



Safe & Sustainable Travel Nepal

TOGETHER FOR SAFE AND SUSTAINABLE TRANSPORTATION SYSTEM

Annual Report 2019





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FOREWORD

I am delighted to put my few words on the works that *Safe and Sustainable Travel Nepal (SSTN)* has been working in the field of traffic, road safety and other pertinent issue of transportation system. Road safety and sustainable transportation in this regards is not just an engineering issue but a deep-rooted socio-economic issue that has affected each individual, society and the state as well . Every individual of us also has the ability and potential to act and ensure safety of the commuters. However, due to lack of education, awareness, research and advocacy, the issue of road crashes and the affected community is in rise each year.

In this situation, the effort and impact made by the team at SSTN is praise worthy. Their works have impacted from the very grass-root communities and advocacy for sustainable practices. Their diverse involvement and effective dissemination of the message have definitely helped improve many issues in transport sector throughout Nepal. It is the cumulative impact of these efforts that helps make the overall transportation system sustainable and friendly to all.

The degrading issue of transport sector cannot be addressed single handed by any of the government or non-government organization alone, and SSTN has been a valuable contributor in all activities to make roads safer for all. I am happy with their initiative in this regards in the past and expect more to reach broader community. I congratulate them for their achievement so far, and wish them very best for the future.

Devendra Karki

Secretary

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FOREWORDS

Greetings to all readers of this third annual report of SSTN, 2019. The organization, in its third year, has been working for sustainable development of transportation system in Nepal through various scientific and research activities, I feel elated helping them on this journey and working with them at different activities. I am truly delighted to write some words to appreciate their achievements.

Nepal Engineers' Association (NEA) has been working incessantly to develop professionalism in engineering through active participation in development works since 1962. NEA has been playing a pivotal role in the development of bilateral relations with international associations and institutions for cooperation and collaborative technological development. Being president of the Nepal Engineers' Association, the professional activities in the sector of country development with respect to sustainable development always have to be appreciated and supported. On the behalf of Nepal Engineers Association's, I would like to congratulate the team, the young and energetic members for their arduous efforts to take the organization to the next level and bring the work this far as for the sustainable transport system development.

Their work is dedicated to bringing the change in behavior of transportation service users by directly reaching them through different media and awareness-raising programs. Besides these, the participation of students and volunteers from different fields have made their programs more enriching and has been penetrating through different age groups of the society. Research programs, their participation in KEC conferences this year, the National Conference on Road Safety and other traffic studies have helped them grow in the development of research-based policy-making practices. Thus, I would like to wish them a further great year of professionalism and volunteerism in the sector of sustainable transportation development.

Er. Prof. Dr. Tri Ratna Bajracharya
President



FOREWORDS

Nepal is currently moving towards safe and sustainable infrastructure and transportation which is regarded as ***“Infrastructure of Infrastructure”***, is the prime concern of the country. Along with the government, other organization is also working in this field, particularly on research, awareness, and advocacy for a better transportation system. I am very happy to work with **Safe and Sustainable Travel Nepal** time and again at various platforms for the development of research and sustainable output in the engineering profession. I was impressed by their dedication when we join hands with them for the **National Conference on Road Safety**, which was the first of its kind, organized by the then Nepal Engineers’ Association during 21 – 22 January 2018.



This organization comprises of young professionals from different fields, students coming together to work for the development of sustainable and safe transportation in Nepal motivates me. Their work in awareness program at different levels of the nation, awareness in “aama samuha”, various schools, various colleges, contractors and institution, participation in different research programmes, traffic study of Lalitpur area, pedestrian and tolls study and programmes such as World Day of Remembrance for remembering road traffic victims on November.

Knowing that the organization has already passed the three years of hard work and successful year, I feel elated to be part of their journey and work. The annual report 2019 gives insight into the work performed by the organization in the sector of sustainable transportation. I would like to wish the organization for the best in the coming days and wish that they will maintain the same pace in good work in this sector which would be set as a backbone for the prosperity of the country.

A handwritten signature in blue ink, appearing to read 'H. Shrestha', with a horizontal line underneath.

Dr. Er. Hareram Shrestha

Chairman, Advisory Council, Nepal Engineers’ Association (NEA)

Immediate Past President, Nepal Engineers’ Association (NEA)

MESSAGE FROM CHAIRMAN

Despite the effort from all concerned stakeholder, the road crashes and consequent fatalities have been surging and have reached 2,763 in the fiscal year 2075-76 with an 8.7% increase from the previous year. Thus, our country was not able to achieve the targets of SDG Goal 3.6 and the UN Decade of Action for Road Safety. What makes it more dangerous is a lack of people's attention and acceptance that road safety is a social and national issue and proper coordination between stakeholders.



Safe and Sustainable Travel Nepal (SSTN) was formed with a pledge to join hands for the improvement of the transportation network which has a major impact on the GDP of the nation. We are striving ahead for the administration of collaborative effort for improving and ensuring efficient, sustainable and safer transportation systems. The safety of all users and the sustainability of the infrastructure lies at the heart of all our activities. We are continuously advocating for the change of traditional mindset of the policymaker who perceives the transportation system only concerning accessibility, but not to safer mobility and traffic management.

This report collects the collaborative work and reflects on the activities and their impact. We were able to reach thousands of people throughout Nepal in sharing and discussing road safety within three years. We tied up with various organizations for capacity building and research. We were able to have a dedicated symposium on "Traffic and Transportation Engineering" in association with Kantipur Engineering College. Similarly, we were able to conduct "World Day of Remembrance for Road Traffic Victims" at 12 cities covering all provinces and share the grief, show those directly affected that we all stand together with them through their sorrow.

The support we got for accomplishing our mission is far encouraging for me and my team, but there is a lot way forward to look upon to complete it. We will continue to strengthen our efforts and broaden our reach and impact. The action needs to be taken proactively to change people's attitudes towards safety and sustainable transportation system. We are committed to conducting and warmly welcomes every person or party to collaborate in related works that support our objectives. We will need the support for then and beyond from every Nepali for better and safer roads in upcoming days.

