

HOW TO ESTABLISH AN URBAN MOBILITY COMPACT

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QUICK GUIDE 3: How to Establish an Urban Mobility Compact

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I. Introduction and Key Messages

This quick guide is intended to provide city-level officials with an easy to understand guidebook on how to develop an urban mobility compact (UMC), sometimes also referred to as a Mobility Pact or Mobility Agreement. It is the third in a series of quick guides addressing urban mobility planning, preceded by guides on how to develop an urban mobility plan and how to set up a metropolitan transport authority, and followed by a guide on how to set up a multi-stakeholder forum on urban mobility¹.

The key messages of this guide are:

- A core aim of developing a UMC is to solidify support for a shared attitudinal shift among stakeholders from auto-centric to more sustainable approaches to urban mobility policy placing people, not vehicles, first and to prioritize sustainability at the forefront of all urban planning and transport policies, investments, and activities.
- An Urban Mobility Compact is successful only if it approached holistically as part of a broader and sustained commitment that cuts across all segments of a city – government, private sector, and civil society.
- The document or pact itself is merely part of a broader sustainable urban mobility process. It publicly commits signatories to certain actions, and links and feeds into the city's urban mobility plan.

¹ The other Quick Guides are available at: [insert URL once all have been published](#).

II. What is an Urban Mobility Compact and why would a city want to establish one?

An Urban Mobility Compact (hereafter, “Compact” or “UMC”) is a process around a written agreement (called a “compact,” “pact,” or “agreement”) that brings together various stakeholders in a city to achieve consensus based sustainable mobility and accessibility. The process around the Compact allows different stakeholders to discuss policy alternatives and commit to actions to achieve the shared vision. Political leadership is key to a successful UMC, as without leadership the document can resemble a dead letter with no impact beyond the photo opportunity accompanying the original signature. A successful UMC is a living organism that evolves according to the needs of the city, providing a forum to discuss the vision, a structure for working groups to develop and follow up on policies for achieving that shared vision. Barcelona pioneered the concept of a UMC, and it is has replicated in many cities within Catalunya in Spain, and two cases in Argentina. Thus Barcelona’s case will be presented throughout the text as the quintessential example of a UMC.

Barcelona’s movement toward its Compact started with work through its Councils (*consejos*), consultative groups established to study and inform about specific topics to promote analysis, debate and diffusion of policy initiatives. In 1983, the Consultative Council on Traffic was established, followed by the Municipal Traffic and Road Safety Council in 1989, and the Council on Traffic, Discipline, and Road Safety in 1993. Movement towards a more formal agreement or pact requires more commitment, and the desire and ability to work together towards sustainable mobility. The Mobility Pact was signed between the local administration and civil society on July 22, 1998, and this helped lead to the Mobility Law, (Law (Ley) 9/2003) on June 13, 2003. The Mobility Pact sought broad civil society and government commitment to a work style of consultation and participation, opening citizen debate on new methods and modes of movement around the city, to jointly design a new model for urban mobility in Barcelona (Lopez, 2010)

According to Salvador Fuentes Bayo, Director of the program to support local environmental activities of the Barcelona Provincial Council:

We can define the mobility pact as the participatory instrument of mobility which the municipal government voluntarily adopts with the aim of becoming a participant in the problems, plans, and projects affecting the thoroughfare. In municipalities where mobility is complex, evolving from traffic management to mobility management requires an advisory body in which participation includes not only the municipal spaces directly or indirectly involved but also the representation of civilians, professional mobility organizations,

syndicates, political parties, advocates of the different travel types, etc. The success or failure of the mobility pact will depend mainly on its members' ability to agree on measures, bearing in mind that conceptual and political divergences may exist regarding how to manage citizen mobility.

(p. 3, Fuentes Bayo, 2008)

The pact was an explicit acknowledgement of the importance of broad-based commitment and support for successful urban mobility policy in a city, and has been used to shore up support for and implementation of the Urban Mobility Plan. Thus it can be seen as an innovative and clever device to commit all the stakeholders into the implementation of an urban mobility plan process.

III. How do we establish an urban mobility compact?

There is no one way to establish an urban mobility compact. This guide will present a general approach, along with insights provided by case studies, most notably the experience of Barcelona, along with a hypothetical example consistent with the other guides in this series. This hypothetical case follows the process of establishing a UMC for a rapidly changing city (which could be located anywhere in the developing world) facing mobility challenges where there are various groups who seek to come together to resolve their problem together, counting on the public commitment made through this compact to achieve real progress towards improved urban mobility in their city.

Leadership is key to a successful urban mobility compact. This leadership ideally is shared between the city government, the private sector, and civil society leaders, but city government is the first among equals. Without political support from the city government at some point (not necessarily at the beginning, although that is optimal), an urban mobility compact cannot succeed.

