TRAFFIC MEETING – 12<sup>TH</sup> MAY, 2011

MUMBAI FIRST CONFERENCE ROOM

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# **AGENDA**

# **Discussion Points**

- 1. Analysis of Traffic Flows and Interruptions
  - Quantum of vehicles on roads
  - · Bottlenecks and jams
  - Construction work
  - · Traffic signals and flyovers
  - · Observation of rules and enforcement
  - Minor aspects of traffic co-ordination that can increase traffic speed.

# 2. Sample Analysis

- Travel from Airport to Nariman Point (West)
- Travel from Powai to Horniman Circle (East)

## Summary of Points that were discussed earlier

- 1. Quantum of private and public vehicles and regulation of their numbers.
  - The present status of vehicles on the roads in given in the newspaper cuttings attached.
- 2. Conditions of the Roads, the Walkways and Pedestrian Bridges.
  - · Signals and co-ordination of signals on one road for smooth flow
  - · Pedestrian crossings and utility
  - · Road repairs
  - Accident prone stretches
  - Dedicated lanes and bus-stops
  - · Road markings and direction indicators
  - One-way routes and no parking zones
  - CCTVs at road junctions
- 3. Enforcement of traffic rules.
  - Rush hours
  - Drunk Driving
  - Naka Bandi
  - Towing of vehicles
  - Signal and Lane Jumping
  - Biometrics and Number Plates
- 4. Parking and floating vehicles with drivers.
  - Illegal charges
  - · Parking on both sides of lanes
  - Paid parkings
- 5. Road blocks and traffic flow interruptions
  - monsoon
  - festive seasons
  - · proximity of construction sites.
- 6. Education and awareness of traffic/road discipline.
  - Teach children 'Road Safety'
  - Safety courses and handouts
  - Licencing/Affirmation of drivers at RTO
  - Helpline
- 7. Traffic police and its responsibilities.
  - Manpower
- 8. BRTS and other public transport systems.
  - Buses
  - Taxis
  - Auto Rickshaws

#### **BACKGROUND: BOMBAY FIRST TRAFFIC GROUP**

- Bombay First Road Traffic Group functioned effectively from 2005 2008 with the following members:
  - 1) Mr. Noel Tata
  - 2) Mr. Narinder Navar
  - 3) Mrs. Lalita Gupte
  - 4) Mr. Satish Mathur (Traffic Commissioner)
  - 5) Mr. Alok Gupta
  - 6) Mr. P.R.K. Murthy
  - 7) Mr. Gerson da Cunha
  - 8) Mr. Alyque Padamsee
  - 9) Mr. V.S. Palekar
  - 10) Mr. Minoo Shroff
  - 11) Mr. Sanjay Ubale (Secretary, Special Projects, GAD, GoM) was also involved in the discussions.
- 2. The last meeting was held in April 2008, after that the meetings could not be held.
- 3. A note prepared by the Jt. Commissioner of Police, Traffic in 2005 enumerating initiatives taken by the traffic control branch in that period is given below:

The peculiar peninsular shape of Mumbai with Central Business District situated at its apex pose its own unique challenges in terms of traffic management. The situation has become more dynamic because of exponential growth in human and vehicular population and constraints in developing the transport mechanism to keep pace with the growth.

Statistics reveal that from 1951 to date the vehicular population in Mumbai has increased by 3700% whereas the road length has increased by only 230%. As a result the vehicular density of 700 vehicles/km is extremely high as compared to the international average of 300 vehicles/km. Even within India other cities like Delhi and Bangalore have much lower vehicular densities of 163 and 479. The situation with other modes of transport is no better. Today during peak hours local trains carry an average of 5000 passengers against their rated capacity of 1700 passengers. The available infrastructure of road and rail transport has reached a saturation point.

To resolve the traffic related problems of Mumbai city Traffic Control Branch approaches with a three pronged strategy. One being its primary role as an enforcement agency to instill discipline among road users. Second is that of creating awareness regarding road safety and third the engineering.

#### **ENFORCEMENT:**

To specifically counter the negligence of the motorists Traffic Police have been penalizing them wherever they find that law has been violated. Comparative statement of the figures of enforcement of last four years are as under:

Year	Cases made out (in lacs)	Fine collected (in crores)
2001	12.58	9.53
2002	13.80	10.58
2003	15.10	11.04
2004	19.57	13.83
% Increase over 2001	55.56	45.12

Comparative statement of the cases made out by Traffic Control Branch against the movable encroachments on public roads, under the provisions of Bombay Police Act and Public Land and Convenience Act, is given as under:

Year	Cases made out
2001	21,646
2002	22,332
2003	25,343
2004	25,556
% Increase over 2001	18.06

#### Traffic Control Branch also:

- > Undertakes special drives frequently to penalize the motorists committing specific traffic violation
- Studies the roads and junctions suffering from serious traffic problems and imposes restrictions like No Parking, No Entry, No Right Turn, U Turn, etc. From Jan. 2004 to date we have imposed 202 such restrictions.
- ➤ Has procured 100 Alcohol Detectors, 20 Speed Check Guns, 4 Portable Signals, 56 Flood Lights, 485 Parabolic Crash Barriers, etc, under Modernization programme. We have also proposed procurement of 150 Motor Cycles, 300 Solar Traffic Signals, 15 Laser Speed Check Guns, 10 Vehicle Mounted Speed Check Guns, 100 Alcohol Detectors for better enforcement by Traffic Police.
- ➤ It is obvious that people will be more discipline and law abiding if administrative set-up is more visible. To improve the visibility of traffic police. Traffic control Branch Mumbai has:
- undertaken construction of 11 traffic police chowkeys below the flyovers on important arterial roads in the city.
- 2. Have undertaken renovation of existing traffic chowkies. In the year 2004-2005, renovation of 4 chowkies namely Colaba, Bhoiwada, Kalbadevi and Airport has already been done.
- 3. Installed Traffic Pedestals and booths at prominent junctions.
- 4. Improvised and redesigned motor cycles used by patrolling staff and
- 5. Procured modern gadgets like Reflective Jackets (1764 nos.) and 1 FD Batons (500 nos.) to improve visibility of traffic police even during night time.
- Besides the above mentioned the following tasks were undertaken/accomplished during the year 2004 and 2005.
- 1. 551 Traffic Police constables who have completed 12 years of service have vested with powers to impound licenses. This has lead to an increase in our enforcement staff.
- 2. To make the enforcement against unauthorized parking more intense. The number of private towing cranes has been increased by 119.
- 3. To assist Traffic Police, Traffic Wardens have been deployed through private security agencies.
- 4. We have started keeping record of offenders, their motor vehicles as well as their driver licenses. This has started paying off within short period and 55 cases of duplicate licenses have been detected so far.

