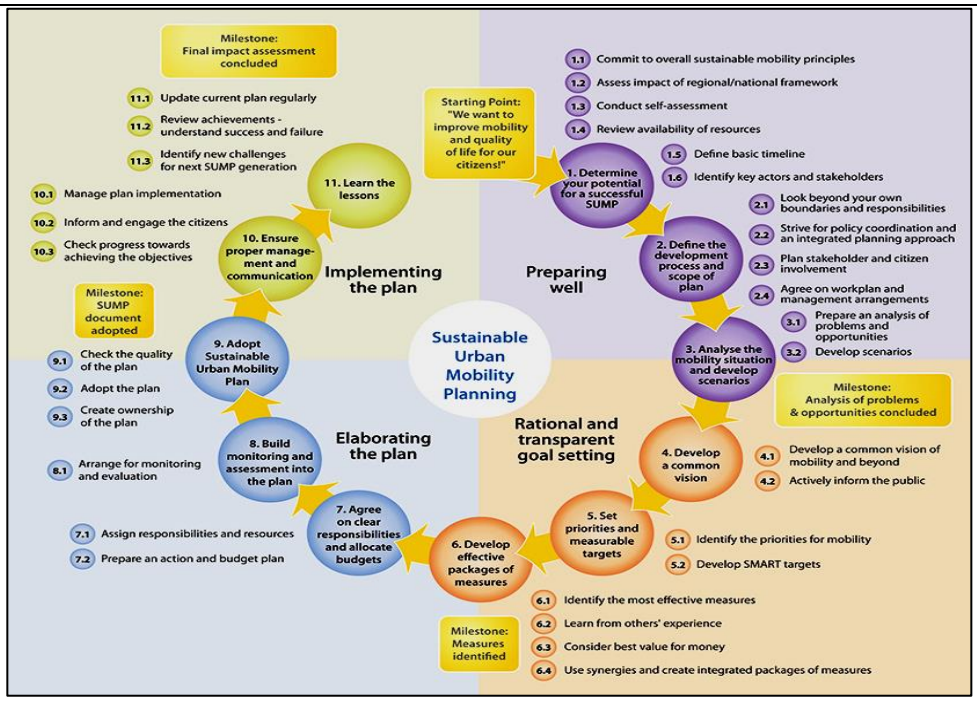
Green Transport

Tool GT 1: Integrated city-wide low-carbon transit plans.

What this tool does:

This tool takes a city wide perspective to transport. It advocates planning for all types of transport, public and private, motorized and non-motorized. This integrated planning of city-wide transit measures needs to be well coordinated with the existing urban master plan, or strategic plan.

How does it work?



The 11 steps of Sustainable Urban Mobility Planning[i]

Example:

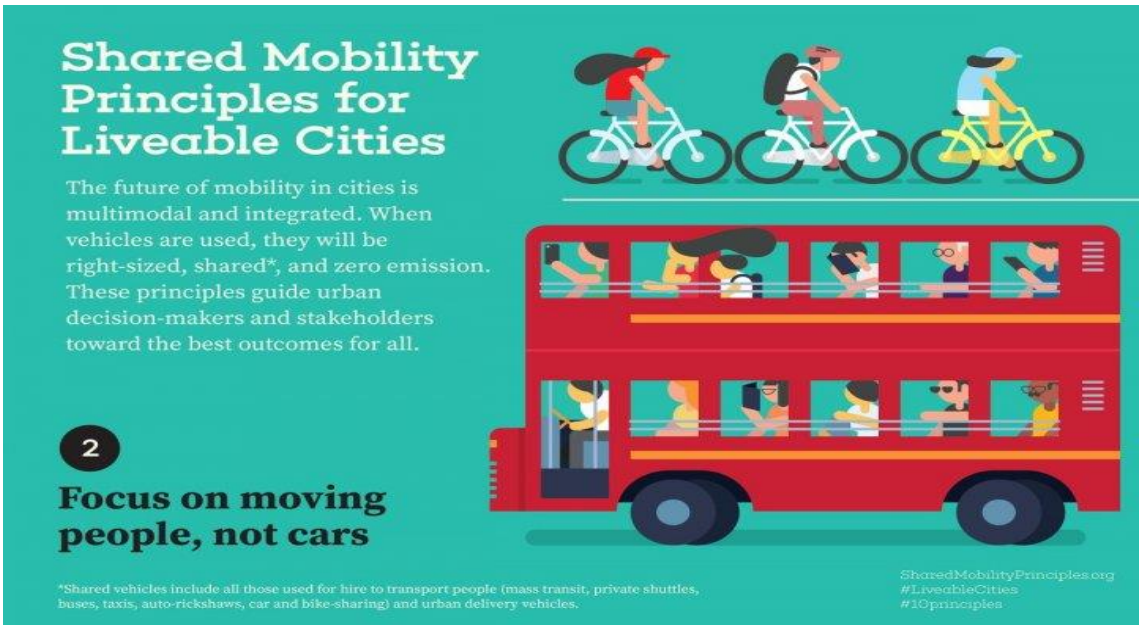
Urban Transport Policies and Packages

Area of Activity	**Basic Package** Minimum requirements	**Advanced Package** Standard approaches	**Deluxe Package** Premium low carbon approaches
1. Make roads people friendly	• Provide side walks • Reduce barriers such as bridges, underpasses and fences • Introduce speed limits • Provide bicycle lanes	• Establish pedestrian and bicycle short cuts • Diverse street environment • Trees along roads • Separated networks for bicycles and pedestrians (bicycle avenues)	• Public bicycle scheme • Shared space concepts
2. Manage parking demand	• Prohibit side walk parking	• Replace minimum with maximum requirements for parking places for cars • Provide minimum requirements for parking spaces for bicycles • Pricing for existing parking places	• Reduce/limit number of parking spaces in urban areas • Zero parking (except for special needs) in new developments
3. Move to high quality public transit	• Make public transport clean and convenient • Increase speed through priority signalling	• Integrated ticketing / fares • Information / marketing • Green procurement of vehicles • Bus-only lanes along high-density areas • High quality interchange (Design of stations to have short transfer times) • Level boarding, and off-bus/metro fare collection to speed up transit	• Comprehensive bus rapid transit system • Urban rail network • Full integration of public transport modes and with non-motorised transport • Full integration with land-use
4. Provide inclusive information	• Information campaigns	• Cooperation with companies (e.g. bike parking) • Car-sharing schemes • Bike-sharing schemes • Car free days	• Travel information (Web 2.0)
5. Reap the benefits of technological advancement	• Incentives to promote clean fuels and vehicles	• Use of Intelligent Transport Systems • Green procurement for local fleets (buses, taxis, etc) • Full prioritisation of public transport and non-motorised transport through priority signalling and ITS	
6. Change the role of cars	• Speed limits • Physical car restrictions to slow down speed (e.g. roundabouts, barriers)	• Reduce investments in car oriented roads • Low emission zones • Intelligent Transport Systems (ITS)	• Limitation of access to city centres • Congestion charge • Advanced city toll

7. Reinvent mixed-used, high density cities	• Retain and reinvent dense urban fabric (mixed-use structures) • Forbid large retail and leisure facilities, that are not integrated in the settlement structure • Incentivize mixed-use city quarters (shopp-ing, leisure, work, living)	• Land use regulation (e.g. restriction of greenfield shopping) • Transit-oriented development (e.g. Curitiba developing in linear corridors along BRT) • Green belts or corridors to keep dense areas (Hong Kong)	• Advanced integration of land-use and transport into planning • Accessibility of public transit (maximum walking time to public transport station below 5 minutes)
8. Create / Live in urban spaces	• Wide side-walks • Pedestrian areas	• Urban greening (shadow trees, lakes and rivers, • Diversity (of buildings, people, infrastructure) • Small public places (with small business and gastronomy)	• Adapted architecture

The Future of Mobility in Cities: Multimodal and Integrated

Ten principles developed by international non-governmental organizations are designed to guide urban decision-makers toward the best outcomes for the transition to new mobility options.



Sustainable, inclusive, prosperous, and resilient cities depend on transportation that facilitates the safe, efficient and pollution-free flow of people and goods, while also providing affordable, healthy, and integrated mobility for all. Innovative shared and autonomous transportation services can have profound impacts on community quality of life and resident's access to opportunity.

A new international working group developed the following ten principles to guide urban decision-makers and stakeholders toward the best outcomes for the transition to new mobility options.[ii]

1. **We plan our cities and their mobility together.** The way our cities are built determines mobility needs and how they can be met. Development, urban design and public spaces, building and zoning regulations, parking requirements, and other land use policies shall incentivize compact, accessible, livable, and sustainable cities.
2. **We prioritize people over vehicles.** The mobility of people and not vehicles shall be in the center of transportation planning and decision-making. Cities shall prioritize walking, cycling, public transport and other efficient shared mobility, as well as their interconnectivity. Cities shall discourage the use of cars, single-passenger taxis, and other oversized vehicles transporting one person.
3. **We support the shared and efficient use of vehicles, lanes, curbs, and land.** Transportation and land use planning and policies should minimize the street and parking space used per person and maximize the use of each vehicle. We discourage overbuilding and oversized vehicles and infrastructure, as well as the oversupply of parking.
4. **We engage with stakeholders.** Residents, workers, businesses, and other stakeholders may feel direct impacts on their lives, their investments and their economic livelihoods by the unfolding transition to shared, zero-emission, and ultimately autonomous vehicles. We commit to actively engage these groups in the decision-making process and support them as we move through this transition.
5. **We promote equity.** Physical, digital, and financial access to shared transport services are valuable public goods and need thoughtful design to ensure use is possible and affordable by all ages, genders, incomes, and abilities.
6. **We lead the transition towards a zero-emission future and renewable energy.** Public transportation and shared-use fleets will accelerate the transition to zero-emission vehicles. Electric vehicles shall ultimately be powered by renewable energy to maximize climate and air quality benefits.
7. **We support fair user fees across all modes.** Every vehicle and mode should pay their fair share for road use, congestion, pollution, and use of curb space. The fair share shall take the operating, maintenance and social costs into account.
8. **We aim for public benefits via open data.** The data infrastructure underpinning shared transport services must enable interoperability, competition and innovation, while ensuring privacy, security, and accountability.
9. **We work towards integration and seamless connectivity.** All transportation services should be integrated and thoughtfully planned across operators, geographies, and complementary modes. Seamless trips should be facilitated via physical connections, interoperable payments, and combined information. Every opportunity should be taken to enhance connectivity of people and vehicles to wireless networks.
10. **We support that autonomous vehicles in dense urban areas should be operated only in shared fleets.** Due to the transformational potential of autonomous vehicle technology, it is critical that all AVs are part of shared fleets, well-regulated, and zero emission. Shared fleets can provide more affordable access to all, maximize public safety and emissions benefits, ensure that maintenance and software upgrades are managed by professionals, and actualize the promise of reductions in vehicles, parking, and congestion, in line with broader policy trends to reduce the use of personal cars in dense urban areas.

Credentials;
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July 2018

Literature / further information:

[i] Source: www.eltis.org/mobility-plans

[ii] Source: Litman, T. 2017. The Future of Mobility in Cities: Multimodal and Integrated. Plantizen 10 October.https://www.planetizen.com/node/95204?utm_source=newswire&utm_medium=email&utm_campaign=news-10122017

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