Finally, we would like to acknowledge all the helping hand for their continual support. Thank you all!

Hemant Tiwari
Chairman
Safe and Sustainable Travel Nepal
hemu.ioe@gmail.com

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EXECUTIVE MEMBER

EXECUTIVE SUMMARY

Safe & Sustainable Travel Nepal (SSTN) is a non-profit organization working for enhancing the sustainability & safety of the existing transportation system since its establishment years. The organization aims to improve the transportation system through research, capacity building awareness and advocacy on the respective fields and had started its initial steps through various memorandum of understanding and joint programs.

The output of last year's work focused on improving the status of road safety. Among five pillar of road safety management, SSTN has been primarily working on three pillar **Road Safety Management; Safer Road; and Mobility and Safer User**. The organization had joined hand with various stakeholder for various road safety activities. SSTN organized Fifth Global UN Road Safety week along with Road Safety Awareness Program in Panchthar and Taplejung. All the awareness events are organized with a motive to share the rudimentary discipline to be followed by active road users & to expand the figure of awaked people for attaining road safety practices. In addition to that, the World Day of Remembrance for Road Traffic Victims was conducted at 12 location covering all seven provinces to remember all the road traffic victims, families and to give tribute to all the emergency response team who work hard day and night to save lives during post-crash relief activities. Decentralizing the events outside Bagmati province or Kathmandu Valley was the major objective of the organization and this event has help to achieve that objective.

Capacity building and promoting research in the field of transportation is another objective of the organization, Symposium on Traffic & Transportation Engineering and Tchnical Presentation during Yatra 3.0 helps in this regards. The organization also organized Training of Trainer (ToT) for development of road safety volunter among rotary, rotract club, engineering students and women group at various location. This program helps to increase the knowledge of road safety among the participant and is expected to teach their friends and family. Various research in the field of public transportation, road network assesment and intersection analysis were carried out during the year.

The report elaborates on the task done and the way forward for future activities the organization plan to perform to meet its objective of achieving safer travel in Nepal. Organizing safer & sustainable transportation sector development programs, extending helping hands to every level of individual, organization, and institutions dedicatedto the betterment of safer & sustainable transportations sector are some of the planned activities in the coming days for the better, safer and sustainable transportation system.

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ABBREVIATION

DoR	Department of Road
DoTM	Department of Transport Management
IoE	Institute of Engineering
IRVP	International Road Victims Partnership
KEC	Kantipur College of Engineering
MoPIT	Ministry of Physical Infrastructure and Transport
MoU	Memorandum of Understanding
NCE	National College of Engineering
NCIT	Nepal College of Information Technology
NEA	Nepal Engineers' Association
NGO	Non-Governmental Organization
SSTN	Safe and Sustainable Travel Nepal
TaTUS	Traffic and Transport Unlimited Solution
ToT	Training of Trainer
WDR	World Day of Remembrance
UN	United Nation

1.0 INTRODUCTION

1.1 Background

Safe and Sustainable Travel Nepal (SSTN) is a non-profit and non-governmental organization (NGO) established in 2073 B.S. (2017 A.D.) leading by transportation professional, committed working for the betterment of transportation sector in Nepal, collaborating with concerned stakeholders. SSTN is working on engineering design, awareness, advocacy and capacity building for the safe, efficient and sustainable transportation system in Nepal.

Since its beginning, SSTN has been working in the field of the safe, sustainable and efficient transportation system in Nepal. The major activities of the organization to date are focus on traffic engineering and road safety-related activities. During the past 2 years before 2019, SSTN had completed **Research on Public Transportation Status** in Lalitpur Sub-Metropolitan City, Nationwide road safety awareness campaign, Training of Trainers (ToT) for development of road safety volunteer. Similarly, SSTN has organized **World Day of Remembrance for Road Traffic Victims** at all provinces, where all the souls lost, road crashes victims, and their family and society were remembered and road safety messages were spread. The event reflects the actual scenario of what impact road crashes have on our society. Thus, the need to go to various levels ranging from the general public (about road rules), engineering students (road safety-related design), drivers (vehicular and ride safety) and policymakers (about laws and legal provision) has been identified by the organization. The organization had collaborated with various stakeholders for the various program, events, and research.

SSTN spreads the scope to a wider audience and plans to carry out programs at broader spatial areas and larger benefited users. The organization is marching towards the prosperous, development & extend the connectivity of the road linkage to every Nepali citizen within a short reach. In a short period, SSTN has introduced the organization as the leading organization in the field of research, capacity building, awareness and advocacy in the field of the sustainable and safe transportation system.

1.2 Organization Motto and Objectives

The organization is established with the following motto, mission, objectives, and scopes.

Motto: Together for Safe and Sustainable Transport System.

Mission: To coordinate and uphold in partnership with the stakeholders locally through advocacy, encouragement, and research to achieve the national goal of maintaining the multi-faceted sustainability of the transportation sector in Nepal.

The objective of the Organization:

The main objective of the organization is:

- To aware, educate, train and advocate for the efficient, sustainable, safer and equitable transportation system.
- To facilitate on Capacity Building on various aspects of transportation through various seminars, conferences, talk programs, training, workshop, and other similar activities.
- To work on various measures on reducing road crashes and fatalities directly through Engineering and Education measures.
- To train & aware of the transport infrastructure planning, designing and construction team, policymakers and all types of road users about the lacking adjunct to make our road safer from every sector and also to explain the user about their rights and duties.
- To encourage and aware of the prompt need for the development of proper emergency response systems to reduce the fatalities and morbidity of the victims.

Scope of the organization:

The major scope of the organization not limited to the following:

- The study, research & design of a sustainable transportation system in urban & rural areas.
- Road safety conference, seminar, awareness program, & workshops.
- Coordinate with Stakeholders/agencies working with similar objectives.
- Awareness and Advocacy based on facts and figures for a better transportation system.

1.3 Summary of works done

As mentioned above, SSTN has been working on various fronts to educate, aware and advocate on the issue of road safety and sustainable transport system in Nepal. The team has been active in reaching the grassroots level to educate and aware people of the safer approach and their role in ensuring safety for all.