Moving forward with a UMC is easiest if it is led by the mayor (or other lead civil administrator), than if it begins in civil society or the private sector. In this latter case, significant time and energy may need to be spent convincing the municipal leadership of the worth of the initiative, rather than on the details of its design and implementation. Given the extent of political capital and time needed to successfully arrive at a UMC and begin to give it life as a process, it is most convenient if an entire cycle/main amount of work/implementation period coincides with a political term. This means that the best timing would be for a process to begin at the beginning of a political term so that incentives are aligned for all to push for visible impact and success during the term.

Typically, urban mobility compacts are built upon a combination of basic principles, with different places emphasizing different elements or combinations. Key elements include sustainability, accessibility, security, efficiency, multi-modal integration, and better planning and awareness of both transport and urban planning. Broader goals such as quality of life, economic dynamism, and improved governance are sometimes also included.

In the case of Barcelona, Mayor Dr. Joan Clos led the process. The key to Barcelona's success is that subsequent leaders have continued this process, allowing it to deepen, and using it as a base upon which to continue the path towards more sustainable mobility. It has been seen as a program of the city, and the participation of many different groups is key to its success.

The key strategic elements and objectives of the PMU of Barcelona were:

1. *Equitable mobility, promoting social cohesion, to guarantee the right to mobility*
2. *Sustainable mobility – reduce the damage of mobility on the environment*
3. *Safe mobility – reduce accident, improve road safety and respect between users*
4. *Efficient mobility – reduce congestion and efficiently organize space and activities.* (Lopez, 2009)

These key elements were translated into the 10 objectives of Barcelona's Mobility Pact:

1. Achieve high-quality, integrated public transport
2. Maintain traffic speeds and improve the speed of surface public transport.
3. Increase the surface area and quality of public areas destined to pedestrian use.
4. Increase the number of parking spaces and improve their quality.
5. Improve citizens' information and preparation, and improve road signals and signs.
6. Achieve a set of legal regulations suited to the mobility of the city of Barcelona
7. Improve road safety and respect among users of the different modes of transport
8. Promote the use of less polluting fuels, and control air and noise pollution caused by traffic
9. Promote the use of bicycles as a regular means of transport
10. Achieve an agile, orderly distribution of goods and products throughout the city (Ajuntament de Barcelona, 1998).

The timing of a successful Compact will vary depending on the local political context, but in general needs to be a gradual process that fits within the political cycle of the city or region in question. Ideally, it is signed at the beginning of the term of the authority in question, at the height of her or his political capital, so that the entire term can be used to implement the agreement. Similarly, the ideal situation calls for multiple political parties to support the Pact so that its energy and approach can carry across time and changes in political leadership. In this vein, the Pact represents a stable instrument that allows various elements of society to support the shared idea of mobility via consultation and participation. It provides a structure that goes beyond limited one way communication to allow for ongoing sharing of ideas and proposals and ongoing communication. It facilitates transparency and generates confidence through building co-responsibility with citizens. Participation here is seen as the path, but not the objective, which is improved sustainable mobility. This path involves and values inputs of operators, firms, and public institutions related to mobility (Ajuntament de Barcelona, n.d.).

The membership process in an urban mobility compact is typically formalized through a written agreement signed by the highest authority of the city or region in question, for example a mayor, or the president of a municipal commission. The agreement lays out the shared objectives along with the commitment to develop, implement, and support policies designed to achieve the objectives, as well as to participate in working groups or other meetings as necessary to move the process forward.

An urban mobility compact can be a moral commitment, or it can be written into a law as a legal requirement in the broader transport planning process. Both cases allow for the use of the document, and its supporters to advocate for and implement policies, investments, and actions that lead to more sustainable mobility in their cities, generally related to other pieces of the transport planning process such as in urban mobility plans

Barcelona's Pact had 62 members in 2009 with representation from government, neighborhood associations, businessmen's associations, unions, chambers of commerce (Lopez, 2010). The associations, businesses, and unions tended to be those related to transport in areas such as freight transport and delivery, passenger transport, vehicle repairs, and driver training along with consumer groups. The pact's role is embedded in the legal process via Urban Mobility Plans (Plan de Movilidad Urbana, PMU) Law 9/2003 of 13 June, on mobility, in Chapter II (Planning Instruments), Article 9 (Urban Mobility Plans), Item 5 that mandates the participation of the regional transport council in the process of development of the urban mobility plan. This law sets the stage for mobility strategies in Catalunya, and in this case, the Mobility Pact acts as the regional transport board (Lopez, 2010).

The lifeblood of a UMC is a series of ongoing activities to keep partners engaged, informed, and enthused/committed to the goals of the Compact. These can range from intimate gatherings of 5 or 6 to working meetings with 15 to large plenary sessions in the hundreds. There are many different ways that participation can be structured. Quick Guide 4 in this series addresses this multi-stakeholder forum process in the context of urban mobility, and resources are provided at the end of this report as well for those interested in this aspect.