- We have implemented dedicated bus lane for BEST buses from CST to Mantralaya in co-ordination with BEST.
- Stringent action was taken against the illegal parking of Auto Rickshaws on Aakurli Village Road
  which had made plying of BEST buses impossible on this road. The road is now made clear for
  BEST buses.
- Illegal parking on Bhulabhai Desai Road and Dadi Seth Aagyari Lane was curbed and the MCGM
  was persuaded to modify existing Pay & Park on B.D. Road from the earlier angular fashion to the
  parallel parking.
- 8. Curbed illegal parking on Dadi Seth Aagyari Lane.
- Stringent action was taken against the hawkers on Sant Rahidas Marg, Abdul Rehman Street and
  roads outside CST, Churchgate, Byculla and Borivali railway stations with the help of MCGM and
  the carriageway was reclaimed for movement of traffic.
- Action was taken against the pedestrians, crossing the road haphazardly outside CST and Churchgate railway stations and discipline is instilled in the pedestrian traffic.
- 11. Traffic Branch has successfully regulated movements of Private Bus operators in South Mumbai. Similarly banned parking of interstate buses at Dadar and other locations.

#### **EDUCATION:**

- > Traffic Police have been conducting traffic sessions in 512 schools, educating approximately 67790 students about road discipline (free of cost) through the movement called "Road Safety Patrol".
- > Traffic Control Branch has Children Parks at Ghatkopar and Colaba where school children are exposed to learn the road culture. Recently we have upgraded these children parks with the sponsorship from private entrepreneurs. We have also introduced the facility of Mobile Children Park for those children who are unable to visit Children Park.
- ➤ Traffic Control Branch has been conducting training program and safety courses for truck, tempo, taxi, autorickshaw and Bombay Electricity Supply and Transport Ltd. (BEST) bus drivers regarding road safety and defensive driving. In the year 2004 and 2005 training course for safe and defensive driving was given to 110 drivers and 10 officers of State Transport Corporation. 50 drivers and 5 officers of BEST, 80 taxi drivers and 125 autorickshaw drivers.
- With the twin objective e of making the general public aware of their safety as well as that of other road users, Traffic Control Branch observes a Road Safety Week every year within maximum publicity is ensured to the events by involving the newspapers/electronic media, painting hoardings, displaying banners, cut-outs, distributing hand bills, etc. The 16<sup>th</sup> Road Safety Week was celebrated in the month of Jan. 2005. During this week, besides above said activities we had also organized Rallies and painting competition for school children. The eye check up camp and blood donation camp were organized for Traffic Police personnel.
- Besides the above mentioned the following tasks were undertaken/accomplished during the year 2004 and 2005.
- To enable the road users to plan a safe and convenient journey rela time traffic updates are made available to citizens through channels like Radio Mirchi, Radio City, Red FM 93.5
- 2. These updates are also available on the official website www.trafficpolicemumbai.org
- During Ganesh Utsav and Navaratri people are large were also educated about traffic rules by displaying banners all over the city

- 4. A helpline 30403040 (Interactive Voice Response System) has been made available for the public.
- We have also proposed installation of stationery vehicle mounted Variable Messaging System (VMS) at 23 strategic locations in the city. VMSs at Mahim Traffic chowky and Dadar TT junction have already been made functional and installation at Marine Drive is underway.
- 6. Traffic Information Kiosk was installed at NCPA on Pravasi Bhartiya Divas.
- Lectures on Road Safety were conducted at J.J.Hospital and Lokmanya Tilak Hospital on World Health Day 2005.
- 8. Poster Exhibitions on road safety were conducted at schools.

However, all these educational awareness activities undertaken by Traffic Control Branch do not touch the technical issues which can only be handled by competent authorities. Availability of funds, space and manpower is also a major constraint in undertaking this activity on larger scale. Traffic Control Branch does not get any grant for publicity. It would be significant to know that Delhi Traffic Control Branch gets 5 crore per annum for the purpose.

#### **ENGINEERING:**

- ➤ Indian Road Congress warrants lay down some specific conditions for setting up of traffic signal at specified junction. Traffic Control Branch, Mumbai in association with Municipal Corporation of Greater Mumbai (MCGM) regularly update the records regarding junctions requiring traffic signals, installation of which is undertaken depending upon the funds released by the Government on yearly basis. Till date there are 1215 junctions of which 428 have been signalized and 150 more have been earmarked for setting up signals.
- ➤ 66 pedestrian crossings have also been signalized to facilitate safe pedestrian movements. It is further stated that because of existing flaws in pre-set timing of the signal, a new system "Area Traffic Control" funded by the World Bank will soon be implemented by Mumbai Metropolitan Regional Development Authority (MMRDA), MCGM and Traffic Police.
- ➤ Besides the above mentioned, the following tasks were undertaken/accomplished during the year 2004 and 2005:
- Installed LED signal aspects at OCS junction, Siddhi Vinayak jun., Haji Ali jun., Suman Nagar Jun. and Worli Naka.
- 2. Installed Vehicle Actuated Signal (VAT) system at Bandra Kurla Complex jun. through MMRDA.
- 3. Restored reversible One Way use of Love Grove flyover, Worli.
- Persuaded MCGM to reroute traffic on Sion flyover in two way mode. This will soon be implemented.
- 5. Persuaded the BEST authorities to ply their buses on J.J. and other flyovers.
- 6. Persuaded MCGM to reinforce central dividers on N.S.Road (Marine Drive). This has reduced fatal accidents on the said road drastically.
- 7. List of unauthorized speed breakers in the city has been forwarded to MCGM and continuous follow up is being done for their removal.
- 8. Information of 43 accident prone spots and the corrective measures required to be taken has been forwarded to MCGM. A Traffic Management Unit (TMU) has been established under Mumbai

Urban Transport Project under the administration of MCGM. This unit is devising action plans to minimizing the accidents based on our information.