The majority of the activities carried out this year includes road safety program at Province 1, Fifth Global UN Road Safety Week, Symposium on Traffic and Transportation Engineering, Technical presentation during Yatra 3.0, Training of Trainer program, World Day of Remembrance of Road Traffic Victims and various research on the field of transportation engineering are the major activities carried out by SSTN in the year 2019. The activities will be explained in detail in subsequent sections of this annual report.

2.0 Fifth Global UN Road Safety Week 2019

Fifth Global United States Road Safety week started from May 6 and ended on May 12 with the theme of **“Saves Lives: Speak Up”**. To spread awareness among the local people newspaper article on **“Road Safety Week and Leadership for road safety improvement”** was written by chairman Hemant Tiwari on Shalleri Khabar. The various program was carried out in Province 1, Province 2, Bagamati Province, Karnali Province, and Sudharpachhim Province.

Full-fledged week-long road safety campaign was launched in province 1 under the leadership of Sahil Dahal. The program was carried out at various location of Biratnagar, Ratuwamai, Inuruwa and Jhapa. Various high level people attended the program at various location including, Past Mayor of Inuruwa Khemraj Pokharel, SP Rajan Adhikari, Traffic Police Head of Damak Dadiram Dahal and representatives from various organization.



Date	Events
2019/05/06	Start of Road Safety Week from District Traffic Police office with awareness campaign at Biratnagar Buspark : Handing of reusable masks to District Traffic Police Office Interaction at Biratnagar Bus Terminal with pasting of road safety slogan sticker
2019/05/07	Awareness and Leadership Campaign at Siddhakali School , Ratuwamai
2019/05/08	Awareness and Leadership Campaign at Shrada Secondary School, Inuruwa
2019/05/09	Awareness and Leadership Campaign at Inuruwa Buspark
2019/05/10	Awareness and Leadership Campaign at Golden Sunrise School , Jhapa
2019/05/11	Interaction with light vehicle driver along with masks distribution and sticker pasting at Damak-Gauradaha road section.
2019/05/12	Closing of Road Safety Week with large scale program at New Moon Secondary School , Biratnagar

Fifth UN Road Safety Week was also observed at province 2 at Parsagadhi municipality through road safety awareness campaign at **Bhu. Pu. Sainik Amadevi Secondary English School** and **Rainbow English Secondary School**. Both the programs were conducted on May 12, 2019 under the leadership of Shiva Raj Poudel and Sanjay Subedi.



A large pool of stakeholders were coordinated for organizing Road Safety Week at Bagmati Province. SSTN collaborated with Ministry of Physical Infrastructure and Transport (MoPIT), Road Safety Society Nepal (RSSN), Nepal Police, Rotary International District-3292, Kathmandu Municipality, Roads Board Nepal, Nepal Engineering Association, Non-Resident Nepali Association for the week long awareness program, which ended with Road Safety Workshop and Mayors’ Forum of 18 Municipalities of Kathmandu Valley. The various events within the week involves “Road Safety Walk”, Training of Trainer for various Rotract clubs and women volunteer, Condolence to all the life lost condolence gathering for the deceased of Road Crashes at Maitighar mandala. The program was coordinated by Hemant Tiwari under the support of Kalyan Regmi and Nausad Ansari.

Fifth UN Road Safety Week was also observed at Karnali Province in support of District Traffic Police Surkhet and Nepal Engineers’ Association, Karnali Province. Road Safety Rally (Mangalgadhi Chowk to Birendra Chowk) and Candle Lighting at Pipalbot (Nearby Birendra Chowk, Surkhet) was done in presence of SP Basanta Rajaure from District Police, Surkhet and ward 6 chairman, Moti Kandel. The program was done under the leadership of Hemant Tiwari with support of Tara Keshar Wagle, Secretary, NEA Karnali Province.



School-level awareness at Nepal Police School, Dhangadhi and Florida International Higher Secondary School at May 10 and 12 respectively was conducted under the support of Hamro Engineering Solution under the leadership of Aashish Thagunna with support from Binaya Dhama. More than 250 students were benefited from the program.



3.0 Road Safety Program at Panchthar, Province no. 1.

Road Safety Program was developed by Infrastructure Development Office, Panchthar district in July 2019 and **Aayam Engineering Research & Consultancy (AERC)** has been provided the responsibility for carrying out the project. Er. Bharat Kumar Yadav had coordinated the task from Infrastructure Development Office, Panchthar and Jeena Kharel had led the program from AERC team. The program was successfully run through the technical support from SSTN with following team member

- Program Coordinator: Hemant Tiwari
- Site Coordinator : Sahil Dahal
- Supporter: Agnidhar Pandey & Nausad Ansari



The sole objective of the program was to create a road discipline regarding traffic rules to enhance the safe driving culture, targeting the fourth pillar "Safer Road User" to school students, local people, drivers and other concerned stakeholder.

The program lasts 15 days covering activities in all municipalities and rural municipalities within the district. To deliver road safety education to school level students, various road safety awareness presentation was displayed in multiple schools located within Panchthar district. In the long run, this helped us to convey the road safety message transfer to a large number of audiences through students, teacher and consequently to their parents.

Minimum of 1.5 – 2.5 hour interaction had been carried out at schools. The students were asked about various road safety messages before and after the presentation to analyze the efficiency of the presentation. A quiz program was also conducted among the students and the one with the maximum right answers was awarded road safety T-shirt and masks and Stickers.



The school, corresponding date and no. of students have been summarized as:

DATE	School Name	Class	Number of Students
02/03/2076	Shree Indreni Secondary School	9	40
03/03/2076	Shree Durga Secondary School	9 & 10	110
04/03/2076	Shree Dhurbise Panchami Secondary School	9 & 10	105
05/03/2076	Shree Jalsingh Secondary School	8,9&10	112
05/03/2076	Shree Jalkalyan Secondary School	9 & 10	60
06/03/2076	Shree Phidim Secondary School, Phidim Municipality	9&10	80
08/03/2076	Shree Sukhabodh Secondary School	9 & 10	73
09/03/2076	Shree Jorpokhari Secondary School	6 & 7	65
09/03/2076	Shree Ganesh Higher Secondary School	8, 9&10	109



Apart from the school level presentation, **Flyers** were distributed with appropriate traffic messages, road discipline elaborating what to do and what not to do. Similarly, **Direct interaction** with the active road users – drivers, passengers and the local people to inspect their knowledge & action regarding safe road culture. **Discussions with traffic police, technical personals** regarding the methods for awareness-raising campaigns and understanding the existing problems with the road safety risky behaviours was also carried out during the program.

