B.PAC recommendations to Draft Parking Policy for Bengaluru
Prepared by Directorate of Urban Land Transport, Urban Development Department, Government of Karnataka

Submitted on Wednesday, April 22, 2020

B.PAC recommendations are based on secondary research and virtual consultation with subject matter experts, members from urban mobility institutions, and solution/service providers. Summary of recommendations are as follows:

Summary of the Recommendations

The Parking Policy must explicitly include the following Objectives in additions to the ones stated:

1. Enhancing the usage of Public Transport
2. Promoting usage of Electric Mobility

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<td><strong>1. Policy 1 : Preparation of area level parking management plans</strong></td>
<td>Members of ward committee to be included Zonal task force</td>
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<td><strong>2. Policy 2: Charges for parking</strong></td>
<td>Hierarchy in charges based upon the category of vehicle as shown in table</td>
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<td><strong>3. Policy 3: Streamlining on-street parking</strong></td>
<td>50% of the parking space in each designated on-street parking should be assigned for bicycle, electric vehicle, para transit and other shared mobility parking. Pick up – Drop off points for shared mobility/ para transit should be at designated spots on main roads and parking zones near transit hubs for shared mobility to be created which could be bought by shared mobility and last mile delivery aggregators in bulk for specific period</td>
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<td><strong>4. Policy 4: Restriction on residential on-street parking</strong></td>
<td>Designated paid parking zones need to be identified and demarcated for vehicles providing first and last mile connectivity,</td>
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| 5. Policy 5: Provisioning for off-street parking | • Vacant plots to make their land available for off-street parking, more incentives need to be made available like rebate on municipal taxes/ property tax.  
• To utilize parking places in public sports and entertainment centres including KSCA, Kanteerava Stadium, Hockey Stadium, Cinema Halls and other large spaces only during off season /off days of the week/ off working hours for a fee.  
• Government should not invest MLCP | • This makes available more off-street parking space without crowding the streets |
| 6. Policy 8 : Adoption of technology in efficient parking management and use of data | • Adopt an open interoperable digital infrastructure in the form of Open APIs/ Protocol that has in-built data standards for propagation of policies.  
• The anonymised aggregate data must be a natural derivative from the parking transactions and not something artificially constructed outside the transaction systems by offline data sharing mechanisms conventionally followed till date. | • Allows effective & transparent policy transmission and adoption across all ecosystem participants.  
• Allows automatic / “Smart” compliance of the policies and reduce the need and burden of elaborate “offline” enforcement mechanisms that have proven to be often inadequate |
| 7. Policy 10: Parking revenue and fine utilization | • Parking revenue and fine from respective ward should be utilized with in ward itself | • Will incentivize better user behavior and can be used to improve local NMT and parking infrastructure. |
| 8. Policy for Persons with Disabilities | • Mandatory parking provision to be made within the premises and on street for Persons with Disabilities. | • Drives inclusivity |
| 9. Pilot in five wards before scaling it to the entire city. |
**Our Recommendations in detail:**

**Objectives of the Parking Policy**

The Parking Policy is not to be viewed as a standalone policy, but as one of the tools that can be effectively used to drive change towards sustainable mobility and greater public transportation usage.

The Draft Parking Policy is more focused on making consumers pay for parking as a concept. While it is important to make the use of public space for parking chargeable, the parking policy could also be an effective tool to drive better usage of public transport and incentivize use of sustainable transport.

Currently only about 48% of the trips in the city is catered to by public transport and RMP 2031 envisages that close to 70% of trips is required to be catered by mass transit/public transport for city to avoid gridlock. Though the parking policy makes a mention of encouraging mass transit systems like metro, suburban rail and bus-based systems this is not a clearly stated objective.

We recommend that the following two objectives be explicitly specified and included under Objectives of the Parking Policy:

1. **Enhancing the usage of Public Transport**

   By stating promotion of public transport as a clear objective, we suggest creating a hierarchy of preferences of vehicles that will use and the amounts they will pay for parking.

