Building Mexico City's future
Highlights from the 2017 Digital Mobility Forum
The 2017 Mobility Forum was presented by

CDMX
CIUDAD DE MÉXICO

Escuela de Gobierno y Transformación Pública
Tecnológico de Monterrey

EY Building a better working world

WRI MÉXICO
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   Becoming the city of tomorrow
Mexico City’s rapid growth and renewed economic vigor have brought fresh challenges to this megalopolis, including mobility. The relentless congestion that most travelers experience on Mexico City’s roads has led many of the city’s key players to take action to improve how the city works but there is still an urgent need to align and coordinate efforts to make mobility in Mexico City the best it can be.

The 2017 Digital Mobility Forum, which was planned primarily to reach agreements and develop practical strategies for turning our metropolis into a Smart City, addressed a broad range of key topics related to connectivity, mobile apps, self-driving vehicles, and key trends in the automotive industry. The forum brought together thinkers from a variety of fields from the public and private sectors, academia, the media and the general public represented by one of the city’s neighborhood organizations.

As we seek to turn ideas into action after the forum, one of the city’s most critical challenges moving forward is assuring the continued implementation of the policy agreements reached at the forum, which is why creating a joint agency to oversee progress of these policies should be a priority for the city.

EY’s participation in these initiatives has revitalized our commitment to driving innovation and collaborating to advance our community and build a better working world. The 2017 Digital Mobility Forum showed us that there is no so-called silver bullet - not one technology, economic force or institution - for curing Mexico’s current mobility challenges and that true progress in mobility will only be achieved through cooperation and interaction among all of the city’s stakeholders as we plan, design, and execute the programs we need in this new age of mobility.

Andres Lerch
Lead Partner of the Automotive and Transportation Segment of EY Latin America North
More than 25 million people live in the greater Mexico City metropolitan area and the average commute time in the metro area is 90 minutes.
Innovative ideas for revolutionizing mobility

In recent years, mobility has undergone significant shifts that have and will continue to reshape the dynamics of how people around the world move as new technologies and models take hold. Current trends have brought to light many innovative approaches to mobility and cities like Tokyo, London, Barcelona, Amsterdam and Singapore have adopted the Smart City model in order to reinvent themselves as sustainable metropolises that offer a better quality of life to their citizens. Mexico City, which has solidified its reputation as one of the world’s most important financial and cultural centers, cannot afford to fall behind in the mobility arena. To provide a space for interaction, planning and dialogue, the Mexico City Government, the Public Transformation and Government School of the Tecnológico de Monterrey, EY Mexico and the World Resources Institute organized the 2017 Digital Mobility Forum, which brought together key thinkers and players from the public and private sectors, civil society, academia, and the media to spark dialogue, seek out innovative solutions, and tackle the upcoming challenges.

The opening ceremony addressed the following initiatives:

- **Renew the commitment to global initiatives.** In light of President Trump’s decision to have the United States withdraw from the Paris Agreement, the potential risks of climate change mean we need to adopt a prudent approach and encourage international cooperation to study and mitigate the human factors that influence climate change. “We believe that the best approach is to apply scientific principles to increase our knowledge and ultimately create a different reality,” said Alejandro Poire, Dean of the Social Sciences and Government School of the Tecnológico de Monterrey.

- **Explore and analyze opportunities for transformation.** Technology will provide a wide array of possibilities for getting new information and developing new connections, but there is still a lot of uncertainty about how to capitalize on these opportunities. “There is a lot of good news out there. The conditions are ripe for offering mobility as a service and this means that there are new alternatives for doing so and although we should approach these opportunities optimistically, they also require regulation and effort so that they have maximum impact,” said Adriana Lobo, the Executive Director of WRI México.

- **Join forces to build meaningful solutions.** Each day about 300,000 people commute into Mexico City’s Santa Fe area, which means that there are about a million trips in and out of this area. “We need to install observatories and develop solutions for a society that is willing to change the way it approaches mobility – namely, through information,” added Itziar de Luisa, President of the Neighborhood Association of Santa Fe.

- **Develop public policy to address short-, medium- and long-term challenges and set the course for the city’s future.** Without fear of the disruption that it would entail, Mexico City became the first city in Latin America to regulate its public transportation companies and with this experience in mind we need to approach the city’s next challenge. “We need to have a permanent public policy for smart mobility in place that will help guide our efforts towards innovation in upcoming years,” said Laura Ballesteros, Under-secretary of Planning of the Mexico City Mobility Office.
“Moving forward on our city’s mobility issues will be impossible if we don’t have a clear roadmap to get us where we want to go.”

José Ramón Zavala
Host of Autos y Más on MVS
Establishing a legacy of urban development

As a megacity, in terms of sheer size Mexico City is really only comparable to Asia’s largest urban centers like New Delhi and Beijing and all enhancement strategies adopted going forward need to be adopted with this in mind.

