

## CONCEPT NOTE

# Workshop on “Building Lives by Ensuring Sustainable Mobility in Gurugram”

### Background

Gurugram is one of the fastest growing metropolitan city in India which has witnessed urbanization at an annual growth rate of 119% between 2001 and 2011 (Urban Mass Transit Company, 2010). Gurugram is considered as pioneer model of public private partnership in land development projects across the country. Due to proximity with airport and National Capital Territory (NCR)- Delhi and situated right on the National Highway-8 makes the city approachable for residential, commercial and tertiary sector industrial developments.

Gurugram’s population according to the 2011 census was approximately 15 lakhs. However, an estimate suggest that the current population in the district is about 18 - 25 lakhs and population is growing exponentially, creating demand-supply side gap in a major way. One of the most important concerns of this constantly increasing population is that of increasing number of vehicles on roads, traffic congestion and lack of sustainable transport options with last mile connectivity to cater to the need of citizens. With the population explosion in the city, the requirement for transportation has also grown proportionally, posing serious questions before the developers and government administration to match the infrastructural and management issues.

Traffic in Gurugram has grown at an unsustainable pace and around 1 lakh vehicles being registered in the city every year. Gurugram has the highest per capita car ownership, almost three times of Delhi that was earlier regarded as the car capital of the country. In addition, Gurugram also registers 50,000 motor vehicles every year which is higher than any other cities of India. For instance, the existing car share is 24% as compared to 5% in Jalandhar, which is a city of similar size. The car share in Gurugram is more than that of Mumbai (6%) and Delhi (13%)(Census of India, 2011). Non-Motorized transport (NMT) share of work trips that includes work trips made by walk and bicycle in Gurugram is 42%. Despite of the fact that Ghaziabad and Faridabad has more population than Gurugram but NMT share is lesser in Gurugram in comparison to the other two cities. This therefore, stresses on the need of promoting eco friendly and localized transport modes for last mile connectivity.

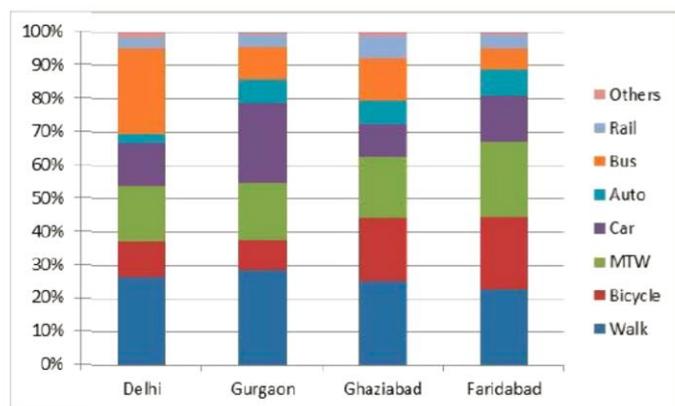


Figure 2: Modal share in cities in vicinity

The world has recognised the silent epidemic of road crashes and Gurugram—famous as the land of ‘Gurujam’, with over 200 traffic deaths annually -has largely ignored road and traffic safety as pillars of sustainable development and a stepping-stone to achieving the sustainable development goals. Addition

of more and more vehicle each year is not helping the city and the residents to mitigate the problem of accessibility rather it is creating huge hurdle in terms of lack of parking space, encroachment by private taxi service providers, road rage instances, increasing fuel consumption leading to health hazards and environmental issues. In February 2014, the Central Pollution Control Board (CPCB) judged Gurugram as the most polluted amongst 28 urban centres for air pollution. The CPCB survey, found Gurugram's air beyond 'poor' and into the 'severe' category due to high concentration of PM 2.5. The readings in Gurugram were found to be 434 micrograms per cubic meter as against the permissible limit of 60, the vehicular pollution remaining one of the prominent contributors to the menace. The city needs to protect the inherent strength in sustainable commuting practices – public transport, car pool, cycling, walking, etc..

## **DLF Foundation's Gurugram Rejuvenation Project and Sustainable Mobility**

Since inception in 2008, DLF Foundation has been working for social issues with major focus in the areas of education, healthcare and community development aspects. As social arm of DLF Ltd. and group companies, the Foundation was also taking up issues and problems in Gurugram to bring positive change in the lives of citizens. In similar lines, flagship programme like Cluster Development Programme and Swach Haryana Campaign were initiated which was appreciated and recognized by stakeholders. The efforts made by Foundation though addressed the exiting problem but somehow it was not sustainable and comprehensive as approach. Realizing this fact, DLF Foundation has made a major shift in approach and took over the role of the catalyst and flag bearer for Gurugram under which the major issues of city like water, transportation, waste management, sustainable energy, environment, etc has been prioritized. DLF Foundation has taken an approach which calls for engagement of all stakeholders on the subject to understand, deliberate and develop roadmap for a particular issue and get it implemented with Government, Other corporate, NGOs, Institutions, etc. Initiative is named as **Gurugram Rejuvenation Project** which also aims to create models for excellence for up-scaling and replication by the larger CSR fraternity and Civil Society.