   This includes discouraging public investment in large multilevel car parks and putting private vehicle owners at the bottom of the pecking order of hierarchy and using policy interventions to disincentive certain behaviors and incentive some others.

2. **Promoting usage of Electric Mobility**

   Karnataka’s EV policy aims to convert 50% of its entire fleet into EV by 2030, thus shifting the focus to electrification of transportation which is the primary technology pathway to achieve the transformation to green mobility. Currently the number of electric vehicles is less than 1%, to the total vehicle population of 80lakhs in 2019.

   Providing priority to EVs in the parking policy will be one way to incentivise and accelerate the shift to EVs, hence this should also be specified as one of the objectives.
1. Policy 1: Preparation of area level parking management plans

Current
The policy proposes to achieve a systemic approach through preparation of an area level parking plan for various zones in Bengaluru.

Zonal Task Force shall be headed by the respective Zonal Commissioner of BBMP and shall have the following members.

➢ Representatives of concerned jurisdictional Traffic Police (rank of DCP and ACP)
➢ Representatives of jurisdictional RTO/ARTO

B.PAC Recommendation

Members of ward committee to be included in the Zonal task force, thereby creating greater local responsibility and accountability for implementation of the policy on ground.

2. Policy 2: Charges for parking

Current
Methodology to calculate the base car fee depending upon average land value per car space per year, the average construction cost per car space per year and average O&M cost per car space per year and charging 2 or 3 times of base car fee for on – street parking. For two wheelers its 50% car fee.

B.PAC Recommendation

The Parking Policy must provide for hierarchy in charges and priority for parking space based upon the category of vehicle, three-wheeler fee is not defined which needs to be clearly defined so that it enables usage of sustainable transportation in the city.

<table>
<thead>
<tr>
<th>Priority for Parking Space (High – low)</th>
<th>Passenger</th>
<th>Last mile delivery</th>
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<tbody>
<tr>
<td></td>
<td>Two-wheeler</td>
<td>Three-wheeler</td>
</tr>
<tr>
<td>Shared + EV</td>
<td>Shared + EV</td>
<td>Shared + EV</td>
</tr>
<tr>
<td>Shared + Non EV</td>
<td>Shared + Non EV</td>
<td>Shared + Non EV</td>
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<td>Private + EV</td>
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</table>

Source: B.PAC

In a recent survey conducted by B.PAC, 24% of the non-users of public transport stated a lack of good first and last mile connectivity as the reason to use private modes of transport (B.PAC, 2019). Hence pricing of parking with the objective of promoting first and last mile connectivity and shared mobility will enable public transport and discourage use of private vehicles.
Both on-street and off-street parking charges for shared mobility services must be in hierarchy as shown in the above table to encourage the adoption of public transit, intermediate public transport, micro-mobility, electric vehicles and disincentivize the ownership and usage of private vehicles especially ICE vehicles.

The goal should be to make availability of parking for private vehicles scarce and prohibitively expensive. This will discourage people from owning/using private vehicles.

3. **Policy 3: Streamlining on-street parking**

   **Current**
   At least 10% of the parking space (in Passenger Car Equivalent or PCE) in each designated on-street parking should be assigned for bicycle, para transit and other shared mobility parking. Prioritizing pick-up/drop-off, loading/un-loading over parking along street edge.

   **B.PAC Recommendation**
   
   i. 10% is insufficient, as we discourage use of private vehicles - 50% of the parking space in each designated on-street parking should be assigned for bicycle, electric vehicle, para transit and other shared mobility parking.
   
   ii. Dedicated curb spaces should be provided for pick-up and drop-off by intermediate public transportation at public transit stops, commercial areas and office spaces. which can be bought by shared mobility and last mile delivery aggregators in bulk for specific period which can be renewed periodically. This reduces random stops of vehicles on roads creating congestion.