In Barcelona in 2005, eight “working groups” were formed to help draft different sections of the urban mobility plan. These groups covered: traffic policy, planning and mobility observatory; safety and road discipline; pedestrian and bicycle mobility; mass transport and taxis; sustainable urban development and the environment; private vehicles (cars and motorcycles); parking policy; distribution of goods.

As of December 2012, eight “permanent groups” have evolved to a slightly different lineup, covering the following topics : pedestrians; bikes; public transport; motorcycles; cars; road safety; logistics and goods transport; mobility of tourists. They continue to serve as a structure to debate, reflect upon, and arrive at consensus on relevant issues. Temporary working commissions are established as needed to discuss proposals presented to Permanent Groups. Once consensus is arrived at, the commission is closed.

In Barcelona, originally extraordinary plenaries were annual events, presided over by the mayor, to present the annual report. Meanwhile, plenary sessions were held quarterly, presided over by the head of the Security and Mobility Council, and received updates from the working groups. Informative sessions are used to inform or consult with the public, often on common themes that cut across one Permanent Group. Bilateral meetings are held between interested and relevant technical and/or political parties as needed. As of December 2012, plenary sessions are presided over by the mayor, or her/his delegate (Ajuntament de Barcelona, n.d.).

IV. How an urban mobility compact connects to other mobility-related institutions

An urban mobility compact is only one piece of a broader sustainable urban mobility policy approach, typically centered around an urban mobility plan and its implementation, building on wide-spread participation and support. Quick Guide 1 in this series addresses how to establish a plan in detail, and Quick Guide 4 lays out how to establish a multi-stakeholder forum for urban mobility. A UMC fits in by tying different groups together and providing a public commitment for all to work towards these common goals. A city can use a multi-stakeholder forum process

to arrive at a UMC, which then provides the joint agreement and structure for implementation of the mobility plan. A compact typically does not have legal status, but is more about moral authority, creating a moral commitment, and may be considered an example of one type of a highly successful multi-stakeholder forum.

Cities in Catalunya have shown that a Pact can facilitate social dialogue about mobility. However, a pact is not a “piece of cake” and several cities have abandoned their effort. “Death by starvation” can occur if this body is not “nourished” with issues and relevance. Success requires a change in mentality to include and directly address differences in opinion, and inclusion of groups with different interest (Fuentes Bayo ,2008). Fuentes’ “death by starvation” can be seen in the case of Buenos Aires, which signed a Pact on Oct 1, 2004 but is now invisible, although the sustainable mobility plan continues to move forward (Borthagaray, 2006; and Gobierno de la Ciudad de Buenos Aires, n.d.).

A UMC may not be appropriate for all cities. Sometimes public declarations defeat the purpose, as they indicate to others not involved in the process that the issue has been “solved” so that everyone can move onto the next pressing policy issue. However, in conjunction with a solid mobility plan, and the appropriate and responsive institutional structure, they can be helpful in keeping all stakeholders on the path to sustainable and inclusive mobility.

V. Case Studies

ROSARIO (maybe two page layout with a few pictures?)

Rosario, Argentina - On December 16, 2010 the Mayor of Rosario and the Governor of Santa Fe signed their Mobility Pact (Pacto de la Movilidad) to show the desire of citizens to establish common criteria and action to achieve them. This pact built upon and expanded the Comprehensive Mobility Plan (Plan Integral de Movilidad, PIM) on which work began in 2006. The signatories wanted to achieve an integrated, efficient, and competitive regional urban mobility system, optimizing modal split in passenger loads and incorporating processes and technologies that promote local and global environmental sustainability through a participatory approach leading to consensus.

Mayor Miguel Lifschitz noted:

“The Covenant is established as a joint and a mutual commitment between stakeholders and municipal management to agree on measures to ensure an integrated, efficient, and competitive mobility system of city-regional. It is ultimately a process of collective construction that allows you to modify behavior to achieve the objectives, establish tools for dialogue to implement policies that

satisfy needs and agree on mobility strategies to emphasize the collective over the individual, allowing inclusive, comprehensive and sustainable mobility”.

The signatories agreed that mobility in the city should focus on three major strategies: promotion of public transport, promotion of non-motorized transport, and discouraging individualized motorized transport. They also agreed to pursue actions based on the following principles:

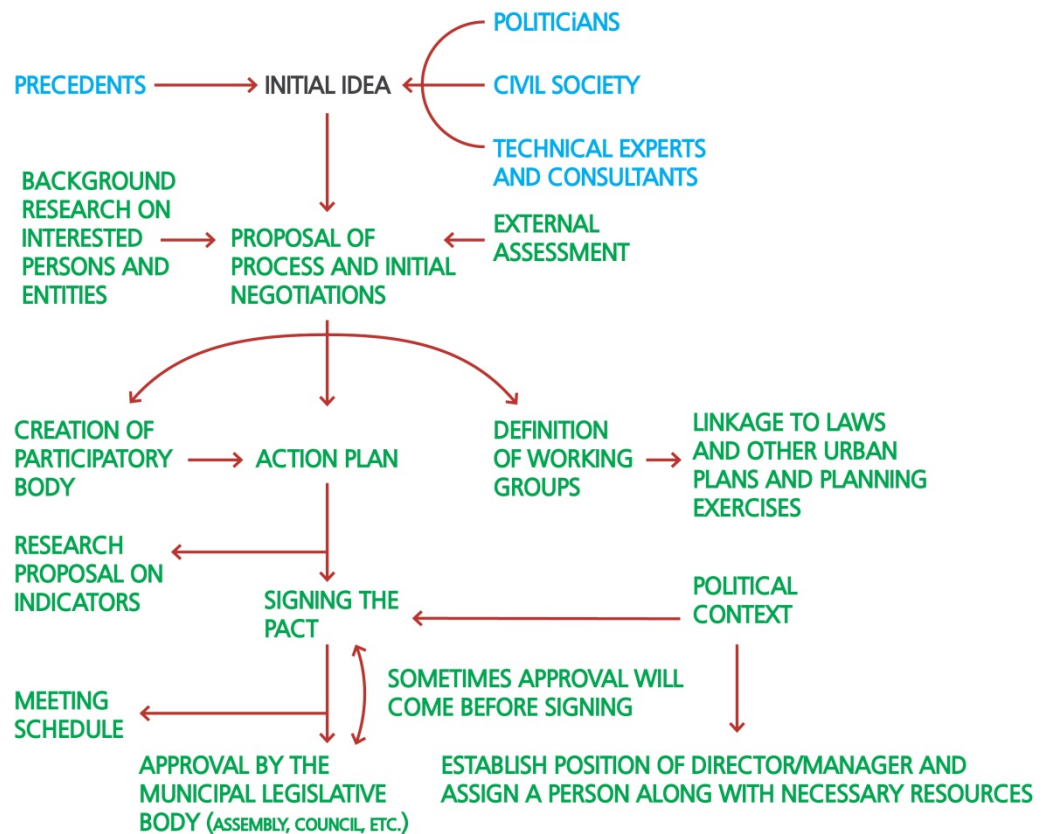
1. Sustainability: promoting a user friendly transport environment, promoting economic viability, the recovery of urban space, and respect for our environment
2. Accessibility: formulating an infrastructure network to integrate citizens and different parts of the city thus permitting spatial and social equality
3. Security: ensuring the safety of people and the protection of public space in terms of road safety.
4. Efficiency: delivering an optimal modal mix from an operational and energy optimization view.
5. Quality of life: the mobility model should promote recovery and usage of public space within a framework of social justice, and reduce travel time.
6. Economic dynamism: mobility must be a tool to help the city develop as an economic center and tourist attraction.
7. Intermodal: Integration of optimal transport modes, in order to achieve more efficient use of resources as well as respond to the needs of citizens.
8. Urban planning: urban form, land use, and in particular public space must be tailored to the needs of desired mobility model, and encourage the coexistence of trips, security and accessibility, avoiding unnecessary travel, and encouraging higher densities.
9. Mobility Management: technology should be applied to better manage traffic, the public transport fleet, and road infrastructure, and to provide dynamic information, including online.
10. Awareness and Education: citizens must create and maintain good habits and attitudes towards the responsible use of public roads and vehicles, reinforced by ongoing communication campaigns.

These principles translated into Rosario’s specific objectives:

1. Develop a high quality and inclusive Integrated Transport System that promotes rail, tram and exclusive public transport corridors, with an emphasis on electric transportation.

2. Promote cycling as a means of transport, through the promotion of its use and maintenance, expansion and renovation of infrastructure.
3. Include pedestrians as key mobility protagonists in the city, expanding urban infrastructure aimed at improving the quality and safety of pedestrians.
4. Promote balanced use of individual motorized transport.
5. Protect the environment by promoting the use of clean, renewable energy.
6. Strengthen the link between urban planning and mobility.
7. Promote the development of technologies for mobility.
8. Organize loading and unloading operations to create agile and orderly urban and regional distribution of goods and products.
9. To improve the availability of information, awareness and driver education.
10. Strengthen institutional mechanisms of governance related to mobility.

Sample Case – to be inserted, based on diagram below



Source: Derived from Fuentes Bayo, 2008.

Sample Case

In CITY, civil society, working with the private sector, has had a history of coming together to address issues that the government seems incapable of handling. This civil society and private sector engagement emerged after citizens grew frustrated with the lack of response from government leaders, with different agencies pointing fingers to others on issues of responsibility. This led to civil society leaders gathering valuable political experience, and the leader of a large neighborhood whose homes began informally fifty years ago, but that had been regularized and slowly developed jointly with a more well-off neighborhood next to it. The areas grew together as both fought to retain a large public park that residents of both used. This citizen activism created a neighborhood association representing both pieces of the area as well as the interests of the park, led by a woman named Maria with an urban planning background and experience in participatory planning. Through her creation of a stakeholder process in the neighborhood, many views were collected, citizens banded together to conduct research on options, and their use of social media allowed their message to spread throughout the community.

