ANNUAL REPORT 2022-2023
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Raahgiri Foundation is a non-governmental organization dedicated to promoting sustainable mobility, fostering active communities, and advocating for healthier lifestyles and safer roads. Its mission is to support inclusive development and bring about a fundamental shift in the day-to-day experience of commuting.

1. To propagate ‘Streets for All’ in order to promote safe, accessible and inclusive public streets among city-stakeholders using effective methods for sustainable mobility infrastructure.
2. The aim abides with Sustainable Development Goal 11.2 as adopted by United Nation Member States in 2015.
3. To instil a perceptual change among people in order to view walking and cycling as essential components of physical and mental fitness, and streets as a means of health and social infrastructure beyond just movement and transportation.
4. To advocate and capacitate government departments to plan and achieve safe, inclusive, and healthy public streets and public spaces.
5. To aid the designing and execution of model urban streets and urban spaces that can act as a precursor to sustainable city infrastructure.
6. To continuously engage with people to initiate bottom-up methods of city planning and simultaneously capacitate top-down methods of managing, planning, and designing cities for a sustainable future.
THE 4 PILLARS OF RAAHGIRI

Temporarily closing streets to motor vehicles achieves multiple objectives: sensitising communities and decision-makers towards sustainable transportation, promoting road safety, advocating healthier lifestyles, addressing air pollution, fostering inclusive city development, and improving quality of life.

"Raah" which is the Hindi word for path or road for pedestrians and "giri" which is the word for a movement to reclaim, come together to form "Raahgiri".

This ethos is where our objectives originate.
Raahgiri Foundation is working in collaboration with the District Administration of Gurugram and software company Nagarro on Gurugram Vision Zero.

Commenced in April 2022, the partnership aims to reduce road traffic deaths through the 4 Es of road safety: Engineering, Education, Enforcement, and Emergency. This will be accomplished through a scientific approach that involves identifying black spots in the district, conducting road safety inspections, re-engineering roads, implementing innovative traffic management techniques, conducting scientific crash investigations, practicing tactical urbanism, implementing education programs in schools and colleges, and enhancing the capabilities of city engineers, police, and the community.

Traditionally, city governments in India haven't actively involved end-users in decisions regarding roads or transportation provision. However, Raahgiri Foundation strives to pioneer a collaborative model where all stakeholders engage in dialogue to develop mutually beneficial solutions. These stakeholders include officials from various engineering departments, the police, industry experts such as architects and urban designers, contractors, and, most importantly, the community.

To drive this initiative, Raahgiri Foundation advocates for greater utilization of technology by and for all stakeholders. Potential technological interventions that are currently lacking in the existing framework include automating the process of identifying black spots, integrating black spot alert systems with navigation apps, installing ANPR-based cameras at major intersections, placing speed-based cameras along road segments, utilizing CCTV footage for purposes beyond security, such as AI/ML-based conflict analysis for engineering departments, and utilizing app-based technologies for conducting road inspections, among others.
**Objective I: Reduce Crash Risk**
Address the challenges faced by Vulnerable Road Users (VRUs), identify high-risk areas, and mitigate crash risk for VRUs in Haryana. This will be achieved through the implementation of safer road infrastructure and effective traffic management practices.

**Objective II: Sustainability & Scale**
Aligning with the global decade of action for road safety, enhance technical capacity of officials and police involved in infrastructure design, construction, maintenance, and enforcement. Additionally, raise awareness among stakeholders and end-users.
**ACCIDENT DATA 2017-2022**