4. **Policy 4: Restriction on residential on-street parking**

   **Current**
   To price and regulate on-street parking in residential areas for existing (built plots and already owned vehicles) through a well-structured permit system in the short-term (i.e. for up to 3 years)

   Adopt Proof of Parking for purchase of new vehicles (vehicles purchased after this policy is in place) to ensure that the owner has ensured availability of parking space within their property before purchasing a vehicle.

   In the long-term residential streets to be free of parking and all vehicular residential parking to be shifted off-street.

   **B.PAC Recommendation**
   
   i. The proposed policy envisages payment of parking charges for residential on-street parking by resident vehicle owners based on street width. However, there are several clusters near low income housing and slum areas where private ownership of vehicles are cab drivers. Such areas will not qualify for parking space provisions. Since it is a means of
livelihood for this category, alternate off street parking zones must be made available so that livelihoods are not lost.

ii. Many in Bengaluru are engaged in providing shared mobility services, micro-mobility services and delivery services. Designated paid parking zones need to be identified and demarcated for vehicles providing first and last mile connectivity, shared mobility, dockless services, para transit and other visitors to the locality. Such provisions for first and last mile connectivity will encourage usage of public transport and decluttering of road space currently plagued by haphazard parking.

iii. Existing residential developments may provide adequate parking and charges depending on the type of the vehicle.

5. **Policy 5: Provisioning for off-street parking**

   **Current**

   In order to encourage owners of vacant plots to make their land available for off-street parking on a payment basis, the civic agency may enter into an agreement with owners of vacant plots to facilitate development and operations of off-street parking facility, where the owner by himself may lack the wherewithal to operate such facilities. The terms of the agreement maybe be stipulated by BBMP.

   **B.PAC Recommendation**

   i. In order to encourage owners of vacant plots to make their land available for off-street parking, more incentives need to be made available like rebate on municipal taxes/property tax.

   ii. To utilize parking places in public sports and entertainment centers including KSCA, Kanteerava Stadium, Hockey Stadium, Cinema Halls and other large spaces during off season days of the year/ off days of the week/off working hours of the day.

6. **Policy 8 : Adoption of technology in efficient parking management and use of data**

   **Current**

   All public parking related information should be integrated at a central control centre (Command Control Centre of BBMP), BBMP shall use the data to disseminate information on availability of parking, pricing and parking restrictions, if any to users. This information could be disseminated to all users through various means like VMS boards, mobile app, web application, etc. to enable users to make informed decisions on parking choices.

   **B.PAC Recommendation**

   There must be a much greater attention to use of data, data architecture, collection mechanism etc. B.PAC in consultation with experts recommends the following principles and interventions for data collection and dissemination.
Principles
Given the fact that some of the regulatory policies will see a gradual and not overnight adoption and that policies will get tested on ground and the learning from adoption will allow the policies to continuously evolve in future, it is important that at the very outset of adoption, the policies use an enabling digital infrastructure that provides for the following guiding principles:

1. Allows effective & transparent policy transmission and adoption across all ecosystem participants
2. Allows the administration of policy to generate and capture clean data to help provide evidence-based inputs for policy evolution.
3. Demonstrate fair & transparent administration of rules through technology and avoid ad hoc, inconsistent or selective adoption of the same across the city and stakeholder groups
4. Allows automatic / “Smart” compliance of the policies and reduces the need and burden of elaborate “offline” enforcement mechanisms that have proven to be often inadequate

Interventions
With the above context, the data sharing framework for parking could look at following interventions

i. Adopt an open interoperable digital infrastructure in the form of Open APIs/ Protocol that has in-built data standards for propagation of policies (digital real-time in machine-readable way) to all parking management systems that will be adopted across the city

ii. All parking booking, allotment and release (parking “transactions”) undertaken through digital parking systems adopted (of govt or private players) help naturally generate or “emit” open-data based on agreed data standards while withholding privacy of parking users and confidentiality of parking businesses. The anonymised aggregate data must be a natural derivative from the parking transactions and not something artificially constructed outside the transaction systems by offline data sharing mechanisms conventionally followed till date. Here again an open APIs / Protocol could be useful to enable the above requirement

iii. Such an interoperable digital infrastructure must be agnostic of technology form adopted by various parking management service providers given the varied spectrum of technology solutions (e.g. – handheld ticketing, Parking IoT sensors, etc) in use today and those that will be in future.

