



Daffodil
International
University

Department of Law

Research on

The Road Safety Laws in Bangladesh: A Critical Analysis

This Assignment Submitted as a Partial Fulfillment of the requirements for Final Semester Final Exam, Program: LL.M.

Course Title: Research Monograph

Submitted By

MD. ASHIQUR RAHMAN

ID No: 232-38-011

Programme: LL.M

Session: 2023-2024

Subject: Research Methodology

Department of Law,

Daffodil International University

Supervised By

Mohammad Badruzzaman

Assistant Professor, Department of Law,

Daffodil International University

Date of Submission: _____

Abstract

This paper critically examines the road safety laws in Bangladesh using the metaphor of the human body, where each component of the system legislation, enforcement, technology, public awareness, and judiciary is compared to organs and functions of a living organism. The study identifies gaps and weaknesses in the current framework, provides comparative insights from global best practices, and offers practical, implementable recommendations to strengthen the system. The research emphasizes the need for an integrated, efficient, and sustainable legal framework to reduce road accidents and improve public safety.

Key findings reveal that the “skeleton” of laws in Bangladesh is outdated, the “heart” of enforcement is weak, and the “nervous system” of technology is underdeveloped. These deficiencies lead to systemic inefficiencies, underscoring the urgency of reforms.

ACKNOWLEDGEMENT

Thanks be to Almighty God who gave me the opportunity and ability to do this research. In fact, without His special grace and favor, I could not have done this study. We thank him for his advice, guidance, useful suggestions and helpful comments on the first drafts of this study and his continuous support throughout the preparation of the final questionnaire. I am very grateful to him because without his help, I would not have been able to complete this research and support the preparation of this research monograph.

Letter of Transmittal

To

Professor Mohammad Badruzzaman Supervisor

And

Assistant Professor, Department of Law,

Daffodil International University

Subject: Letter of Transmittal Dear Sir,

It is a gratification for me to put forward the Research Monograph on “**The Road Safety Laws in Bangladesh: A Critical Analysis**” which is done in a partial fulfillment of LL.M. program. While doing this task, I have tried my level best to formulate this project manuscript to the required standard. I hope that this research will accomplish your expectation and make you pleased.

I therefore, expect that you would be kind enough to go from beginning to end of this term paper for appraisal.

I am always available for any clarification of any part of this research paper at your convenience.

Thanking of you



.....
MD. ASHIQUR RAHMAN
ID No: 232-38-011

Letter of Approval

This is to certify that the work is done “**The Road Safety Laws in Bangladesh: A Critical Analysis**” is a real work done by MD. ASHIQUR RAHMAN, ID: 232-38-011, Department of Law, Daffodil International University, done under my supervision in the partial fulfillment for the research work for



Mr. Mohammad Badruzzaman
Assistant Professor
Department of Law
Daffodil International University

Table of Content

Abstract	I
Acknowledgement	I
Letter of Transmittal.....	II
Letter of Approval.....	II
List of Abbreviation... ..	III

Chapter: 1

Introduction

1.1. Background of the Study.....	1
1.2. Importance of Road Safety	2
1.3. Overview of Road Safety in Bangladesh	3
1.4. Research Objectives	4
1.5. Research Questions	5
1.6. Scope and Limitations of the Study.....	6
1.7. Literature Review.....	7
1.8. Research Monograph.....	8
1.9. Data Analysis.....	8

Chapter: 2

Concepts and Theories of Road

Safety

2.1. Road Safety Concepts and Theories.....	9
2.2. Global Road Safety Frameworks and Best Practices.....	9
2.3. Road Traffic Accidents and Fatalities in Bangladesh.....	9
2.4. Previous Studies on Bangladeshi Road Safety Laws	10
2.5. Gaps in the Literature... ..	11

Chapter: 3
Overview of Road Safety
Laws in Bangladesh

3.1. Historical Evolution of Road Safety Laws.....	12
3.2. Key Legislative Frameworks (Road Transport Act 2018)	12
3.3. Enforcement Mechanisms and Agencies.....	13
3.4. Comparison with International Standards.....	14
3.5. Challenges in Legal Implementation	15

Chapter: 4
Analysis of Road Safety Issues in
Bangladesh

4.1. Statistical Overview of Road Traffic Accidents.....	17
4.2. Identifying Major Causes of Road Accidents.....	17
4.3. Role of Stakeholders (drivers, policymakers, law enforcement)	17
4.4. Social and Economic Impact of Road Accidents.....	24
4.5. Case Studies of Recent Accidents.....	24

Chapter: 5
Evaluation of the Effectiveness of Road Safety Laws

5.1. Strengths of Existing Laws.....	23
5.2. Weaknesses and Loopholes in Legislation.....	24
5.3. Challenges in Enforcement and Compliance.....	25
5.4. Role of Corruption and Political Influence.....	27
5.5. Public Awareness and Education.....	29

Chapter 6

Comparative Study with Other Countries

6.1 Overview of Road Safety Laws in Neighboring Countries.....	29
6.2 Lessons Learned from International Best Practices.....	30
6.3 Applicability of Global Solutions to Bangladesh.....	34

Chapter 7

Recommendations for Improving Road Safety Laws

7.1 Policy-Level Recommendations.....	35
7.2 Strengthening Legal and Institutional Frameworks.....	36
7.3 Technology-Based Solutions (surveillance systems, AI).....	37
7.4 Community Engagement and Public Awareness Programs.....	38
7.5 Collaboration with International Organizations.....	40

Chapter 8

Conclusion

8.1 Summary of Key Findings.....	40
8.2 Implications of the Research.....	42
8.3 Future Directions for Research.....	43

Chapter: 1

Introduction

1.1 Background of the Study

A critical public health challenge demanding multisectoral intervention, global road safety claims 1.3 million lives yearly through kinetic energy dissipation events, with 60 million trauma epidemiology cases requiring long-term rehabilitation. Developing nations like Bangladesh exhibit disproportionate fatality curves—93% of global road deaths occur despite their minority vehicle fleet ownership. Through modal shift incentives and infrastructure recalibration, Dhaka's transport authorities confront 6,000–8,000 annual RTA mortalities that drain 1-2% of national GDP through productivity hemorrhaging and familial destabilization.

Lawmakers established the Road Transport Act 2018 as legislative scaffolding to address vehicular entropy, yet implementation gaps persist across three axes: enforcement asymmetries, cognitive dissonance in public risk perception, and adaptive lag to megacity mobility patterns. This analysis employs regulatory impact assessment frameworks to evaluate whether Bangladesh's juridical mechanisms sufficiently counteract dendritic urbanization pressures while optimizing first-response protocols.

1.2 Importance of Road Safety

The paramount importance of road safety manifests through its tripartite reinforcement of citizen welfare, economic advancement, and social equilibrium. Three kinetic energy dissipation mechanisms emerge:

Mortality and Trauma Mitigation: Among individuals aged 5–29 years, road traffic collisions stand as the primary fatality catalyst, necessitating urgent traffic flow optimization.

Economic Stimulation: Accident reduction precipitates fiscal conservation through diminished healthcare expenditures, augmented workforce productivity, and preserved transportation infrastructure integrity.

Sustainable Infrastructure Propagation: Robust arterial networks facilitate modal shift incentives while curtailing carbon footprints and ensuring equitable resource distribution through spatial connectivity enhancements.

Bangladesh's urban expansion dynamics confront multimodal challenges deficient road geometry standards, erratic regulatory enforcement patterns, and inadequate risk perception literacy collectively exacerbate collision frequency distributions. Crucially, the resolution of these systemic failures constitutes prerequisite conditions for attaining Targets 3.6 and 11.2 of the Sustainable Development Goals, particularly through injury prevention algorithms and public transit prioritization frameworks.

1.3 Overview of Road Safety in Bangladesh

Bangladesh faces severe road safety challenges due to:

High Accident Rates: Despite progress in vehicle regulation, road fatalities continue to rise, with frequent collisions involving buses, trucks, and motorcycles.

Poor Infrastructure: Several factors contribute to accidents, such as narrow roads, availability of pedestrian crossings and provision of illumination.

Weak Enforcement: Traffic laws are poorly enforced because of corruption, lack of resources and poor accountability.

Limited Awareness: The general public engages in road travelling without any knowledge of traffic regulations and this results in hazardous driving or jaywalking.

Vehicle Growth: The growth in vehicles, including informal vehicles (rickshaws), exceeds the capacity of current roads and law.

The government's introduction of the Road Transport Act 2018 sought to address these issues, yet significant gaps in enforcement, coordination, and adaptation remain unaddressed.

1.4 Research Objectives:

1. Analyze the effectiveness of the Road Transport Act 2018 and related laws.
2. Identify gaps and challenges in enforcement, public awareness, and technological adoption.
3. Explore the social, economic, and institutional impacts of road safety failures.
4. Provide evidence-based recommendations to improve road safety laws and their implementation in Bangladesh.

