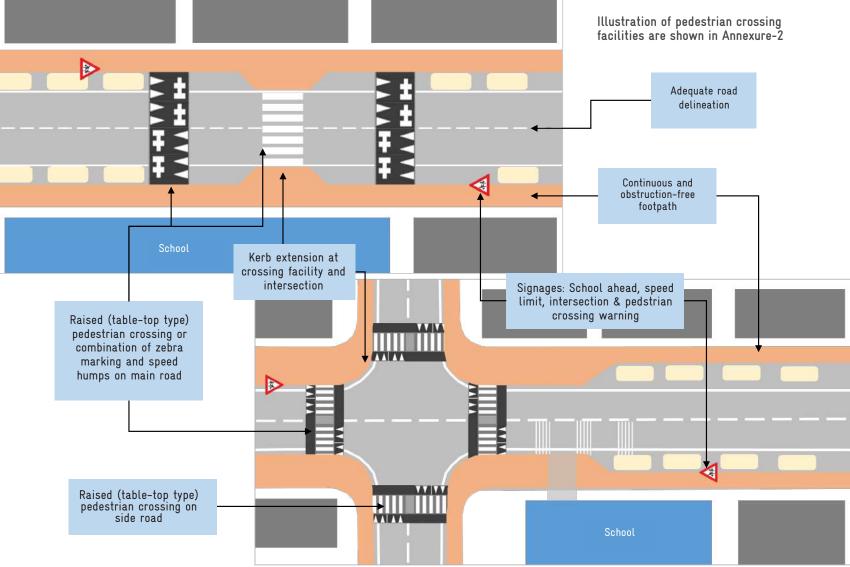
GROUP 3			
Scho	ool No. and Name	Location No.	
3	CPS Peelamedu Pudur	3	
9	CMS BB Street	2, 3	
11	CMS Tatabad	2, 3	
13	CHS Anupparpalayam	1, 2	
14	CGHS Puliakulam	1, 2	
15	CHSS R S Puram	2	
16	CHSS Ramanathapuram	1, 3	
18	CGHSS Ramakrishnapuram	1	
19	CHSS Peelamedu	4	



Standard improvement layout for low traffic undivided roads (Group-1)

Schematic layout

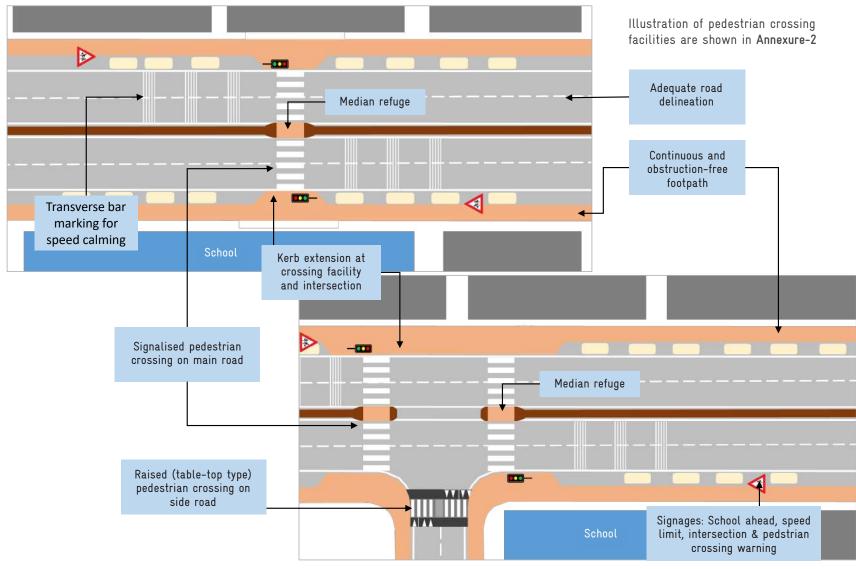
SAFE SCHOOL PRECINCTS - ENCOURAGING ACTIVE MOBILITY AMONG SCHOOLCHILDREN



Standard improvement layout for medium-high traffic undivided roads (Group-2)

Schematic layout

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Standard improvement layout for high traffic divided roads (Group-3)

Schematic layout

3.2 STAR RATING FOR SCHOOLS - IMPROVEMENTS

For each of the locations, 2 improvement options are suggested:

Option-1 in general includes raised table-top type crossing for undivided road and signalised crossing for divided roads.

Option-2 includes zebra marking for undivided road and raised table-top type crossing for divided roads.

Additionally, both options include treatments such as road delineation and surface improvement, curve and intersection quality improvement, school ahead sign, etc. wherever required.

After Star Rating (Improvement option-2)

	5-star: 4 of 69 locat	ions	
	4-star: 24 of 69 locations 3-star: 41 of 69 locations		
Star Rating	No. of locations	% share	
1-star	0	0%	
2-star	0	0%	
3-star	41	59%	
4-star	24	35%	
5-star	4	6%	
Total	69	100%	

After Star Rating (Improvement option-1)

100% of the locations will achieve 3-star or better rating for pedestrians if the treatments suggested under option-1 are implemented. But as per option-2, 31% of the locations still remain 1 and 2 star.