4.0 Road Safety Program at Taplejung, Province No. 1

Road Safety Program at Taplegunj was conceptualized and developed by Infrastructure Development Office, Panchthar district in July 2019. Next Sansar Clean Geo Engineering Solution was given the responsibility to lead the program. Upon request for technical assistance from Next Sansar, the following members were involved for the successful completion of the program.

Program Coordinator: Hemant Tiwari

Site Coordinator : Sahil Dahal and Agnidhar Pandey

Supporter: Nausad Ansari & Madhav Pokharel



Based on the interaction of traffic police and statistics, the major cause of the road crashes was found to be lack of awareness, driver negligence, speeding, overloading and many other human factor and it can be reduced through awareness and to aware the people about the various factors contributing road crashes, and thus helping on road crashes reduction; this program was designed. The scopes of work were: Interaction with drivers of all types of vehicles, passengers of public transportation, pedestrian, cyclists, and all other road users including local people to create awareness about how to use the road.

10 days awareness program at school level and busparks were conducted at all five municipalities/rural municipalities of Taplegunj benefiting 400 students from 8-10. They will make aware their junior friends. The programs were conducted at the following schools.

DATE	School Name	Class	Participants
12/03/2076	Kanchan Academy	8,9&10	60
13/03/2076	Shree Bhanu Secondary School	9& 10	103
13/03/2076	Shree Oxford Model English School	9 & 10	62
14/03/2076	Mechi St.MARY English Boarding School	8,9&10	80
15/03/2076	Shree Little Buddha English Boarding School	9	65



Apart from this, the team has spread road safety awareness to local people, driver. Near about 80 local people and 43 jeeps and two-wheeler have interacted during the awareness campaign. Also, road safety information was shared with some of the online news portals to flow the message of simple road safety rules like "Right Hand Walking".

5.0 Symposium on Traffic and Transportation Engineering

Memorandum of Understanding (MoU) was signed on 24th June, 2019 between SSTN and Kantipur Engineering College (KEC) to organize a **Symposium on Traffic & Transportation Engineering** during “2nd International Conference on Engineering and Technology” to be held on 26th September 2019 at KEC premises, Dhapakhel, Lalitpur. The chairman of SSTN, Er. Hemant Tiwari and Conference Organizing Committee Chairperson, Dr Surendra Bahadur Tamrakar signed the MoU. This collaborative approach would bring researchers, academicians, professionals, and students in the same platform where ideas are shared for equal benefit.



Symposium on Traffic & Transportation Engineering was organized as a part of 2nd International Conference on Engineering and Technology was held on 26th September, 2019 under the chairmanship of our guest Hare ram Shrestha, former president of Nepal Engineers' Association. The program started from the overview of "SSTN and Role of SSTN towards Capacity Building" from Vibek Gupta, Co-chairman, SSTN. The moderator of the program was Er. Dilman Singh Basnyat, Treasurer, SSTN.



The session kicks off formally through *Key Note Presentation* from Hemant Tiwari, Chairman, SSTN on "Transportation Infrastructure: Status, Issues and Opportunities in Nepal", followed by nine other thematic paper presentation. Following papers were presented in the program:

1. "Study on Effectiveness of Combined Maintenance In Strategic Roads Network In Kathmandu Valley Of Nepal" - Khet Raj Dhakal
2. "Effect of Taxiway Configuration (Central vs. Parallel) on the Design and Structural Life of Overlay over Runway Flexible Pavement" - Swopnil Kalika & Guru Datta Adhikari
3. "Pavement Condition Analysis Using GIS A Case Study of Prithivi Highway (Pokhara to Kotre)" - Roman Pandit & Sushmita Subedi
4. "A Study on Marshall Properties of Hot Mix Reclaimed Asphalt Pavement" - Reeta Khadka, Gautam Bir Singh Tamrakar & Padam Bahadur Madai
5. "Stability Analysis of Road-cut slope: A Case Study of Kanti Lokpath" - Shankar Khatri & Indra Prasad Acharya
6. "Effective Implementation Of The 'Kathmandu - Terai Fast Track' Road Project" - Sachet Khatiwada & Rajan Aryal
7. "Spatial Accessibility of Airports in Nepal: A Geospatial Approach" - Yogesh Bhattarai, Kshitij Dahal, Ramesh Bala & Sailesh Khadka
8. "A Brief Report On Safer Journeys In New Zealand And Learning Outcomes For Countries Like Nepal" - Bishnu Basnet
9. "Life Cycle Costing Comparison of Diesel Bus vs Electric Bus in Context of Nepal" - Sushil Rijal, Sabin Paudyal and Sudeep Thapa



The full papers can be downloaded from the link: <http://kec.edu.np/kec-conference-proceeding-2019/>. Certificates were distributed to all the presenter along with Best Paper award. **Sushil Rijal and his team** received Best Paper Award for **“Life Cycle Costing Comparison of Diesel Bus vs Electric Bus in Context of Nepal”**. The program was concluded by final remarks from the Chair of the session, who was impressed with the quality of the paper presenter and the effort of SSTN to make the event successful one. The token of love was provided to Er. Hareram Shrestha jointly from SSTN and KEC.

Recognizing the contribution of SSTN for the entire conference, SSTN was regarded as Research Partner and token of love was granted to the SSTN team from the Conference organizing committee.