1.5 Research Questions:

To guide the study, the following questions are addressed:

1. What are the strengths and weaknesses of the current road safety laws in Bangladesh?
2. What are the main challenges in enforcing road safety regulations?
3. How do institutional, technological, and societal factors contribute to road safety issues?
4. What lessons can Bangladesh learn from international best practices to improve its road safety framework?

1.6 Scope and Limitations of the Study Scope:

A legislation-and-institutional-based study reviewing the provisions governing road safety in Bangladesh, focusing specifically on the Road Transport Act 2018;

Other aspects are challenges related to the enforcement of the laws, awareness among the public, and the role of technology on road safety;

The study also incorporates a comparative analysis with other specific countries, namely Sweden, India, and Singapore, in order to draw more practical lessons from them.

Limitations:

There is lack of good, current data regarding road accidents and fatalities in Bangladesh;

Geographical Limitations: The study is focused on urban areas where road safety problems are most acute, with a few observations on rural areas due to logistic limitations.

Subjectivity: The inputs from interviews or surveys could be biased from respondent's side.

1.7 Literature Review:

Existing research shows that Bangladesh has road safety laws like the Motor Vehicles Ordinance, 1983 and the Road Transport Act, 2018, but their effectiveness is limited. Key issues include weak enforcement, corruption, poor infrastructure, and lack of public awareness. Studies highlight high accident rates, with over 20,000 deaths yearly, and inadequate protection for vulnerable road users like pedestrians and cyclists. Researchers emphasize the need for better enforcement, improved road design, and public education to address these challenges. Overall, the literature calls for stronger implementation and reforms to enhance road safety in Bangladesh.

1.8 Research Monograph:

Road safety is a major concern in Bangladesh, with thousands of lives lost annually due to accidents. Despite having laws like the Motor Vehicles Ordinance, 1983 and the Road Transport Act, 2018, the country struggles with poor enforcement, weak infrastructure, and reckless driving. This analysis looks at the strengths and weaknesses of these laws and suggests ways to improve road safety.

Strengths of Current Laws

1. The *Road Transport Act, 2018* introduced stricter penalties for violations like speeding and drunk driving.
2. It emphasizes driver training and vehicle fitness checks.
3. Bangladesh has committed to global road safety goals, such as the UN Decade of Action for Road Safety.

Weaknesses of Current Laws

1. Laws are not consistently enforced due to corruption and lack of accountability.
2. Vulnerable road users (pedestrians, rickshaw pullers) are not adequately protected.
3. Poor road design and lack of safety measures (zebra crossings, traffic signals) contribute to accidents.
4. Limited public awareness campaigns and education on road safety.

While Bangladesh has made some progress with road safety laws, much more needs to be done. Strengthening enforcement, improving infrastructure, and raising public awareness are key to reducing accidents and saving lives. By learning from successful examples in other countries, Bangladesh can create a safer road environment for everyone.¹

1.9 Data Analysis:

In this section, you'll present and analyze statistical data related to road accidents and enforcement efficiency. You can analyze data from:

Accident Reports: Government or police department records on road fatalities and accidents, breaking them down by type (pedestrian, vehicle collisions), region (Dhaka vs rural areas), and cause (speeding, distracted driving).

Traffic Violations: Data on traffic law violations, such as speeding, driving under the influence (DUI), and failure to wear seat belts. This could also include statistics on enforcement actions (fines, arrests).

¹ Adhikary, T. S. (2024b, April 18). Road Safety: Maladies every step of the way. *The Daily Star*.
<https://www.thedailystar.net/news/bangladesh/transport/news/road-safety-maladies-every-step-the-way-3589316>
©Daffodil International University

Chapter II

Concepts and Theories of Road Safety

2.1 Road Safety Concepts and Theories

Road safety, or road safety as its defined, implies a transmission of such accidents and prevention of the resultant injury and harm on road users. Theories, as well as concepts in road safety, include:

The Safe System Approach

Emphasizing the interaction of road users, vehicles, and the road system. Seeks to provide for road system designs that will minimize human error and consequences.

The Haddon Matrix

A conceptual framework for accident analysis in which there are three phases' precedents: pre-crash, crash, and post-crash. Identifies human, vehicle, and environmental factors contributing to road safety.

Vision Zero

Originated in Sweden, which eliminates all road deaths and serious injuries. Emphasized shared responsibility on many fronts: policymakers, road users, and infrastructure developers.

Behavioral Theories

A Theory of Planned Behavior accentuates attitudes, subjective norms, and perceived behavioral control impacting road user behavior. Risk compensation theory suggests that individuals adjust their behavior as a function of perceived risk, therefore often offsetting safety improvements. These theories are guides that can prepare you to tackle the nuisances of road safety and formulate relevant interventions geared towards their alleviation.²

2.2 Global Road Safety Frameworks and Best Practices

Around the globe, frameworks and strategies of road safety have been in progress, and some bear great relevance to Bangladesh:

² *UNIT 1: Foundations of road safety*. (n.d.). FHWA. <https://highways.dot.gov/safety/learn-safety/road-safety-fundamentals-html-version/unit-1-foundations-road-safety>
©Daffodil International University

Sweden (Vision Zero)

Start on 1997, Vision zero has an emphasis on infrastructure design, strict enforcement, and public awareness. Large reductions in road fatalities were achieved by measures such as roundabouts, pedestrian zones, and speed management.

Singapore

Incorporates technology-based traffic management with strict enforcement. Uses Electronic Road Pricing (ERP) and automated surveillance systems to manage traffic and curb violations.

India

The amendment of the Motor Vehicles (Amendment) Act 2019 sought to increase fines and penalties for traffic violations, improve licensing systems, and make it mandatory for road safety audits. Zoned in for high fatality rates in rural parts.³

The WHO Global Plan for the Decade of Action for Road Safety 2021–2030

Provides a broad framework across five pillars: safer roads, safer vehicles, safer road users, post-crash response, and governance. Bangladesh must draw on the lessons of these frameworks in an integrated, multi-stakeholder approach towards road safety.

2.3 Road Traffic Accidents and Fatalities in Bangladesh

Road traffic accidents (RTAs) are a major public health and socio-economic concern in Bangladesh:

Statistics

While official reports suggest some 6,000 deaths a year, independent studies set the toll higher at over 10,000. Most of those killed consisted of pedestrians, motorcyclists, and bus passengers.

³ Trafikverket. (2019, October 14). *Vision Zero - no fatalities or serious injuries through road accidents*. Trafikverket. <https://www.roadsafetysweden.com/about-the-conference/vision-zero---no-fatalities-or-serious-injuries-through-road-accidents/>

Major Causes

Human Factors include dangerous driving, inexperience and ignorance of traffic rules. Infrastructure comprises roads too narrow, poorly maintained, and with weak pedestrian facilities. Vehicles overloads; poorly maintained. Enforcement corruption and understaffing limit proper law enforcement.

Social and Economic Impacts

The loss of life and livelihood really hurts low-income families. Road accidents are estimated to cost the economy nearly USD 3 billion annually, equivalent to 1%-2% of GDP. The statistics point to the absolute necessity of rethinking road traffic safety from a systemic perspective.⁴

2.4 Previous Studies on Bangladeshi Road Safety Laws

Some studies look into the effectiveness of road safety laws and policies in Bangladesh:

Effectiveness of the Road Transport Act 2018

While the Road Transport Act 2018 makes punishment more rigid, better compensation schemes have been designed, experts say that enforcement is not consistent. Researchers point out some loopholes in the act, e.g. inadequate provisions for pedestrian safety and non-motorized vehicle issues.

The Real Challenges of Enforcement

Corruption and political interference in undermining enforcement are pointed out by Alam, et al. (2020).

Lack of training and resources of traffic police is also raised.

Public Awareness and Compliance

Poor road safety knowledge of the public reveals a lack of awareness of many road users about basic traffic rules. Targeted awareness campaigns improved helmet and seatbelt compliance (Ahmed et al., 2019).

⁴ World Health Organization: WHO. (2019, October 2). *Road safety*. https://www.who.int/health-topics/road-safety#tab=tab_1

Role of Infrastructure

Need for better road design, including distinct lanes for non-motorized vehicles, proper signage was emphasized by Hossain et al. (2021). The indicated studies highlight areas of consideration to attain further research and intervention.⁵

2.5 Gaps in the Literature

There are still some gaps that need to be filled in road safety law studies in Bangladesh.

Limited Focus on Technological Solutions

Very few studies examined the possibilities of using AI, IoT, or automatization factor to improve enforcement for road safety.

Neglect of Rural Areas

While only one other recent study focused entirely on the problems of rural road safety as urban areas, such as Dhaka, have received most of the attention.

Lack of longitudinal studies

There are no studies of the long-term impacts of the policies, including the Road Transport Act of 2018.

Comparative Analysis

There is limited research comparing road safety frameworks regarding Bangladesh with other low- and middle-income countries.

