

EPCA Report No. 25 (August 2006)

Implementation of the Parking Policy

In response to the Hon'ble Court order dated May 5, 2006
In the matter of W.P. (C) No.13029 of 1985; M.C. Mehta v/s UOI &
others

1. This report is submitted to the Hon'ble Supreme Court vide its directions on May 5, 2006 which directed EPCA and Delhi Government to issue necessary directions for implementation of the parking policy
2. This report reviews the implementation of the action plan of different civic agencies - New Delhi Municipal Council (NDMC) and Municipal Corporation of Delhi (MCD) and Delhi Development Authority (DDA) that are included in the Parking policy submitted by the Delhi Government to the Hon'ble Court
3. This report recommends further strategies for proper management of parking and pricing of parking that can decongest commercial and public places effectively

Environment Pollution (Prevention & Control) Authority
for the National Capital Region

EPCA's mandate

In its order dated May 5, 2006 the Hon'ble Supreme Court had given the following directive:

“The E.P.C.A. and the Delhi Government will issue necessary directions for implementation of the parking policy.”

In response to the Hon'ble Supreme Court direction, the EPCA initiated a process of consultation with the concerned civic agencies – New Delhi Municipal Council (NDMC), Municipal Corporation of Delhi (MCD), Delhi Development Authority (DDA) and the Delhi government officials. It held extensive deliberations on the action plans presented by these agencies in the Parking Policy submitted by the Delhi government to the Hon'ble Court.

EPCA is reviewing and monitoring the action plans with the objective to issue appropriate directives that can help to decongest public places. In this regard EPCA has assessed the proposals made by the civic agencies for supply and provision of parking and the proposals for improving the management of parking through regulations and pricing. Issues related to parking in the residential areas and in the vicinity of schools will be taken up by EPCA in the next stage of consultation.

This report therefore:

- i. Reviews the implementation of the action plan of different civic agencies that are included in the Parking policy submitted by the Delhi government to the Hon'ble Court
- ii. Recommends strategies for proper management of parking and pricing of parking that can control demand for parking and decongest commercial and public places effectively.
- iii. Addresses the special concern over the congestion impacts of the number of shopping malls that are being planned by different civic agencies and the ways to control it

1. Review of implementation of action plans

EPCA has held extensive deliberations to review, monitor and expedite implementation of the various proposals that have already been made by different civic and development agencies. It has also suggested modifications to improve the system. The key features of these deliberations are as follows:

Consultation with NDMC

Issues related to provision of parking facilities

1. **Proposal for multilevel parking:** EPCA has asked for schedule of construction of three multilevel parking selected by NDMC at Baba Kharak Singh Marg, Hindustan Times Building Kasturba Gandhi Marg and Sarojini Nagar.

NDMC has mentioned in the Parking Policy that construction work of its three multilevel parking sites would be completed within 24 months from the date of award of work that is August-September 2006. EPCA was informed that tendering had not been done. The Authority asked the agency to submit a schedule with milestones for implementation of the three multilevel parking sites with details such as tendering, start of work and its completion.

On the submission made by NDMC in EPCA's meeting on June 17, 2006, EPCA noted that the agency had not given a detailed schedule with clear milestones for implementation for the EPCA to monitor activities. The agency in its second submission on July 1, 2006 informed EPCA that bid documents will be issued to the short listed concerns in July and after a two-stage bid process, the selection of the concessionaire is expected to be completed by December 2006. A period of 24 months has been allowed to the concessionaire for completing the work and the project will be completed by December 2008.

2. **Parking plan to integrate metro rail:** EPCA has asked for a plan on integration of metro rail and parking in Connaught Place. The Engineers India Ltd (EIL) estimates 10 per cent reduction in parking demand due to Delhi Metro Rail Corporation (DMRC) Dwarka and New Ashok Nagar lines. They have also projected 10 per cent increase in parking demand over the next five years. Additionally EPCA has asked for a parking plan for Delhi Haat and a pedestrianisation plan in these areas so as to facilitate the movement of people. EPCA has asked the agency to submit a schedule and plan on the same.
3. **Holistic plan for Connaught place:** NDMC has also submitted Redevelopment plan for Connaught Place as that has elements of parking management. These include removal of surface parking from Connaught Place and full utilisation of Palika parking.

