Protocol for Livable Cities

By Robin Chase

Cities need to be clear about their goals and requirements for creating a livable future. They need to lead rather than respond to new technologies that will comprise fundamental city infrastructure. Absent a pro-active approach, laissez-faire leads to more congestion and worsening economic outcomes. Cities want:
- Clean air - phase out of combustion vehicles and air pollution from fossil fuels
- Affordable access for all, without increasing congestion
- Maximal use of existing public infrastructure and cost control

In complement with several international initiatives, the Protocol for Livable Cities is clear about cities' long term goals and minimum top-level requirements, leaving legislation, land use, taxation, and incentives to be enacted locally. The Protocol is firm guidance for the private sector; will complement, extend and strengthen the sustainable city work being undertaken by governments, consulting firms, NGOs, and others; and can be used by community activists to hold their city to best practice.

Importantly, cities that join the Protocol are participating in a group purchasing organization, with identical terms in order to negotiate as a block with large multinationals (particularly those engaged in the transportation sector), giving the cities bargaining power where they have little acting alone. For the private sector, this uniformity is in many ways be positive. Behind the Protocol, Best Practice Standards will be included, against which cities might be assessed.

See www.osmosys.org for more details. The current draft of the Protocol itself follows.

PROTOCOL FOR LIVABLE CITIES

New Mobility
The pace of innovation from the private sector in transportation services, vehicles, and networks is rapid and accelerating. In addition to saving lives, reducing injuries, and providing accessible affordable access to opportunity, these new services, and vehicles are transforming the quality and livability of cities.

A key service goal for a city's streets is to **encourage more efficient and pollution-free flows of people and goods, enhancing mobility and access, and promoting the health and safety of its residents**. Therefore:

(1) Starting in 2020, all new vehicles intended for shared use must be clean fuel or EVs. By 2025, all shared use vehicles must be clean fuel or EVs.
> *In densely populated areas, poor air quality has significant negative impacts on the health of residents. Intensively used vehicles have greater impact on air quality while also able to reap greater cost-benefits over combustion engines. Shared use vehicles include those used for hire to transport passengers or freight, including car-sharing.*

(2) New transportation BTUs added to energy grid must be renewable.
> *And keep pace with energy demand from electrified vehicles.*

(3) Shared-vehicle and shared-ride services must use standard open APIs.
> *Cities should seek to maximize the likelihood of passengers sharing vehicle trips. This requires one pool for the data, made possible through standard open APIs (application program*

interfaces). People are working on creating the standard right now; we will update when a standard is agreed upon.

(4) All AVs operating in densely populated areas* must be part of a shared fleet.
1) to maximize learning per vehicle in these first years and thus safety; 2) to make sure that the benefits of autonomous travel are available to all and extend access; 3)maximizes efficiency of both vehicles and roads; 4) codifies OEM intent to sell first limited supply of AVs to shared fleets before manufacturing supply increases, prices fall and they can be widely marketed.
*at a minimum should be constrained to areas with population density greater than 10,000/m2 (6,250/km2), city limits or other geographically defined limitations.

(5) Local land use, zoning, building regulations, and user fees will support and incentivize these requirements.
Most of these need to be addressed locally. Best practices will be continuously updated at osmosys.org. Examples include combing through existing building, zoning, transport, road construction to remove barriers and enhance opportunities. Urban design guidelines, for example, should serve shared mobility rather than SOVs (prioritizing compact and walkable) and eliminate parking minimums (and if parking is built, it should be flat plate and repurposable).

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