6.0 World Day of Remembrance (WDR)

SSTN had been conducting various programs on WDR for road traffic victims since the year of its establishment. Last year, various programs were conducted at 12 locations covering all seven provinces with the common slogan “**Life is not a car part**” in supports of various local and national organization. The program is observed every third Sunday of November and was marked on 17th November, 2019. The program was organized in association with Nepal Engineers’ Association with support from Traffic & Transport Unlimited Solution TATUS; Picasso Consultant Pvt. Ltd., AERC, Executive Consulting Engineer & Planner Pvt. Ltd. and SR Steel in national wide formulation of program. Shalleri Khabar support the entire program as Media Partner and International Road Victim Partnership (IVRP) as an international partner. The local level stakeholders were also acknowledged as a co - organizer or supporter, which were very pivotal in the succesful completion of the program. The large number of volunteer and organization has worked for the successful completion of the program and in spreading awareness among people about importance of road safety.

6.1 WDR at Province 1

WDR 2019 was observed at Charali, Jhapa and Itahari, Sunsari of Province No. 1.

In Itahari, WDR was observed with an awareness rally at morning. Rally marched to Itahari city core area in presence of participant from local, youth, school under the coordination of Binod Subedi. During evening candle lightening in the main street of Itahari paying tribute to road crash victims. The program was organized with the support of Helping Youth, New Vision Itahari, District Traffic Police and other helping hands. Similarly, **Candle Lighting Program** was conducted in the remembrance of road traffic victim and the people who work for the rescuing operation. The program was attended by Nepal Police DIG Thakur Prasad Ghimire, who appreciated the work of SSTN to work in this global issue and work outside Kathmandu Valley. Common causes of road crash facilities and mitigating measures were discussed during the program.



Another **Candle Lighting Program** was organized at Charali, Jhapa, Province No. 1. in support of Nabin Yuwa Club in the presence of youth people. Pamphlets related to Road Safety were demonstrated and candles were lighted in remembrance of crash victims. The program was coordinated by Bishal Shrestha. Participants of the program shared their experiences and gave some message during the event.



6.2 WDR at Province 2

Different forms of programs were conducted at Dhangadimai Municipality, Siraha and Kalaiya, Bara on WDR 2019 in Province No. 2.

WDR was observed in Dhangadimai Municipality, Siraha in province 2 with support of Dhangadimai Municipality Office under the coordination of Mukesh Sah. Road safety quiz and rally was organized which was attended by students of five schools. In another session, SP Khagendra Ekten, Municipality executive Gajendra Nath Sharma and other guests put their views on lives being lost on roads. Participant students were informed about road safety rules. After that candle was lighted in remembrance of road crash victims.



A similar program was organized in Kalaiya Chowk, Bara under the coordination of Maneesh Yadav. Candles were lighted remembering the soul lost within last fiscal on road crashes and end up with the determination from youth to work for the improvement of road safety scenario in province 2 from now onwards.

6.3 WDR at Bagmati Province

WDR was observed in three places, viz. Lalitpur, Dhulikhel & Bhakundebeshi, Kavrepalanchowk of Bagmati Province. In Jawlakhel, Lalitpur **Awareness Rally and Candle Lighting Program** was organized in support of Metropolitan Traffic Police Division (MTPD) along with other National Supporter and Next Sansar Clean Geo Engineering Solution,

Sustainable Infrastructure Development Foundation, Realpath Engineering Consultancy, KEC, National College of Engineering, Suzuki Driving, and Metro Traffic FM. Students of road safety and traffic engineering joined the program. SSTN Chairman Hemant Tiwari, NEA President Dr. Tri Ratna Bajracharya, Road Safety expert Laxman KC, Bhim Prasad Dhakal(SSP, MTPD) addressed the program. All the guest provide their remarks and importance of public participation in conducting awareness programs and how this can make a positive impact on the overall safety scenario.



A similar program was conducted in Saraswoti Bazar, **Dhulikhel Municipality**. The program was conducted in presence of Chief District Officer **Shrawan K. Timilsina**, District Administration Office, Kavre and **SP Jayraj Sapkota**, chief of District Police Office, Kavre. Candles were lighted in remembrance of road crash victims. The program was conducted jointly with District Police, Kavre, NASA Foundation, Dhulikhel Municipality and other organization. Candle lighting program was also observed at Bhakunde Chowk, Namobaudha Municipality, in presence of Mayor of **Namobuddha Municipality Tanka Prasad Sharma** and ward chairman of ward no. 2, 4, 6 and 10. The candle lighting was carried out in remembrance of road traffic victims as the road within the municipality witness fatalities. The program was organized in association with the District Police Office and Bhakunde Jaycee. The program was coordinated by Bishnu Thapa, Executive member of SSTN.



6.4 WDR at Gandaki Province

WDR program at Gandaki Province was observed at Damauli, Tanahu & Pokhara. Candle lighting program was also observed at Damauli, Tanahu in support of 13 governmental and non-governmental organizations including the municipality, traffic police, Rotary, Lions and Leo club of Tanahun. The program was coordinated by Bikash Shrestha. The overwhelming support of the general public was seen. Participant pledged to be aware and make others aware of road safety matters in days to come. **Baikuntha Neupane, Mayor of Byas Municipality** committed to work for improvement of road safety in the municipality and thanked SSTN for the effort for organizing the program.



A similar program was organized in Kaski, Pokhara which was coordinated by Sundar Adhikari. The program was supported by Traffic Police Office, Kaski. Candles were lit in remembrance of road crash victims writing 2742 (Life lost on last fiscal year 2075-76). Engineering features of improving road safety were also discussed in the program.



6.5 WDR at Province 5

In Province 5, road crash victims were remembered by organizing a candle lighting program led by Surakshya Kafle, Executive member of SSTN in support of SR Steel. The program was organized at Budhhachowk, Bhairahawa. Police Authorities, members of different social organizations and locals participated the program.



6.6 WDR at Karnali Province

District Public Health Office, Surkhet Model College and *Mote Gang Nepal* supported SSTN to organize an awareness rally and candle lightening. The program was coordinated by Basant Subedi. Assembly of general public and participant of the different organization was addressed by Public Health Service office executive Chetan Nidhi Wagle, Traffic Police Officers and members of SSTN.