Maria ran for mayor, and won, convinced of the need for sustainable mobility to be a key issue for her administration. This led her to focus more clearly on how to translate the enthusiasm and ideas gathered through their neighborhood forum, and its broader city-wide expansion, into something that could be channeled into more binding commitments for the city. She set up an official city-wide exploratory group with a mandate to establish an action plan.

This group set up 12 working groups: administrative and legal (including linkages to urban land use planning), pedestrians, bicycle-related, public transport, motorized two and three wheelers, cars, road safety, logistics and goods transport, public space, financial (including economic development), communications and public involvement, and lifelong accessibility for all. The administrative and legal group took top priority in the short run, as it needed to map the current institutional responsibilities, laws, and experience of existing bodies, given the public knowledge that the existing set-up had not been working. This group compiled all the existing laws and plans, and made a public library (both physical and virtual) so that all citizens could have access to this material. It worked with the communications working group to involve high school students to work with primary school students to become aware of sustainable transport issues and practices. Each of the working groups came up with three goals, one of which was

easy, one of which was challenging but doable, and one which was longer-term and aspirational. For example, the public space group's goals were: initiate an awareness campaign around the importance of public space, to improve the public space around public transport access points, and to aim for a network of public space that would allow everyone to walk freely, safely, and enjoyably throughout the entire city. As these working groups progressed together, the mayor suggested that all stakeholders, in addition to others, publicly commit to working on this sustainable transport approach, and the exploratory group organized the stakeholders (both as individuals and as representatives of their respective groups) to agree to a formal compact. In CITY's case, it could not be a legal document, but the Mayor sought to legally require public participation in development of the urban mobility plan, and at least in her term, pledged that this would be through the Mobility Pact. The exploratory group, which evolved into the Urban Mobility Oversight Committee, proposed the following objectives, which were approved by all working groups.

CITY's Urban Mobility Compact specific objectives:

1. Develop a high quality and inclusive Integrated Transport System that promotes bus, rail, tram and exclusive public transport corridors, with an emphasis on sustainable and low carbon transportation.
2. Promote cycling as a means of transport, through the promotion of its use and maintenance, expansion and renovation of infrastructure.
3. Include pedestrians as key mobility protagonists in the city, expanding urban infrastructure aimed at improving the quality and safety of pedestrians.
4. Promote balanced use of individual motorized transport.
5. Protect the environment by maintaining and expanding green areas and public spaces, and promoting the use of clean, renewable energy,
6. Strengthen the link between urban planning and mobility.
7. Promote the development of low-carbon technologies for mobility and mobility-related information.
8. Organize loading and unloading operations to create agile and orderly urban and regional distribution of goods and products.
9. Improve the availability of information, awareness and driver education.
10. Strengthen institutional mechanisms of governance related to mobility, including financial sustainability.

The mayor brought this to the city council, which approved it, and each working group sought approval. It was signed by fifty different groups three months after the mayor's inauguration, and she assigned responsibility for continuing to monitor progress and keep the pact moving

forward, and feeding into the development and then implementation of the urban mobility plan to the head of the Sustainability Department, who was empowered to lead the process forward.

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(still to do: make bibliographic styles consistent across this, and all guides in series)

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VII. Further Resources

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VIII. Useful Definitions for Discussion on Urban Mobility

Transport and urban development concepts that might come up during the multi-stakeholder forum	Definition	Source
Accessibility	The ease of reaching destinations. The degree of ease with which it is possible to reach a certain location from other locations. One meaning of accessibility specifically focuses on people with disabilities and their ability and right of access to facilities and services.	GTKP
Access to and Egress from to transit	Time taken/distance to be travelled to reach a transit station from origin and time taken/distance to be travelled to reach the destination from the transit station, respectively.	
Area Licensing Scheme (ALS)	A demand management strategy aimed to reduce auto travel within city centres. The Singapore Area Licensing Scheme, introduced in 1975, required motorists to purchase a license (and display it) to enter the central area. It was the first pricing scheme to be successfully implemented in the world. It was replaced by the current Electronic Road Pricing (ERP) system in 1998.	GTKP
At grade	An at-grade intersection is a junction at which two or more transport axes cross at the same level (or grade).	
Auto-free Zones	Areas of a city or town in which automobile traffic is prohibited (also called "Car-free Zones and "Pedestrianised Zones").	GTKP
Average Daily Traffic (ADT)	The total volume of traffic, combining both directions, using a road in a single 24-hour period.	GTKP
Bikeway	A facility designed to accommodate bicycle travel for recreational or commuting purposes. Bikeways are not necessarily separated facilities; they may be designed and operated to be shared with other travel modes.	GTKP
Bikesharing	A bicycle sharing system, also known as bikesharing, is a service in which bicycles are made available for shared use to individuals who do not own them.	