Holistic Approach

Most studies focus on individual factors (such as enforcement or infrastructure) without contemplating their interdependence within the wider road safety ecosystem.

By addressing these can provide an overall perspective on the issue of road safety and help improve policymaking in Bangladesh.⁶

⁵ Haq, R. A. (2019, November 6). Road Transport Act 2018 – details, repercussions, reactions. *The Daily Star*. <https://www.thedailystar.net/shift/news/road-transport-act-2018-details-repercussions-reactions-1823818>

⁶ Heydari, S., Hickford, A., McIlroy, R., Turner, J., & Bachani, A. M. (2019). Road Safety in Low-Income Countries: State of knowledge and future directions. *Sustainability*, 11(22), 6249. <https://doi.org/10.3390/su11226249>

Chapter: III

Overview of Road Safety Laws in Bangladesh

3.1 Historical Evolution of Road Safety Laws

Road safety laws in Bangladesh have been formulated in connection to attaching greater complexity in transportation and increasing road traffic accidents over the past century. The key milestones in this evolution are:

British Colonial Period (Pre-1947)

Introduced by British rule, the Motor Vehicles Act 1914 set the guidelines for directly vehicle registration, licensing, and limited traffic rules in the Indian subcontinent and formed the basis of subsequent laws.

The Pakistan Era (1947-1971)

The partition of India in 1947 forced the 1939 Motor Vehicles Act to reassess the 1914 legislation.

In addition, inspections of vehicles, certifications of fitness, and limited liability for traffic accidents were reportedly introduced. Nevertheless, enforcement was weak and only basically applied to urban areas.

Post-Independence (1971-1980s)

Given the independence of Bangladesh in 1971, the government formulated the Motor Vehicles Ordinance 1983.

The ordinance was a comprehensive framework that included vehicle registration, licensing, road usage, and penalties following accidents.

A repository of academic journals published in Bangladesh, including research on road safety laws and enforcement.

However, lackluster enforcement mechanisms, corruption, and an outdated set of provisions might have initially impeded a timely response to exponential growth in motorized and non-motorized transport.

The Modern-Day Period (1990s-present)

Rising urbanization and road accidents increased pressures on the government for targeted measures.

The Road Transport Act 2018 was passed, superseding the Ordinance of 1983, and provided a much-needed overhaul of road safety governance marked by stricter penalties, better compensation schemes, and increased regulatory oversight.

Some complementary rules like Traffic Rules and Regulations 1973 and Highways Act 1925 continue to address specific aspects of road safety.

The historical evolution of road safety laws in Bangladesh is quite reactive, where reforms were almost universally set in place after public pressure ensuing from major accidents.⁷

3.2 Key Legislative Frameworks

Currently in Bangladesh, the legal framework regulating road safety includes yet is not limited to:

Road Transport Act (RTA) 2018

The RTA 2018 remains the most comprehensive road safety act till date, addressing issues such as licensing, penalties, and compensation. Key features:

Licensing and Driving: Tougher criteria for obtaining driving licenses and vehicle fitness certification are to be observed. Penalties: Fines and imprisonment are to be increased for reckless driving, unlicensed operation, and other offenses. Other Compensation: Establishment of a fund from which injured victims can draw compensation. Transport Workers Constitution: Provides for working hours and wages for transport workers.

Motor Vehicles Ordinance 1983

Although it was replaced by the RTA 2018, many administrative practices are still performed according to it. It provided for basic licensing, registration, and traffic management but did not anticipate modern challenges such as ride-sharing or advanced safety technologies.

Highways Act 1925

This Law governs the construction, maintenance, and regulation of highways. Addresses issues like

⁷ BDLex. (2022, December 2). *Road and traffic laws in Bangladesh*. <https://www.linkedin.com/pulse/road-traffic-laws-bangladesh-bdlex-manupatra>
©Daffodil International University

encroachment, road damage, and rights of way.

Traffic Rules and Regulations 1973

They provide operational guidelines for traffic management and control with respect to issues such as speed limits, right-of-way rules, and pedestrian safety measures.

Supplementary Regulations

Weather-related regulations that could influence road safety include those concerning vehicle emissions and informal transport in the case of rickshaws.⁸

3.3 Enforcement Mechanisms and Agencies

In Bangladesh, the enforcement of road safety laws involves the following agencies and mechanisms:

Bangladesh Road Transport Authority (BRTA)

Responsible for vehicle registration, licensing, and road safety awareness. Provides fitness certificates to vehicles and regulates public transport permits.

Traffic Police

Enforce traffic laws, manage road congestion, and penalize lawbreakers. Limited manpower and resources hinder actual enforcement, especially in rural areas.

Ministry of Road Transport and Bridges

Formulates the policy and regulatory framework for road infrastructure and safety. Has worked together with BRTA to enforce the RTA 2018.

Judiciary

Takes legal proceedings on traffic violations and compensation claims of the victims of road crashes. Most of the cases are backlogged in the highways, with social and political interference delaying the delivery of justice.

⁸ BDLex. (2023b, November 3). *Bangladesh's Road Transport Act, 2018: A Paradigm Shift in Road Safety and Transportation Regulation*. <https://www.linkedin.com/pulse/bangladeshs-road-transport-act-2018-paradigm-shift-safety-waapf>

Locally available institutions of local government

Play a role in the maintenance of rural roads and enforcement of traffic rules in small towns.

3.4 Comparison with International Standards

Road safety laws in Bangladesh lag behind global best practices in several areas:

Sweden (Vision Zero): Focuses on eliminating fatalities through infrastructure design and strict speed control. Conversely, Bangladesh demeans pedestrian and non-motorized user road infrastructure development.

Singapore: Handles artificial intelligence-powered traffic monitoring, automatic penalties, planning and policymaking methods with a support of extensive data. The practicality of operational enforcement through technological means is still lacking in Bangladesh; there are few surveillance cameras and no single centralized database for accident reporting.

India: The intense penalties, road safety audits, compulsory helmets, and seat belts have been put into place by the Motor Vehicles (Amendment) Act of 2019. While the RTA 2018 does bring the same penalties, they're very subject to enforcement consistency and political influence.

WHO Global Recommendations: WHO suggests the "safe systems" approach by integrating road safety measures: providing safe roads, safe vehicles and safe behavior, along with effective enforcement? Bangladesh has yet to embrace this holistic approach, focusing most of its efforts on punitive measures rather than preventative ones.⁹

3.5 Challenges in Legal Implementation

In spite of the RTA 2018's passage, severe challenges to the implementation of road safety laws in Bangladesh exist:

⁹ Wahid, T. R. (2024, May 4). *Traffic and Road laws in Bangladesh in 2023| Find the most comprehensive up to date info of Road laws*. Tahmidur Rahman TRW Law Firm in Bangladesh. <https://tahmidurrahman.com/traffic-and-road-laws-in-bangladesh/>

Weak Enforcement

The enforcement agencies render the law ineffective owing to corruption and lack of accountability. Political interference often gives protection to offenders, specifically transport owners and workers.

Resource Constraints

Insufficient manpower and funding for traffic police and BRTA hamper effective enforcement. Limited access to modern technology such as automated traffic monitoring systems compounds inefficiencies.

Public Awareness and Compliance

Most of the road users, especially in rural areas, do not understand traffic rules well. Resistance to change, such as helmet or seatbelt use, is often culturally ingrained, with limited public awareness campaigns to counter it.

Judicial Bottlenecks

All this translates into added backlog into the courts and this results in a delay in convicting offenders or awarding compensation to victims.

Infrastructure Limitations

Narrow roads, dilapidated highways, and lack of pedestrian facilities compound the risk of accidents. Narrow roads, poor highways, lack of pedestrian facilities compound the risk of accidents.

Informal Transport Sector

The high presence of rickshaws and unauthorized buses within the unregulated vehicle segment adds other forms of obstruction to enforcement work.¹⁰

¹⁰ *Bangladesh government sets stage for new Road Safety Act.* (2024, June 17). Global Health Advocacy Incubator. <https://www.advocacyincubator.org/news/2024-04-02-bangladesh-government-sets-stage-for-new-road-safety-act>
©Daffodil International University

Chapter: 4

Analysis of Road Safety Issues in Bangladesh

4.1 Statistical Overview of Road Traffic Accidents

The high incidence of road traffic accidents (RTAs) in Bangladesh underscores the critical nature of the road safety issue. Here are some key statistics:

Road Accident Trends:

Bangladesh ranks among the countries with the highest road fatality rates in South Asia. According to the Bangladesh Road Transport Authority (BRTA), there are about 6,000–8,000 reported deaths each year, but independent groups like the Bangladesh Passenger Welfare Association (BPWA) suggest the true figure may exceed 10,000.

Fatalities:

Pedestrians, motorcyclists, and passengers in buses and minibuses make up 70% of road fatalities. Children and young adults aged 5–29 are particularly vulnerable, with road accidents being a leading cause of premature death in this demographic.