04

ILUSTRATION OF PROPOSED MEASURES AND CONCLUSION

This chapter provides brief illustrations of the pedestrian infrastructure that are proposed as part of the measures to improve safety around schools. The illustrations presented in this section are generic to visualize the potential street design near to the schools to include safe crossing and accessibility. However, detailed designs based on these principles need to be adapted to the local context according to star rating secured for each location.



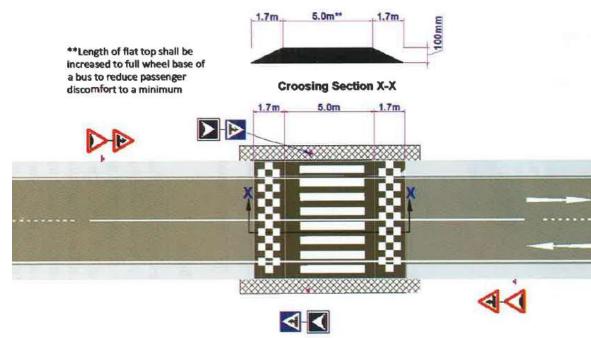
R

4.1 RAISED (TABLE TOP) PEDESTRIAN CROSSING

Unsignalized raised marked pedestrian crossing (table top type crossing) can be provided on undivided roads with medium-high pedestrian crossing demand.

This type of crossing facility acts as a speed-calming measure also reducing the risk for crossing pedestrians.

Facility should be provided with adequate signages, markings etc. and should be designed as per IRC standards (IRC:99-2018).

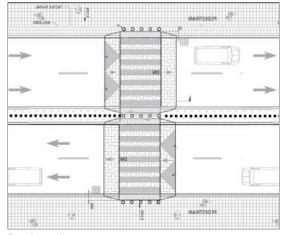




Undivided road



Source: NACTO Global Street Design Guide



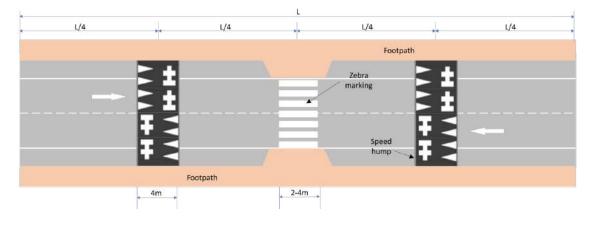
Dual carriageway

4.2 UNSIGNALISED, MARKED PEDESTRIAN CROSSING (ZEBRA MARKING) WITH SPEED HUMPS

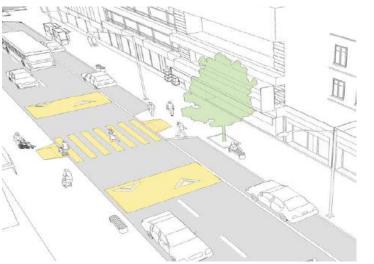
A combination of unsignalised, marked crossing (zebra marking) and speed humps may be provided as an alternative to raised (table top type) pedestrian crossing.

The distance between speed hump and marked crossing, typically can be 1/4th of the street length.

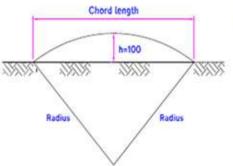
If the length of a street between 2 nodes (or length of school zone) is 100 m (L), it can be divided into 4 equal segments by providing 2 speed humps and a zebra marking in the centre. In this case, distance between the speed hump and zebra marking (L/4) will be around 25 m. This type of treatment would help in establishing a low-speed environment in the school zone.



Schematic layout of zebra marking with speed humps



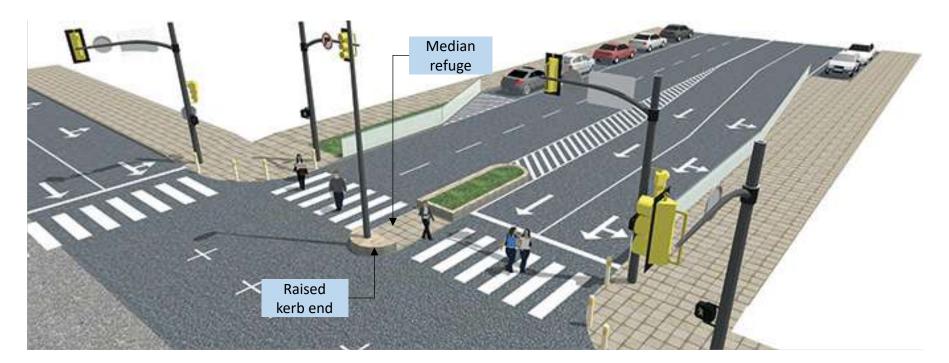
Speed hump design should be standard as per IRC:99-2018. For a speed limit of 30 kmph, the chord length of speed hump shall be 4 m and rise should be 10 cm.



