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TOWARDS A SUSTAINABLE TRANSPORTATION MODEL FOR MEXICAN CITIES

In Mexico, the vehicle transport sector uses close to a third of all the energy generated from fossil fuels, emits a fifth of greenhouse gas emissions and on average consumes 8% of the time¹ of the inhabitants of the bigger Mexican metropolis². This is mainly due to the current disconnection between the city's development and the organization of transportation infrastructure, which makes the journeys longer, more exhausting and polluting every time.

This is why the Mario Molina Center proposes public policies that articulate urban development plans and investment projects in public transportation. Through better coordination, planning more intelligent cities and introducing **public transportation solutions that reduce the energy intensity of journeys, improve air quality and increase service accessibility for all of the population**, will be possible. This model will support itself on economic instruments that promote social equity and discourage the use of low capacity and highly polluting means of transportation.

In the first place, we must reverse the dispersed development model that has caused "motorization" and traffic jams in Mexican cities, as well as eliminate the multiple incentives for the use of vehicles, where fuel subsidies stand out, elevated highway investments, abundant free parking lots along highways and the wide offer of credits from automobile companies. To give solutions to these challenges, it's necessary to create **metropolitan institutions** and strengthen the existing ones, generating spaces of complete budget autonomy and liberty, where different levels of government can coordinate an integrated vision of urban development and mobility.

In second place, the Mario Molina Center considers that public transportation should have preference over automobiles. With each private vehicle that is added to highways, there is an increase in traffic, time of travel of goods and people, fuel consumption and pollution; which ultimately cause the deterioration of the city's competitiveness and the quality of life of its inhabitants. Moreover, vehicles use urban land in a deficient manner: being parked almost 95% of the time, a car uses the same or more amount of space than the office of its driver. In contrast, public transportation works almost throughout the day and uses up to 50 times less road space per passenger carried.

That is why it is necessary to implement measures that motivate citizens to choose to leave their cars at home. This is possible by improving travel times, reliability, security and the net coverage of public transportation. An attractive and convenient public transportation system can compete against private transportation options.

To make this possible, we must **avoid reproducing the system of individual concessions for transportation** and encourage the organization of transportation groups in public-private companies to be more up to date, to be capable of offering competitive services with higher quality. Once this is achieved, it will be possible to plan and invest in public transportation systems with high capacity that are affordable, decent and with low environmental impact.

The options for public transportation, both motorized and non-motorized need to be diversified according to studies of local demand levels. We need to strengthen **supply**

¹ The inhabitants of Mexican metropolis take an average of 2 hours to transport themselves from one point to another.

² Own estimation based on CTS information, Metrobus "Welcome aboard", Pleasant mobility, September 2005.

routes - those that connect the most isolated places with the main urban corridors – through more secure bicycle paths and pedestrian walkways, light trains, buses in confined lanes that complement the existing infrastructure and connect the outskirts of the cities with downtown. It is necessary to facilitate and **expedite modal shifts**, for which we recommend the use of accessible parking lots where private vehicles can be switched for other transportation means. Also, all motorized options must incorporate clean technologies (diesel vehicles with particle traps or hybrids) with clean fuels (compressed natural gas, ultra low sulfur diesel) emphasizing the **particulate material lower than 2.5**, because this represents one of the major public health risks in air quality matter.

A fundamental challenge for the sector is to integrate this diversity of transportation means through flat rate fares and prepaid systems, as well as introducing routes with pre-established scheduled stops and arrivals. This way, **switching will be quicker, reliable and comfortable for users**. Once the renovation and extension of the urban mobility public network has been fully planned, it will make sense to prioritize the use of public highways to accommodate public transportation, even if it means sacrificing space given to automobiles.

Finally, the proposals mentioned before will only be viable through the implementation of economic instruments which will have to serve a double purpose: be a predictable source of finance and contribute to discourage the use of private vehicles. In this sense, the most effective instruments are: **fuel prices, charges for the use of urban highways**, use of **parking meters**, fines on vehicles that evidently pollute and public parking lot rates in high traffic vehicular areas. Since in the short-term these new overbearing fees may affect financially underprivileged families, a part of the additional income should be destined to the direct support for this segment of the population. The rest of the income should be oriented to public trust funds with legal attributions in order to manage the funds in favor of a better public transportation system, making sure to inhibit creating highways unless they serve the public transportation system. With these measures, certainty, coherence and continuity will be given to investment projects and maintenance work.

The series of measurements here gathered **must be implemented as a whole and in direct collaboration with different sectors of society**; if it is implemented in a fragmented way or isolated from citizen's reality, it will not bring the expected benefits. The Mario Molina Center is convinced that the correct instrumentation of these proposals will reduce consumption of fossil fuels and externalities like pollution, accidents and noise. This will yield in more habitable, competitive, equitable and sustainable cities.