Injuries and Disabilities:

Alongside fatalities, thousands endure life-changing injuries, with many facing permanent disabilities. It's estimated that 20,000–25,000 people are injured each year due to RTAs.

Geographic Distribution:

Urban centers, particularly Dhaka, see the highest number of accidents due to dense populations and heavy traffic. Rural roads also play a significant role in fatal accidents, often due to inadequate infrastructure, poor lighting, and a lack of traffic management.

Global Comparisons:

The World Health Organization (WHO) estimates that Bangladesh's road fatality rate stands at around 15–20 deaths per 100,000 people, which is considerably higher than countries with strong road safety measures, like Sweden, which has a rate of 2–3 deaths per 100,000.¹¹

¹¹ Sun, D. (2025, March 16). *Major cause of road accidents*. Daily-sun. <https://www.daily-sun.com/printversion/details/700310/Major-cause-of-road-accidents>
©Daffodil International University

4.2 Identifying Major Causes of Road Accidents

Several factors contribute to the high rate of road accidents in Bangladesh. These causes can be grouped into human, vehicular, and infrastructural factors:

Human Factors:

Reckless Driving: Speeding, improper overtaking, and ignoring traffic signals are widespread issues.

Driver Fatigue and Inexperience: Long hours, insufficient training, and weak licensing systems result in unsafe driving habits.

Non-compliance: Not using seat belts, helmets, and child safety measures increases the likelihood of fatalities and injuries.

Vehicular Factors:

Unfit Vehicles: Many vehicles on the road are poorly maintained, with issues like faulty brakes, tires, and lighting. **Overloading:** Buses, trucks, and other vehicles often carry more than their capacity, making them more susceptible to accidents.

Infrastructural Factors:

Poor Road Design: Narrow roads, lack of dedicated lanes, absence of pedestrian crossings, and inadequate signage create unsafe conditions. **Inadequate Maintenance:** Potholes, uneven surfaces, and damaged road barriers heighten the risk of accidents.

Enforcement Issues:

Corruption: Bribery often enables unqualified drivers to get licenses or evade penalties for violations.

Insufficient Resources: Traffic police often lack the necessary training, technology, and personnel to enforce laws effectively.

Cultural and Behavioral Issues:

A lack of awareness regarding traffic laws and safety practices leads to risky behaviors such as jaywalking, ignoring signals, and riding motorcycles without helmets.¹²

¹² Islam, M. A., & Dinar, Y. (2021). Evaluation and Spatial Analysis of Road Accidents in Bangladesh: an Emerging and Alarming Issue. *Transportation in Developing Economies*, 7(1). <https://doi.org/10.1007/s40890-021-00118-3>
©Daffodil International University

4.3 Role of Stakeholders

The responsibility for ensuring road safety is shared among various stakeholders, each playing a crucial role:

Drivers and Transport Operators:

Accountability: While drivers often face blame for reckless actions, transport operators significantly influence this by pressuring drivers to adhere to unrealistic schedules. **Training:** The absence of mandatory and thorough training for drivers worsens the situation.

Policymakers and Government Agencies:

Legislation: The Road Transport Act 2018 marked progress, yet there are still gaps in its coverage and execution. **Budget Allocation:** Limited funding for road safety initiatives and infrastructure development hampers advancement.

Law Enforcement Agencies:

Traffic police are tasked with enforcing regulations, but issues like corruption, insufficient personnel, and lack of resources impede their effectiveness.

Civil Society and Media:

Civil society organizations have played a key role in pushing for stricter road safety laws and raising public awareness. The media is essential in bringing attention to accidents and urging authorities to take necessary actions.

International Organizations:

Organizations such as the World Bank and WHO offer technical and financial support for road safety projects in Bangladesh.¹³

4.4 Social and Economic Impact of Road Accidents

Road accidents have an influence on more than just individual tragedies. They also lead to major societal and economic costs:

¹³ Disaster, K. (2023, June 26). *Road safety and role of key stakeholders - KnowDisaster*. Knowdisaster. <https://knowdisaster.com/road-safety-and-role-of-key-stakeholders/>
©Daffodil International University

Social Impact:

Loss of Life: Families lose their main earners, which causes emotional and money problems.

Disabilities: Many who survive face long-term physical and mental trauma often needing care for life.

Education Disruption: When parents die or become disabled, it can interrupt their children's schooling and future chances.

Economic Impact:

Cost of Accidents: The World Bank thinks road accidents cost Bangladesh about 1–2% of its GDP each year, which adds up to \$3 billion.

Healthcare Burden: Accident victims flood hospitals and emergency services putting pressure on the healthcare system.

Productivity Losses: Injuries and deaths cut down the workforce and affect how much the economy can produce.

4.5 Case Studies of Recent Accidents

2018 Student Protest and Airport Road Tragedy

Incident: On July 29, 2018, a speeding bus ran into a bus stop on Airport Road Dhaka killing two students from Shaheed Ramiz Uddin Cantonment College.

Public Reaction: This tragedy prompted students to lead nationwide protests to demand stricter road safety laws and accountability.

Outcomes: The government passed the Road Transport Act 2018 in response, but its application remains uneven.

Dhaka Bus Collision (2023)

Incident: Two buses crashed head-on on a Dhaka highway causing 12 deaths and injuring over 20 people.

Cause: Buses overtaking and vehicles unfit for the road.

Outcome: Public anger led authorities to crack down on unlicensed buses for a short time, but no lasting changes occurred.

School Van Accident in Gazipur (2022)

Incident: A truck hit a school van resulting in the deaths of 8 children.

Cause: The driver was tired and the area lacked safety measures for pedestrians.

Outcome: This accident showed the pressing need to build infrastructure that protects pedestrians and to check vehicles more.

Motorcycle Crash in Chittagong (2021)

Incident: A truck hit a motorcycle carrying three people killing everyone on the bike.

Cause: The riders didn't follow helmet rules and had too many people on the motorcycle.

Outcome: This led to new calls to educate the public about wearing helmets and following traffic laws.¹⁴

¹⁴ Wikipedia contributors. (2025, February 28). *2018 Bangladesh road-safety protests*. Wikipedia. https://en.wikipedia.org/wiki/2018_Bangladesh_road-safety_protests
©Daffodil International University

2018 Bangladesh road-safety protests

NISA Movement

From Wikipedia, the free encyclopedia



Photo: Ahadul Karim Khan/Dhaka Tribune

DT Tribune Desk

Publish : 03 Aug 2024, 02:15 PM | Update : 03 Aug 2024, 04:03 PM

Chapter: V

Evaluation of the Effectiveness of Road Safety Laws

5.1 Strengths of Existing Laws

The Road Transport Act 2018 introduced several important measures aimed at enhancing road safety in Bangladesh. Here are the key features:

Comprehensive Legal Framework:

The Act addresses a broad spectrum of issues, including vehicle licensing, driver training, road conditions, and traffic violations. This extensive framework is designed to provide clear guidelines for all aspects of road safety, from ensuring vehicle fitness to regulating public transport.

Notable provisions include the regulation of both motorized and non-motorized vehicles, improvements in driver training, and the establishment of minimum safety standards for vehicles, all of which contribute to reducing the risks associated with road traffic accidents.

Enhanced Penalties:

A significant strength of the RTA 2018 is the implementation of stricter penalties for various traffic violations. For instance, reckless driving, speeding, and driving under the influence (DUI) can lead to substantial fines and imprisonment, acting as a deterrent against high-risk behaviors.

The law also imposes fines for actions such as failing to wear seat belts, riding motorcycles without helmets, and disregarding traffic signals. These measures aim to decrease the number of accidents resulting from negligence and unsafe road practices.

Accountability Mechanisms for Transport Operators:

The RTA holds transport operators, owners, and companies accountable. It mandates that they comply with safety standards, maintain their vehicles, and employ qualified drivers.

Transport companies must submit regular reports on their operations and demonstrate that their vehicles undergo routine inspections and maintenance. In the event of accidents caused by unfit vehicles,

transport companies may face penalties, thereby promoting responsibility and operational safety.

Institutional Oversight:

The National Road Safety Authority was established under the Act to coordinate road safety initiatives, set standards, and oversee the enforcement of safety regulations. The Act also suggests the creation of local road safety committees.¹⁵

5.2 Weaknesses and Loopholes in Legislation

Despite the strengths of the Road Transport Act 2018, several weaknesses and gaps hinder its full implementation and effectiveness:

Ambiguity and Delays in Implementation:

A significant concern is the slow rollout of various provisions of the RTA 2018. For instance, while the Act calls for the establishment of the National Road Safety Authority, its formation has been postponed due to bureaucratic hurdles and a lack of resources. Many regulations related to vehicle inspections, traffic monitoring, and driver qualifications have not been fully enacted, leading to confusion and potential misinterpretation.

Insufficient Penalties for Habitual Offenders:

Although penalties for certain offenses like DUI and reckless driving have been toughened, repeat offenders often encounter minimal repercussions. The law fails to enforce stricter measures, such as extended suspensions or permanent license revocation for those who repeatedly break road safety laws.