Bus Lane	A lane designed to give priority to buses and save journey time in places where roads are congested with other traffic.	GTKP
Bus Rapid Transit (BRT)	A bus-based mass transit system that delivers fast, comfortable, and cost-effective urban mobility through the provision of busways and bus priority measures along with rapid boarding and alighting and excellence in customer service.	GTKP
Busway	A bus only, exclusive right-of-way (at-grade or grade-separated). Dedicated bus lanes that operate separately from all other traffic modes.	GTKP
Bollards	Rigid posts that can be arranged in a line to close a road or path to vehicles above a certain width. Bollards can be mounted near enough to each other that they block ordinary cars, for instance, but wide enough to permit special-purpose vehicles through. Bollards can be used to enclose car-free zones: removable bollards allow access for service and emergency vehicles.	GTKP
Carpooling	The shared use of a car, especially for commuting to work, often by people who each have a car but travel together to save cost and to promote other socio-environmental benefits. In some locations, there are special facilities intended to encourage carpooling such as designated pick-up points and high-occupancy vehicle lanes that only allow cars with multiple riders at certain times of the day.	GTKP
Carsharing	A type of car-rental where people rent cars for short time periods, often by the hour with self-service reservation, pickup, and return.	GTKP
Central Business District (CBD)	A term generally used to describe the heart of an urban downtown.	Hamilton City
Congestion Charge	A demand management strategy aimed to reduce auto travel into congested urban areas. The London congestion charge is a fee for some motorists travelling within those parts of London designated as the Congestion Charge Zone. It aims to discourage the use of private cars, reduce congestion, and raise funds for investment in public transport.	GTKP
Capacity	A transportation facility's ability to accommodate a moving stream of people or vehicles in a given time period.	FHWA/FTA, 2007

Carbon Monoxide	A colorless, odorless, tasteless gas formed in large part by incomplete combustion of fuel. Human activities (i.e., transportation or industrial processes) are largely the source for CO emissions.	FHWA/FTA, 2007
Demand-responsive public transport	Provision of public transport services to meet individual needs of travellers (origin and destination, time of day, etc.), normally using a central dispatching system.	GTKP
Density	Density is a measure of the intensity of use of housing land. It is calculated on the basis of the number of habitable rooms per unit area.	SCC
Design guidelines	Criteria established to guide development toward a desired level of quality through the design of the physical environment, and which are applied on a discretionary basis relative to the context of development.	Hamilton City
Electronic Road Pricing (ERP)	A demand management strategy aimed to reduce auto travel in selected areas and along certain routes within congested periods. Introduced in Singapore in 1998, the system is based on a pay-as-you-use principle and motorists are automatically charged during peak hours. A device known as an In-vehicle Unit (IU) is placed on the lower right corner of the front windscreen within sight of the driver, in which a stored-value card, the CashCard, is inserted for payment of the road usage charges. It is mandatory for all Singaporean vehicles to be fitted with an IU if they wish to use the priced roads.	GTKP
Environmental Impact Assessment	The process by which information about the likely environmental effects of major projects is gathered, evaluated and taken into account by the local authority in considering whether or not planning permission should be granted.	SCC
Environmental Justice	Environmental justice (EJ) assures that services and benefits allow for meaningful participation and are fairly distributed to avoid discrimination.	FHWA/FTA, 2007
Flyover/overpass	A bridge, road, railway or similar structure that crosses over another road or railway.	GTKP
Geographic Information System (GIS):	Computerized data management system designed to capture, store, retrieve, analyze, and display geographically referenced information.	FHWA/FTA, 2007
Grade separated	A grade-separated crossing provides continuity of a bicycle/pedestrian facility over or under a barrier. A bicycle/pedestrian crossing structure may be either a bridge or an underpass.	CAMPO
High-Occupancy Vehicle	(HOV): a vehicle with two or more occupants, used in HOV, or carpool, lanes.	GTKP

