

Universal Human Values Portfolio On Road safety and Traffic Awareness around Amity University, Noida

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INTRODUCTION

Educational institutions like Amity University, Noida contribute significantly to Noida's aesthetic vibrancy. However, its large student population also leads to increased traffic flow in the surrounding areas. This can create a complex traffic environment potentially compromising road safety for students, faculty, staff and the general public. This research project aims to investigate road safety and traffic awareness around the institution with particular focus on the nearby Mahamaya flyover, the Noida- Greater Noida Expressway and its service roads which is adjoining the University perimeter. Road accidents are a significant public health concern in India. According to a report by the Union Road Transport Ministry, in 2022, the amount of road accidents jumped by 11.9 per cent within a year with over 4.61 lakh accidents being reported out of which 1.68 lakh deaths took place. Understanding and addressing traffic issues around educational institutions is crucial for preventing accidents and ensuring the safety of the university community. This study will explore several key aspects related to road safety and traffic awareness in the vicinity of Amity University. One of the primary things that will be looked after are traffic patterns around the institution by analysing traffic volume, peak hours and the types of vehicles present in the area. The study will also assess the adequacy of infrastructural measures such as crossings, signage and road markings in these areas. The study will also involve evaluating the effectiveness of existing traffic management strategies, such as the presence of traffic department personnel, adequate parking facilities and initiatives conducted by the university itself. Focus will also be put on Mahamaya flyover which is a vital traffic junction that facilitates movement between South Delhi and Noida. Similarly, the Noida-Greater Noida Expressway serves as a high-speed corridor connecting major commercial and residential areas. However, these high-traffic areas can pose unique challenges for road safety such as lane management, vulnerability of pedestrians and cyclists and over speeding. By analysing these factors, our research aims to provide a comprehensive understanding of road safety and traffic awareness around Amity University, Noida. The findings will be used to develop targeted recommendations for improving the existing infrastructure, traffic management strategies and promoting safe road user behaviour.

NGO: TRAX ROAD SAFETY

TRAX, headquartered in Delhi, is a non-profit organization dedicated to improving road safety in India since 2007. Renowned for its innovative and solution-oriented strategies, TRAX takes a comprehensive yet psychologically informed approach to road safety. The team comprises of enthusiastic advocates, doctors, marketers and trainers, all driven by a shared commitment to making roads safer. We prioritize collaboration

with various stakeholders and adhere closely to the recommendations and rules set by the United Nations and the World Health Organization. Throughout its exploration of the domain, the NGO has pinpointed "Human Errors" as the primary reason for road accidents in India. Armed with fresh ideas and an innovative approach, the NGO has embarked on its mission, carefully considering the road traffic behaviour and psychology of Indian road users.

Goal	Reduce road accident fatalities and injuries in India
Industry	Road Safety and Traffic Awareness
Company Size	11-50 employees
Specialities	Traffic Safety, Road Safety, Road Awareness, Traffic Rules, Traffic Management
Website	www.trafficzam.com

OBJECTIVES OF THE STUDY

- Analyse traffic patterns around Amity University, Noida and surrounding areas
- Evaluate the adequacy of traffic management infrastructure in these areas
- Assess the effectiveness of existing traffic management strategies
- Explore road user behaviour of pedestrians, cyclists' motorists and public transport users
- Investigate specific traffic safety concerns related to the Mahamaya flyover and the Noida-Greater Noida Expressway
- Develop targeted recommendations for improving traffic infrastructure, management and road user behaviour

METHODOLOGY OF THE STUDY

This social work study will use a mixed-methods approach to completely assess road safety and traffic awareness near Amity University in Noida, combining quantitative and qualitative data collection techniques.

Methodology for gathering data:

1. **Traffic volume data:** We will use data from relevant authorities or undertake human traffic counts at important crossroads and stretches near the institution, including the Mahamaya flyover and the Noida-Greater Noida Expressway. This will facilitate the analysis of traffic patterns, peak hours, and vehicle kinds.
2. **Infrastructure assessment:** A site inspection will be performed to determine the effectiveness of traffic lights, pedestrian crossings, signage, and road markings. This could entail taking measurements and pictures of these components.
3. **Traffic management review:** Documents and reports linked to existing traffic control methods, including deployment of traffic police and universities.