The two consultants of NDMC – Engineers India Limited (EIL) and Rail India Technical and Economic Services (RITES) made presentations on the Redevelopment Plan for Connaught Place.

RITES has proposed 'Traffic Engineering and Management Plan for Connaught Place and Central Secretariat areas.' The objective is to prepare low-cost traffic engineering and management schemes to cater to the traffic demand in the study areas with a view to optimise the use of the available infrastructure. RITES conducted traffic field studies, which also included parking survey. It was observed that Palika parking is being underutilised and there is intensive on-street parking. Besides these, RITES also observed ill-maintained pedestrian facilities – discontinuous/encroached footpaths and inadequate pedestrian signals and grade separations.

EIL has proposed removal of surface parking from Connaught Place, full utilisation of Palika parking, introduction of new multilevel parking in and around Connaught Place. The new proposals will have the following impact on traffic – 45 per cent of bus routes are not likely to pass through Connaught Circus, proposed parking plan pulls out parking 2459 ECS from inside Connaught Place to outside, new circulation plan does not permit through traffic from inner circle, signals will be removed from outer circle, inflow and outflow from each of Connaught Place extension roads, entry on each radial serves one segment of Connaught Place and no continuous traffic on middle circle. As an impact of relocation of parking facilities outside Connaught Place, the destined traffic will get reduced by 35 per cent and traffic on outer circle would move uninterrupted, as there are no traffic signals and virtual continuous flows.

Parking management at Connaught Place

Pricing of parking: According to RITES the parking policy should discourage surface parking, maintain supply at or below present levels, increase parking charges, better organised facilities and its better enforcement. The proposed parking rates were also presented - premium parking at upto 5 times Palika parking rates for a 4 hour duration, premium parking at upto 4 times Palika parking rates for a 4 hour duration, premium parking at upto 3 times the Palika parking rates for a 4 hour duration. The verandah block parking and the underground Palika parking rates will not change.

The representatives of the New Delhi Traders Association (NDTA) expressed reservation against the proposed pedestrianisation plan and discouraging surface parking. They were of the viewpoint that this would affect their business. RITES informed that several studies done worldwide have shown that pedestrianisation has led to more business. Chairperson EPCA informed that hourly parking rate in Connaught Place will actually increase their customer turnover. Representatives of NDTA informed that

they are not against the hike in parking rate and the proposed plan. Their main concern is that the proposed plan should take the convenience of the customers into account. They agreed to move their cars from the surface parking provided they get a parking space either in the Palika parking or in the surface parking lots. They insisted that they should be given alternate parking space before surface parking is removed. Chairperson EPCA made them understand that land is limited and there is a limit to the additional parking space that can be created. Therefore, demand side management will also be required and a strategy for that will have to be developed.

Consultation with MCD

Issues related to provision of parking

1. **Surface parking:** MCD has been asked to publish the list of authorised parking sites under MCD and upload the list of authorised sites on the agency's website with clear demarcation. Each site on the ground will also be demarcated physically and a public board prominently displayed with details of the name of contractor, timings, rates, area and name of person to be contacted for any problem.

MCD has submitted three lists of parking sites in its various zones to EPCA. List I consists of 110 sites that have already been auctioned and awarded. List II include the parking sites that have been auctioned on November 16, 2005 and are in the process of allotment. List III include the parking sites that have been auctioned on February 27/28, 2006 and are in the process of allotment. EPCA has directed MCD to provide area in square metre and GIS based maps with respect to all these 110 sites listed in List I by July 31, 2006. The Authority will subsequently take up list II and III, by which MCD would have done the necessary work for the listed sites.

2. **Multilevel parking:** Out of the 15 multilevel parking lots to be developed by the agency and listed in the Parking policy, the agency has been directed to select 6 sites on a priority basis and give schedule of implementation, with milestones, to EPCA. MCD has submitted separate time schedules for its multilevel parking sites at Kamla Nagar, Parade Ground and Ramlila Ground and in Shastri Park, Karol Bagh; M block market, GK- I; and NDSE I & II.