HOV Lane	A lane reserved for vehicles with a driver and one or more passengers. These lanes are also known as "Carpool Lanes", "Commuter Lanes", "Diamond Lanes" and "Transit Lanes".	GTKP
Impact Evaluation:	The assessment of the effects of an intervention beyond the outcomes on individuals targeted by the intervention.	
Infrastructure	The underlying foundation or basic framework of a city, including streets, parks, bridges, sewers, street lights, and other utilities.	Hamilton City
Instruments (policy, economic, fiscal)	Actions and rules that are implemented by the government to achieve a change in behavior. Examples include taxes, fees, and subsidies.	
Integrated Planning	Integrated Planning is the interaction between the transportation decision-making process and external processes. Identifying the influences of these external processes on the transportation process is important in ensuring the end product of the transportation process is comprehensive and attained through full collaboration with other partners.	PIARC
Integrated transport systems	Networks of links (bus, rail, road etc.) rather than individual routes, connected in terms of physical access, ticketing, service frequency, timing and capacity.	SCC
Intelligent transportation Systems (ITS)	A combination of Information Technology and telecommunications systems used in the development of car navigation systems, traffic signal control systems, container management systems, variable message signs, speed cameras, monitoring systems (such as security CCTV systems). Also included are applications that integrate live data and feedback from a number of other sources (such as parking guidance and information systems, weather information, bridge de-icing systems, and the like).	GTKP
Interchange	A grade separated intersection or junction that enables traffic to change from one road to another without crossing a stream of traffic.	GTKP
Intermodal	The connections between modes of transport.	GTKP
Land Use	Refers to the manner in which portions of land or the structures on them are used (or designated for use in a plan), i.e., commercial, residential, retail, industrial, etc.	FHWA/FTA, 2007
Living Street	A street in which the needs of car drivers are secondary to the needs of users of the street as a whole; traffic calming principles are integrated into their design.	GTKP

Mass Rapid Transit	A rail based public transport system that transports large numbers of people at high frequency through the provision of multiple sets of high capacity vehicles, high speeds, exclusive right-of-way infrastructure, efficient fare collection systems, and fast boarding and alighting techniques.	GTKP
Metropolitan planning organization	Organization made up of representatives of local government and transport authorities, with responsibility for defining transport policy in a given metropolitan area	PIARC
Mobility Management	A demand-oriented approach to passenger and freight transport that involves building partnerships and using a set of "tools" to support and encourage a change of attitude and behaviour among transport users towards using sustainable modes of transport. Mobility Management requires information, organisation, co-ordination and effective marketing and promotion.	GTKP
Modal Split	The percentage of travellers using a particular type of transportation. For example, if 60% of all travellers use cars to get from A to B, while 30% use the train and 10% use the bus, then the public transport (bus and train) modal share would be 40%, while the motor vehicle (car and bus) modal share would be 70%.	GTKP
Mode Share	The proportion of total journeys (trips) carried out by various modes of transport. Modal split can also be defined as the share of different modes of transport, including non-motorized modes and pedestrian trips, within overall transport demand.	GTKP
Mixed uses	Provision of a mix of complementary uses, such as say residential, community and leisure uses, on a site or within a particular area.	SCC
Multi modal	The availability of transportation options within a system or corridor.	GTKP
Non-Motorised Transport (NMT)	Any form of transportation that provides personal or goods mobility by methods other than by fuel powered engines (including electric power). This would include walking, trips by bicycles and tricycles, human portorage, handcarts and wheelbarrows; animal drawn carts and other human powered vehicles.	GTKP
Origin Destination (O-D) survey	A survey conducted of the traffic using the study area roadway system to determine/document current traffic patterns.	

Park and Ride	Public transport stations that allow commuters and other people wishing to travel into city centres to leave their personal vehicles in a car park and transfer to a bus, rail system (rapid transit, light rail or commuter rail) or carpool for the rest of their trip. The vehicle is stored in the car park during the day and retrieved when the commuter returns. Park and rides are generally located in the suburbs of metropolitan areas or on the outer edges of large cities.	GTKP
Parking Management	Parking Management includes a variety of strategies that encourage more efficient use of existing parking facilities, improve the quality of service provided to parking facility users and improve parking facility design. Parking Management can help address a wide range of transportation problems (see Parking Evaluation and Parking Solutions), and help achieve a variety of transportation, land use development, economic, environmental objectives.	VTPI
Paratransit	An alternative mode of flexible passenger transportation that does not follow fixed routes or schedules.	GTKP
Peak Hour	The 60-minute period in which the largest volume of travel is experienced.	GTKP
Peak Traffic flow	The maximum traffic flow recorded during a given period of time (e.g. hourly, daily, monthly).	PIARC
Pedestrian oriented	An environment designed to make movement by pedestrians fast, attractive and comfortable for various ages and abilities; considerations include separation of pedestrian and auto circulation, street furniture, clear directional and informational signage, safety, visibility, shade, lighting, surface materials, trees, sidewalk width, intersection treatment, curb cuts, ramps and landscaping.	Hamilton City
Performance Measures	Indicators of how well the transportation system is performing with regard to such measures as average speed, reliability of travel, and accident rates. Used as feedback in the decision-making process.	FHWA/FTA, 2007
Polluter pays principle	One of the core principles of sustainable development is the "Polluter Pays" Principle. This recognises that the polluter should pay for any environmental damage created, and that the burden of proof in demonstrating that a particular technology, practice or product is safe should lie with the developer, not the general public. Unfortunately, when and how much the polluter should pay is often unclear.	Sustainable Environment