Realizing the importance of intra city transportation issue in Gurugram, DLF Foundation has engaged with the District Administration, the Municipal Corporation of Gurugram, Institute of Road Traffic and Education, (IRTE) and institutions such as TERI University & Management Development Institute (MDI) as knowledge partner to understand and develop detailed plan for addressing the dimensions of transportation related concerns in Gurugram.

### **Sustainable Mobility**

Mobility plays a central role in cities for ensuring prosperity and social cohesion. In highly motorised and car dependent cities, moving people and goods has its own impacts leading to congestion, air pollution, noise, dust, etc. In context of Gurugram, the problem is more concerning due to the unexpected urban growth coupled with lack of town planning in early stages of city development. At present, Gurugram is facing problem of unavailability of land for retrofitting or making changes in Transportation infrastructure vis a vis issue of coordination among different bodies managing the city like Municipal Corporation, Government Departments and Private Developers. The enforcement of existing transportation policies is also a grey area which is leading to health, safety and crime related problems.

DLF Foundation recognizes the policy of “Avoid, Shift and Improve” to address the facets of Intra City Transportation in Gurugram. “Avoid” policies strategizes focus on aspects of urban planning and land use regulations, which calls for compact & green cities thus, reducing the distance between workplaces, homes, shopping and leisure activity. “Shift” is more towards reducing vehicular use and optimization through car pooling, public transportation, vehicle sharing, etc. “Improve” strategy talks about improving and optimizing the vehicle use by making technological improvement in terms of renewable energy, vehicle design for space and safety, etc.

DLF Foundation with the partnering organizations conceptualizes the intra city transportation problems around two major areas – A. Accessibility and Affordability and B. Health and Safety.

### **A. ACCESSIBILITY AND AFFORDABILITY:**

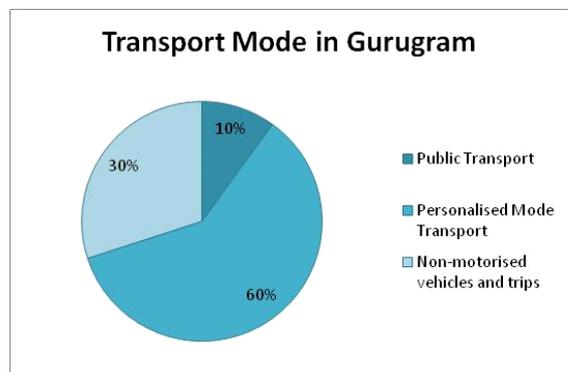
Gurugram’s growth as business hub in the national capital region has induced huge population influx in the city. In contrast the up-gradation of civic amenities and facilities like public transportation, waste management, water supply, etc has not kept pace thereby creating demand and supply gap. Accessibility to affordable, safe and reliable transport mode for all economic section of society is a huge challenge for the Gurugram Administration. Though the city has an exemplary Rapid Metro System, but it is underutilized due to absence of the last mile connectivity. The city lacks the affordable options for local connectivity and the poor enforcement mechanism allows the drivers of auto-rickshaw to charge excessively. Cheaper options such as the Metro Feeder buses are also not available and the private buses/shared autos are crowded, dilapidated, unsafe and often unreliable. The number of buses run by Haryana roadways is limited and the bus related infrastructure has to be improved extensively. This has created a situation in which the poor, who rely majorly on the mass transport systems, do not have access to safe, sustainable and affordable transport system.

As shown above in the graph, the public transport share in total trips is minimum (10% of total trips), while personalised mode share has 60% and walk trips constitute 30%. Non- motorized transport (NMT) trips in Gurugram is significant, but the facilities are inadequate.

The city has a wide socio-economic divide and one can see luxury cars passing by frequently. The affluent families have more cars than members in the family.

Thus, the use of personal vehicles is making enormous pressure not only on roads but also on public spaces. It seems that the emphasis of the affluent is more on capturing spaces than sharing. In some areas of the city, autos are a part of intermediate public transport and primary mode for last mile connectivity.

Another dimension to the problem of accessibility is the inadequate traffic management system in Gurugram. Presence of multiple authorities for different part of the city also hinders the objectives of City Transportation Plan. Traffic related infrastructure in parts of Gurugram is managed by multiple players are making it extremely complex to manage the overall traffic movement in the city. In many parts of Gurugram, movement of bus which is the common public transport mode is not possible. Road Design related flaws, non installation/ functioning of automated traffic management systems, inadequate deployment of traffic management personnel and poor emergency preparedness are some factors contributing to this menace.



The business locations in Gurugram are serviced by private radio taxi operators like Ola, Uber, etc. but lack of regulations and enforcement has resulted in severe inconvenience. Such as, denial by the taxi drivers for the service at last moment and carpool encompasses too much waiting and diversions for the commuters.

## **B. Health and Safety**

When we talk about sustainable mobility of a city like Gurugram than question of health and On-road & Off-road safety automatically comes to mind.

**According to one of the article published by Hindustan Times on 7<sup>th</sup> August, 2017**, the total number of deaths on Gurugram roads in the last six years was 2,968. Of these, 2,043 were either pedestrians or two-wheeler riders.