Time schedule for multilevel parking sites

A. Parking sites at Kamla Nagar, Parade Ground and Ramlila Ground		
S. No.	Process	Date
1.	Finalisation of tender document and concession agreement	30.7.2006
2.	Issue of RPF/bid document to prequalified bidders	10.8.2006
3.	Receipt of bid	15.9.2006
4.	Evaluation of bid and selection of preferred bidder	15.11.2006
5.	Approval of Standing Committee/Corporation	10.1.2007
6.	Issue of letter of intent	25.1.2007
B. Parking sites at Shastri Park Karol Bagh, M-block market GK-I and NDSE – I&II		
S. No.	Process	Date
1.	Framing of revised rules and regulation concerning multilevel parking and soliciting approval from Standing Committee/Corporation	16.8.2006
2.	Invitation of prequalification bids	15.10.2006
3.	Issue of RFP	25.10.2006
4.	Receipt of bids from prequalified bidders	1.12.2006
5.	Evaluation of bids	15.1.2007
6.	Approval of preferred bidder from Standing Committee/Corporation	1.3.2007
7.	Issue of letter of intent	15.3.2007

Management of parking in MCD areas

Enforcement of parking rules: MCD has informed EPCA that the deputy commissioners of the respective zones have been made responsible to ensure that the parking contractors are complying with the laid down rules, display of rate lists and boards at site containing mandatory information like name of the contractor, parking map, validity of contract, phone numbers where complaints have to be lodged and adhering of single lane parking wherever necessary. Further the Remunerative Projects cell will also have the concurrent jurisdiction for the enforcement of parking rules and will have an overall planning as well as supervisory authority. The agency has to submit a status compliance report on physical demarcation and uploading on the website as per the EPCA's directive for the 110 sites by July 31, 2006.

Rationalisation of parking fee: MCD has proposed to enhance the parking fee and a structure for the parking fees. EPCA has asked for the urgent finalisation of the parking rate that are to be increased and

rationalised. EPCA was informed that the proposal is still pending for approval with the Standing Committee.

The present rate of parking fee charged for a car is Rs. 5 for 2 hours and Rs. 2 for every additional hour. The proposed parking fee is Rs. 10 for first 8 hours. It was agreed that there is lack of clarity in the present parking rates and in particular the structure of slabs. This is leading to tremendous corruption and misuse. It is clear that while the agency has not revised its parking rates and therefore it is not earning better revenues, the contractors are charging this rate and are earning money. It is therefore imperative that the decision is taken expeditiously so as to check misuse. EPCA has written to MCD Commissioner drawing attention to this problem and directing urgent finalisation of the parking rate increase and rationalisation. It also directed that this increased rate must be revised in the contracts of all authorised parking sites that have been auctioned or are in the process. The response is still awaited.

Consultation with DDA

Issues related to parking regulations

DDA is responsible for setting parking norms. Currently these norms are being discussed as part of the Master Plan Delhi 2021 (MPD 2021). EPCA was informed that the MPD 2021 is being further revised, on the basis of the Tejinder Khanna Committee report and other developments. EPCA has asked DDA to submit any revision that it proposes in the MPD 2021, which would have implications on the parking provisions.

EPCA has been made to understand that parking standards have been prescribed in each use premises and whereas it is not prescribed, it will be followed as given below. These norms have been cited in the Parking policy of Delhi Government.

Parking standards in different land-use classes

S. No	Use premises	Permissible equivalent car spaces (ECS) per 100 sq m of floor area
1.	Residential	2
2.	Commercial	3
3.	Manufacturing	2
4.	Government	1.8
5.	Public and semi-public facilities	2

In existing buildings having plot area of more than 2000 sq m, an extra ground coverage of 5 per cent shall be permissible for construction of automated multi-level parking to provide dedicated parking structures for additional needs.

Space standards for car parking are as follows:

S. No	Type of parking	Area in sq m per ECS
1.	Open	23
2.	Ground floor covered	28
3.	Basement	32
4.	Multilevel with ramps	30
5.	Automated multilevel with lifts	16

- a. In all premises, parking on the above standards shall be provided within the plot (where provision exists)
- b. Basements up to the setback line maximum equivalent to parking and services requirement such as installation of electrical and fire fighting equipments and other services required for the building with prior approval of the concerned agencies could be permitted and not to be counted in FAR. However the area provided for services should not exceed 30 per cent of the basement area. The storage provided in the basement shall be counted in permissible FAR except in the case of residential plot-plotted housing and cluster court housing
- c. The basements beyond the ground coverage shall be kept flushed with the ground and shall be ventilated with mechanical means of ventilation
- d. Basements shall be designed to take full load of the fire tender wherever required and subject to adequate safety measures
- e. Parking area if misused is liable to be municipalised/taken over by the local body/authority

Special concern over shopping malls

EPCA has taken special note of the explosive trend towards mega shopping malls that are being planned in the city without considering the congestion impact of these malls on the carrying capacity of the area. If this problem is not addressed now the city will hurtle towards a congestion nightmare.