Data Analysis

1. Quantitative data from traffic volume counts and surveys will be evaluated statistically to discover patterns and trends.
2. Qualitative data collected during site inspections, interviews, and focus groups (if relevant) will be thematically examined to identify important concerns and reoccurring experiences.

Ethical Consideration:

All study participants will provide informed consent, preserving the anonymity and confidentiality of their comments.

Data will be kept secure and used only for the purposes of this research project.

Limitations:

This study could have limitations because of things like:

1. Relevant authorities' existing traffic data is available.
2. The response rate and representativeness of survey participants.
3. Focus groups' scope is limited (if they are undertaken).

RATIONALE FOR THE STUDY

Road accidents are a serious public health concern in India, accounting for a sizable proportion of global road death figures. Schools such as Amity University, Noida, have a lot of traffic because of their students, staff, teachers, and visitors. This increasing traffic volume creates a complex traffic environment surrounding the university, potentially jeopardizing road safety for everyone nearby.

The following factors support the validity of this study:

1. **Limited Existing Research:** While road safety is a national problem, research on traffic hazards and safety near educational institutions such as Amity University is lacking. By offering a targeted examination of the difficulties encountered in this setting, this study seeks to close this knowledge gap.
2. **Vulnerable Population:** University campuses have a large population of young adults, who are statistically more likely to engage in unsafe driving behaviours. This study will look into students' individual road user behaviours and find areas for intervention to improve safe practices.
3. **Infrastructure at High Risk:** The inclusion of the Mahamaya flyover and the Noida-Greater Noida Expressway in the research area recognizes the increased safety risks associated with high-speed traffic and difficult merging manoeuvres. This study will investigate these unique difficulties and provide mitigation solutions.
4. **Possibility of Enhancement:** The research's goal is to discover areas for improvement by evaluating traffic patterns, infrastructure, and user behaviour. This includes proposals for infrastructural improvements, better traffic management, and focused public awareness initiatives.

In general, this social work study on traffic safety and traffic awareness around Amity University in Noida can dramatically improve the safety of the university community and its surroundings.

AREA OF THE STUDY

Since TRAX is an organization that promotes road safety, it makes sense that it would conduct research in a variety of fields to help it fulfil its purpose of raising awareness of traffic safety and lowering accident rates.

Analysis of Road Traffic Accident Data: Finding trends, patterns, and high-risk locations through the analysis of road traffic accident data. To comprehend the reasons behind accidents, this may entail looking through accident reports, police reports, hospital data, and other sources of information.

Infrastructure and engineering: Researching ways to improve safety through road design, traffic flow, and infrastructure improvements. This entails looking into efficient intersection design, road markings, signage, and other engineering fixes.

Public Awareness and Education: Researching the efficacy of educational initiatives and campaigns for road safety that try to alter attitudes and encourage safe driving habits.

International Comparisons and Best Practices: Researching road safety programs and results in other nations to find lessons learned and best practices that could be used locally.

Based on these unique goals and resources, **TRAX** may choose to concentrate on one or more of these categories, as each one provides insightful information on enhancing road safety. The results of these studies' research can guide advocacy campaigns, suggested policies, and doable solutions that increase road safety for all users.

WORK DESCRIPTION

Here is a succinct overview of the regular tasks and endeavours of TRAX, a non-governmental organization dedicated to road safety:

Development of Policies and Advocacy: Advocating for better laws and guidelines pertaining to traffic safety. Also, working together with governmental organizations to create and execute efficient traffic safety programs.

Campaigns for Awareness and Education: Setting up training sessions and workshops on safe driving techniques. Creating instructional resources and carrying out community and school outreach initiatives.

Gathering and Analysing Data: Collecting and examining data on traffic accidents in order to find patterns and risk factors. Keeping up databases to support decision-making based on evidence.

Participation in the Community: Forming alliances with organizations and communities nearby. Enlisting volunteers for campaigns and projects aimed at improving road safety.

