



NEWSLETTER

September 2019

TM TRAFFIC MANAGEMENT



Traffic Management

-By Shri Sunil Kumar Sinha, MC Member, FRNV

Traffic jams are blight on our modern, fast moving lives. We've all been there, stuck at traffic lights that never seem to change to green. And we have been dealing with them in a very unmodern way. Jam-busting measures are often slow to react to changes in road or weather conditions and many traffic lights still work on timers that are often out of synchronisation, preventing vehicles from flowing freely.

The negative effects of traffic congestion are many at the physical, mental and emotional level. Research shows that a person dealing with traffic jams on daily basis suffers from high levels of stress, irritability and discomfort. This mental disturbance leads to weight gain and hypertension in many individuals. Adverse health problems also arise from noise pollution and air pollution.

Traffic congestion is not a problem which could be overcome with one straight solution. There are factors like inefficient parking systems, unmanageable influx of vehicles at peak hours and weak traffic control systems which results in traffic congestion.

For example, smart parking systems or possibly mobile applications can accumulate data of parking systems and suggest the vehicles with instantly available parking spaces. This can reduce the time commuters have to spend in circling around and searching or waiting for available parking spots.

In the near future, we hope to see self-driving cars, having great efficiency in cutting down all traffic related issues, as the automated cars would move along the roads in an organised system that ensures

an optimal flow of traffic. While many see self-driving vehicles as the panacea for traffic jams, it will be at least two decades before they start to make a meaningful impact on our roads. In the meantime, highways agencies and city planners will have to cope with a complicated mix of human, semi-autonomous and autonomous drivers on the roads. Keeping them all moving will require traffic management systems to be instantly reactive and adaptable.

But, by combining new communications technology with the power of artificial intelligence (AI) to crunch vast amounts of data in real time, it may be possible to ease our clogged roads so they can cope with the growing number of cars. There are hopes that new technology can ease traffic jams in already congested cities like Bengaluru, India, where vehicles often move at a walking pace and the average speed on some roads at peak hours is just 4km/h (2.5mph). Siemens Mobility has built a prototype monitoring system that uses AI through traffic cameras. Traffic cameras automatically detect vehicles and this information is sent back to a central control centre where algorithms estimate the density of traffic on the road. The system then alters the traffic lights based on real-time road congestion.

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detect vehicles and this information is sent back to a central control centre where algorithms estimate the density of traffic on the road. The system then alters the traffic lights based on real-time road congestion.

To respond in this way, however, requires data. Data may be collected through traffic monitoring systems, road infrastructure, cars and drivers themselves via their mobile phones. Millions of cameras line our roads while the passing vehicles induces tiny electrical currents in loops of metal hidden beneath the tarmac, providing further information about the traffic conditions. Motorists can send instant updates about hold ups; linking to the navigation software they use on their mobile phones and in their cars.

In Fijian, China recently 120,000 public vehicles in the province have been outfitted with GPS devices that are programmed to automatically transmit data of their position and speed every 30 seconds. Apart from this, the region has equipped the traffic lights with video surveillance to keep track of driving patterns of vehicles in and out. Ultimately, all the data collected will be used in making strategic policies to combat traffic congestion and gridlocks.

Intelligent Transportation Systems (ITS) is now being seen as a potent tool to ameliorate the grim situation of gridlock in various metros including capital city of Delhi. It refers to the use of technology (computing, communications, and sensors) to optimize the movement of vehicles over transport networks. This optimization covers areas as diverse as traffic signal control, automatic number plate recognition (ANPR), and on-line real-time traffic messaging.

With specific reference to the Indian experience, the main problems faced by traffic managers in many of the Indian cities are that of enforcement of traffic rules, and directing traffic through key junctions, in order to maximize flow. Addressing these problems also requires the use of video surveillance technology and specialized software applications. Thanks to artificial intelligence (AI), Delhi is set to have its own intelligent traffic management system (ITMS) soon. According to a news report, the Ministry of Home Affairs has officially accepted the proposal sent in this regard by Delhi Traffic Police. The new traffic management system will work on a radar-based monitoring with the help of AI. The police analyses

the traffic pattern, volume, number of vehicles, and other factors, and collect them on a cloud. The data then, would be used to manage the traffic — one of the key tools being the automated traffic signals. With AI coming in place, the signals would work according to the volume of traffic on each road. The new project, which will cost around ₹1,000 crore, will aim to overhaul the existing traffic system in Delhi. It will be implemented in three phases.