DDA has sanctioned three shopping malls in over stretched areas of Vasant Kunj, Saket and Jasola. Following EPCA's directives DDA has submitted to EPCA the norms and parking provisions for these malls. But these norms and parking provisions have been listed without indicating how these will fulfil the

actual demand for parking when the malls become fully operational and not add to the congestion in the area.

Parking provisions in the shopping malls and commercial complexes

S. No.	Shopping malls/commercial complexes	Total built up area (in sq m)	Parking requirement as per MPD	Parking achieved
1.	Vasant Kunj	190,162 sq m	@ 2 ECS/100 sq m = 3803 ECS	6000 ECS @ 3.15 ECS/100 sq m
2.	Saket district centre	249,692 sq m	@ 2 ECS/100 sq m = 4993 ECS	8035 ECS @ 3.2 ECS/100 sq m
3.	Jasola commercial centre	212,220 sq m	@ 2 ECS/100 sq m = 4244 ECS	6366 ECS @ 3 ECS/100 sq m

MCD has also submitted that three sites have been sanctioned for the construction of shopping malls and commercial complexes – community centre cum commercial complex at sector V, plot 1 and 2, Pushp Vihar, convenience shopping centre ONCS/OCF, Pocket Block 1, Sector 16, Rohini and commercial building at local shopping centre Gujranwala town. MCD informs that the following parking provisions have been made with respect to the shopping malls and commercial complexes.

S. No.	Name of site	Parking provisions	
		Required ECS @ 2 ECS/100 sq m	Proposed/sanct ioned ECS @ 2 ECS/100 sq m
1.	Community centre cum commercial complex at sector V, plot 1 and 2, Pushp Vihar	485.61	514.66
2.	Convenience shopping centre ONCS/OCF, Pocket Block 1, sector 16, Rohini	345	390.60
3.	Commercial building at local shopping centre Gujranwala town	232	290

EPCA is not convinced by these estimates and norms. EPCA would therefore recommend that a strict directive be issued to the mall owners and the development agencies that the parking demand will have to be met within the premises of the complex through adequate provisions and good management practices. No spill over outside the premises will be tolerated. In fact any spill

over should be banned. Additionally the entire area surrounding the mall will be declared a no parking zone. The development agency DDA and the civic bodies will be directly responsible for the enforcement of these provisions.

EPCA's observations

After reviewing the action plans of all the civic agencies, EPCA is of the view that all agencies are aiming to create more parking facilities and the key component of these plans is multilevel parking facilities and underground parking. EPCA is concerned by the fact that such huge investments are being planned without any clarity how these facilities will solve the problem of congestion. The review shows that these facilities remain largely underutilised due to distortion in parking pricing. There is disparity between rates for surface parking and for multilevel parking, rates being many time lower for the surface parking and the multilevel parking remains under utilised. Similarly, availability of abundant, free/cheap and unauthorised surface parking undermines the utilisation of the underground parking areas.

This emerged from the review of the underground parking facility in Palika bazar in Connaught Place and multilevel parking in Nehru Place. The following has come to the notice of EPCA:

- **Under-utilisation of the Palika underground parking:** According to the NDMC's estimate, 3000 ECS is the designated parking in Connaught Place. Out of this, 1200 ECS is the current capacity of the Palika underground parking. The remaining 1800 ECS is the designated capacity of the surface parking in the outer circle, radial roads, main circle and the inner circle. As against the designated capacity of 1800 ECS in the surface, nearly 4600 ECS are parked on surface unauthorised. But the Palika underground parking with a capacity of 1200 ECS is not fully utilised to its capacity and there is a vacant space for nearly 500 ECS at any given time. The peak hour parking demand in Connaught Place is about 5434 ECS. This shows that the underground parking that has been created to minimise surface parking and to lower congestion is not being utilised effectively. This parking area has been made concessional – with cheaper rates, than on-road parking. Yet people do not use this underground parking. This points to the problem in other such projects as well. Availability of abundant free/cheap surface parking is undermining the utilisation of the underground parking that has been created to decongest the surface area.
- **Concerns over multilevel parking**