- Suggested to the MMRDA to paint road markings and upgrade traffic signal systems on reconstructed Eaastern and Western Express Highways.
- 10. With the objective of finding solutions to the parking problems in the city. We have suggested amendments in the Development Control Regulations 1991 to the MCGM. To address to this problem sustainably we have also suggested comprehensive measures to the Government.
- 11. Studied traffic problems in Bombay Central, Sion Rly. Station and Chembur areas and suggested remedial measures to MCGM, BEST and Railway authorities. Similarly we have informed the Government about the traffic problems in Mahul area and have suggested measures for the same.
- 12. We had communicated the Government about the ill effects of development of mill lands and high density commercial occupancies along important arteries like AAtria Mall, Dr. Annie Besant Road, Worli on the traffic in the city.
- 13. We have suggested the BEST authorities to use their Depots for Pay & Park during the day time when they are vacant.
- 14. We are persuading the schools situated on major arterial roads like Villa Teresa, Don Bosco to provide school bus facility and encourage the parents to make use of those buses for their wards rather than using private vehicles.
- 15. We are following up with MCGM for increasing the charges of Pay & Park systems and systemize their operations.

#### OFFICE ADMINISTRATION AND WELFARE.

#### During the year 2004-2005 we have:

- 1. Induced 221 police constables from local police into Traffic Police.
- 2. Given promotions to 281 personnel of constabulary grade.
- 3. Recommended 17 Traffic personnel for advanced increment and 2 for Police Medal.
- 4. Publicized the good work of Traffic Police personnel through FM Radio Channels and Bulletins.
- 5. Provided good quality raincoats to Traffic personnel on sponsorship basis.
- Set up medical check up camps, eye checking camps for Traffic personnel at Traffic Police H-Qa and KEM hospital.
- 7. Set up a Gymnasium and Recreation Centre at Traffic Police H-Qs.
- Upgraded canteen at Traffic Police H-Qs.
- 9. Installed Water Coolers at Installed water coolers at Traffic Police H-Qs.
- 10. Conducted management courses for Traffic Police officers with the assistance of SYMBIOSYS.
- Sent 70 Traffic Police Officers to the Central Institute of Road Transport, Pune, for training course on Road Safety and Traffic Management.
- 12. Conducted workshops for stress management for traffic personnel.

- 13. Conducted seminars for Traffic Police personnel on Heart Decease with help of Wockhardt Hosp.
- 14. Conducted lectures of investment professionals for Traffic Police personnel on small savings and tax planning.
- 15. Conducted camp for Traffic Police personnel on AIDS awareness.
- 16. Organized Advance Traffic Management Workshop Seminars for Police Officials involved in traffic management in other metropolis of the country.

## DISCIPLINARY ACTION:

Traffic Branch does take disciplinary action against its own officers and men. To date 23 officers and 34 men from constabulary staff are transferred out of traffic branch.

LIST OF SALIENT PROPOSALS PENDING WITH THE GOVERNMENT AND REQUIRING URGENT ATTENTION:

- > Increasing manpower to Traffic Control Branch.
- > Creating 21 posts of engineers in Traffic Control Branch for Area Traffic Control System
- Allotting to the Traffic Control Branch 50% of the time collected by it.
- Increasing fines compounding charges in Motor Vehicles Act.
- Setting up of Traffic Training Institute at Bandra Kurla Complex.
- Revision of the post of Asst. Engineer at Traffic Police H-Qs.
- CCTV system for 100 junctions in the city.
- 4. A Six-point programme to reduce traffic congestion in Mumbai was prepared in 2008 and is listed below:

There is a growing sense of helplessness and cluelessness about the growing menance of traffic jams in Mumbai. No serious and comprehensive suggestions are coming forward as to what we can and should do? That we should develop public transport is obvious but hardly an answer. Firstly, it will take years and crores if the zero progress so far on Versova Ghatkopar metro line approved and tied up for over three years is any indication.

It is an open secret that Bandra Worli sea link consisting Rs.1300 cr. Will be a dead white elephant when it is born in 2009 as it will only shift traffic jams from Mahim to Haji Ali. The govt. must be in a dilemma whether to extend this all the way to Nariman Point (by which method and at what cost? – again disputes!) and will it be really effective, if and when it gets completed! By now people are clear that flyovers and road widening wont reduce congestion especially when Nano and other cars will more than grab whatever "space" that will be created! It is time we realize that we now need a governance focus – not because it is a superior solution but possibly the only solution to this extra ordinarily congested metropolis! First, we must recognize that growing traffic congestion is due to:

- Growth of vehicles at 10% p.a. four times that of population and each new car needs at least three additional spaces for parking (doubling every 5 years)
- Avg. occupancy of only 1.8/car and three out four cars have drivers.

- In 2006-07, avg price of cars bought in Mumbai was up from Rs.3.30 lakhs to Rs.5.20 lakhs (an increase of over 70%). Obviously with Nano in the offing, we may see a lot of small cars a new segment those graduating from 2 wheelers!
- Neither availability of parking nor its pricing nor the fines for traffic offences have changed at all
  during the last two decades! Prices of private parking have gone up by 10 times during this period!

Cars and buses compete for the road space and with more vehicles using the same road space with growing indiscipline, avg speed of all vehicles crops faster than the growth in the vehicles and due to more stop and start driving, there is more emission. If we improve the productivity of roads and vehicles with a focus on governance, we can reduce the congestion significantly. The rate of success will depend upon how diligent and committed we are – both the administration and the people!

The six point congestion mitigation program covers:

- 1. Serious management of parking in all parts of city
- 2. Regulating the total no of automotive vehicles thru licensing and pricing
- 3. Using IT, higher fines and other governance measures to radically improve traffic
- 4. Adoption of BRTS system as far and as much as possible (at least 20% of buses)
- 5. A fair deal to taxi/rickshaw trade to provide high quality user friendly service
- 6. Serious promotion of carpooling and other governance oriented projects

## Parking solution for Mumbai in 2008

It is administratively easy, fully quantifiable and can be implemented in a short time without much investment. It involves an extension of "users pay principle" to road space. Yes, it requires some reduction in a huge subsidy – that is currently offered to car owners to increase the congestion and pollution – in the form of free or heavily subsidized use of very expensive road space. If we accept that in a choking Mumbai, we must either pay or don't park the vehicles, it can make a difference. Since we are so much used to this subsidy that it is now almost considered "a right by motorists to park the car anywhere any time without any fee". If you have a driver equipped with mobile, he can keep on running in circles to avoid getting caught or paying any fee. We don't mind parking cars for the whole day on both sides in lanes, double parking on busy roads and on bus stops or virtually anywhere without any thought how it affects traffic when we block one or two full lanes. When we park even in one lane, we block the two lanes – the second for getting into and out of parking. Can we not change this chaos and anarchy? Today we have barely 100 parking lots with 6000 on road parking spaces for which we pay Rs. 5/hr. going down to Rs. 3/hr. as the no. of hours for parking increase! It is not difficult to:

- 1. Convert at least 30,000 spaces from free parking to paid parking
- 2. Introduce flexi parking charges ranging from Rs.5/hr to Rs.40/hr. depending upon the location, time and size/type of the vehicle
- Parking tariff increases as the number of hours increase as is commonly done in all other major cities such as New York
- 4. Further, the tariff for underground or multi storey parking lots should not be higher than on the road
- 5. Any vertical parking should not be "subsidized by a dubious grant of fsi for commercial development" as such solutions are worse than the problem!