<table>
<thead>
<tr>
<th>COUNT</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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<tr>
<td>Total Crashes</td>
<td>443</td>
<td>446</td>
<td>960</td>
<td>250</td>
<td>944</td>
<td>1040</td>
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<tr>
<td>Total Injuries</td>
<td>201</td>
<td>193</td>
<td>792</td>
<td>171</td>
<td>845</td>
<td>886</td>
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<tr>
<td>Total deaths</td>
<td>461</td>
<td>465</td>
<td>405</td>
<td>169</td>
<td>377</td>
<td>404</td>
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<table>
<thead>
<tr>
<th>COUNT</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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<tbody>
<tr>
<td>Pedestrian’s death</td>
<td>188</td>
<td>202</td>
<td>157</td>
<td>66</td>
<td>118</td>
<td>137</td>
</tr>
<tr>
<td>Cyclist’s death</td>
<td>19</td>
<td>17</td>
<td>19</td>
<td>5</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Two wheeler’s death</td>
<td>181</td>
<td>165</td>
<td>138</td>
<td>63</td>
<td>156</td>
<td>164</td>
</tr>
<tr>
<td>Four wheeler’s death</td>
<td>45</td>
<td>49</td>
<td>20</td>
<td>17</td>
<td>47</td>
<td>57</td>
</tr>
</tbody>
</table>

**BLACKSPOTS IN GURUGRAM**

[Map showing locations of blackspots in Gurugram]
STEPS TO RESOLVE BLACKSPOTS AND REDUCE FATALITY RATE

PILLAR 1: Road Safety Management – Institution and Capacity Building

PILLAR 2: Safer Road Infrastructure

PILLAR 3: Safer Vehicles

PILLAR 4: Safer Road Users

PILLAR 5: Emergency Care

Systematic management of political, financial, legislative, legal, regulatory, and institutional environments and developing systems for implementing, monitoring, and evaluating road safety activities.

Revolves around bringing about a behavioural change to accept safe practices using comprehensive programs and multiple approaches.

- Pillar 4.1: Safer Road Users through Enforcement
- Pillar 4.2: Education and Awareness

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Data analysis & Identification of Blackspots through HARSAMAY Data

Stage-1

Stage-2

Spot visit with all stakeholders

Issue Identification

Stage-3

Design / DPR Preparation

Immediate Interventions

Stage-4

Presentation of DPR / Design to all stakeholders

Modification in design if required

Stage-5 (Optional)

Seeking NOC for Trial purpose (in case of disagreement between stakeholders)

Stage-6 (Optional)

Implementation of Trial.

Stage-7 (Optional)

Modification in design (If required)

Seeking NOC (If Required)

Stage-8

Construction of the proposal.
Several intersections in Gurugram termed black spots. Black spots are locations where a minimum of 10 injuries or 5 deaths are recorded over the course of 3 years. These intersections were redesigned based on road safety principles.

- issues with the existing infrastructure are pinpointed (such as lack of lane balancing, undefined pick-up and drop-off zones, lack of pedestrian crossings etc.)
- issues are resolved using tactical urbanism practices during a trial
- trial outcomes are measured and evaluated
- permanent infrastructure is put in place in order to fix issues based on empirical proof from trials.

<table>
<thead>
<tr>
<th>PROJECTS</th>
<th>DETAILS</th>
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<tr>
<td>IFFCO Chowk</td>
<td>permanent bollards, designated and segregated pick up and drop off points, painted pedestrian crossings, island expansions, portable traffic signals installed</td>
</tr>
<tr>
<td>Hero Honda Chowk</td>
<td>segregated u-turns, pedestrian pathways, designated bus bay, traffic signals installed, table top crossings for pedestrians, table top crossings proposed</td>
</tr>
<tr>
<td>IMT Manesar</td>
<td>continuous pedestrian paths proposed, rumble strips and other speed calming measures, installation of traffic signals proposed, installation of street lights proposed</td>
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</table>
There was no traffic signal and pedestrian at-grade crossing at the
junction, which was leading to haphazard pedestrian movement and
high-speed traffic movement, leading to multiple conflict points.

Painted zebra crossings & pedestrian pathways gave a designated
space for pedestrians to cross roads & walk as well as a reference
point for vehicles to stop before the signal.

There were no designated pedestrian walkways and crossings
before the trial was executed.