EPCA has noted that all agencies have listed construction of multilevel parking complexes in their action plans. These complexes will be constructed

on a build-operate-transfer (BOT) basis in a public-private partnership. In order to make these projects commercially viable, 30 per cent of the land area is given to the developer for commercial purposes. While NDMC has plans to construct three multilevel parking complexes, MCD is far ahead of it and plans to have 15 multilevel parking complexes. DDA has already got two multilevel parking complexes cleared from its Technical Committee. One of these is the Nehru Place multilevel parking complex, which has become operational. The other will come up at DTC Terminal at Nehru Place. DDA has three more multilevel parking projects, which are in the planning stage. These are to be developed at phase II of Nehru Place, district centre Rohini – Mangalam Place and in Trans Yamuna area in facility centre no. 17.

Poor performance of the multi level parking in Nehru Place: It has been brought to the notice of EPCA that on a plot auctioned by DDA, a seven-storied multilevel parking complex has come up in Nehru Place. It is a ramp based multilevel parking with a capacity to accommodate around 1,000 ECS. This parking complex is built up in the plot of an area of 12,985 sq m. The total permissible built up area (including basement) is 60,550 sq m. Nearly 30 per cent of the total built up area is to be used for commercial activities. As per development control norms of DDA, barring the basement commercial activity will be allowed in all the floors. Of the total built up area, 18,165 sq m (nearly 30 per cent) is the permissible area for commercial development and the remaining 42,385 sq m is the permissible area for parking and services.

As this is an expensive facility, the parking rates are also comparatively higher. The applicable parking rates for a car are Rs. 30 for 1 hour, Rs. 50 for 2 hours, Rs. 80 for 4 hours and Rs. 120 for 8 hours. It was informed that if a car is parked till 12 am at midnight, a parking fee of Rs. 300 has to be paid after which the hourly rates are added till the car leaves the parking lot. At present, only two floors are operational – the first and the fourth floor. It was informed that first floor has capacity to accommodate 120 cars while 108 cars can be parked on the fourth floor. On a daily basis, nearly 200 to 250 cars come to this multilevel parking complex.

Field information indicates very poor utilisation of this facility. Only nine cars were found parked on the first floor at the time of visit. Very low parking rate in the surrounding surface parking and unauthorised are responsible for the poor utilisation of this multilevel parking facility that has been created at an enormous cost.

Key concerns

EPCA is convinced that the civic bodies have not paid any attention to the management and pricing parameters of providing parking facilities. Deliberations were held with regard to the feasibility of the multilevel parking complexes. There

is little evidence across the country that these multilevel parking complexes are viable. EPCA observes that there are a number of issues in these, which remains unresolved.

- Problem regarding the commercial viability of these schemes due to distortion in parking rates charged in other parking facilities (surface and underground parking). As surface (roadside) parking is not adequately priced, multi level parking remains underutilised and the Internal Rate of Return (IRR) of the parking remains very low. Currently, surface parking is priced at Rs 10. Such low rates undercut viability of the multilevel parking and underground parking that are being created at a very high cost.
- As multi level parking facilities are operated by private agencies pressure to allow other commercial activities within the premises of the multilevel parking is very strong to make the project commercially viable. This in turn leads to reduction in available space for vehicle parking. It has also been brought to the notice of EPCA that the current development norm for such facilities favours commercial activities. This changes the landuse of the designated parking area and encourages private profits.
- These complexes are very expensive to build. The cost of 1 ECS parking in a manual multilevel parking area is Rs 3 lakh, whereas in a mechanised parking it would be at the minimum of Rs 6 lakh per ECS. The operation and maintenance (O&M) cost of multilevel parking complexes is very high and it is difficult to recover the cost of the project
- from revenue earned from parking.
- Poor enforcement of the no-parking regulation on roads further undermines the occupancy and viability of multilevel parking facilities.
- There is a serious risk therefore that the multilevel parking would increasingly be used for commercial activities where parking will play a secondary role defeating the basic purpose of providing for parking. Private profit will increase in the name of parking.