#### Parking solution - 2008 should provide:

- Yellow marking on road (indicating where to park and where double fines apply)
- There should be monthly area permits for residents/regular users for parking during the night (similar scheme for private buses and other vehicles)
- Use of time meters and pre paid smart cards which can be used anywhere in city offering discounts to encourage convenience and transparent practices
- It should be supported by higher and graded fines
- and IT based ticket fixing for parking offences to ensure very high level of compliance in an
  efficient manner
- should be implemented by a unified parking authority combining planning, supervision and enforcing discipline thru a transparent public private partnership.

2. Regulation of number of vehicles in Mumbai

Mumbai being a long, slim city with only 3 north south arteries and several congested zones, it would be unfair and ineffective to have a congestion charge payable at the entry into the island city. Instead, it is important to freeze the number of vehicles that can be permitted to use the roads in Greater Mumbai. We should allow all the existing cars to get a license to use the city road on payment of 1% of purchase value of a car as an annual fee (irrespective of the time, place of purchase and purchase price. (We can use a simple ready reckoner for this purpose). For new cars, we should establish a quota – say a total of 2% every year (to be split into each class of engine size – i.e. below 1000 cc, 1000 cc to 1500 cc and above 1500 cc. Similar procedure can be adopted for 2 wheelers. Existing users can sell their number plates by scrapping their vehicles.

The primary objective of this scheme is not so much to collect revenue, although it would be substantial, but it is to regulate the no. of vehicles in a manner fair and equitable to all. This is balancing of demand and supply of road space so that everybody can use the road space in a fair, thoughtful and equitable manner.

3. Use of IT to Improve Governance

When govt. has already planned a use of smart cards with biometrics for people with below the poverty line for distribution of food subsidy in a targeted manner, it should be very easy and much more effective to develop a data base for all vehicles and all drivers in a period of few months. This will enable traffic police to record vehicle no. and then establish the previous compliance record instantly and to use this info for fixing a ticket or sending a challan thru use of basic and elementary IT in a timely and cost effective manner. Developing a comprehensive data base of number plates and driving licenses can be completed in a few months. It is much simpler than what depositors achieved in the year 2000 which radically improved the governance in the stock markets. We must develop a comprehensive system of data base and its use to apprehend traffic and parking offences at a much higher level so that it will work as an effective deterrent. It is time that we enhance the level of fines for various offences such as parking and double parking, speeding, overtaking, lane indiscipline, violating traffic lights, alcohol, road rage and violence, etc. The repeat offences in a time period should provide for higher fines and with the use of IT it should be very easy to control thru deterrence.

To support the use of IT and higher and graded fines, we need to increase traffic wardens who can note down the vehicle number of offending vehicles, fix tickets where possible and physically prevent vehicles to drive thru amber lights at critical traffic junctions. We should not waste years or even months in implementing such simpler reforms on which there should be common consensus. In addition to extensive use of IT, we should train and equip traffic staff with requisite training and equipment. This will cost very little compared to futile projects like signal optimization costing Rs.70 cr. And the sea links and waste of money for last several years on studies and reports for sea transport!

4. Adoption of BRTS as Far, as Much and as Early as Possible

The buses are getting less popular and more loss making primarily because they have become slower on account of more and more vehicles occupying scarce road space. The other side of regulation of vehicles thru the control in their number and strict and widespread observance of parking rules would be to use the road space thus getting freed for improving the speed and comfort for bus journeys. To implement a perfect Bus Rapid Transit System is an ideal that is not going to be very easy and will take quite some time. Dedicated lanes in the center of roads require some engineering, construction, time and investment (although much lower than railways) we should consider this as an urgent public transportation agenda for the next 12 months. In fact, in addition to the center lane full system, it is worth while even to accept somewhat compromised version of kerbside lanes where central lanes wont be possible in a realistic manner. Needless to say, kerbside system is an interim solution. We must work on full center lane system on all wider roads such as express ways and suburban main arteries.

Together with better parking, regulation of vehicles and better discipline thru the use of IT and governance, we should not hesitate in introduction of kerbside BRTS. For example, why cant we make most (if not all) parts of one of the most popular commuter route of Andheri – Nariman Point via Bandra, Mahim /worli, Pedder Rd., Marine Drive, N. Point as kerbside lane BRTS and run a bus every 30 – 45 seconds on this artery with fewer stops with feeder buses providing passengers from other areas so as to reduce the total

time of journey by at least 25% (with high reliability and perhaps every third bus as an AC bus with only twice the regular fare!) Similar routes can be introduced on other arteries such as Chembur – Colaba, Andheri – Vikhroli and other similar routes besides the routes on express ways. It should be possible to define min acceptable level of discipline for sub optimal routes for early introduction to offer an alternative to private vehicles while planning for full features BRTS as early as possible. While BRTS must get maximum attention from BEST, it must also examine other features to improve the bus service as innovatively as possible such as various passes, bus rail combo, hub and spoke structure for routes, more AC buses with much lower fares than now (on non peak direction only 25% higher than the reg. bus fares)!

## 5. A win win deal for Taxi & Rickshaw Trade and the City

When we are making it expensive and difficult for private vehicles, this will automatically mean lot more business for taxi and rickshaw trade as they would serve the needs for point to point transportation. If they can improve the productivity thru better equality and reliable service, their popularity and profitability will increase. They have a high proportion of fixed costs and more km/day will mean more income.