Painted zebra crossings & pedestrian pathways gave a designated
space for pedestrians to cross roads & walk as well as a reference
point for vehicles to stop before the signal.
Hero Honda Chowk

**Issues**

- Poor turning radius
- Wrong side drivers
- Intermixing of lanes
- Wrong side drivers

**Other issues**

1. No pedestrian crossings
2. No footpaths
3. No cycle tracks
4. Poor turning radius of road
5. No designated bus/auto stops
6. Obstructed traffic signals

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**Proposal Plan (Signalized Intersection for Trial)**

- U-turn location revised
- Segregated U-turns
- Pedestrian pathways
- Designated bus bay
- Traffic signals for safe U-turns (wrong-side drivers)
- Table-top on all slip lanes
- Speed calming measures
- U-turn with geometric correction
- Speed calming measures
- Pedestrian pathways
- Cycle lane/service lane
- Safe pedestrian zone with crossings in all directions
- Speed calming measures

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[Image of the road layout with various markers and signs indicating directions and issues.]
IMT Manesar
1 year of Gurugram Vision Zero

Traffic Trials conducted 4

Blackspots rectified 3

Pedestrian Fatalities decreased by 12.7%

Blackspots redesigned 14

Reduction in accidents 36% if redesigns are implemented

24 cr of GOVT money saved

WAY FORWARD...

1290 persons are involved in road accidents - 2022

GLOBAL TRAGET — To Reduce 50% of accidents by 2023

GVZ TRAGET— To Reduce 20% of accidents by 2023 in Gurugram
The redevelopment of Sanath Road (formerly known as Anath Road for its status as "forgotten" by public and private stakeholders) has been underway.

- a model street, 2.4km in length
- the road will have a carriageway, footpath, as well as a designated bicycle path, space for street vendors, and designated pick up and drop off points
- a frontage zone with a green belt will provide a buffer between the road and office buildings along the road
**ROAD HIERARCHY**

1. **FRONTAGE ZONE/ GREEN BELT**
   - The frontage zone is the extension of the building, whether through entryways and doors, providing buffer space between buildings and road with the help of green belt/Planting strip.

2. **SHARED PATH**
   - The pedestrian path and Cycle Track defines the primary, dedicated, and accessible pathway that runs parallel to the street.

3. **MFZ/ FOOTPATH EXTENSION**
   - The multi-functional zone is the section of the sidewalk between the kerb and the clear path consisting of street elements, planting strip and utilities.

4. **CARRIAGeway**
   - The Carriageway consists of a width of road on which a vehicle is not restricted by any physical barriers to move laterally.
**SECTOR 58-67 REDEVELOPMENT**

- a 10km stretch of sector roads being redeveloped with pedestrian paths, cycle paths, and a green belt
- use of fences to create protected walkways in commercial areas
- informal vending zones in alignment with placemaking principles
- taxi waiting areas as well as designated pick up and drop off zones
- redevelopment of existing bus stands
INTERSECTION REDEVELOPMENT

KHUSHBOO CHOWK

- increase traffic island size
- continuous pedestrian crossings
- traffic calming measures on all arms of the road
- table top crossings at slip lanes for speed reduction
**PROPOSED ELEMENTS:**
- Traffic signal
- Median Extension
- Traffic Islands with continuous pathway
- Table top & pedestrian crossings
- Rumble strips
- Signages
- Shared path (footpath + cycle track)
- Road, chevron markings + Road Studs
- Criss Cross Intersection marking
- CC & spring Bollards
Farrukhnagar Chowk

Proposal:
1. Round about & Signalized intersection
2. Geometry correction
3. Median Extension & Hazard marking
4. Lane Marking
5. Rumble Strips
6. Pedestrian crossing with bollards
7. Designated bus stop
8. Signages

Hailey Mandi Flyover Intersection

Proposal:
1. Island with slip lane
2. Geometry correction
3. Median & Hazard marking
4. Lane Marking
5. Rumble Strips
6. Tabletop crossing with bollards
7. Bus Bay
8. Footpath
9. Vending Zone Signages
Dhankot Chowk

Proposal:
1. Round about
2. Geometry correction
3. Median
4. Lane Marking
5. Rumble Strips
6. Pedestrian crossing with bollards
7. Footpath
8. Signages

Kanhai Chowk & Urban Square
Kanhai Chowk is a three-way intersection that connects Golf Course Road to Sector 46. It is a signalized intersection with moderate traffic flow, but despite that, it has issues related to a lack of proper infrastructure and not meeting the Indian Road Congress (IRC) standards. The problems include a discontinuous pedestrian pathway, missing directional and wayfinding signage, and unbalanced lanes.