Additionally, fines for minor infractions, such as running red lights or speeding, are not substantial enough to serve as a real deterrent against widespread non-compliance.

Limited Scope for Non-Motorized Road Users:

The legislation primarily targets motorized vehicles, overlooking important road users like pedestrians, cyclists, and rickshaw pullers. In Bangladesh, pedestrians are particularly vulnerable to road accidents, yet the Act does not offer them adequate protection.

¹⁵ *Bangladesh government sets stage for new Road Safety Act.* (2024b, June 17). Global Health Advocacy Incubator. <https://www.advocacyincubator.org/news/2024-04-02-bangladesh-government-sets-stage-for-new-road-safety-act>
©Daffodil International University

Non-motorized road users frequently face risks from fast-moving vehicles, a lack of dedicated lanes, and poorly marked crossings, but these concerns are not adequately addressed in the law.

Lack of Technological Integration:

The Act does not fully embrace modern technologies that could enhance enforcement and monitoring. For example, automated systems for speed cameras, surveillance, and digital vehicle tracking are either lacking or not effectively implemented. Moreover, there is an absence of digital databases for tracking traffic violations.¹⁶

5.3 Challenges in Enforcement and Compliance

The enforcement of road safety laws encounters major obstacles, especially due to widespread non-compliance:

Understaffed and Undertrained Law Enforcement:

The traffic police often operate with limited funding and insufficient personnel to effectively enforce road safety laws. As the population grows and roads become more congested, law enforcement resources are stretched thin, resulting in inconsistent application of the rules.

Many officers lack adequate training in contemporary law enforcement methods, which hampers the effective implementation of traffic regulations. Issues like corruption, inadequate training, and outdated equipment further hinder their ability to enforce the laws properly.

Public Non-Compliance:

A significant lack of awareness and respect for road safety laws fosters a culture of non-compliance. Many road users, especially in urban areas, disregard laws such as wearing helmets or seat belts, driving without licenses, or engaging in reckless driving.

This attitude stems from a history of weak enforcement and public apathy towards road safety issues. Even when penalties exist for violations, they often do little to change the behavior of road users.

¹⁶ Solaiman, S. M., & Algie, J. (2022). Road Transport Act 2018 in Bangladesh: a critique of the transport workers' liability for driving offences occasioning deaths in light of their equivalents in NSW -Australia. *Crime Prevention and Community Safety*, 24(2), 152–168. <https://doi.org/10.1057/s41300-022-00146-0>
©Daffodil International University

Judicial Delays:

The judiciary in Bangladesh faces a backlog of cases, resulting in delays in handling traffic violations and accident-related cases. This slow process diminishes the perceived seriousness of violations and weakens the deterrent effect of the law.

Traffic-related cases can take months or even years to resolve, and victims of road accidents often find that justice is delayed or denied, perpetuating a cycle of impunity.

Resistance from the Transport Sector:

The transport sector in Bangladesh, particularly bus operators, frequently resists adhering to safety regulations. Due to political influence, transport owners often evade legal repercussions for unsafe practices like overloading, speeding, and neglecting vehicle maintenance. This poses a significant challenge to enforcing road safety laws.¹⁷

5.4 Role of Corruption and Political Influence

Corruption and political influence significantly obstruct the effective enforcement of road safety laws:

Corruption in Licensing and Inspections:

Corruption within traffic police and vehicle inspection agencies has been a persistent problem. Drivers can evade the licensing process by paying bribes, resulting in licenses being issued without adequate training.

Similarly, vehicle inspections are frequently circumvented through bribery, allowing unsafe vehicles to remain on the roads, which contributes to accidents.

Political Influence on Law Enforcement:

Transport unions, often supported by political parties, hold substantial sway over law enforcement. These unions can disrupt the enforcement of road safety laws, particularly in cases involving powerful transport operators.

¹⁷ The Financial Express. (n.d.). *Road safety remains elusive, law lopsided*. <https://today.thefinancialexpress.com.bd/views-opinion/road-safety-remains-elusive-law-lopsided-1695738649>
©Daffodil International University

Political figures sometimes step in to halt the prosecution of transport owners or bus operators who breach road safety regulations, undermining the authority of the law.

Mismanagement of Resources:

Funds designated for road safety enhancements or compensation for accident victims are occasionally misappropriated or redirected due to corruption. This results in insufficient resources for road maintenance, public awareness initiatives, or the development of road safety infrastructure, making it challenging to implement effective safety measures.

5.5 Public Awareness and Education

Public awareness and education are essential for the effectiveness of road safety laws. However, several challenges remain:

Limited Awareness Campaigns:

Road safety awareness initiatives often have a narrow focus and limited reach, particularly in rural areas. Many individuals, especially in low-income communities, lack knowledge about the laws and the significance of adhering to them.

Programs promoting the importance of seat belts, helmets, and obeying traffic signals need to be strengthened, particularly in schools and through mass media.

Insufficient School Curricula:

Road safety education is not sufficiently integrated into school curricula. Teaching road safety habits from an early age could lead to long-term reductions in road accidents.

Most students do not receive structured education on road safety, resulting in a poor understanding of the importance of following traffic laws.

Media and Civil Society's Role:

Although civil society organizations and the media have raised awareness about road safety issues, their efforts are often disjointed and inconsistent. Greater collaboration is needed to enhance public awareness campaigns.

The media, especially during significant accidents or protests (like the 2018 student protests), plays a crucial role in raising awareness, but continuous engagement is vital to keep pressure on the government for road safety reforms.

Cultural and Behavioral Issues:

Many risky driving behaviors, such as speeding, overloading, and not wearing helmets, are deeply rooted in Bangladeshi culture. Changing these behaviors requires a unified effort through education, law enforcement, and public advocacy.

While the Road Transport Act 2018 includes several important provisions aimed at enhancing road safety, its effectiveness has been compromised by challenges related to implementation, enforcement, corruption, and public awareness. To genuinely reduce road traffic accidents and fatalities, a more comprehensive approach is necessary.¹⁸

¹⁸ Sam, E. F. (2022). How effective are police road presence and enforcement in a developing country context? *Humanities and Social Sciences Communications*, 9(1). <https://doi.org/10.1057/s41599-022-01071-1>
©Daffodil International University

Chapter 6

Comparative Study with Other Countries

In order to evaluate the effectiveness and potential improvements of road safety laws in Bangladesh, a comparative analysis with road safety practices in neighboring countries and international standards is crucial. This chapter aims to provide an overview of road safety laws in Bangladesh's neighboring countries, examine the international best practices in road safety, and assess the applicability of these practices to the Bangladeshi context.

6.1 Overview of Road Safety Laws in Neighboring Countries

The effectiveness of road safety laws is contingent on the legal framework, enforcement mechanisms, public awareness, and technological integration. By analyzing road safety practices in Bangladesh's neighboring countries—India, Nepal, Myanmar, and Bhutan—we can identify similarities, differences, and lessons that might be relevant for improving Bangladesh's road safety policies.

India

India, with one of the highest rates of road fatalities in the world, has undergone significant reforms in road safety legislation. The Motor Vehicles (Amendment) Act 2019 is the latest effort to improve road safety. Key features include:

Stricter Penalties: The Amendment Act increased penalties for traffic violations, including penalties for speeding, driving without seat belts, and driving under the influence. The fines for violations were substantially raised, and specific fines were introduced for offenses like overloading of public transport.

Focus on Vulnerable Road Users: The Act includes specific provisions for pedestrian safety, cyclist protection, and safety of children on the road, which Bangladesh's laws could benefit from, considering the rising number of pedestrian casualties.

Technological Integration: India has made significant strides in incorporating technology into road safety enforcement. Automated traffic enforcement, e-challans (electronic tickets), and vehicle tracking systems are being employed to streamline enforcement and reduce corruption.¹⁹

¹⁹ Bhatt, A. (n.d.-b). *India has the worst road safety record in the world. a new law aims to change that*. World Resources Institute. <https://www.wri.org/insights/india-has-worst-road-safety-record-world-new-law-aims-change>
©Daffodil International University

Nepal

Nepal, although smaller in size, faces similar challenges regarding road safety. The Road Safety Action Plan (RSAP) focuses on the following:

Pedestrian Safety: Given the high number of pedestrian fatalities, Nepal's road safety laws prioritize pedestrian infrastructure such as pedestrian bridges and crossings.

Road Safety Education: Nepal has integrated road safety education into school curriculums at a national level, aiming to instill road safety habits from an early age. This proactive approach is something Bangladesh could consider adopting to create lasting behavioral change.

Public Transport Regulation: The country has stricter regulations for bus operators, including mandatory vehicle checks and penalties for overloading.²⁰

Myanmar

Myanmar's road safety laws have been evolving in recent years. Key provisions include:

Focus on Rural Roads: Myanmar has a large proportion of road traffic fatalities in rural areas. The government has been focusing on improving road infrastructure and promoting safe driving habits through public education.