- We can reduce the no of taxis and rickshaws by offering voluntary retirement scheme for about 20% of vehicles
- 2. The rest must adopt electronic metering system
- Changing to all new vehicles (this will give take care of reduced sales of private vehicles by the
  auto manufacturers) by all taxies and switching over to rickshaws to CNG using Nano cars. They
  can then be permitted to all over Mumbai
- 4. Non air-conditioned journey cost for first 3 km must be 25% higher. Between 3 to 10 km, cost/km should be 10% higher and for higher distances the cost should be same as now, with provision for meter running faster when the speed is slower.
- 5. Air conditioner can be switched on only when the passengers want it and then the meter should run 20% faster.
- 6. All meters must be electronic.
- 7. All taxies (incl CNG Nano replacing the autorickshaws which can run all over city) must accept ride shares with shared benefits from extra passengers fairly.
- 8. Taxies must become members of radio paging system by paying a subscription. Alternatively, they should be part of one of the operators.

### Other Governance oriented Measures for 2008

- We should provide baggage carrying buses from air terminals and bus and train termini. About 300 specially designed buses with provision for carrying baggage on key routes should work round the clock.
- We should support car poling and bus pooling especially for commuters. The support must be thru
  official endorsement and reduced parking fees. A common smart can be used for parking and credit
  and debit for rides given or taken for incentives.
- Build several high quality skywalks from train stations connecting major roads thus making walking a pleasant experience. Station area decongestion must be undertaken to all the major railways stations.
- Intercity buses should not enter the island city, build several termini in the suburbs linked with major points in city by luggage carrying buses.
- Trucks should be completely banned from all congested parts of the city and in most areas their
  movement should be restricted to nights only. Garbage collection can also be restricted to nights
  only.
- Allow exclusive use of incremental revenues whether from parking or fining for traffic management and infrastructure improvement projects.

#### What are the goals?

There could be number of small, area specific measures that need to be considered. Such governance focused program of traffic management will be beneficial to even car owners as they will get much better value for their expenditure. The goals of this program are:

- Improving the speeds of all vehicles, more pass km litre for all vehicles
- More km and more passengers per da for buses, taxis and even cars

- Reduced emissions total as well as per passengers
- · And overall improvement in the passenger fatigue

This entire program is totally self financed (in fact, it will provide surpluses for other common projects such as sea transport and rail transport unlike sea links and flyovers. All the users incl fee paying private vehicle users will find that they are getting much more value for the fees they pay in a great improvement in overall ambience. This holistic approach can deliver visible results in a few moths time. Such program can succeed if implemented in an integrated manner whether under one integrated authority or thru a consensual approach is less important but decisive, clear information based decision making will make a great difference.

Let us give governance a chance!

## 5. In the last meeting held in 2008, the following problems existing in Mumbai were enumerated:

- 1. Important that we do a study to see how better flow of traffic can be arranged at Haji Ali/Mahalaxmi. There is always a bottle-neck here and some early attention is necessary.
- 2. Traffic arrangements in Mahim area: Presently, Swatantrya Veer Savarkar Marg is made ONE-WAY for south bound traffic from the junction at Mahim Fort upto the intersection point with Sitladevi Temple Marg from 7 a.m. to 2 p.m. Thereafter, it is ONE-WAY in the opposite direction. This arrangement results in the intersection of North & South bound traffic at two points from 7 a.m. to 2 p.m. at either ends of ONE-WAY section. The suggestion is to make this section permanent ONE-WAY for north bound traffic. This will avoid the intersections in traffic. To compensate, A S Gaya Marg can be made ONE-WAY for south bound traffic from 7 a.m. to 2 p.m. A dedicated BUS LANE can be proposed for north bound traffic during these hours. Moreoever, Sitladevi Temple Marg will have to be made ONE-WAY in the opposite direction i.e. from east to west as against from the existing west to east.
- 3. Andheri Ghatkopar Link Road the shaded area shows where either double parking of trucks or the road is dug up with no work going on for several months. This is hampering flow of traffic and needs to be looked at.
- 4. Consideration be given to allowing trucks and delivery vans to operate in the city only during night hours. This would definitely help particularly when a lot of construction work is going on, and the roads are either dug up or traffic is closed because of construction of flyovers.
- 5. Police need to ensure that pedestrians do not cross at traffic lights when traffic is flowing during green signals.
- 6. Removal of angular parking on Bhulabhai Desai Road around Amarson stores.
- 7. Removal of hawkers in front of Mahim church on Wednesdays which is a Novena day. Mr. Mathur mentioned that this has happened in 40 years and now there are no hawkers here any more.
- 8. Penalty for jay-walking at churchgate and V.T. stations. A fine of Rs.120/- is levied on people jay-walking in front of these stations. With the result of this fine, people are now hesitant to cross and even the students are not spared and are fined on the sport for jay-walking. Mr. Mathur requested the group to take up this do-able in the form of a campaign which could help stop jay-walking completely.
- Two right turns and a left turn along Mahim junction to Sitladevi during peak hours have now been banned.
- Median on Marine Drive: MCGM is in a dialogue with Rahejas to put up a median but the matter is being prolonged and now there are barbed wires put up. Mr. Mathur mentioned that MCGM and

Rahejas should solve this matter quickly and have the median put up. He mentioned further that he personally likes aesthetics but we should also try to save lives as well.

- 11. A good suggestion was given by the Residents' Association of Kemps' Corner. This was submitted to MCGM after Mr. Mathur made some improvements. The required work was to be carried out by Godrej, but it has not even started. Everything has been properly documented with him but neither MCGM nor Godrej are moving ahead.
- 12. At Marine Drive there is a front called M. V. Asia which is under World Bank. Mr. Mathur informed that he does not know why and what are they doing there? This apparantly shows a lack of coordination between different agencies.
- 13. Sion-Dharavi Road: A study has been done, costing has been done but nothing is known as to what is happening further. All the 3 circles on this road have to be removed.
- 14. Road below Jog flyover at Andheri going towards the airport is problematic. This road has to be widened upto 61 metres and a super elevated road will be made which will take 3 to 4 years. According to Mr. Mathur, this problem is very difficult to tackle.
  - Mr. P.R.K. Murthy (MMRDA) informed that there re-engineering problems at the turn going towards the airport. These problems need to be sorted out. Mr. Murthy was requested to discuss this point in the next meeting.
- 15. Mr. Mathur informed that after turning right from underneath of Jog flyover, there are shops right n the service road. Also as you turn right, you hit a pool of water. This road is under MCGM and PWD and shops on the service road plus the pool of water is a big obstacle to the smooth movement of traffic.
  - Mr. Murthy informed that the eligibility of hutment dwellers/shop keepers is being assessed and once it is done the huts/shops will be cleared.
- 16. Situation is again bad further up the same airport road near the cigarette factory as well as the petrol pump near the AAI colony.
- 17. Last obstacle on this road cited by Mr. Mathur is the big garden near Ambassador Sky Chef before taking final turn to Sahar Airport.
  - Mr. Murthy was requested to do a study and clear this rotary near the airport.
- 18. Mr. Mathur also informed that there were 27 VVIP movements last year. These movements from the airport to the city and vice-versa also disturbs the normal pattern of traffic. He suggested that VVIP should not be received at the airport. Instead they should fly down to Rajbhavan or Kunjali by helicopter and received there.
- 19. Mr. Mathur also mentioned that there is no improvement yet on Senapati Bapat Marg. Houses for the slum dwellers are ready and they should be moved out so that the road is free for traffic. It is taking unduly long time to move these people.
- Presently a fine for wrong parking is Rs.100/- for cars and Rs.50/- for taxis. Fine for taxis should be increased to discourage taxi drivers for wrong parking.
- According to Mr. Mathur there is not much discipline upto Mahim junction. After Mahim autorickshaws should be on one lane which does not happen. MMRDA should do lane-marking for autorickshaws.
  - Mr. Nayar wished to know how do we reduce the taxis in the city from the present 55,000 to 30,000.