The new proposal aims to address the issues at Kanhai Chowk by creating a more balanced flow of traffic through the intersection. It includes adjustments to the turning radius, connecting pedestrian paths throughout the intersection, and installing necessary signages. Additionally, the plan also includes improvements to the landscaping on the islands to enhance the overall aesthetic of the area.
Raahgiri Day is India’s first sustained car-free citizen initiative that promotes safety of pedestrians and cyclists, healthy living and connects communities by reclaiming city streets and public spaces, to eventually reclaim urban lives.

Raahgiri Day works, among other things, to highlight the importance of tactical urbanism, the purpose of which is to highlight the improvement in the safety and comfort that road users experience by making street junctions more compact and reclaiming unused/overused spaces and putting them to better use. By allowing people to experientially reimagine their streets as being vehicle and congestion-free, it leads the citizenry to demand such changes – open, safe, and inclusive streets.

Collaboration between Sustainable Mobility Network (SNM) and Raahgiri Foundation for the coordination of 8 (total) Raahgiri Day events in Gurugram and Delhi. The goal of the partnership was to attract 2,000 to 5,000 participants per Sunday from both cities.

The events took place 8 times a year, while 3 times in Connaught Place New Delhi, 1 time in GK-2 New Delhi, 1 time in Vyapar Kendra Road, New Delhi 1 time in Galleria Road, Gurugram, 1 time in Kamla Nagar, New Delhi.
The District Administration of Gurugram and the Gurugram Traffic Police, with the support of Raahgiri Foundation and several other organisations and groups in Gurugram, hosted an event at Genpact Chowk on the 20th of November to mark the 27th World Remembrance Day for Road Traffic Victims. The event aimed to remember those killed or injured in road traffic accidents and highlighted the need for a more appropriate post-crash response for road traffic victims and their families, as well as accelerated action to prevent road traffic crashes. The event featured speeches from dignitaries, performances from artists, and testimonials from those affected by road traffic crashes. The event was successful in raising awareness about road safety issues.
Two Wheels Gurugram is a 5-day event and art exhibition organized by the Sustainable Mobility Network to raise awareness about the need for improved cycling infrastructure in Gurugram, India. The event includes a panel discussion and an art exhibition that showcases the safety needs of cyclists and pedestrians. The event aims to initiate conversations about the city’s outlook towards cyclists, what needs to be changed, and how this change can be brought about. The event also aims to leverage the power of art to add to a movement to improve cities and reclaim the roads by cyclists and pedestrians.
Max Healthcare, in association with The Daredevils and Raahgiri Foundation, is organizing a Cyclothon event on Sunday, 24th September from 6AM to 9AM to spread awareness about heart health on World Heart Day. Heart issues are no longer restricted to the elderly, and poor lifestyle choices, sedentary lifestyle, obesity, stress, and hypertension are some of the reasons that put pressure on the cardiovascular system. Regular cycling helps improve heart health by stimulating the heart, lungs, and circulation, reducing the risk of cardiovascular diseases, strengthening heart muscles, lowering resting pulse, and reducing blood fat levels.
On the occasion of World Environment Day, Gurugram District Administration partnered with Raahgiri Foundation to organize two significant events. A bicycle rally to Leopard Corridor and back was hosted by the foundation on June 5th, and on-spot registrations were available. The participants were awarded refreshments and prizes at the end of the bicycle rally. The foundation representative mentioned that a large number of people participated in the event, and several cycling groups across Gurgaon supported the cause. Nagarro and BYCS, an Amsterdam-based social enterprise that supports cycling in cities, provided their support for the event. The event began at 5:15 am from Road Riders Arcadia market, Sector 49. The event aimed to support the cause of bicycling to enhance the quality of life of the people and the city.
The Festival of Places is an initiative that aims to inspire people to creatively engage with public spaces in cities and revitalize them. It advocates for research on public spaces, encourages participation of professionals, researchers, and the community, raises awareness about the state of public spaces, and promotes community participation in planning, maintenance, and management of public spaces. As part of the festival, there will be various events including an Inter-School Quiz, Panel Discussions, Place Story Presentations, and a White Paper release on 'Children's Place in Public Spaces’. Additionally, there will be a capacity-building session called Place Studio in collaboration with Raahgiri Foundation, which will include a Quiz on Road Safety Engineering and a short workshop on how to view streets as public spaces in line with the theme of the festival. The session aims to equip students and faculty with the knowledge and resources to design people-centric streets and deepen their awareness of public spaces.
There were three board meetings over the course of the one year 2022-23. The first took place on the 17th of March 2022, the second on the 18th of July, 2022, and the third on the 20th of January, 2023. The attendees at the board meetings were the trustees Mr. Rajesh Kalra, Ms. Dhruv Swamini, Ms. Shubhra Puri, Ms. Sarika Panda Bhatt, and Mr. Manit Jain, as well as, Operations Manager of Raahgiri Foundation, Ms. Seema Karhana. They discussed the work done by the Foundation in the intervening months as well as what is to come. New initiatives like the documentary, 'The Silent Epidemic', increased social media reach, new funders, additional intersection and street redesign plans were also brought up.