6.7 WDR at Sudurpaschim Province

Candle lighting program was also observed at Dhangadi, Kailali of Sudurpaschim Province in support of District Traffic Police & Hamro Engineering Solution under the coordination of Binaya Dhama. The program start from an assembly and later converted to a tribute ceremony where the general public joined to pray for lives lost on roads through candle lighting.



7.0 Training of Trainer and Capacity Building

As a effort to multiply the efforts put by the SSTN team in expanding its reach and, thus, impact, SSTN has been providing Training of Trainers (ToT) to various individuals and field of profession. Such programs have been conducted by SSTN as a part of its plans & also upon request and support from other organization and individuals who share similar intentions.

7.1 TOT Program on Development of Road Safety Champion

SSTN lead the "TOT Program on Development of Road Safety Champion" dated May 3, 2020 at Metropolitan Traffic Police Division hall Twenty- Five people, representing various Rotary and Rotract clubs were provided with extensive training on road safety awareness and theoretical impact of the road crashes. The program was conducted in collaboration with Road Safety Society Nepal and Metropolitan Traffic Police Division. The attendee from the program had carried out a school level campaign at various schools/colleges. Nirajan Raj Panta, a trainee, representative from the "Rotaract Club of Dillibazar-Kathmandu" had conducted Road Safety Program at Liberty College after the ToT program.



Similarly, with the purpose of development of the Road Safety Champion among engineers, ToT Program was organized in association with Ayam Engineering Research & Consultancy on April 6, 2019. An extensive level of knowledge was provided from SSTN Chairman Hemant Tiwari and Traffic Awareness Expert Bishnu Thapa. Eight champions were developed from the workshop and they are expected to spread awareness all over the country.



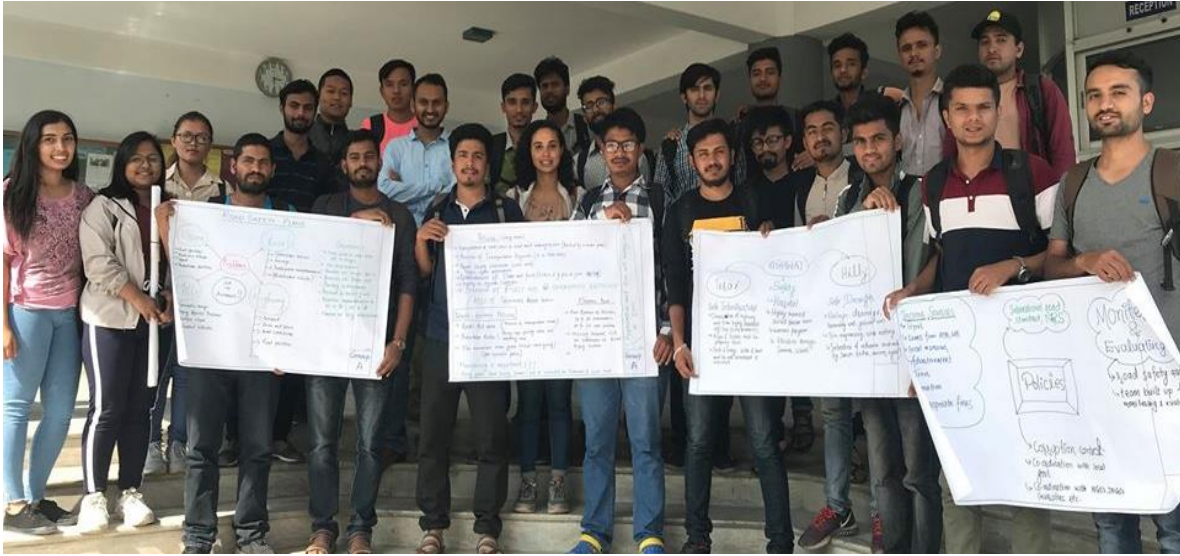
7.2 Women Group Awareness on Road Safety

There is a saying *"If we educate a boy, we educate one PERSON, but if we educate a girl, we educate a FAMILY"*, thus amplify the effect of awareness campaign, road safety campaign was carried out at **Dibya Nagar Women Group**. They are expected to educate their family and friends which will have significant impact on overall road safety scenario. The program was supported by Indira Sharma.



7.3 Workshop on "Development of road Strategy for Nepal"

In order to promote skill among fresh engineer in the field of Road Safety Policy, a half day workshop on the topic "Development of road Strategy for Nepal" was organized on National College of Engineering at June 8, 2019. Around 30 participant, who have basic knowledge on road safety actively participated in the workshop.



7.4 Memorandum of Understanding with Rotaract Club of Patan West

Memorandum of Understanding(MOU) was made on May 15, 2019 between Rotaract Club of Patan West and Safe and Sustainable Nepal for effective road safety awareness via collaborative effort. The MoU paved the road to facilitate SSTN in providing technical assistance to Rotaract Club of Patan West to conduct awareness programs to various schools within their jurisdiction.

8.0 Technical Presentation Competition at YATRA 3.0

Yatra 3.0, event to promote students towards research, capacity building through presentation competition, model competition and other similar type of events. Based on trilateral MoU between SSTN, National College of Engineering and Picasso Consultant Pvt. Ltd, the technical presentation competition was carried out at July 12- 13, 2019 under the coordination of SSTN.



The Judges present were Vibek Gupta, Sudeep Thapa, Sambridhi Shrestha, Subash Bhattra and Dilman Singh Basnyat. A representative from Nepal Engineering College win the best presentation awarded for their topic on recycling of plastic waste for constuction works and second place goes to Kiran Dhakal, representative from National College of Engineering. SSTN team also assisted in judging of civil model led by Hemant Tiwari.



Being the awarness partner, a stall was placed at the premises displaying road safety related message. A road safety quiz was also carried out to further attract visitors and facilitate interaction among them. The winners were provided with a tshirt with road safety message.

9.0 Research on Transportation Sector

Acting on the MoU signed with various collaborating institutions, SSTN supported academic research at undergraduate level of National College of Engineering & Kantipur Engineering College with assistance from Traffic & Transport Unlimited Solutiuon and Aayam Engineering Research and Consultancy, following final year projects have been carried out.