However, the application of traffic management techniques to urban roads needs to be holistic, emphasising the desirability of treating routes or networks as a whole rather than simply focusing on isolated problem spots. Past and likely future trends in road travel, and various techniques for travel demand management are to be kept in prime view. While these sorts of techniques have been existing, their use should be encouraged. The important area of traffic enforcement and the associated aspects of education and encouragement are to be also considered. Unless traffic management is logically applied and consistently enforced, it will not be effective. Enforcement must be considered an integral part of traffic management only.

Traffic Management: The need to follow Traffic Regulations

-By Shri Prabhakaran M Nair, Friend, FRNV

Management of Road traffic is a subject widely discussed by Nations all over the world. While every Nation has systems formulated to suit the peculiar conditions prevailing in that country, traffic Rules and Regulations are generally the same everywhere. Among the many factors to be considered in formulating and implementing a traffic management plan, **foremost is the safety of pedestrians and vehicle drivers**. Rules and regulations needed for implementing the plans also form part of the schemes. Often it is left to the law enforcing authorities to ensure compliance of traffic rules by the road users.

Yet the number of road traffic crashes remains unacceptably high, killing more than 1.3 million people and injuring as many as 50 million people a year around the world, with 90 per cent of those casualties occurring in developing countries. The loss of young life between ages 15 and 29 is particularly alarming.

The United Nations General Assembly adopted a resolution on improving Global Road Safety, in April

2018(UNGA_resolution_A_RES_72_271_N1810643) listing out a comprehensive set of suggestions for design and implementation of Road Safety management schemes and systems world over. The UN had also declared the period 2011-2020 as the Decade of Road Safety. The resolution notes that most of the traffic related accidents are preventable and states that promotion of sustainable modes of transport, in particular, safe public transport and safe walking and cycling, is a key element of road safety.

In most of the developed nations, traffic discipline is almost a tradition, a culture ingrained in the people right from their school age.

Data derived from Kerala Police Crime Statistics (Public) shows that violation of traffic regulations and traffic rules were the main causes of Road accident deaths and injuries in 2018.

Traffic Violation	deaths	total deaths	percen t	Injuries	Total Injured	percen t
alcohol	22	4069	0.54%	135	36112	0.37%
speeding	2806	4069	68.96%	26969	36112	74.68%
Others*	1241	4069	30.50%	34685	36112	96.05%

***Other causes** include : Wrong side driving, overtaking, abrupt stopping, pedestrians, non stopping at zebra lines, signal jumping, non wearing of Helmet, non use of seat belt, wrong signaling, undefined factors etc ., etc. These figures are typical of the other years also.

It is obvious that the main cause of accidents is non-compliance of traffic regulations. **The reasons for such violations seem to be:** Lack of wide roads capable of handling the large volume of private and public Vehicles. Lack of separate tracks exclusively for two-wheelers and cyclists. Lack of median on main roads. Poor Lighting and poor visibility on congested roads. Lack of awareness of traffic rules among pedestrians, particularly women and children.

Apparently the urgent need is to inculcate sense of discipline in people and also enforce the traffic regulation rules strictly. The penalties imposed for violations of traffic rules, either by the drivers or by the pedestrians, should be exemplary and act as a deterrent for further mishaps. To a great extent the programme of training school children as Cadet Police, initiated by the Kerala Police has been very successful. But at the same time, without providing proper infrastructure such as wide roads, lighting and parking spaces, it is almost futile to enforce traffic rules stringently.

On the one hand, our population is very high and unevenly spread over the country. There are densely populated regions within a given state and also heavily concentrated in Metros. On the other the available transport systems, including mass transport, are far

too inadequate to provide quick and easy access to destinations in our cities and towns let alone Metros.

The solution appears to be:

1. Widen the roads to accommodate a larger number of vehicles.
 2. Provide clearly marked paths for motorcycles and bicycles completely separated from the lanes for cars, buses, cargo trucks etc.
 3. Bring in legislation to ensure that traffic is restricted to the designated carriage ways for two-wheelers, four and multi axial vehicles.
 4. Impose exemplary and deterrent penalties on traffic offenders. Educate road users on traffic rules and regulations and update them periodically on the prevailing state.
 5. Involve the Local Self Government agencies such as panchayaths and municipalities in educating and enlightening the road users.
- In its Vision Document on Road Safety, NATPAC (National Transportation Planning and Research Centre -an initiative of Kerala Government)) envisages the formulation of an Action Plan for Reduction of Traffic Accidents and its implementation in a coordinated manner. Among the measures towards achieving this objective the document aims to take steps to :
1. Reduce the severity of road accidents by enforcing the seat belt and helmet use, and strict compliance of speed governors by heavy vehicles.
 2. To minimize loss of lives due to delay in evacuation and transfer of accident victims to first-aid/trauma care centers and ensure quality medical attention within the minimum response time, say 60 minutes.
 3. To educate road users through

various means about the basic road rules. To impart training to drivers the importance of defensive driving, courtesy and respect to fellow drivers/ road users.