CDMX by the numbers

- 73% of federal budget spent on road infrastructure
- 42% percentage of the surface areas of new buildings taken up by parking spaces
- 8.8 million – the population of Mexico City proper
- 20.1 million – the population of the Mexico City metropolitan area
- 5.5 million – the number of cars on the road
- 23 million trips each day:
  - Public transportation: 67.58%
  - Private transportation: 31%
  - Other: 1.37%

Fuente: SEMOVI
Mexico City’s new governing model emerged in 2014 with the enactment of the new Mexico City Mobility Law that had been championed by Mexico City’s current mayor Miguel Ángel Mancera and other government agencies and which was drafted with the participation of the city’s civil organizations.

“Yes, we need budgetary fearlessness to resolve our mobility issues, but we also need to coordinate the mobility improvement efforts taking place across the metro area in order to achieve the goals that this new model embodies,” said Laura Ballesteros, Under-secretary of Planning of the Mobility Office of CDMX, who also highlighted the following key points:

- **Change the legal framework to alter relevant budget allocations.** Elevated freeways, lane increases and parking lot developments have caused a surge in vehicle traffic resulting in a rise in vehicle congestion. “Right now, 80% of the city’s available transit surface area is for cars, which makes vehicle congestion one of our biggest challenges,” Ms. Ballesteros pointed out.

- **Reset parking lot construction rules.** Under the new regulations, developers are required to build parking spots based on each m2 of construction whether the spots are needed or not. “We are building infrastructure for cars and not for people. These old rules need to be overhauled,” said Ms. Ballesteros.

- **Work on improving the city’s transportation mode mix and road safety of commuters.** Ideally, the number of people who use public transportation should be over 70% and less than 20% of the population should be using automobiles.

- **Create and evaluate specialized areas formed to implement public mobility policy.** Ensure success by having specialists evaluate, study, plan and implement all aspects of the city’s new mobility culture. “Having isolated public policies will inhibit the effectiveness of the new model. We need to integrate in order to move beyond pilot projects and change public policy permanently,” she added.

- **Meet the requirements of the planning agreements in place.** The Comprehensive Mobility Program and the Road Safety Program established by law and which must be adopted by all relevant city agencies are the city’s two main instruments for executing the new policy. “We’re aiming for more mobility with less cars, which means we need to implement disruptive changes to allow people to use other systems and in this way link development to mobility,” Ms. Ballesteros concluded.

In addition, giving citizens the capacity to fully exercise their right to mobility is a priority and more resources will need to be invested in this area. The mobility pyramid now places pedestrians as the first priority in the hierarchy, and not the other way around as was the case in past decades.
Mobility technologies

Accessible disruption to drive mobility efficiency

Many emerging technologies are jockeying to position themselves as viable alternatives for achieving connectivity and workable mobility improvements. What is needed for these options to take hold in CDMX? The forum’s panel participants shared the following insights:

- **Development of electric and hybrid vehicles.** Development of these new technologies presents new challenges that will largely require continued support from the public sector. “It is critical for to have the support of policymakers, since having the foundations and infrastructure in place for alternative vehicles will allow us to further develop this technology, which is also environmentally friendly,” said María Eugenia Escobedo, the CEO of BMW Mexico.

- **Introduction of self-driving vehicles.** The switch to self-driving vehicles is expected to lead the way to an unprecedented technological revolution, and having vehicles that can drive themselves will provide countless benefits for society by making it possible for citizens to share vehicles and by fostering less restrictive mobility. “To spark this revolution, infrastructure and technology will need to meet in the middle to bring about certain required gradual changes, which will also involve cultural shifts. We will need to objectively develop new systems so that these technologies, like impact sensors and brake assistance systems, are available to all,” said Raúl Chávez, Product Development Manager of Ford Mexico.

- **Growth of the collective approach and regulatory framework.** The approach to developing the mobility ecosystem has been fragmented and today’s cities have more people than ever demanding high-quality public transportation options. Having a regulatory framework in place will be indispensable for getting these technologies to work effectively. “The regulations that are now in place are unresponsive and were not designed to address how to regulate the new technologies within the new ecosystem, not just from the perspective of its users but considering as well all of the players involved in the sector,” added Fernando Páez, COO of WRI México.

- **Connectivity.** Introducing new technologies like collision warning systems and vehicle-to-vehicle connectivity to prevent accidents will become a main area of focus. “Connectivity between vehicles and infrastructure will allow us to control climate and lighting systems from home or on the cloud. These technologies are already in place in Japan and we want to bring them to Mexico in the near future,” said Omar Zúñiga, Product Planning Director for Nissan Mexico.