As per a recent assessment conducted by DLF Foundation, in collaboration with Fleet Forum, among the drivers of corporate in Gurugram, it was found that that majority of drivers were good in driving skill but very low in the knowledge of basic traffic signs and signals. Assessment revealed that at least 25% of the drivers did not meet the normal vision standards. Pre-screening test results shows high percentage of drivers require more training in traffic knowledge and signs.

Health concerns are haunting in terms of extreme air pollution leading to respiratory disease related morbidity, road accidents and absence of emergency response. No substantial efforts are being made by the Government or the Stakeholders to reduce the health related vulnerabilities of local residents. Only one air quality-monitoring unit is set up by the Central Pollution Control Board to assess the pollution level in Gurugram and none of the mitigation plans are in practise at present.

As per a report titled 'Gurugram: A framework for sustainable development' which was released on June 5, 2017 by Civil Society Organizations i.e. Centre for Science and Environment (CSE) and Gurugram First has clearly stated that as per the Central Pollution Control Board (CPCB) the city's air quality is poor. Out of all the pollutants, the suspended particulate matter (PM) 2.5 has been way above the permissible limit, which is 60 micrograms per cubic metre ( $\mu\text{g}/\text{m}^3$ ). PM2.5 is particulate matter 2.5 micrometres or less in diameter and is a major component of what constitutes air pollution. These are very fine particles and can reside in the lungs and aggravate asthma or respiratory conditions. The elderly and children are most vulnerable to adverse effects on health caused by PM2.5.

According to a study conducted by Central Pollution Control Board (CPCB), every third child in Delhi has reduced lung function and their sputum contains four times more iron-laden macrophages than those from cleaner environments, said the report. It has been recommended that the city should focus on vehicular emission standard and energy efficiency to reduce air pollution. As per this study, the number of cars entering Gurugram from Delhi daily is more than three times the number of cars registered in Gurugram in 2015 and nearly 900 trucks cross the city every day.

Thousands of girls and women face obstacles in reaching their destination every month due to unsafe public transport. Although many modes of public transport are available in the city but none of them have been regularized to provide a safe commuting option to women. In order to create identity as Female Friendly City, Gurugram has to develop in a way where women's perspectives are central to the design process, and where women can safely access services such as healthcare, public transport, social services, and education with the same ease and opportunity as men. So far, no significant efforts has been made on the front of transportation for female and in absence of reliable last mile connectivity, a fear of any unfortunate incidence with female members while commuting always hover in minds of

their family. Though the private radio taxi services has been mandated to install tracking devices and several phone based applications are also available to observe the moment but women still feel insecure to use cabs during late hours due to higher sexual assault cases reported in news . The situation is no different in public buses. Women face harassment almost every day in public buses also. Being ogled at and hearing lewd comments are very common issues faced by women and girls while commuting. College students, who use public transport vehicles every day, are among the worst sufferers.

Since Gurugram does not have reliable last mile connectivity and many a times, the commuters have to walk down the street hence, the installation of street lights in all roads of Gurugram is equally needed for male and female equally from safety point of view. Presently, less than 20% roads and streets of the city are illuminated which is matter of concern for the district administration.

Due to safety concern, the steep decline in public transport ridership and high increase in personal vehicle usage has increase congestion in the city. This has social, economic and environmental impact on each and every citizen of Gurugram.

### **Workshop on “Building Lives by ensuring Sustainable Mobility in Gurugram”**

In this background, DLF Foundation understands the importance of taking up issue of Sustainable Mobility in Gurugram as one of the thematic priority under Gurugram Rejuvenation Project. DLF along with the Expert Organizations like Institute of Road Traffic and Education (IRTE), TERI University, Management Development Institute (MDI) and knowledge partner KPMG is organizing one day Conference in Gurugram on 14<sup>th</sup> December 2017.

The Objective of the Workshops to deliberate, discuss and consolidate the knowledge and resources available on the issue of sustainability mobility with focus on the policy of “Avoid, Shift and Improve” and to come up with a sustainable model for Gurugram.

The Conference is divided in three sessions i.e. 1<sup>st</sup> session as Introductory Session, 2<sup>nd</sup> Session on Accessibility and Affordability and 3<sup>rd</sup> Session on Health and Safety in Gurugram’s Intra-city Transportation context. The 2<sup>nd</sup> and 3<sup>rd</sup> Session will start with Theme Presentation and will have experts and experienced speakers from the sector who will deliberate 5 key questions on the session theme. The programme will develop the way forward in terms of White paper for a Sustainable Mobility Plan for Gurugram in line with the Haryana government’s ‘Vision 2030’ document, released in 2017 (based on United Nations’ Sustainable Development Goals) which also highlights the issue-

*‘An inadequate public transport system has encouraged greater reliance on personal transport, which increases congestion and slows down traffic. Ineffective transport management at a more strategic level is also lacking. This is visible in the lack of connectivity between districts by rail, traffic surveillance and insufficient traffic police personnel in the state.’*