- a. Capacity and Performance Assessment of Satdobato Intersection – Kiran Dhakal et.al (NCE)
- b. Capacity Assessment and Signal Timing Design of Narayan Gopal Intersection – Krishna Shrestha et. al. (KEC)
- c. Rescheduling of Public Transportation System in Chapagaun – Lagankhel Route: Andy Neupane et. al. (KEC)
- d. Transport Network Assessment of Lalitpur Metropolitan City inside Ring Road - Sanjay Luitel, et.al (NCE)

Similarly, pedestrian inventory survey and public transport scenario survey of Ring traffic has been conducted in association with Aayam Engineering Research & Consultancy(AERC) with the help of students of National College of Engineering, Kantipur Engineering College & Himalayan College of Engineering. This survey helps to build professional engagement of students with the professional field and SSTN was involved as a supporter cum mediator.



10.0 School Level Road Safety Awareness:

Apart from more than 30 school level awareness program during Fifth UN Global Road Safety Week, Road Safety Awareness at Taplegunj and Panchthar, WDR 2019, school level awareness program was carried out at Province 1 & Bagamati province under the coordination of Binod Subedi and Unnati Subedi respectively, both of them were ToT Trainee.

S.N.	Name of School	Location	Date	Number of Participants
1.	L.E.S Secondary School	Ramdhuni, Sunsari	August 11, 2019	50
2.	Mount Summit Secondary School	Sunsari, Province 1	August 23, 2019	40
3.	Shree Chandi School	Chakupat, Lalitpur	Sept 18, 2019	25
4.	Jyoti Secondary School	Itahari, Sunsari	November 13, 2019	25
5.	Adarsha Kanya Niketan	Mangalbazar, Lalitpur	Nov 27-28, 2019	30



11.0 Coordination with Concerned Stakeholder

SSTN has coordinated with various governmental and non-governmental organization for improvement in transportation system in Nepal. SSTN has coordinated with World Bank (WB), Nepal Cycle Society(NCS), Road Safety Society Nepal (RSSN), NASA Foundation, Nepal Engineers' Association (NEA), municipalities, Traffic Police during the process.

11.1 Interaction with World Bank Team

As World Bank in support of MoPIT is preparing various plan and policies regarding road safety enhancement in Nepal; interaction program with civil societies were held on July 6, 2019 & September 25, 2019. Work carried out by SSTN, improvement measures to improve current safety scenario, probable research topic were provided during the interaction.



11.2 Interaction during Road Safety Action Plan 2013-2020 Workshop

Consultation Workshop on “Review of National Road Safety Action Plan 2013-2020” on July 1, 2019, was organized by MoPIT and where the SSTN team had officially participated. During the program, pillar wise discussion were carried out with Hemant Tiwari facilitating Pillar 1: Road Safety Management and Vibek Gupta facilitating Pillar 2: Safer Road and Mobility. The event was milestone event for initiation of the Road Safety Action Plan.



11.3 Collaboration for World Bicycle Day

An event was held in Kathmandu to mark world bicycle day on 1st June 2019. 3rd June 2019 was the world bicycle day. SSTN supported the event organized by Nepal Cycle Society, along with World Bicycle Forum Nepal, Cycle City Network Nepal and many agencies. A cycle rally was organized from Basantapur, Kathmandu to Patan Durbar Square, Lalitpur – two historic and cultural centers of Kathmandu Valley. The various speakers highlighted the need of promoting cycling and building the required infrastructure along with legislation, advocacy and awareness to effectively implement the envisioned cycling and sustainable transport as a whole. The event also featured flash mob dance, cycle painting and instrumental music performance. The event intended to not only bring the various stakeholders and cyclists together, but also to demonstrate that cycling is possibility through the rally, advocate and spread awareness among all.



11.4 Other Collaboration

SSTN Collaborated with National College of Engineering for organizing YATRA 3.0. Also collaborated with Kantipur College of Engineering for organizing 2nd International Conference on Engineering and Technology and many other events in the field of efficient, sustainable and safe transportation system.

12.0 Miscellaneous Activities

Along with above mentioned activities, othe events basically in the field of knowledge sharing and awareness were carried by the organization.

12.1 Knowledge Sharing

International Conference on Belt and Road Initiative: Nepal Connecting the World, Opportunitites and Challenges was organized by NASA Foundation and BRITA dated 26-27 February, 2019. National and international delegate were present at the conference covering presentation in the field of infrastructure and connectivity. Hemant Tiwari, represent SSTN with the presentation titled “Road Side Management” during the event.



Similarly guest Lecture on **Road Safety** was delivered by chairman Hemant Tiwari at **National Open College** to the students of PGDHCM and MHCM on 23 March, 2019. The presentation gives insight into the overall scenario and challenges on the field of road safety globally and nationally and how different stakeholders can contribute towards betterment on the road safety status. The program was well facilitated by Prof. Dr. Sital Kumar Karki, Principal of National Open College.

12.2 Sticker Campaign Knowledge Sharing

To spread road safety awareness retroreflective sticker with slogan “सडक सुरक्षा: हाम्रो जिम्मेबारी” “Road Safety: Our Responsibility” was pasted on the back of Two Wheeler. The sticker is too visible at night and has a safety impact too. More than 1000 stickers have been distributed during the period.



12.3 Other Activities

The other activities carried out by the team of SSTN is spreading road safety awareness message through social media like Facebook, Instagram, LinkedIn and Youtube. Along with the representatives of SSTN has published articles on road safety as well as articles on newspaper. Similarly, the team has provided their remarks on various radio and TV programs. Also the team had supported Rotary Club to publish diary with few pages on road safety, traffic signs and other supporting material.

13.0 Future Activities

Continuing on the activities related to road safety awareness programs and advocacy through various events, SSTN needs to further step on other methods and ways to spread the awareness and responsibility to make the roads and infrastructure safe for all. The organization will further stride and plan on better ways to impart the knowledge and share them.