Why is the traffic density so high? Practically all families own at least one motor vehicle these days. This has become a necessity rather than a luxury. The inadequate public transport system as well as lack of mass transport facilities in major cities and towns compel the working people to buy a two wheeler or a small car. The most preferred vehicle seems to be the motorcycle or scooter because of its high mobility, small size and ease of parking. Parking of vehicles is a herculean task anywhere in India. The users are therefore forced to park their vehicles in unscientific manner albeit for short periods, at the closest point of their destination. This further adds to the traffic congestion on roads.

Almost all roads are without footpaths, curbs, for pedestrians and people face great risks while walking on the roads out of necessity. The roads being too narrow, drivers particularly the motor cyclists, seek to exploit even the slightest opening in a traffic jam to sneak through and move ahead. The relatively free carriage way on the opposite lane is very often used by motorists to step ahead of the long queue of vehicles in their own lane. This results in adding to the blockade of incoming vehicles on the opposite lane. This vicious cycle cannot be broken except by providing clearly defined paths for cars and motorbikes and strict imposition of deterrent penalties particularly at road junctions and cross roads.

So, even though it is absolutely necessary to educate the road users on the traffic rules and regulations, the immediate need is to improve the infrastructure and facilitate traffic movement. Trying to prevent people from buying their own vehicles through heavy taxation will only add to their discomfort and loss of working hours.

The NATPAC report does not however address the need for wider roads and augmenting parking facilities for handling the large traffic volume existing today on our roads.

Let us hope that with better awareness

of the need to understand and obey traffic regulations will increase road safety.

Sri Prabhakaran, a semiconductor technologist by profession retired from Keltron , a public sector undertaking by Kerala Government, in 1995 and lives in Thrissur in close proximity to Narayanashrama Tapovanam. He is a disciple of Swami Bhoomananda Tirthaji Maharaj, and engages himself in spiritual pursuits.

Small changes, big impact: How Tamil Nadu brought down road accidents, deaths

Last year, when the State Traffic Planning Cell and IIT-Madras studied the pattern of road accidents that happened between 2016 and 2017 across 11 districts, they identified 190 blackspots along the highways. Not only accidents, high fatalities were also reported from these spots.

The decrease is all thanks to the efforts of critical stakeholders, including:

1. The police department, which seeks to enforce the rules.
2. The health department, which seeks to ensure that systems are in place to deal with emergency trauma care and helping people access these critical services.
3. The transport department, which seeks to ensure quality in providing licences and fit vehicles.
4. The highways department, which seeks to oversee the conditions on the road and transport department deciding on who obtains a vehicle and whether it receives a fitness certificate.

In all these avenues, policy decisions were being taken based on rigorous data analytics. In addition to this, the reason why Tamil Nadu succeeded was that all stakeholder departments worked as an integrated entity, particularly at the field level.

Today, 120 such spots are safer after rectification. Experts analysed accident data, identified the nature and cause of accidents and designed appropriate low cost engineering solutions. And the results are visible. There has been a dip in the number of road accidents and deaths following the remedial measures.

Although the number of accidents continues to be high, the figures fell from 65,562 in 2017 to 63,920 in 2018, a dip of almost 3%. Increased coordination with ambulance services and faster medical response

during the golden hour brought down the number of deaths from 16,157 in 2017 to 12,216 in 2018, which is 24.4%. Officials said the closure of 3,300 Tasmac shops along the highways following the Supreme Court ban also reduced the number of accidents.

A detailed analysis of accidents reported in 2017 between Thiruvannamiyur and Muttukadu on East Coast Road, the Chennai traffic police found that there were four Tasmac shops on the stretch.