The board meeting on the 20th of January included all members of the Raahgiri Foundation team who all gave an update on the work of the Foundation.
"The Silent Epidemic" is a documentary that portrays the devastating social impact of road crashes through 4 real life stories.

Presented to you by: Raahgiri Foundation & Cinema4Good
Director: Akshat Gupta
Producers: Sarika Panda Bhatt & Jitendra Mishra
Creative Producer: Akash Basu
In association with: Wheeling Happiness Foundation

The Silent Epidemic had its world premiere at the Indo-German Film Week, Berlin, Germany, 7th June, 8PM, at the iconic Babylon theatre.
In October 2021, Raahgiri Foundation and National Institute of Urban Affairs (NIUA) teamed up to launch a podcast called 'Pave the Way'. The podcast is hosted by Akash Basu from Raahgiri, who engages in conversations with mobility experts from different parts of the world. The discussions revolve around various topics related to sustainable mobility and transport planning. Over a year, from April 2022 to March 2023, Six episodes were released and made available on various streaming platforms.

Guests included Daniel Moser, Kalpana Vishwanath, Dr. Natalia Barbour, Melissa Bruntlett, and more
The Foundation mainly uses Instagram and Twitter to communicate with the general public about its events and work on outreach and education. LinkedIn is used for specifics about our work on design and engineering interventions. We connect with other industry professionals in the mobility, placemaking, road safety, and city design space to productively discuss how our cities can be made safer and more equitable.

Impressions on Twitter: 100,000+
Impressions on Instagram: +211%
Impressions on LinkedIn: +300%
Over the course of 2022-23, Raahgiri Foundation focused on conducting trials, redesigning intersections, outreach, capacity building, and community engagement in order to reduce road deaths. The launch of Gurugram Zero, street and intersection redevelopment, along with our ongoing Raahgiri Day programme all contributed towards our larger mission of making streets safer, accessible, and more sustainable.

IMPACT AT A GLANCE

- 3 blackspots rectified
- 12.7% reduction in pedestrian deaths
- 20 raahgiri days
- 14 black spots redesigned
- 24 crore rupees saved in govt spending
- 100,000+ citizens engaged
We could not have achieved what we did over the course of the last year without the help of our tireless team.

Shakti Singh

Site Engineer A Road safety Expert from Uttar Pradesh, having Masters in Highway, Safety and Engineering, certified Road Safety Auditor from CSIR-CRRI New Delhi. He is associated with “Sanath Raah Redevelopment”

Pavan Kumar

An Architect and Urban Designer from Hyderabad with a master’s degree from the School of Planning and Architecture, Bhopal. He specializes in streetscaping, road intersection design, smart city proposals, master planning, city and town level urban infrastructure designing, and stakeholder engagement & coordination. He is associated with Gurgaon Streetscaping and Intersection Design.