Incentivized Driver Training: Myanmar offers incentives for private driving schools that implement high-quality training programs for new drivers.

Road Safety Campaigns: Public awareness campaigns are regularly conducted in collaboration with international agencies, with a focus on high-risk groups like commercial drivers.²¹

Bhutan

Bhutan has the smallest road network in the region but boasts one of the lowest road traffic fatality rates in South Asia. The Road Safety and Transport Act of Bhutan (RSTAB) includes the following features:

Strict Enforcement of Laws: Bhutan has a strong track record of law enforcement, particularly for

²⁰ *Road Design and Construction Standards* | Washington County, OR. (2024, October 31). <https://www.washingtoncountyor.gov/lut/road-design-and-construction-standards>

²¹ World Health Organization: WHO. (2019a, May 16). *Road safety in Myanmar*. <https://dev-cms.who.int/myanmar/news/feature-stories/detail/road-safety-in-myanmar>

speeding, drunk driving, and seat belt use. The penalties are severe, and repeat offenders face significant legal consequences.

Environmental Integration: Bhutan's focus on environmental sustainability extends to road safety by promoting the use of eco-friendly vehicles, which reduces road hazards related to poor vehicle condition.

Community-Based Safety Approaches: Bhutan's government employs community-based approaches to road safety, with local communities playing an active role in promoting road safety initiatives.²²

6.2 Lessons Learned from International Best Practices

A closer look at global road safety best practices reveals a range of strategies that have proven successful in reducing fatalities and accidents, many of which could be applied to Bangladesh. Some of the most effective international practices include:

Zero Tolerance for Drunk Driving

Countries such as Sweden and Australia have implemented zero-tolerance policies for driving under the influence of alcohol. These policies include low permissible blood alcohol concentration (BAC) levels, mandatory sobriety checkpoints, and severe penalties for offenders.

Lesson for Bangladesh: A stricter and more consistent approach to drunk driving enforcement could significantly reduce fatalities in Bangladesh, where alcohol-related accidents are prevalent.

Road Safety Education and Behavioral Change

Countries like Germany and Japan have integrated road safety education into school curricula and community programs from an early age. Additionally, campaigns targeting specific risk groups (such as young drivers and motorcyclists) have been highly effective.

Lesson for Bangladesh: Establishing robust road safety education programs within schools and universities, along with specialized campaigns for vulnerable groups, could help shift public attitudes toward safer road behaviors.

²² *Bhutan Road Safety Profile 2025*. (n.d.). Asian Transport Observatory. <https://asiantransportobservatory.org/analytical-outputs/roadsafetyprofiles/bhutan-road-safety-profile-2025/>
©Daffodil International University

Use of Technology in Enforcement

In Singapore, the use of technology for law enforcement is widespread, including the use of automated cameras, speed detectors, and AI systems to identify traffic violations in real-time.

Lesson for Bangladesh: Investing in automated traffic surveillance systems, such as speed cameras and real-time tracking of traffic violations, would greatly enhance the ability to monitor and enforce laws, reducing human error and corruption.

Comprehensive Injury and Fatality Data Collection

The United Kingdom and Norway have comprehensive systems for collecting and analyzing data on road traffic accidents. This data is used not only for law enforcement but also for infrastructure planning and to evaluate the effectiveness of road safety policies.

Lesson for Bangladesh: A centralized database for traffic accident reporting and analysis could help Bangladesh improve its road safety strategies and prioritize interventions based on evidence.

Focus on Vulnerable Road Users

Netherlands has made road safety a priority for cyclists and pedestrians, ensuring dedicated lanes and robust protection laws for non-motorized road users. This approach has significantly reduced fatalities among these groups.

Lesson for Bangladesh: Bangladesh should focus on protecting its large pedestrian and cycling population by introducing pedestrian-friendly infrastructure and stricter enforcement for vehicle drivers who endanger non-motorized road users.

Enforcement of Speed Limits and Safe Road Design

New Zealand and Switzerland are examples of countries where speed limits are strictly enforced, particularly in urban areas, and road design incorporates clear signage and features that encourage slower speeds, such as roundabouts and pedestrian crossings.

Lesson for Bangladesh: Strengthening the enforcement of speed limits, coupled with improved urban road design to control vehicle speeds, and could reduce the severity of accidents in congested areas like

Dhaka.²³

6.3 Applicability of Global Solutions to Bangladesh

While global best practices offer valuable lessons, it is essential to consider their applicability to the unique context of Bangladesh. The country faces specific challenges such as dense traffic, limited infrastructure, a high proportion of informal drivers, and a lack of technological integration. Nevertheless, several global solutions could be tailored to fit Bangladesh's needs:

Adopting a More Robust Enforcement System

While the RTA 2018 increased penalties for traffic violations, the enforcement remains weak due to resource constraints and corruption. By incorporating automated surveillance, electronic ticketing, and AI-driven monitoring, Bangladesh can improve law enforcement efficiency.

Actionable Solution: Introduce a national traffic management system with digital tracking and reporting tools, similar to what is implemented in Singapore.

Public Awareness and Education Campaigns

While there are public campaigns in Bangladesh, their impact has been limited. By adopting the successful public education models of Japan and Germany, Bangladesh can create sustained, wide-reaching campaigns that target different age groups, driving demographics, and communities.

Actionable Solution: Partner with schools, universities, media outlets, and community groups to launch continuous, multi-channel road safety education campaigns.

Improvement of Pedestrian Infrastructure

Bangladesh could learn from Nepal and Bhutan, which prioritize pedestrian safety in their road policies. Creating more pedestrian-friendly infrastructure, such as safe crossings, pedestrian overpasses, and designated lanes, is crucial in urban areas.

Actionable Solution: Allocate resources to redesign urban areas to improve pedestrian access and safety, and enforce laws against jaywalking.

²³ Europe PMC. (n.d.). *Europe PMC*. <https://europepmc.org/article/ppr/ppr699080>
©Daffodil International University

Focus on Rural Areas

Similar to Myanmar, which focuses on rural road safety, Bangladesh must address the unique challenges faced by rural areas, such as poor road conditions, lack of traffic regulation, and lower levels of awareness.

Actionable Solution: Implement road safety programs tailored to rural areas, including infrastructure improvements and targeted educational campaigns for rural communities.

Data-Driven Policy Making

Countries like the United Kingdom have demonstrated the value of collecting and analyzing road safety data. Bangladesh could benefit from a comprehensive data collection system to assess accident hotspots, types of violations, and the effectiveness of safety measures.

Actionable Solution: Develop a national database for traffic accidents and safety violations to guide policy-making and prioritize interventions.

A comparative study of road safety laws in neighboring countries and international best practices provides valuable insights into how Bangladesh can strengthen its road safety policies. By learning from countries like India, Bhutan, Nepal, and others, Bangladesh can adopt more effective strategies, from stricter law enforcement to better public education campaigns. While challenges remain, particularly regarding implementation, political will, and resource allocation, the adaptation of these global solutions could lead to a substantial reduction in road traffic fatalities and injuries in Bangladesh.²⁴

²⁴ Sarwar, F. (2022, December 21). Climate migration: a wicked problem for Bangladesh. *ArcGIS StoryMaps*. <https://storymaps.arcgis.com/stories/ab576605af9741acb119616109354f73>
©Daffodil International University

Chapter 7

Recommendations for Improving Road Safety Laws

The need for comprehensive reform in road safety laws and their enforcement in Bangladesh is urgent, given the alarmingly high rate of traffic-related fatalities and injuries. This chapter presents recommendations aimed at enhancing the efficacy of the current road safety framework by addressing critical policy gaps, strengthening enforcement mechanisms, leveraging technology, fostering public awareness, and fostering international collaboration. These recommendations are grounded in both global best practices and an in-depth understanding of Bangladesh's unique road safety challenges.

7.1 Policy-Level Recommendations

At the policy level, addressing systemic issues in road safety requires a multifaceted approach that integrates law-making with enforcement, infrastructure development, and long-term planning. The following recommendations focus on formulating a more holistic and forward-looking road safety policy in Bangladesh:

Comprehensive Road Safety Strategy

Bangladesh should establish a National Road Safety Strategy that clearly defines the roadmap for reducing road fatalities and injuries over a specified period. This strategy should align with UN Decade of Action for Road Safety (2021-2030) and set achievable, measurable targets, such as a 50% reduction in traffic fatalities by 2030.

The strategy should include specific performance indicators to evaluate the success of interventions. Furthermore, it should be reviewed regularly to accommodate emerging road safety concerns and evolving traffic dynamics.

Establishment of a National Road Safety Council

A high-level, cross-governmental National Road Safety Council should be formed, comprising representatives from key ministries such as Transport, Law and Justice, Home Affairs, and Health. This council would provide oversight and guidance on road safety policies and ensure coordination between government agencies. It would also foster accountability and ensure that road safety is prioritized in national development plans.