Investigation and Originality: Carrying out research on vehicle safety, road infrastructure, and driver behaviour and partnering with academic institutions to develop cutting-edge solutions for traffic safety.

Developing Capabilities and Training: Supplying instruction to law enforcement, government, and medical personnel and assisting partner organizations in building their expertise in road safety.

12-WEEK JOURNEY

The 12-week journey boarded upon by the team working with TRAX NGO was a multifaceted endeavor aimed at enhancing pedestrian safety, advocating for traffic management, and fostering community engagement. Here's a summary of the week-wise activities and key outcomes:

Week 1: Setting Objectives

Defined objectives for enhancing pedestrian safety through infrastructure development, awareness campaigns, policy recommendations, community engagement, and data analysis.

Week 2: Identifying Leads

Explored potential NGOs focused on traffic management in Noida, highlighting environmental organizations, transportation groups, online resources, and local networks.

Week 3: Brainstorming with NGO

Collaborated with the NGO to brainstorm ideas for spreading awareness about traffic management, emphasizing human impact, diverse audience targeting, utilizing multiple channels, promoting responsible behavior, and stakeholder collaboration.

Week 4: Poster-Making on Road Safety

- Created a public service announcement poster on the dangers of texting while driving, highlighting statistics and providing tips for safe driving practices.

Week 5: Key Funding Strategies

Developed strategies for securing funding for road safety awareness initiatives, including government grants, CSR partnerships, private donations, educational institution collaborations, and participation in major events.

Week 6: Case Study on TRAX NGO's Impact

Presented a case study on TRAX NGO's impact on community traffic management values, showcasing how their initiatives fostered community unity and improved road safety.

Week 7 & 8: Surveys on Parking & Traffic Facilities

Conducted surveys around Amity University and Mayoor School to identify traffic management issues and propose solutions for improving visibility, addressing improper parking, and managing traffic congestion.

Week 9 & 10: Distribution Drive & Traffic Analysis

Distributed reflective stickers on two-wheelers to enhance road safety during low-light conditions and analyzed traffic flow issues at Mahamaya flyover to propose solutions for improving lane management.

Week 11: Safety Concerns at University

Highlighted safety and efficiency concerns at the university, focusing on limited visibility due to overgrown trees and dense fog, as well as improper parking contributing to traffic congestion.

Week 12: Faculty Feedback & Reflection

Received feedback on the report draft, emphasizing clarity, detail, evidence, reflection, and alignment with learning objectives, ensuring a comprehensive and effective documentation of the team's experiences and outcomes.

Throughout the 12 weeks, the team demonstrated a proactive approach to addressing traffic management challenges, fostering partnerships, and advocating for safer roadways, contributing to a more informed and engaged community.

OBSERVATION AND ANALYSIS

For Trax NGO's road safety initiatives, thorough observation and analysis are crucial for program success and identifying areas for improvement. A systematic approach includes:

4. Analysing accident data to identify patterns and hotspots.
5. Evaluating road infrastructure for safety features.
6. Researching driver behaviour through surveys or interviews.

7. Assessing public awareness campaign effectiveness.
8. Reviewing collaboration efficacy and partnerships.
9. Evaluating educational programs' content and delivery.
10. Assessing technology utilization for data collection and safety promotion.
11. Analysing policy advocacy impacts on traffic safety laws.
12. Monitoring long-term effects on accident reduction and cultural change.
13. Implementing a feedback mechanism for stakeholder input. This methodical approach empowers Trax NGO to make informed decisions and expand their road safety impact.

INNOVATION IN THE AREA OF THE STUDY

Trax NGO can elevate its road safety efforts through innovative initiatives like virtual reality driver training, gamified education apps, augmented reality road signs, crowdsourced hazard reporting, peer-to-peer mentorship, creative campaigns, smart crosswalks, vehicle safety feature promotion, pedestrian safety measures, and data-driven decision-making. These strategies enhance effectiveness and community engagement.

LEARNING OUTCOMES

In order to make sure that TRAX NGO's road safety programs successfully fulfil important educational objectives, it can be helpful to design particular learning outcomes. Several possible learning objectives, each specific to its setting, are as follows:

Acquiring Knowledge: With this, participants will acquire a thorough understanding of road safety concepts, such as traffic laws, danger recognition, and defensive driving methods.