Shivani Khurana

Project Associate An Architect and Urban Planner with specialization in Urban street Infrastructure Design, street quality assessment, accessibility planning, stakeholder engagement, and participatory planning. She is associated with the Vision Zero project.

Seema Karhana

Operations Manager An Accountant professional from Gurgaon, Haryana. Heading NGO sector for over 8 years. Currently working with Raahgiri Foundation as Operations Manager, looks after compliance, HR, Accounts & administrative work.

Akash V. Basu

Communications Associate, A graduate with a BSc. degree in economics with a specialisation in development economics from the University of Warwick. Has a year of experience with data, social media and web design. He is associated most with ‘Raahgiri Day’ and consults on all content development.
OUR TEAM

Aditi Saini

Project Associate Urban Designer hailing from Delhi with experience in multilayered architecture, urban design and master planning projects varying from area developments, street scaling, temple town etc. She is associated with the “Street ReDesign, Sector 58 to 67 Gurugram” Project.

Dushyant Yadav

Site Engineer, a graduate with a B.Tech degree in civil engineering, specializing as a site engineer. Working as a site engineer, primarily involved in on-site implementation of streets and intersections.

Ishaan Gogoi

Senior Project Associate Architect Planner from Assam with experience in Junction Correction, FIR data Analysis, and Traffic management in Tactical Urbanism along with Stakeholder Engagement at different stages. He is associated with the “Safer streets for Gurugram” Project.

Damini Jaiman

Communications Associate with a background in media production. A Bachelor’s in history and media with experience in writing, podcast production, and film-making.
OUR TRUSTEES

Sarika Panda Bhatt is leading the Raahgiri Day movement in Haryana. She is also helping other cities to replicate this hugely successful concept. She is leading the nonmotorized transport work and India Vision Zero work in Haryana and Punjab. Sarika has about 15 years of experience in the field of urban development, transport, environment and architecture. Sarika was selected as one of the 60 global women leaders in the world who are making a change in how we move around cites. The recognition came from TUMI, Germany. Sarika is bicycle mayor of Gurugram by BYCS, Netherlands. She has been formally trained as an architect and urban planner with a Master's degree in Sociology.

Shubhra Puri is the Founder of Gurgaon First, a social enterprise that promotes sustainability, women safety, good governance and empowerment in Gurugram through workshops and research books. She has been writing a regular column with Hindustan Times, Gurugram edition under the column “Human Impact’. Ms. Puri also writes, composes and produces songs on sustainability issues. An MBA, Ms Puri has been a journalist with 20 years of experience in business journalism. She started her career in 1995 with The Economic Times and later on worked as Editor-content.

Rajesh Kalra is Executive Chairman, Asianet News Media & Entertainment Pvt. Ltd. He is former Chief Editor of Times Internet, TIL, Narad Online, Economic Times, Business Standard, Times Of India and Dataquest. A seasoned journalist for three decades. He is passionate about writing on themes such as IT, telecommunications, sports and developmental issues. He is also a sportsman, mountaineering enthusiast, mountain biker and marathoner. He is also member of Olympic Task Force and All India Council of Sports. He runs a blog, namely Random Acess which covers issues of sports, development, IT and communications.

Dhruv Swamini is co-founder of Duplay advocates for sports activities in Gurugrams. She is a former consultant at McKinsey & Company. She started her entrepreneurial journey through partnering with Duplay, a UAE based company to get people together to play sports and promote and establish sporting facilities in Gurugram. She is a computer science engineer and an MBA graduate by education. She has also helped Public Health Foundation of India to set up the immunization Technical Support Unit to work with MoHFW.

Manit Jain has been a key advisor to Heritage Xperiential School. An alumnus of Harvard University and co-chair of FICCI's School Education Committee ~ FICCI Arise, Manit Jain supports Heritage Xperiential School through infrastructure development, talent acquisition, teacher's capacity building and parent engagement.