The organization with support from its core team, members, volunteers and supporter intend to execute the tasks as listed given below but not limited to in the next year:

- Development of road safety club inside the schools & higher secondary institutes & conduct various extra curriculum activities related to road safety & discipline so that they will be self-conscious while using the road.
- A national wide road safety awareness campaign is expected to be launched in next year and is planned to cover more than 25 districts of the country.
- Monthly Talk program or seminar on various aspects of traffic and transportation engineering is expected to commence in next year.
- Some fundamental training related to emergency response in association with Red Cross & other INGO's should be provided to the students as well as taxi and public transportation drivers.
- MoU with various organizations to work jointly in the field of traffic and transportation is expected to happen in next year.
- Various research and studies on traffic management, public transportation, road safety, intersection analysis and other aspects of traffic and transportation engineering will be carried out in close consultation of various stakeholders.

WHAT OUR SUPPORTERS SAY ABOUT US

UNNATI SUBEDI

My name is Unnati Subedi and currently I am studying BA.LLB as my bachelor's degree. I am working as Community Service Director at Rotaract Club of Patan West for the rota year 2019/20. I have always been interested in working with children. Rotaract Club of Patan West and Safe and Sustainable Travel Nepal (SSTN) has been collaborating since 2018. SSTN had organized Training of Trainers (TOTS) about road safety for rotaractors as well as non-rotaractors. After this training as trained personnel we conducted road safety awareness campaigns throughout various governmental schools for the children of age group 13-16 years old.



Program conducted at various schools were very effective. Children were curious to know about road safety. I had a great experience teaching them about road safety. I learned how to collaborate with younger people and learned from them as well. Another day after the session at Tri Padma School, I met a boy on the road of same school, who recognized me and told we should walk from footpath and he even asked his sister to follow the traffic rule. I was so happy to see that. Thank you SSTN for such support and collaboration. We are looking forward to more collaboration.

BISHAL SHRESTHA

Hi Everyone, I am Bishal Shrestha. By professional I am civil engineer. I got to know about SSTN through Hemant Tiwari sir, my elective teacher and project supervisor. I am privileged to be a part of SSTN team as SSTN provided me an opportunity to do volunteering work in WDR 2018. It was a great learning experience for me personally. This laid a foundation for me to go on to coordinate events & projects like WRD 2019 and Traffic volume count survey. Also, I recently coordinated the presentation competition in KEC lite technical exhibition organized by SSTN.



SSTN creates a great learning atmosphere and working environment which helps me grow not only professionally but also personally. SSTN team is rife with experts who helped me a great deal in learning about transportation engineering and road safety. My experience so far with SSTN has been great. I'd be honored to work for SSTN even in its future endeavors.

OUR TEAM MEMBERS

S.N.	Name	Qualification	Designation
1	Hemant Tiwari	M.Sc. in Transportation Engineering	Chairman
2	Vibek Gupta	M.Sc. in Transportation Engineering	Vice-Chairman
3	Sudeep Thapa	M.Sc. in Transportation Engineering	Secretary
4	Dilman Singh Basnyat	M.Sc. in Transportation Engineering	Treasurer
5	Bishnu Thapa	Mass communication	Executive Member
6	Niraj Bohora	M.Sc. in Transportation Engineering	Executive Member
7	Surakshya Kafle	M.Sc. in Transportation Engineering	Executive Member
8	Sambriddhi Shrestha	Msc in Transportation Engineering	Lifetime Member
9	Nausad Ansari	B.E. in Civil Engineering	Member
10	Subash kr Bhattarai	Msc in Construction Management	Member
11	Reema Basnet	B.E. in Civil Engineering	Member
12	Prabesh Adhikari	M.Sc. in Geotechnical Engineering	Member
13	Suman Neupane	B.E. in Civil Engineering	Member
14	Bishnu Basnet	Msc in Transportation Engineering	Member/ International Coordinator
15	Sundar Adhikari	Msc in Infrastructure Engineering and Management	Member
16	Sushant Tiwari	B.E. in Civil Engineering	Member
17	Pritam Shah	B.E. in Civil Engineering	Member
18	Sahil Dahal	B.E. in Civil Engineering	Member
19	Jeena Kharel	Bachelor in Bussiness Studies	Member
20	Sanjay Luitel	B.E. in Civil Engineering	Member
21	Binod Subedi	B.E. in Civil Engineering	Member
22	Kopila Basnet	Master in Arts in Sociology	Member
23	Aashish Thagunna	B.E. in Civil Engineering	Member
24	Sushil Shrestha	B.E.in Civil Engineering	Research Assistant
25	Kiran Dhakal	B.E. in Civil Engineering	Research Assistant

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Dr. Partha Parajuli

Transport and Traffic Engineer

Associate Professor, Institute of Engineering, Pulchowk Campus (Retired)

Prof. Dr. Er. Padma Bahadur Shahi

President, Society of Transport Engineers' Nepal (SoTEN)

Technical Advisor, Department of Transport Management (DoTM)

Er. Anil Marsani

Secretary, Society of Transport Engineers' Nepal (SoTEN)

Coordinator , MSc in Transportation Engineering, IOE, Pulchowk Campus

Dr. Kush Shrestha

Deputy Head, Orthopedic Department, Royal Darwin Hospital

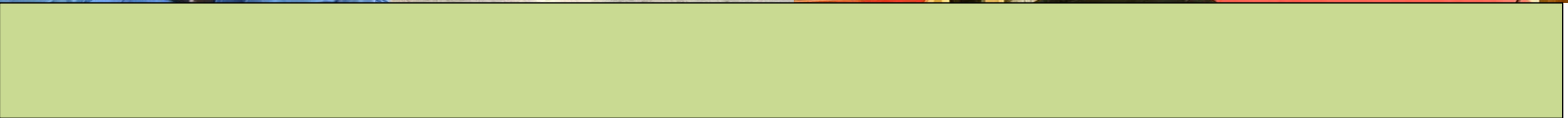
Vice President, Royal Australasian College of Surgeon NT

Er. Subhash Dhungel

Chairman, Traffic and Transport Unlimited Solution (TATUS)

Sitaram Hachhethu:

Retired Inspector of Traffic Police



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