Integration of Road Safety into Urban Planning

Urban development and transportation planning must incorporate road safety principles, ensuring that cities are designed with pedestrian-friendly infrastructure, safe public transport systems, and traffic-calming measures. Urban planners should collaborate with road safety experts to ensure that new developments adhere to safety norms.

Periodic Review of Traffic Laws

The Road Transport Act (2018) and other related traffic laws should be reviewed regularly to ensure their alignment with international best practices and emerging traffic trends. Bangladesh should consider integrating feedback from traffic safety research, accident data, and public consultations in the law revision process.²⁵

7.2 Strengthening Legal and Institutional Frameworks

While road safety laws have evolved in Bangladesh, their effectiveness is limited by gaps in legal enforcement, institutional capacity, and accountability. The following recommendations aim to address these weaknesses:

Strengthening Enforcement Mechanisms

Enforcement should be significantly enhanced through the adoption of smart law enforcement tools such as automated traffic violation detection systems (speed cameras, red-light cameras) and real-time traffic monitoring. These tools would reduce human error, increase transparency, and curb corruption within enforcement agencies.

Traffic police training programs should be upgraded to ensure officers are well-versed in the latest traffic laws and equipped to handle high-risk situations. Special attention should be given to training officers on handling commercial vehicle operators, who contribute significantly to road accidents.

²⁵ Khan, A. M. F. (2024, December 15). Road Safety in Bangladesh: Can RTSMS save lives? *The Business Standard*. <https://www.tbsnews.net/thoughts/road-safety-bangladesh-can-rtsms-save-lives-1019136>
©Daffodil International University

Expanding Traffic Court System

The backlog of traffic-related cases in the court system should be addressed by setting up dedicated traffic courts to expedite the judicial process. Traffic courts should have the mandate to handle traffic violations and accidents efficiently, ensuring swift justice for offenders.

The penal code for traffic offenses should be re-evaluated to impose harsher penalties for high-risk violations, such as drunk driving, oversteering, and driving without seat belts. The penalties should act as a deterrent and incentivize safer driving practices.

Strengthening Institutional Capacity

The Road Transport and Highways Division (RTHD), Bangladesh Road Transport Authority (BRTA), and police forces should receive consistent funding and resources to upgrade their institutional capacity, including equipment, staff training, and technology.

Data management within these agencies should be streamlined to ensure accurate and real-time recording of road accidents, traffic violations, and fatalities, contributing to better policy-making and accident prevention strategies.²⁶

7.3 Technology-Based Solutions (Surveillance Systems, AI)

Technological solutions have the potential to revolutionize road safety in Bangladesh by improving enforcement efficiency, detecting violations in real-time, and providing valuable data for decision-making. The following technology-driven approaches should be prioritized:

Intelligent Traffic Management Systems

Bangladesh should invest in Intelligent Traffic Management Systems (ITMS), which use real-time data to control traffic flow, prevent congestion, and reduce accidents. For example, smart traffic lights can be adjusted based on traffic volume, and congestion points can be monitored in real-time to deploy traffic police efficiently.

²⁶ Hossain, S. (2023). Road accident and safety issue in Bangladesh: A critical review. [www.academia.edu](https://www.academia.edu/109437981/Road_Accident_and_Safety_Issue_in_Bangladesh_A_Critical_Review).
https://www.academia.edu/109437981/Road_Accident_and_Safety_Issue_in_Bangladesh_A_Critical_Review
©Daffodil International University

AI-driven traffic monitoring systems, which can predict accident hotspots and adjust traffic signals accordingly, would significantly improve the management of high-traffic areas, particularly in Dhaka.

Artificial Intelligence for Accident Prevention

AI and machine learning algorithms can be employed to predict and prevent accidents by analyzing factors such as traffic density, weather conditions, and driver behavior. By analyzing vast amounts of traffic data, AI can identify patterns and provide predictive alerts to prevent collisions or dangerous driving behavior before they occur.

AI could also be used in autonomous vehicles, which are expected to become more prevalent in the future. Regulations around autonomous driving should be developed to ensure these vehicles meet safety standards.

Enhanced Surveillance Systems

Automated license plate recognition (ALPR) systems can be deployed at key traffic intersections to identify traffic violators and issue fines automatically. These systems would address the issue of corruption and human error in traditional traffic law enforcement.

Drones could be used to monitor traffic patterns and enforce regulations in congested or high-risk areas.²⁷

7.4 Community Engagement and Public Awareness Programs

Public awareness and education are integral to long-term behavior change in road safety. Effective road safety education campaigns must be widespread, inclusive, and continuous. The following recommendations focus on fostering a culture of road safety:

Nationwide Road Safety Campaigns

Bangladesh should initiate large-scale, sustained road safety campaigns using various media platforms, including television, radio, social media, and billboards. These campaigns should address key issues such as seat belt usage, drunk driving, speeding, and pedestrian safety.

²⁷ *Bangladesh Chapter - AI for improving Road Safety in Bangladesh | Local Chapters | Omdena*. (n.d.). Omdena. <https://www.omdena.com/chapter-challenges/bangladesh-chapter-ai-for-improving-road-safety-in-bangladesh>
©Daffodil International University

The campaigns should not only target drivers but also pedestrians, motorcyclists, cyclists, and other vulnerable groups, educating them on their rights and responsibilities on the road.

Road Safety Education in Schools and Universities

Road safety education should be made part of the national curriculum for primary and secondary schools, with a focus on responsible road behavior, understanding traffic signs, and the importance of wearing seat belts and helmets.

Universities should offer specialized road safety programs that provide students with knowledge on traffic laws, safe driving practices, and pedestrian safety.

Community-Based Safety Programs

Community-based programs should be implemented in local neighborhoods, especially in high-risk areas. These programs could involve local residents in promoting road safety, conducting awareness sessions, and assisting with basic road safety education. Collaborations between local authorities, NGOs, and civil society organizations could enhance outreach efforts.²⁸

7.5 Collaboration with International Organizations

Collaboration with international organizations and road safety experts can provide valuable technical assistance, financial support, and policy guidance. The following actions are recommended to facilitate such collaboration:

Partnerships with WHO and UN Agencies

Bangladesh should collaborate with the World Health Organization (WHO) and United Nations Economic Commission for Europe (UNECE) to develop and implement road safety frameworks. Such partnerships could help Bangladesh adopt international best practices, integrate global standards, and

²⁸ Johnson, M., Napper, R., Johnston, V., & Corser, J. (2023). How to successfully engage a community in road safety. *Journal of Road Safety*, 34(4), 31–41. <https://doi.org/10.33492/jacrs-d-22-00050>
©Daffodil International University

align its policies with global initiatives like the UN Road Safety Fund.

Capacity Building with Global Experts

Bangladesh should engage global road safety experts, including traffic law enforcement agencies from Singapore, Norway, and Australia, to provide training, share expertise, and offer guidance on improving traffic management, legal enforcement, and public awareness campaigns.

Access to International Funding

Bangladesh should actively seek funding and technical support from international organizations like the World Bank, Asian Development Bank (ADB), and Global Road Safety Partnership (GRSP) for infrastructure development, road safety research, and public education initiatives.

The recommendations outlined in this chapter offer a multifaceted approach to improving road safety laws and practices in Bangladesh. By addressing legal, institutional, technological, and social dimensions, Bangladesh can make significant strides in reducing road traffic fatalities and injuries. The successful implementation of these recommendations will require political will, financial investment, and the active involvement of various stakeholders, including government agencies, civil society, and international organizations. With a clear roadmap, collaboration, and sustained efforts, Bangladesh can create a safer and more sustainable road transportation system.²⁹

²⁹ Khalaf, M. (2022, October 27). Beyond awareness: A new decade of action on road safety. *The Daily Star*. <https://www.thedailystar.net/opinion/views/news/beyond-awareness-new-decade-action-road-safety-3152826>
©Daffodil International University

Chapter 8

Conclusion

This chapter provides a synthesis of the key findings of the research, examines the broader implications of the study for road safety policy and practice in Bangladesh, and proposes directions for future research that could further strengthen the road safety framework in the country.

8.1 Summary of Key Findings

This research has critically analyzed the state of road safety laws in Bangladesh, explored the underlying causes of road traffic accidents, evaluated the effectiveness of existing laws, and provided a comparative analysis of road safety frameworks in neighboring countries. The key findings from the study are as follows:

Road Safety Laws in Bangladesh:

The Road Transport Act of 2018 and related legal frameworks represent a significant step toward improving road safety in Bangladesh. However, several key issues persist, including weak enforcement mechanisms, insufficient public awareness, and gaps in legal provisions related to vulnerable road users such as pedestrians and cyclists.

High Incidence of Road Traffic Accidents:

Bangladesh has one of the highest rates of road traffic accidents in South Asia. The primary causes of these accidents include poor road conditions, reckless driving, lack of enforcement of traffic laws, and inadequate infrastructure, especially in urban areas. Pedestrian fatalities are disproportionately high due to the absence of proper pedestrian pathways and crossings.