Perception of Risk: The capacity to identify and evaluate possible dangers and hazards on the road, such as speeding, distracted driving, and inclement weather, will be developed in the participants.

Modification of Behaviour: Participants will exhibit a constructive change in mindset and actions toward safer driving habits, like fastening seatbelts, respecting speed limits, and abstaining from drug and alcohol use while operating a vehicle.

Enhancement of Skills: In addition to learning good communication skills with other drivers, participants will gain practical driving abilities such safe braking, steering, and navigating.

Being Ready for Emergencies: Participants will gain knowledge on how to safely evacuate a car, call emergency services, and provide first aid in the event of an incident while driving.

Participation in the Community: The participants will proactively involve themselves in their communities to raise awareness of road safety issues and push for better laws and infrastructure.

Advocacy and Leadership: In order to launch and oversee grassroots projects, educational seminars, and campaigns for road safety in local communities, participants will gain the confidence and leadership abilities necessary.

Respect and Empathy: In order to promote a culture of respect and cooperation among drivers and other road users, such as cyclists, motorcyclists, pedestrians, and others, participants will develop empathy and respect for all of them.

Knowledge of Data: In order to evaluate and analyse data on traffic safety, recognize trends and patterns, and make defensible decisions to enhance traffic safety outcomes, participants will acquire fundamental data literacy skills.

Lifelong Education: The significance of ongoing education and self-improvement in upholding safe driving practices and adjusting to evolving traffic laws and regulations will be acknowledged by the participants.

By using these learning goals as a guide, Trax NGO can make sure that all of its initiatives—including workshops, educational programs, and awareness campaigns—empower people and communities to make a positive impact on road safety. Frequent assessment and evaluation can also be used to gauge the success of these goals and provide guidance for upcoming program enhancements.

CONCLUSION

The research conducted around Amity University, Noida, serves as a testament to the intricate relationship between educational institutions and traffic management, spotlighting the dual roles they play in contributing to the city's vibrancy while also posing challenges to road safety. Through a meticulous examination of traffic patterns, infrastructure adequacy, and existing management strategies, the study has unearthed critical insights into the current state of road safety and traffic awareness in the vicinity of the university. One of the primary findings of the research is the significant impact of Amity University's large student population on traffic flow in the surrounding areas. The influx of vehicles during peak hours creates a complex traffic environment that not only compromises the safety of students, faculty, staff, and the general public but also poses challenges for efficient traffic management. Moreover, the study identifies specific areas of concern, such as traffic congestion, inadequate parking facilities, and visibility issues, which demand immediate attention and intervention. However, amidst these challenges lie opportunities for innovation and improvement. The exploration of innovative solutions, such as the Smart Traffic Management Framework, presents a promising avenue for enhancing the efficiency of traffic management through real-time monitoring and adaptive control systems. By leveraging technology and data-driven approaches, it is possible to mitigate traffic congestion, optimize traffic flow, and reduce the incidence of road accidents. Furthermore, the collaboration with TRAX Road Safety NGO underscores the importance of community engagement and advocacy in promoting road safety awareness. Through strategic partnerships and initiatives, such as workshops, awareness campaigns, and community patrols, TRAX exemplifies the transformative power of collective action in fostering a culture of responsible road behaviour and enhancing pedestrian safety. In light of these findings and collaborations, the imperative for action is clear. It is essential for stakeholders, including the university administration, local authorities, NGOs, and the community, to come together and work collaboratively towards implementing evidence-based solutions. This entails investing in infrastructure improvements, enhancing traffic management strategies, and fostering a culture of road safety awareness and responsibility among all road users. By prioritizing road safety initiatives and embracing innovative solutions, we can create safer and more sustainable transportation systems around educational institutions like Amity University, Noida. In doing so, we not only ensure the well-being of all road users but also contribute to the overall development and

prosperity of the city. As we move forward, let us seize this opportunity to build safer, more inclusive, and more resilient communities for generations to come.

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