- **Electro-mobility plan.** The electro-mobility plan seeks to align federal, state and local policy strategies to foster the expansion of electric transportation options that use clean energies. “We are a country under development and a comprehensive policy around electric transportation will do much to drive environment sustainability,” said Gustavo Jiménez, Project Leader for CiAes Finance Facility in CDMX.
Building Mexico City's future
Data management for mobility solutions

Turning data into integrated actions

In today's world, data represents both a challenge and an opportunity that comes from a wide range of sources. It fosters knowledge building and the introduction of improvements in many areas of society. It also turns people into real-time information generators. In the mobility arena, data has a wide variety of roles to play, ranging from providing follow-up on environmental impact to route planning.

The speakers on this panel analyzed the key aspects of this critical topic:

► **Education for intelligent data processing.** Research and data studies can provide policymakers with an invaluable tool for making critical decisions. “Today's data sciences give us a great way to understand what is happening in the city, which could help forge the experiences and perspectives of citizens into a driving force for implementing public policy,” said Edmundo Molina, Professor of the Government School of the Tecnológico de Monterrey.

► **Data usefulness.** Data can be used to fine-tune public policy, assess strategies, and address public scrutiny. “Data is the new gold,” said Gonzalo Peón, Assistant Director for Mexico of ITDP.

► **Infrastructure for open data.** The path towards mobility solutions depends on the capacity and on the tools we have available to analyze data. “Information that is public by default is not in any kind of format that generates solutions. We need to think about the infrastructure around data, which so far has not evolved as much as it could,” commented Juan Pablo Escobar, CEO of Cívica Digital.

► **Distribution of shared data.** Companies use data to study user behaviors and they use that information to find ways to meet their needs. Governments can also leverage this information to meet their own needs. “As businesses we are willing to share our data with the government to help improve people’s quality of life,” said Jaime Aparicio, Global COO of Easy Taxi.

► **Governance of transport.** Integrating all of the alternatives into a regulated and accountable system managed by government agencies will allow our city to optimize its mobility. “Having the government take responsibility for integrating the solutions into a single platform is one way for cities to take back control over the mobility in their urban spaces,” said Vicente Torres, Latin America Director of PTV Group.
The rise of digital platforms and applications that give users instantaneous access to mobility services has garnered a lot of attention in recent years and has revolutionized how we move. It has also made it clear that generating and handling data is no longer the domain of a privileged few.

This panel focused its discussion on the following points:

- **Integrating collectivity into actions that were formerly individual in nature.** Mobility is a social phenomenon whose starting point is the interaction and relationships between individuals. “It is now imperative that we see mobility as a social act,” said Diana Sifuentes, Open City Coordinator for Laboratorio para la Ciudad.

- **Recognizing disruption.** This means contextualizing and adopting disruptive trends to create needs and experiences that determine value and which contribute to development. “We need to see what things technology is changing both inside and outside the automotive industry and we need to start seeing mobility as a system,” said Alfredo Guerrero, Smart Mobility Leader for Ford.

- **Shared mobility.** Private sector initiatives and the public at large have worked together to reach an important understanding that has led the way to faster adoption of shared technologies. “We are moving away from seeing people’s needs on a strictly individual basis to now consider the things that everyone needs and using that new perspective to develop new transportation option,” added Ricardo Martínez, CEO of BUSSI.

- **Moving the masses.** We need to think about shared models that move us more quickly while reducing congestion, giving us safer roads, and reducing environmental impact. “We’re not just looking for new modes of transportation that are fast, efficient and clean using the available options. We also need new ways of getting around that are convenient,” said Alejandro Sisniega, Mexico-Center General Director of Cabify.

- **Changing the business models.** People are open to the idea of having different transportation options that fit well into this new era. “We’re not just proposing a new mobility model, but a change in cultural patterns as well,” said Hugo Martínez, Public Policies Director for Uber.
“Mexico City has the opportunity to develop models that combine connectivity with mobility projects, vehicle sharing and ownership models, the “uberization” of our taxis, and modernization of our public transportation systems. There is a lot to do but if we all work together there is nothing that we can’t get done.”

**Andres Lerch**

Lead Partner of the Automotive and Transportation Segment
EY Latin America North

**Conclusions**

**Becoming the city of tomorrow**

Consolidating a network that ensures that we take the right steps forward

The forum ended with the announcement that a Consultation Board will be created to determine the potential for generating competencies for developing standards and regulations, to determine whether the infrastructure will provide the opportunity to have the disruption needed for Mexico City’s mobility success and to determine whether the right administrative and institutional competencies have been activated to build the collaborative structures needed to implement this new public policy. The actions and recommendations addressed in this closing sessions included:

- Standardizing criteria
- Increasing collaboration
- Ensuring continuity
- Establishing a mobility axis
EnTendencia
#CiudadDelFuturo

Moving the conversation

Find more insights from the Mobility Forum on Twitter using the hashtag #CiudadDelFuturo.
The future is in our hands.

See you at next forum!
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Contact

Andres Lerch
Lead Partner of the Automotive and Transportation Segment
EY Latin America North
andres.lerch@mx.ey.com