Institutional Weaknesses and Challenges:

While there are agencies such as the Bangladesh Road Transport Authority (BRTA) and the traffic police tasked with enforcing road safety laws, they face challenges related to insufficient resources, corruption, and lack of coordination between agencies. This results in poor implementation of traffic laws and inconsistent enforcement.

Public Awareness and Education:

Public awareness of road safety laws remains low in Bangladesh, contributing to widespread disregard for basic traffic regulations. While some campaigns have been launched, they have been largely ineffective in instilling long-term behavioral changes among road users. The lack of an integrated, nationwide education program is a key gap in the current system.

Comparative Insights:

Comparative analysis with neighboring countries like India, Nepal, Bhutan, and Myanmar revealed that Bangladesh can learn valuable lessons in terms of policy design, enforcement mechanisms, and public engagement. Neighboring countries like India have embraced technological solutions such as automated traffic monitoring systems, while Bhutan has implemented strict enforcement strategies and focused on community engagement. Bangladesh could integrate similar practices to improve its road safety framework.

Technology and Innovation:

Technological innovations, such as smart traffic management systems, AI-based predictive tools, and automated violation detection, have the potential to significantly enhance road safety enforcement in Bangladesh. However, the adoption of these technologies is hindered by infrastructural constraints, lack of political will, and a limited budget for large-scale implementation.

Implications of the Research

The findings of this research have significant implications for policy-makers, road safety agencies, civil society, and the general public in Bangladesh.

Policy and Legal Reforms:

The study emphasizes the need for stronger enforcement of road safety laws and comprehensive policy reforms to address the gaps in existing legislation. Key policy recommendations, such as the establishment of a National Road Safety Strategy, stricter penalties for violations, and a more coordinated approach to law enforcement, could play a crucial role in reducing road traffic fatalities and injuries.

Technological Integration:

The research highlights the importance of leveraging modern technology to improve road safety enforcement. The application of automated traffic monitoring, real-time accident reporting systems, and AI-based risk prediction tools could help Bangladesh bridge the enforcement gap, especially in densely populated urban areas like Dhaka.

Public Awareness and Education:

One of the most important implications of the study is the need for a national road safety education program that targets all sections of society, especially the most vulnerable road users such as pedestrians, children, and cyclists. This should be integrated into the national curriculum, community outreach programs, and media campaigns. Educating road users about the importance of abiding by traffic laws and adopting safe road practices is fundamental to changing attitudes and behaviors on the road.

Institutional Strengthening:

The research calls for a restructuring of enforcement agencies such as the BRTA and traffic police to increase their effectiveness in implementing road safety laws. Building institutional capacity through training, increased funding, and technological upgrades is essential to ensure that these agencies can carry out their mandates effectively.

International Collaboration:

Bangladesh can benefit from deeper collaboration with international organizations like the World Health Organization (WHO), United Nations (UN), and road safety experts from developed countries. International partnerships can provide Bangladesh with financial and technical assistance, knowledge sharing, and access to best practices in road safety policy and enforcement.

8.3 Future Directions for Research

While this research has provided a comprehensive analysis of road safety laws in Bangladesh, several areas require further investigation. Future research could build on these findings by exploring the following:

Impact of Technology on Road Safety in Bangladesh:

Future studies could examine the impact of emerging technologies—such as AI, big data, and autonomous vehicles—on improving road safety in Bangladesh. Research could investigate how the adoption of these technologies could enhance law enforcement, accident prevention, and data collection in the context of Bangladesh's infrastructure and road user behaviors.

Longitudinal Studies on the Effectiveness of Road Safety Campaigns:

There is a need for longitudinal research to assess the long-term impact of road safety education campaigns in Bangladesh. Future studies could evaluate the effectiveness of various public education programs, comparing regions with active campaigns to those without, to identify which strategies yield the best results in reducing accidents and fatalities.

Socioeconomic Factors and Road Safety Behavior:

Further research could explore the role of socioeconomic factors in shaping road safety behavior in Bangladesh. Studies could investigate how factors such as income levels, education, occupation, and urban versus rural living influence individuals' adherence to traffic laws and their likelihood of being involved in road accidents.

Gender and Road Safety:

Given that road safety issues disproportionately affect certain segments of the population, future research could focus on gender-based differences in road safety. This could include an exploration of how women and children are particularly vulnerable to traffic accidents and how road safety policies can be tailored to address their specific needs.

Comparative Studies with Other Developing Countries:

Comparative studies with other developing countries facing similar challenges, such as Vietnam, Nigeria, and Kenya, could provide valuable insights into innovative and scalable road safety solutions. By examining how these countries have dealt with infrastructure limitations, low enforcement capacity, and high road accident rates, Bangladesh could adopt more adaptable and context-specific solutions.

In conclusion, this research underscores the urgent need for comprehensive road safety reforms in Bangladesh, addressing legislative, institutional, technological, and educational gaps. The findings demonstrate that while progress has been made, significant improvements are still necessary to reduce

©Daffodil International University

road traffic fatalities and injuries. The policy-level recommendations, coupled with technological innovations, enhanced enforcement mechanisms, and targeted public awareness campaigns, provide a clear pathway toward safer roads in Bangladesh.

Future research should continue to explore these themes, particularly with respect to the integration of technology, the assessment of public education programs, and the understanding of socioeconomic factors influencing road safety behaviors. Ultimately, the implementation of these recommendations will require concerted effort from the government, civil society, and international partners to transform the road safety landscape in Bangladesh and save countless lives on the road.

Bibliography:

Books and Reports:

WHO. (2018). Global status report on road safety 2018. World Health Organization.

Road Transport and Highways Division (RTHD), Bangladesh. (2020). National Road Safety Strategy for Bangladesh: 2020-2030. Government of Bangladesh.

Journal Articles:

Rahman, M., & Hossain, M. (2019). Road safety in Bangladesh: Challenges and prospects. *Journal of Transport Safety & Security*, 11(3), 220-234. <https://doi.org/10.1080/19439962.2019.1624298>

Islam, S., & Bhuiyan, M. (2017). Traffic accidents and fatalities in Bangladesh: An overview of the causes. *Asian Journal of Transportation and Infrastructure*, 10(2), 45-59.

Government Reports:

Bangladesh Police Department. (2019). Annual report on traffic accidents and enforcement. Bangladesh Police.

Conference Papers:

Karim, S., & Khan, M. (2018). Enhancing traffic law enforcement: A comparative study of Bangladesh and India. In *Proceedings of the 6th International Conference on Road Safety and Policy* (pp. 55-72). Dhaka, Bangladesh.

Websites and Online Resources:

1. World Health Organization (WHO) - Road Safety www.who.int/health-topics/road-safety
Provides global data, reports, and research on road safety, including causes of accidents and their socio-economic impacts.
2. International Transport Forum (ITF) - Road Safety www.itf-oecd.org/road-safety
Offers research and policy recommendations on road safety, including case studies and best practices.

3. World Bank - Transport and Road Safety
www.worldbank.org/en/topic/transport/brief/roadsafety
 Contains reports and studies on the economic impact of road accidents and road safety initiatives in developing countries.
4. Global Road Safety Partnership (GRSP) www.grsproadsafety.org
 Provides resources and research on road safety interventions, stakeholder roles, and enforcement mechanisms.
5. United Nations Road Safety Fund (UNRSF) www.unroadsafety.org
 Supports road safety projects globally and offers insights into best practices and frameworks.
6. Transport Research International Documentation (TRID) trid.trb.org
 A comprehensive database of transportation research, including studies on road accidents and safety measures.
7. PubMed pubmed.ncbi.nlm.nih.gov
 Includes research on the health impacts of road traffic accidents and safety measures.
8. ResearchGate www.researchgate.net
 A platform where researchers share their work, including studies on road safety in Bangladesh and other countries.
9. JSTOR www.jstor.org
 A digital library offering access to academic journals, books, and primary sources on road safety and transportation laws.
10. SpringerLink link.springer.com
 Provides access to peer-reviewed journals and books, including research on road safety frameworks and enforcement mechanisms.
11. ScienceDirect www.sciencedirect.com
 A leading platform for scientific, technical, and medical research, including studies on road safety policies and legislation.
12. Bangladesh Journals Online (BanglaJOL) www.banglajol.info
 A repository of academic journals published in Bangladesh, including research on road safety laws and enforcement.
13. SSRN (Social Science Research Network) www.ssrn.com
 A repository for preprints and published papers in the social sciences, including legal and policy research on road safety.
14. Bangladesh Road Transport Authority (BRTA) www.brta.gov.bd
 Provides official data and reports on road safety initiatives and accident statistics in Bangladesh.
15. Dhaka Transport Coordination Authority (DTCA) www.dtca.gov.bd
 Offers information on urban road safety initiatives and traffic management in Dhaka.