It is not at all clear to EPCA how the civic bodies plan to address these distortions. The major concern is that such huge investments are being made in multilevel parking when the general willingness to pay for the parking is very low in the city. It has been brought to EPCA's notice that the feasibility studies available for MCD's automated multilevel parking sites at Parade Ground show that 50 per cent of the car users interviewed are willing to pay only Rs. 10 – the same amount that is usually chargeable at most ordinary parking lots in the city and 30 per cent are willing to pay Rs. 15. However when it comes to payment on an hourly basis, most opt for the rate of Rs 5. Only 28 per cent of all the respondents are willing to pay equal to or more than Rs. 10 for the proposed parking. For the proposed fully automated multilevel parking lot at Ramlila Ground, 93 per cent of the car users were willing to use the parking lot. But when asked about the parking fee, 61 per cent were willing to pay only Rs. 5, about 26 per cent Rs. 10, 3 per cent Rs. 15 and only 10 per cent said that they would pay Rs. 20.

Clearly, with this kind of rates it will be impossible to recover the cost of investment. Multilevel parking in itself is not the solution. An integrated management strategy is needed for all types of parking facilities to maximise the utilisation of the authorised parking spaces. The only way this issue can be addressed is to make it clear that the full cost of parking of any kind will have to be borne by the user of personal motorised vehicle and accordingly parking rates should be rationalised across all types of parking facilities.

Need integrated management strategy

In view of these reservations EPCA would like to state that in addition to the setting up of the various types of parking facilities that have been planned, a clear management and pricing strategy should be adopted for the commercial parking in the city:

EPCA holds that land is limited and there is a limit to the additional parking space that can be created in the city. Therefore, the available parking space will have to be managed efficiently to meet the parking demand. This will also require demand side management through a well thought out pricing policy to control the demand for parking.

The provision of parking for personal motorised vehicles cannot be considered as a matter of public good. Individual user of personal vehicle should pay for the use of the space for parking. Parking facilities – underground, surface, and multilevel parking – are provided at an enormous cost. This uses up a lot of public money and cheap/free lands. According to one estimate available from NDMC shows that if only the capital cost of providing multilevel parking is considered then to recover it each car would have to be charged Rs 100 per hour. This means any rate below that would amount to a subsidy.

If the public agencies are responsible for funding these structures or providing land as part of their share in a public-private partnership, this will amount to subsidy for the rich car users. This is against the principle of equity. Therefore, the user pay principle should govern the pricing of parking.

All civic agencies have proposed increasing the rate for parking but they have not established the principle for rationalisation. The full cost of providing parking in public places that includes the land cost, capital cost, and the O&M costs – should be recovered from the user of the parking. Government should not subsidise this cost. The space that a car occupies for parking has to be considered in terms of the real estate price of land in a commercial area like Connaught Place which is Rs 1,50,000 per sq m.

This will require rationalising of parking rates across the board for all kinds of parking – surface parking, underground parking and multilevel parking, to reduce distortions and ensure full utilisation. The surface parking is seen as the cheapest form of parking as the opportunity cost of the land is not reflected in the parking rates.

The civic bodies can have the opportunity to use a wide variety of tools for pricing parking. They can use time variable rates – higher rates during peak hour, progressive increase in rates per hour. Differentiation in parking fees can be done according to zone, peak hour demand, weekdays and weekends, etc. Even market based instruments can be used to reduce the impact of high parking rates like mall and shop owners paying for parking and transferring the benefit to their customers etc. The civic bodies should therefore frame innovative approaches. A city wide approach is needed for successful implementation.

On the basis of these principles MCD, DDA, NDMC should frame the rationalised pricing policy for all types of parking facilities – surface, underground, and multilevel parking -- and submit that to EPCA. Public support can be mobilised if people are also made aware of the actual cost of providing parking and it is demonstrated that the revenue from parking is reinvested in other public facilities. Simultaneously, strict enforcement of municipal laws and penalty for parking violations can improve the overall management of parking in the city.

Recommendations

Direction to NDMC, MCD and DDA

EPCA notes with concern that while massive investments have been planned for creating underground and multilevel parking facilities by the civic agencies there is no plan to suggest how will they ensure their full utilisation that can be leveraged to decongest the roads.

- In this regard the concerned civic and development agencies NDMC, MCD and DDA be directed to submit a plan to maximise utilisation of the available parking facilities and the new ones in the pipeline. The plan should include rationalised parking rates for all authorised parking facilities – surface, underground, and multilevel parking. This should be based on user pay principle and eliminate elements of subsidy. The plan should include other management strategies like linking of pedestrianisation with parking among other innovative approaches. This plan along with the rationalised parking rates should be submitted to EPCA within 3 months.