“Since the median was not very high, tipplers would scale it to reach the other side. Such people met with accidents,” said R Sudhakar, joint commissioner of police, traffic (south). “We have marked the accident prone spots as 304 (A) (section of the IPC that deals with causing death due to negligence), which attracts the attention of the motorists who then slow down,” he said.

Senthil Nagar junction on 200 Feet Road in Ambattur was another such blackspot. Five fatal accidents were reported here between 2016 and 2017 due to vehicles converging from all directions at the junction. Now barricades and high mast lamps have been installed.

At spots such as Sathyabama University junction and Sri Ponnamman junction on Old Mahabalipuram Road, the study stressed on the need for speed restrictions and helmet enforcement.

In Villupuram district, 15 blackspots were identified and six were set right. Officials found that most blackspots were junctions where vehicles pile up. With better illumination, proper signage, road medians and stricter enforcement, officials said the number of accidents would further come down.

<https://timesofindia.indiatimes.com/city/chennai/sm-all-changes-big-impact-how-tamil-nadu-brought-down-road-accidents-deaths/articleshowprint/68248767.cms>

Traffic Management - Need to follow traffic regulations?

-By John F Williams, Annual Member, FRNV

Introduction

In almost every town of the country, there is increase in traffic density which has led traffic planners to widen the roads, construct flyovers, underpass and build new roads with several lanes on each and still, there is no respite from congestion on

the road. In India the main problems faced by Traffic Managers in most of our cities are that of enforcement of Traffic rules, and directing traffic through key junctions.

Enforcement

Many cities in India have already implemented a video recording system for Traffic management with the introduction of CCTVs.

Recognition using Automatic Number Plates will result in a much larger identification of the Traffic rule violations / defaulters.

Some Specific interventions to prevent Road Traffic Injuries are:

- Reducing exposure to risk through land-use policies;
- Shaping the road network for road injury prevention;
- Improving visibility of road users;
- Promoting crash-protective vehicle design;
- Setting and securing compliance with road safety rules;
- Delivering post-crash care.
- Reducing the volume of motor vehicle traffic by means of better land use;
- Providing efficient networks where the shortest or quickest routes coincide with the safest routes;
- Making alternatives to private motorized transport.
- Better management of commuter transport and of transport to and from educational institutions & offices ;
- Better management of tourist transport;
- Ban on freight transport;
- Restrictions on vehicle parking and road use;
- Making greater use of electronic means of communication as a substitute for delivering communications by road.
- Availing travel by bus and train which is many times safer than any other mode of road travel.
- Providing safe walking and bicycling facilities;
- Better coordination between different modes of travel.
- Allowing bicycles to be carried on board trains, ferries and buses;
- Introducing • “park and ride” facilities, where users can park their cars near public transport stops/ metro ;
- Improvements in taxi services;
- Higher fuel taxes and other pricing reforms

to discourage private car in favour of public transport.

- Laying lanes for overtaking,
- Better highlighting of hazards through road lighting at junctions and roundabouts;
- Advisory speed limits at sharp bends;
- Regular speed-limit signs;
- Removal of roadside hazards – such as trees, utility poles and other solid objects.
- Use of daytime running lights on the front of motorized vehicles,
- Use of reflective and protective clothing, especially for two wheel riders, which increases the visibility of riders during the night and thus reduces the probability of accidents. Brightly coloured clothing, extra reflectors on speed bumps .

Obey Traffic Rules

- Setting road safety rules is an important aspect of road traffic injury prevention.
- There are risk factors such as speed and Alcohol which require enforcement of road safety rules.
- Speed limits speed is a key risk factor in road traffic injuries, influencing both the risk of a road crash as well as the severity of the injuries that result from such crashes. Impairment by alcohol is an important factor influencing both the risk of a road accident, as well as the severity of the injuries that result from crashes.
- Enacting and enforcing laws on the use of seat-belts.
- Strictly enforce these laws, and support enforcement by Public information and awareness campaigns.
- Use incentive programmes to enhance Police enforcement ,
- Set and enforce speed limits;
- The transition from high-speed to low-speed roads can create areas of high risk for crashes. Mark transition zones on busy roads approaching towns and villages that can influence drivers' speed.
- Set blood alcohol limits.
- Use breath-testing devices that provide objective evidence of blood alcohol content;
- Reasons for low use of helmets, numbers of fatalities and injuries occurring to motorcyclists; monitoring and evaluation of helmet use.
- Basic skills on how to control vehicles can be taught.
- Education and skill training for children and pedestrians
- Driver education (school based) leads to early licensing.
- Young and inexperienced drivers have higher crash rates. Over the past decade experiments have been done to provide gradual access to driving privileges to new licenses.