- Mr. Mathur informed that one more larger issue is that hardly any contractor wants to work at night. We should insist on contractors working 3 shifts to ensure work moves faster.
- 23 The sacrosanct yellow box rule must be implemented at all traffic lights - junction. Cars stuck in the middle of a traffic junction, must be heavily penalized as this is one of the main causes for pyramiding traffic jams and road rage.
- 24. Traffic lights must be on from 7 a.m. to 2 a.m. every day.
- Parking in No Parking Zones, double parking and slow cruising, particularly by taxis must be strictly penalized.
- Apart from having well surfaced non-potholed roads, all manholes must be level with the road This is not so even on Marine Drive.
- Introduction of High Occupancy Vehicle Lane on selected stretches of key arteries with due consideration of logistics.
- Positive encouragement of carpooling (current rules don't permit a formal car pool wherein a rider can pay a small amount to the ride provider)
- A rapid and quantum increase in ground level pay and park sites (currently, for each pay and park car space, there are more than 20 legally permitted free road side parking spaces if we consider the city as a whole) and if the parking tariff is increased in line with the cost of cars, fuel and real estate, it can make a material difference to the traffic discipline, a sense of fair play and a critical step towards "user pays" regime. A substantial increase in revenue is the least important positive outcome of this overdue measure (although this revenue is welcome and can be exclusively spent for traffic management).

#### Parking: 30.

- a) Serious management of parking in all parts of city
- b) Regulating the total no. of automatic vehicles through licensing and pricing
- c) Using IT, higher fines and other governance measures to radically improve traffic
- d) Adoption of BRTS system as far and as much as possible (at least 20% of buses)
- e) A fair deal to taxi/rickshaw trade to provide high quality user friendly service
- Serious promotion of car-pooling and other governance oriented projects
- g) Yellow marking on road (indicating where to park and where double fines apply) h) There should be monthly area permits for residents/regular users for parking during the night.
- (similar scheme for private buses and other vehicles).
- Use of time meters and pre-paid smart cards which can be used anywhere in the city offering discounts to encourage convenience and transparent practices.
- It should be supported by higher and graded fines
- k) And IT based ticket fixing for parking offences to ensure very high level of compliance in an efficient manner
- Should be implemented by a unified parking authority combining planning, supervision and enforcing discipline through a transparent public private partnership.

# Road Traffic Group Meeting held on Wednesday, 2<sup>nd</sup> March, 2005 at ICICI Towers (BKC)

Present: Mr. Noel Tata, Mr. Narinder Nayar, Mrs. Lalita Gupte, Mr. Satish Mathur, Mr. Alok Gupta, Mr. P.R.K. Murthy, and Mr. Vijay Mahajan.

Aim of the Meeting: To discuss few short-term measures/remedial actions which can reduce the traveling time from Nariman Point to Airport.

## Salient Points Emerging out of the Meeting

At the outset, Mr. Noel Tata extended a warm welcome to all those present and thanked them for having come to attend this meeting. He also thanked Mrs. Lalita Gupte on behalf of the group for arranging a wonderful lunch for the members.

Mr. Tata mentioned that we need to put up a paper through CAG which could facilitate short-term measures in order to reduce the travel time from Nariman Point to airport. This paper should suggest improvement of 4 main arterial roads. He emphasized that this group can provide shoulders to Government authorities and requested Mr. Satish Mathur to suggest certain points which he would like the group to take up with the government for implementation.

Mr. Narinder Nayar mentioned that in our proposal we should enumerate the actions which are required to be taken and then take it to the Chief Minister under CAG.

Mr. Satish Mathur began by informing that he and his staff has been working hard and has put in a lot of efforts in recent months to improve the traffic situation in the city. However, he felt, that the hard work put in to smoothen traffic is not getting proper recognition and is not appreciated. Mr. Mathur wished to put on record the efforts made by him otherwise he felt that it is very demoralizing for the traffic branch.

Mr. Mathur highlighted the locations along the route to the airport on which he has already brought about considerable improvements. He also brought to the notice of the members a few obstacles/problems which need to be ironed out with authorities such as MCGM/MMRDA, etc.

#### Following are the improvements/modifications carried out :-

- 1. Removal of angular parking on Bhulabhai Desai Road around Amarson stores.
- Removal of hawkers in front of Mahim church on Wednesdays which is a Novena day.
   Mr. Mathur mentioned that this has happened in 40 years and now there are no hawkers here any more.
- 3. Penalty for jay-walking at churchgate and V.T. stations. A fine of Rs.120/- is levied on people jay-walking in front of these stations. With the result of this fine, people are now hesitant to cross and even the students are not spared and are fined on the spot for jay-walking. Mr. Mathur requested the group to take up this do-able in the form of a campaign which could help stop jay-walking completely.

- 4. Two right turns and a left turn along Mahim junction to Sitla Devi during peak hours have now been banned.
- Bomanji Petit Marg has now been opened.
- 6. Marine Drive have been divided into two lanes so that normal vehicular traffic can also be driven along with VIP entourage now. This ensures that the traffic is not held up everytime VIP caravan is driving on Marine Drive.
- 7. Underneath of "Jog flyover" at Andheri is now lit up and Mr. Mathur informed that it has taken him over a year to get the lights fixed below this flyover.