DESIRED SPEED (KMPH)	RADIUS (METER)	CHORD LENGTH (METER)	BUS SPEED DURING PASSAGE (KMPH)
20	11	3	5
25	15	3.5	10
30	20	4	15
35	31	5	20
40	53	6.5	25
45	80	8	30
50	113	9.5	35

Source: NACTO Global Street Design Guide

4.3 SIGNALISED PEDESTRIAN CROSSING



Signalized crossing (Pelican type) can be provided on divided roads with high traffic and high speed.

Median refuge with good surface, adequate dimension and free of obstructions should be provided on all crossing facilities across divided roads. Raised kerb should be provided at the end of median refuge at intersections.

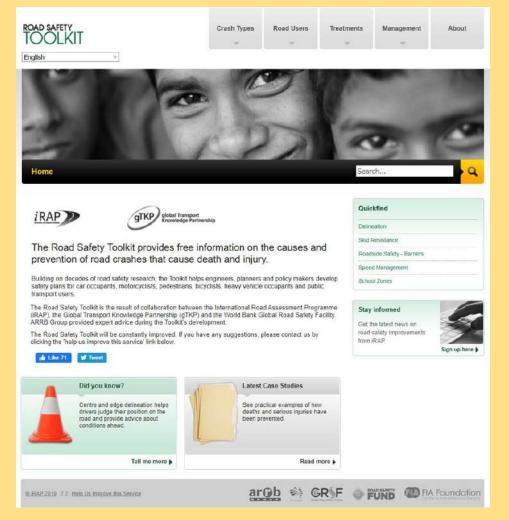


Median Refuge Island



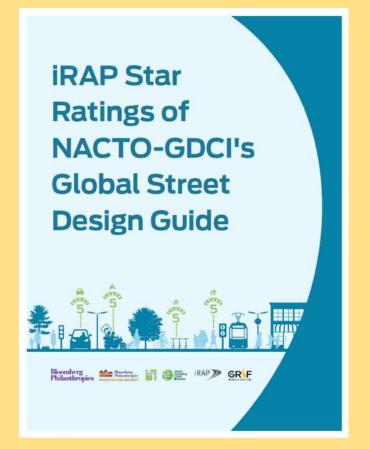
Source: NACTO Global Street Design Guide

More information and illustrations



The Road Safety Toolkit provides information on the causes and prevention of road crashes that cause death and injury

www.toolkit.irap.org



More illustrations to design 5-star streets for pedestrians are available in, iRAP Star Ratings of NACTO-GDCI's Global Street Design Guide

https://globaldesigningcities.org/2020/09/29/starrating-your-street-plans-with-irapand-the-globalstreet-design-guide/

R

4.4 CONCLUSION AND WAY FORWARD

Leave no one behind

Children and vulnerable groups, most prone to use nonmotorised transport modes, can greatly benefit from the star rating that has identified, with evidence, the critical areas of improvements for safe accessibility of schools.

Agile tool for upscaling

The star rating for schools (SR4S) application proved to be an agile tool highly suitable for the urban challenges of Indian cities and thus it is recommended to expand both the star rating process and the implementation of improvement measures to other schools in the city.

Simple application

The tool requires a minimum training and practice enabling a wide group of officials from concerned departments to use the application.

Evidence-based measures

The results of the star rating, based on assessing various indicators on road safety, provides evidence-based information for decision-making of city authorities. Understanding the needs for school children through star rating will also provide detailed insights into the accessibility issues of other vulnerable road users and general infrastructure gaps.

Evidence for budgeting

The data collected through the star rating, the travel pattern survey, and the onsite ground assessment of infrastructure informs the city for prioritising budgets.

Sensitisation for street design

The detailed assessment of the star rating for schools methodology sensitises those conducting the assessment for the importance of various elements of street design and the impact changes in the street landscape can have for the safety of non-motorised transport users.

Participatory planning

When detailing out the measures based on the collected data, cities are encouraged to involve schoolchildren and administrators to assess the critical locations around the schools.

Partnership with civil society

As suggested in Volume I, cities with support from local active partners working on active mobility or road safety should assign a person responsible to collate and analyse the data from star rating.



Ministry of Housing and Urban Affairs (MoHUA) and Deutsche Gesellschaft for Internationale Zusammenarbeit (GIZ) GmbH are jointly implementing the technical cooperation project 'Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SuT)', commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ). The project works with the three Smart Cities of Bhubaneshwar, Coimbatore, and Kochi and respective state governments of Odisha, Tamil Nadu, and Kerala to promote low carbon mobility planning, and to plan and implement sustainable urban transport projects.

As part of the Indo-German bilateral cooperation, both countries have also agreed upon a strategic partnership—Green Urban Mobility Partnership (GUMP)—between the Ministry of Housing and Urban Affairs (MoHUA) and Federal Ministry for Economic Cooperation and Development (BMZ). Within the framework of partnership's technical and financial cooperation, the German government will support improvements in green urban mobility infrastructure and services, strengthen capacities of national, state, and local institutions to design and implement sustainable, inclusive, and smart mobility solutions in Indian cities. As part of the GUMP partnership, Germany will also be supporting the expansion of public transport infrastructure, multimodal integration, low-emission or zero-emission technologies, and promotion of non-motorised transport in India. Through this strategic partnership, India and Germany intend to jointly achieve effective international contributions to fight climate change.