Education and publicity, taking into account evidence from research on behaviour change, the interventions that may be promising, those to avoid, and those to encourage, as well as the need to implement proven measures.

Suggestions:

- Traffic Police Constables or Marshals be deputed immediately at the Crossings once Signals fail to function.
- Cardiac & Trauma Ambulances on Highways/Main Busy Roads of the Cities to take care of the Road accidents victims without going into the Police Station of the Area but rushes the Patient immediately to the nearest Hospital/Clink and the rest of the formalities can take care later. With immediate First/Medical aid, more than 70 % of the injured persons WILL survive.
- Last but not the least, Self discipline is the Best in case Traffic norms/laid down Regulations are implemented by us!

ROLE MODEL

The Man of the Millennium Palam Kalyanasundaram Spreads Kindness like a Bonfire

No words can describe the beauty of this man's kindness. A 76 year old librarian, Palam Kalyanasundaram teaches the world that money does not get you popularity and recognition. It is your kindness that becomes famous for which people recognize you as their idol. Kalyanasundaram has acted the role of a librarian for 30 years. Apart from working as a librarian, he has also worked as a waiter in a hotel in a deal of 2 meals a day and some salary. He was honored as the Man of Millennium by an American association.

The young librarian served his company effortlessly and donated his entire monthly salary to the orphans. He continued to do so, till his retirement. To add more, this amazing and inspiring man never married with the intention to serve his country by his kindness. Kalyanasundaram also donated his monthly pension to the needy orphans.

It is not a piece of cake to live on two meals a day and have nothing in your pocket despite a handsome salary and stable job. He donated his

monthly pension to the needy orphans.

It is not a piece of cake to live on two meals a day and have nothing in your pocket despite a handsome salary and stable job. He donated his ancestral property, jewelry, assets and everything that belong to him.

This great legend conveys a strong message to the world that there is nothing in this universe as precious as your own soul. Do not let the materialistic things affect your soul in being kind to others. If Kalyanasundaram being a normal human with no special skills, wings, or angels around him, can take efforts in bringing smile on little children, what are we waiting for? It is no doubt that not everyone is as selfless and angelic like Kalyanasundaram; however, we can at least begin to take efforts. There are many people desperate for a touch and a simple hug of kindness. Let's begin today!

Source: <https://www.viralindiandiary.com/the-man-of-the-millennium-palam-kalyanasundaram/>

News & Events

❑ On August 29, 2019, a meeting was held on Value Education Curriculum Development in which Prof. Daya Pant, Mrs. Simmi Mahajan (Headmistress, Fr. Agnel School), Mrs. Sonam Guliani (DUSC, Maurice Nagar), Mrs. Meenakshi (DUSC, Maurice Nagar) participated.

The members suggested that this curriculum should include :

- Respect** – for public property which is also a responsibility of every citizen; respect for women; and every living thing.

- Peer pressure** – it can be also put under importance of friendship.

- Brand consciousness** – which will talk about how the new generation is more conscious about the brand names. The children judge other what the other person is wearing.

- Cyber bullying** which should also include social media.

- Body shaming** - which is criticizing own

appearance, through a judgment or comparison to another person or criticizing another's appearance in front of them or criticizing another's appearance without their knowledge. It is very common in our schools, colleges and even our families and communities.

•**Substance abuse**

- Family** – time with parents, grandparents. It will also include respect for elders.

- Gadgets and life** – that should show how the use of mobile and TV hampers the social relationships, physical growth & strength

- Discipline** – should be displayed and discussed with children

- Environment** – plastic, water, electricity and plants. It should be treated as Respect for natural resources which will cover sustainable development.

- Striving for success** – fighting with yourself to succeed; list down your strengths.

11th Annual General Meeting

The Foundation for Restoration of National Values is pleased to extend an invitation to all the members for their kind presence at the **11th Annual General Meeting** of FRNV scheduled for **September 7, 2019, Saturday, at 03.30 p.m.** at the Registered Office of the Society at **M-75, Greater Kailash Part I, New Delhi 110048.**

Dear Readers,

FRNV invites stories from its readers on deep-rooted values that have helped us in our everyday lives. Some of these stories will be featured in the next issue of our newsletter. So put your thinking caps on, recall the values integral to your life which you cherish and write to us at shilpi@valuefoundation.in.