Direction to DDA regarding parking requirements in shopping malls

EPCA has reviewed the issues regarding the parking capacity being planned for the shopping malls being constructed in Vasant Kunj, Saket, and Jasola that have been proposed by DDA. EPCA is not convinced that adequate planning has been done to ensure that these malls and commercial complexes do not add to the congestion.

- In view of this DDA should be made responsible for ensuring that no spillover of vehicles takes place outside the mall area. The area along the entire radius of the mall should be declared as no-parking zone. DDA will be responsible for its enforcement. Any deviation will invite strong action. Vice Chairman, DDA will be responsible for its implementation.

Annexure 1

<p align="center">Action plan for parking submitted by various agencies that is included in the Parking Policy submitted by the Government of Delhi to Hon'ble Supreme Court</p>		
Agencies	Supply of parking spaces	Managing demand for parking with various tools
DDA	<p>Multilevel parking Multilevel parking facility is to be preferably developed in the designated parking space or in the vacant areas/undeveloped green area with development controls.</p> <p>All existing areas where there is absence of adequate parking and there is congestion should be identified and listed and based on the studies of vehicle volumes, specific projects for multilevel parking using the latest technologies should be formulated and implemented in a time bound manner</p> <p>Development of multilevel parking facilities may be taken up wherever feasible in a public-private partnership framework with private sector investment and involvement for which incentives may be provided by way of land use and FAR etc</p> <p>Parking in public places Major corridors along which commercial activities have grown should be identified and taken up for redevelopment with a major objective being the identification and development of open spaces for parking, green development and pedestrianisation</p> <p>In all new commercial, business, industrial centres, adequate parking on the surface as well as below and above</p>	<p>Park and ride facility</p> <p>Stringent provisions by way of fine and other penal actions need to be provided for violation of parking rules</p> <p>A graded parking fee structure should be evolved as a measure of parking demand management and encouraging the use of public transport</p> <p>Serious consideration to be given to evolve policy linking registration of new vehicles to availability of owned parking facilities</p> <p>All encroachments on land earmarked for public parking should be removed, However public parking areas may be used for second hand car bazars on payment basis only during holidays subject to meeting requirements of the concerned authorities</p>

the ground must be provided. The revised norms in ECS would need to be strictly adhered to and enforced

Parking facilities in DTC depots

The use of DTC terminals and depots for development of public parking along with parking of DTC buses, private buses and chartered buses should be explored and specific projects developed

Underground parking

Parking facilities can be created under the open spaces without disturbing the green areas on the surface and surrounding environment based on the site availability and after getting approvals from the concerned agencies

Parking in residential areas

All encroachments on residential streets in the form of kitchen gardens/roadside private greens, large projections/ramps etc need to be removed

Road cross-sections may be redesigned wherever possible to accommodate planned car parking along the residential streets and also creating more space for surface movement

Other options in selected areas such as creation of underground parking below parks and open spaces will also have to be considered

Resident welfare associations (RWAs) will have to be called upon to participate in this process by raising contributions from the residents on the basis of objective criteria such as number of cars owned etc

	<p>Problem of congestion arising on account of traffic generated by schools have to be specifically addressed and the main responsibility for putting up required additional facilities has to be borne by the schools themselves and policy guidelines will have to be evolved for this</p>	
NDMC	<p>Multilevel parking Introduction of new multilevel parking in and around Connaught Place. It has selected three locations for the construction of multilevel parking lots at Baba Kharak Singh Marg, Hindustan Times Building Kasturba Gandhi Marg and Sarojini Nagar</p>	
MCD	<p>Multilevel parking It has proposed to develop 15 automated multilevel parking in the first phase through public-private partnership.</p> <p>It proposed to auction 175 additional parking sites and to identify new sites and to develop them every month.</p>	<p>Pricing parking It has proposed to enhance the parking fee</p> <p>Steps to enforce parking regulations Necessary steps have been taken by MCD to restrict misuse of residential buildings for commercial purposes</p> <p>Steps have also been taken to restrict the misuse of organised parking spaces including basement for commercial purposes which results in creation of additional parking demands</p>