Public Transit	Transport system available to the public in an urban centre, using vehicles designed for use by multiple individuals, with fares, schedules and routes that are planned and available in advance.	PIARC
Public Transport	Public transport includes public transit (urban buses, underground, tramways and suburban trains) and the use of road vehicles, trains, boats and sometimes planes. It may involve fixed fares, schedules and routes (ferries, trains and planes) or more flexible systems adapted to individual needs (car pooling and shared taxis). Public transit services are generally provided by buses, underground, tramways and suburban trains.	PIARC
Private Transport	A transport system in which one or more persons use a private vehicle.	PIARC
Quiet Lanes	Minor rural roads that are appropriate for shared use by walkers, cyclists, horse riders and motorised users. They should have low traffic flows travelling at low speeds.	
Road hierarchy	Categorisation of roads by function and intended traffic management treatment.	Hamilton City
Road Pricing	A term used to cover all the various charges applied for the use of roads. The term includes fuel taxes, licence fees, tolls, and congestion charges, including those that may vary by time of day, by the specific road, or by specific type of vehicle being used.	GTKP
Road Safety Audit	A systematic safety analysis procedure which brings traffic safety knowledge into the road planning and design process with the purpose of preventing traffic accidents.	PIARC
Sidewalk	A path for pedestrians, situated alongside a road.	GTKP
Site Plan	A plan prepared to scale, showing accurately with dimensions the boundaries of the site and the location of all buildings, structures, natural features, uses and principal site design features proposed for a parcel of land.	Hamilton City
Smart growth	An approach to urban planning and transportation that concentrates growth in the centre of a city to avoid urban sprawl; and advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighbourhood schools, streets that work for everyone, mixed-use development with a range of housing choices.	GTKP
Social Impact	A change in the quality of life of a community that extends beyond the direct use of the road space in the vicinity of the community.	PIARC

Speedtable	A traffic calming device designed as a long speed hump with a flat section in the middle. The long, flat design allows cars to pass without slowing as significantly as with speed humps or cushions.	
Stakeholders	Individuals and organizations involved in or affected by the transportation planning process. Include federal/state/local officials, MPOs, transit operators, freight companies, shippers, users of the transportation infrastructure, and the general public.	FHWA/FTA, 2007
Sustainable urban mobility	"The ability to meet the needs of society to move freely, gain access, communicate, trade, and establish relationships without sacrificing other essential human or ecological values today or in the future."	WBCSD, 2001
Sustainable transport system	A sustainable transport system: <ul style="list-style-type: none"> - Allows the basic access and development needs of individuals, companies and society to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations. - Is affordable, operates fairly and efficiently, offers a choice of transport mode and supports a competitive economy, as well as balanced regional development. - Limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and uses non-renewable resources at or below the rates of development of renewable substitutes, while minimizing the impact on the use of land and the generation of noise. 	ECMT, 2004
Tactile paving	Tactile paving is a system of textured ground surface indicators found on many footpaths, stairs and train station platforms to assist blind and vision impaired pedestrians.	
Traffic Calming	A set of strategies which aim to slow down or reduce traffic, thereby improving safety for pedestrians and bicyclists as well as improving the environment for residents.	GTKP
Traffic Congestion	Occurs when transport demand exceeds transport supply in a specific section of the transport system. Under such circumstances, each vehicle impairs the mobility of others.	GTKP
Traffic Incident	An abnormal and unplanned situation, including an accident, adversely affecting the traffic flow.	PIARC
Traffic Management	The process of adjusting or adapting the use of an existing road system to meet specified objectives without resorting to substantial new road construction.	GTKP

Transit-Oriented Development (TOD)	A mixed-use residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership.	GTKP
Transportation Demand Management (TDM)	The application of plans and policies to change or reduce demand for car use by encouraging the behavioural change of household choices of travel. It is sometimes also referred to as "Travel Demand Management".	GTKP
Travel Time Index (TTI)	The ratio of the travel time during the peak period to the time required to make the same trip at free-flow speeds. A value of 1.3, for example, indicates a 20-minute free-flow trip requires 26 minutes during the peak period.	GTKP
Urban design	The planning and design of cities focusing on the three dimension form and function of public and publicly accessible space.	Hamilton City
Urban Traffic Management and Control (UTMC)	A framework to allow the different applications used within modern traffic management systems to communicate and share information with each other. Thereby a more robust and intelligent system can be used to meet current and future management requirements.	GTKP
Vehicle occupancy	The ratio of the number of passengers to the operational capacity of a vehicle. For private vehicles the driver is included.	PIARC
Wayfinding	The information available to people which they need to find their way around the city and can be verbal, graphic, architectural and spatial.	Hamilton City
Zebra crossing	A zebra crossing is a type of pedestrian crossing usually painted in alternating dark and light stripes on the road surface and designed to give rights of way to pedestrians, while crossing roads.	