## Following are obstacles/problems which need ironing out with authorities

- i. Median on Marine Drive: MCGM is in a dialogue with Rahejas to put up a median but the matter is being prolonged and now there are barbed wires put up. Mr. Mathur mentioned that MCGM and Rahejas should solve this matter quickly and have the median put up. He mentioned further that he personally likes aesthetics but we should also try to save lives as well.
- ii. A good suggestion was given by the Residents' Association of Kemp's Corner. This was submitted to MCGM after Mr. Mathur made some improvements. The required work was to be carried out by Godrej, but it has not even started. Everything has been properly documented with him but neither MCGM nor Godrej are moving ahead.
- iii. At Marine Drive there is a front called M.V.Asia which is under World Bank. Mr. Mathur informed that he does not know why and what are they doing there? This apparently shows a lack of co-ordination between different agencies.
- iv. Sion-Dharavi Road: A study has been done, costing has been done but nothing is known as to what is happening further. All the 3 circles on this road have to be removed.
- v. Road below Jog flyover at Andheri going towards the airport is problematic. This road has to be widened upto 61 metres and a super elevated road will be made which will take 3 to 4 years. According to Mr. Mathur, this problem is very difficult to tackle.
  - Mr. P.R.K.Murthy (MMRDA) informed that there are engineering problems at the turn going towards the airport. These problems need to be sorted out. Mr. Murthy was requested to discuss this point in the next meeting.
- vi. Mr. Mathur informed further that after turning right from underneath of Jog flyover, there are shops right on the service road. Also as you turn right, you hit a pool of water. This road is under MCGM and PWD and shops on the service road plus the pool of water is a big obstacle to the smooth movement of traffic.
  - Mr. Murthy informed that the eligibility of hutment dwellers/shop keepers\_is being assessed and once it is done the huts/shops will be cleared.

- vii. Situation is again bad further up the same airport road near the cigarette factory as well as the petrol pump near the AAI colony.
- viii. Last obstacle on this road cited by Mr. Mathur is the big garden near Ambassador Sky Chef before taking final turn to Sahar Airport.
  - Mr. Murthy was requested to do a study and clear this rotary near the airport.
- ix. Mr. Mathur also informed that there were 27 VVIP movements last year. These movements from the airport to city and vice-versa also disturbs the normal pattern of traffic. He suggested that VVIP should not be received at the airport. Instead they should fly down to Rajbhavan or Kunjali by helicopter and received there.
- x. Mr. Mathur also mentioned that there is no improvement yet on Senapati Bapat Marg. Houses for the slum dwellers are ready and they should be moved out so that the road is free for traffic. It is taking unduly long time to move these people.
- xi. Presently a fine for wrong parking is Rs.100/- for cars and Rs.50/- for taxis. Fine for taxis should be increased to discourage taxi drivers for wrong parking.
- xii. According to Mr. Mathur, there is not much discipline upto Mahim junction. After Mahim, auto-rickshaws should be on one lane which does not happen. MMRDA should do lane-marking for auto-rickshaws.
  - Mr. Nayar wished to know how do we reduce the taxis in the city from the present 55,000 to 30,000.
- xiii. Mr. Mathur informed that one more larger issue is that hardly any contractor wants to work at night. We should insist on contractors working 3 shifts to ensure work moves faster.

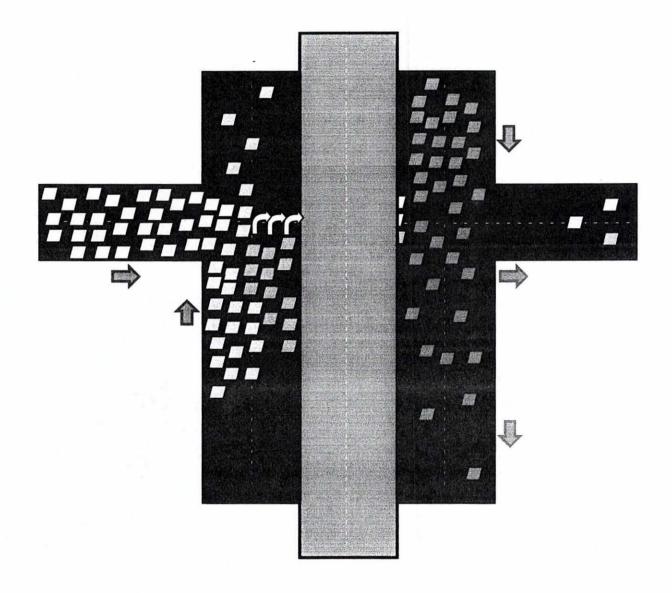
In conclusion, it was decided that we should prepare a matrix and find out the value cost to remove the hutments/shops on the road from Jog flyover to the airport. We should then take up this issue with the Chief Minister through CAG and show corporate willingness. Mr. Murthy was requested to work out how much money would be needed for doing this.

It was decided to have the next meeting on 21st March, 2005 at the office of Mr. Satish Mathur.

There being no further points, the meeting ended with a thanks to the Chair.

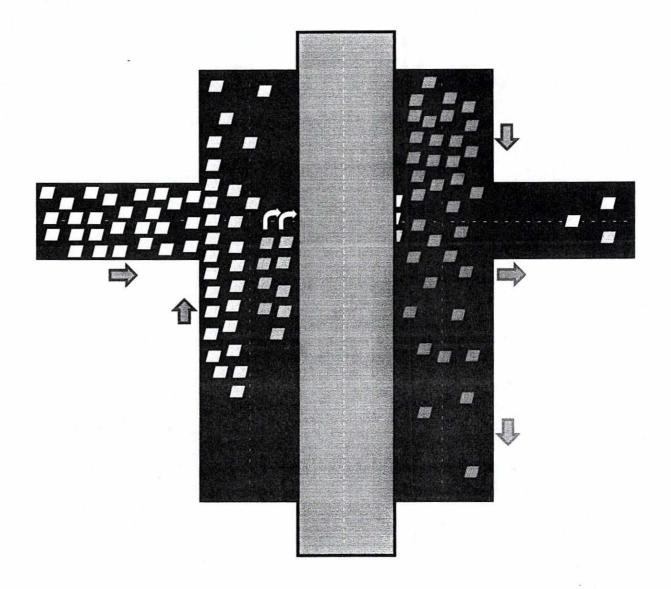
## NOTICE

Please note that the next meeting is now rescheduled on 21<sup>st</sup> March, 2005 at 1100 hrs. at the Standing Committee Hall (next to Municipal Commissioner's Office), 1<sup>st</sup> floor, MCGM Head Office, Mahapalika Marg, Mumbai. This meeting will also be attended by the Municipal Commissioner and his concerned staff. This shall enable the group to discuss issues related to MCGM directly with the Municipal Commissioner.