Thus, the data sharing framework must enable an open-data two-way transmissions infrastructure across systems:
1) Parking policies digitally transmitted to parking systems for smart implementation
2) Aggregate Open data emitted from the parking systems to govt and public stakeholders, based on the parking transactions happening on them

7. Policy 10: Parking revenue and fine utilization

Current
The revenue generated from parking fee (or annuity obtained from Parking Space Management Agency) and parking fines shall be deposited in a dedicated Parking Fund Account created by BBMP. The parking funds should be utilized by BBMP only for
- Maintenance of parking spaces and systems,
- Development of new parking lots,
- To cover costs of parking operations and enforcement,
- Local developmental works related to safety of pedestrians,
- Road safety,
- Development of nonmotorized vehicles (NMV) infrastructure,
- Footpath improvement,
- Improving public realm for pedestrian on streets (planting of avenue trees),
- Improving transit infrastructure (like bus stops, bus bays, IMTH, etc.),
- Strengthening of parking enforcement and carrying out parking awareness to citizens.

**B.PAC Recommendation**

Parking revenue and fines from respective wards should be utilized within the ward itself so that it improves area planning and parking. It should incentivize better user behavior and can be used to improve local NMT and parking infrastructure.

8. **B.PAC Recommendation: Policy for Persons with Disabilities**

The policy doesn’t mention any specific provision for Persons with Disabilities. As per Census 2011, Bengaluru has 2.2 lakhs of persons with disability. The specific accessibility needs of this population should be incorporated in the parking policy.

i. Reserved spaces may be designated and clearly signposted for use by Persons with Disabilities. In this regard, the pedestrian pathways from the designated parking space to the point of entry should be clearly defined and accessible or mandatory parking provision to be made within the premises for Persons with Disabilities.

ii. The pathways should meet minimum statutory requirements that allow wheelchairs to move easily. The design of the pathway should be in a way to avoid crossing vehicular routes within the site. Where this is not practicable, use should be made of curb spaces or textured surfaces for both people with visual impairments and wheelchair-dependency.

iii. A provision for accessible parking permits may be issued by the government that provides for legal binding and helps in getting concessions on parking charges.

9. **B.PAC Recommendation: Pilot in five wards before scaling it to the entire city.**

The above-mentioned recommendations and draft parking policy by DULT can be initially piloted in 5 wards under different categories depending on location, commercial/residential etc. The learnings from this could be incorporated into the policy before rolling it out to the entire city.
B.PAC conducted a series of virtual consultations with subject matter experts, members from urban mobility institutions, and solution/service providers from city. The above set of recommendations are compiled by B.PAC based on secondary research and from discussion points from virtual consultations.

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ABOUT B.PAC and B.MOBILE:
Bangalore Political Action Committee (B.PAC) is a non-partisan citizen’s group working to improve governance in Bengaluru and to enhance the quality of life of every Bengalurean. B.PAC is specifically targeting good governance practices, integrity and transparency in all arms of the government, improving the quality of infrastructure in the city and the creation of a safer city where the rule of law is ensured for all citizens. (www.bpac.in)

B.MOBILE is B.PAC’s mobility initiative that works on research, policy advocacy, stakeholder awareness in the areas of sustainable mobility, shared/pooled mobility, nonmotorized transit, para transit including related planning and infrastructure needs for providing seamless and integrated first, middle and last mile connectivity to citizens of Bengaluru. Our goal is to push for sustainable mobility for all by encouraging the use of public transport and disincentivizing the private vehicles usage. (https://bpac.in/b-mobile/)

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