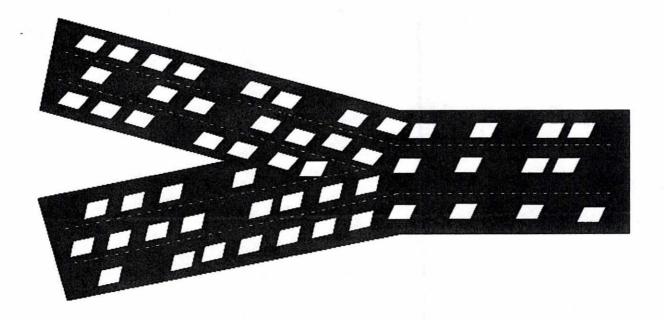
# **Problem**

At the intersection, the road is blocked by vehicles [ marked in white colour] waiting to cross to the other side and the cars waiting to turn to the right [ marked in blue colour] also block three lines and block the passage of the vehicles [ marked in peach colour] moving straight.



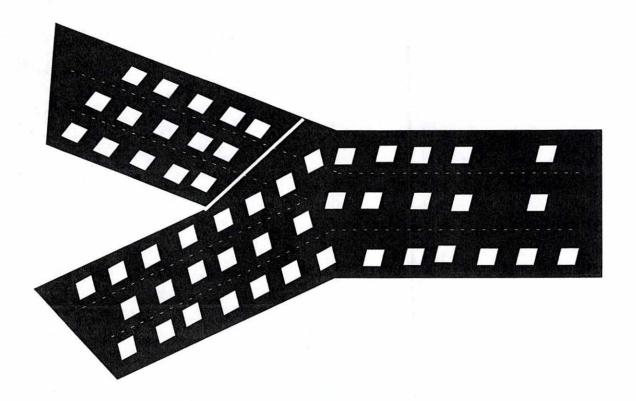
# Solution

The vehicles [marked in white colour] should be stopped before the zebra line at the signal so that they don't block the vehicles [marked in peach colour] moving straight. The cars turning right [marked in blue colour] should occupy the two lanes that are to move right. This will allow free flow of traffic going straight ahead.



# **Problem**

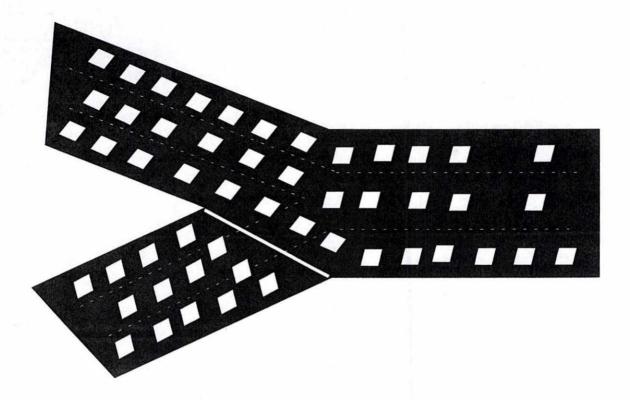
The Two roads [with 3 lines each] are merging and so from 6 lanes reduces to 3 lanes which causes a traffic jam and reduces the speed.



# Solution 1

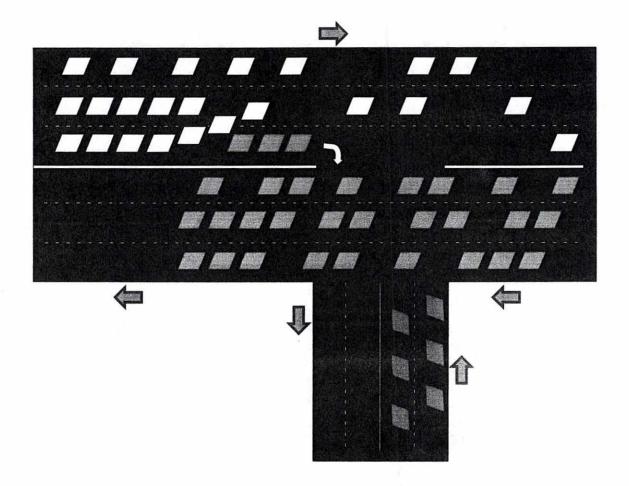
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If there is a signal which stops the traffic coming from each road, alternatively, then the traffic jam may reduce by increasing the speed substantially and resulting in reduced traffic jam.



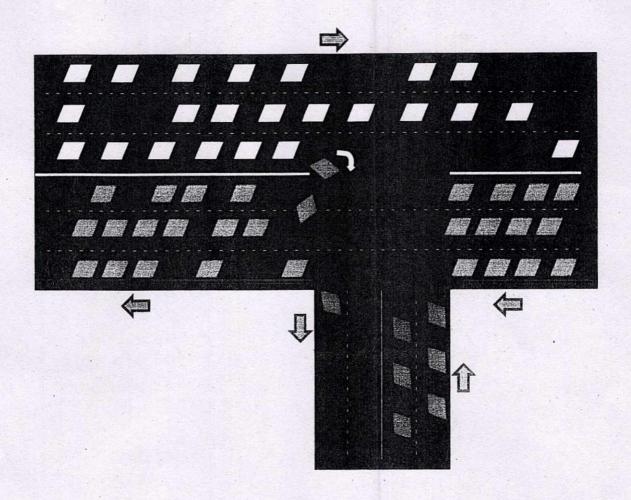
# Solution 2

If there is a signal which stops the traffic coming from each road, alternatively, then the traffic jam may reduce by increasing the speed substantially and resulting in reduced traffic jam.



# **Problem**

There are only 3 cars [marked in orange colour] waiting to turn right but since the signal to turn right is off, they have stopped and they are blocking the cars [marked in white colour] that would like to move straight.



## Solution

The right turns provided for less number of cars [marked in orange colour] should simultaneously be managed by the traffic policemen to clear the road for vehicles [marked in white colour] moving straight or if the right turn is provided for only 1-2 cars, such facility should be stopped where in such scenarios the cars can take a small distance detour to go to its destination.