### How Mexico City is Transforming a Jitney System into a World Class Bus Rapid Transit System

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# DRAFT



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#### Bus Rapid Transit as Key to Mexico City's Transport Future

Between 2005 and 2014 Mexico City authorities established the longest network of Bus Rapid Transit (BRT) corridors in Latin America, locating this new service along key roadways in some of the most traveled and geographically centric areas of the city. Considered by industry specialists to include most of the elements of international best practice and to achieve high operational performance and quality of service, Mexico City's BRT network [called "Metrobús"] is currently composed of 6 lines spanning over 115 kilometers of bus exclusive lanes accompanied by 80 stations (ITDP 2014). The system is motored by more than 441 top-of-the -line high capacity, low floor, low emission, and handicapped-accessible buses. It also relies on an electronic fare system fully integrated with the existing subway network. A seventh Metrobús line, with double decker buses running along the iconic Reforma Avenue, was publicly announced in mid 2015, and plans for several additional lines are underway, promising continued expansions to the network for several years to come.

The introduction of Metrobús to several strategically selected, high demand corridors produced a cleaner, safer, and more reliable public transit alternative for approximately 900,000 daily users of the system. Taking into account that this new transit mode replaces polluting jitneys<sup>1</sup> and helps discourage automobile use, government authorities estimate that Metrobús reduces carbon emissions by 122 thousand tons every year (Ciudad de Mexico 2010). The streetscape surrounding Metrobús stations has also noticeably improved. The newest BRT corridor designs now closely follow "complete street" guidelines, not only making transit more appealing but biking and walking as well. In the ten years since its launch, the number of traffic accidents involving public transit vehicles in Metrobús corridors was slashed almost in half, and public perception of the quality of the system –especially when contrasted to other public transport alternatives- polls as consistently positive (Metrobús 2015). BRT also saves time: Metrobús delivers traveltime savings of up to 40% when compared to similar trips on the old jitneys, which may explain why the actual patronage of the system has largely exceeded projections (CTS-Mexico 2009). In particular, the Insurgentes Corridor, the city's first and most heavily used BRT line (see Map A), has doubled its daily ridership since its launch in 2005, and now carries more passengers than 7 of the 12 subway lines in operation (Metrobús 2014).

This case study examines the political forces and conditions that made this significant transportation initiative possible. It assesses the motivations of its key proponents and opponents and it documents the economic, political, and social barriers faced and

<sup>&</sup>lt;sup>1</sup> In this case study, we use the word jitney to refer to a small private providers of mass transport, using equipment ranging in size from sedans to mini-buses in various layouts. In the local lexicon, these are known as *peseros, combis,* and *microbuses*. For more on the historical evolution of this industry, see Flores Dewey (2013).

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overcome by local authorities as they sought to restructure Mexico City's broader surface transit network through the implementation of several high-profile bus rapid transit corridors. While BRT is by no means a novel or under-utilized transportation technology, its introduction in the Mexico City context in 2005 by then-Mayor López Obrador, and its continuation and expansion during the subsequent administration of Mayor Marcelo Ebrard, can be considered a fundamentally transformative initiative. This is in large part because the development of the BRT system came coupled with a strategic use of space (namely a corridor strategy) that when combined with strong support for this new form of bus service, helped to halt and eventually disable prior industry barriers to the provision of clean, safe, and automobile-reducing transportation service.

In particular, the BRT corridor strategy helped undermine the power of jitney owners who had for decades consistently pushed back against the rationalization of publictransport policymaking. Many of them now have come full circle and actively support the government's plans. Just as significantly, the implementation of BRT helped strengthen the institutional and political capacities of local authorities in their struggles to provide a better-integrated and more sustainable transportation network for the entire city. In one of the world's largest urban agglomerations, with a population of close to 9 million in the city proper and nearing 24 million in the metropolitan area, and where increasing automobile usage on the main roadways of the city proper threatens to bring the metropolitan area to a standstill,<sup>2</sup> such advances can be considered transformative. They have made measurable headway in institutionalizing a viable public transport alternative for large numbers of urban residents, and they have helped lay the groundwork for renewed government oversight of surface transit services, following several decades where jitney owners themselves were calling the shots. Both of these changes have permitted more comprehensive transportation planning by local authorities, putting Mexico City on a path that allows it to better achieve its sustainability goals – with the latter defined both in environmental terms and with respect to predominant mode shares.

<sup>&</sup>lt;sup>2</sup>This case covers the Distrito Federal (DF) or Federal District which currently has around 8 million residents (http://mim.promexico.gob.mx/Documentos/PDF/mim/FE\_DF\_vfi.pdf). The DF is the economic, political, social, educational, and cultural center of Mexico City and the nation. For most of the twentieth century, the national president governed and administered this district through an appointed mayor, although in the late 1980s, a city council began to gain political power (Wirth 1997, 177), first in the form of a consultative body and later as a representative body whose members were elected. After 1995, the city became fully democratized, making it possible for citizens to directly elect a mayor (Davis and Alvarado 2004). Despite hosting a decentralized political structure for election of a local congressmen (16 *delegaciones*, or boroughs), urban policymaking remains largely in the hands of the Mayor and his cabinet.

### Who Championed the BRT Corridor Strategy, and Why?

The administrations of two democratically elected mayors, Andres Manuel López Obrador (2000-2005) and Marcelo Ebrard (2006-2012) should be credited for the launch and expansion of the Metrobús system.<sup>3</sup> Several of their aides including López Obrador's Minister of the Environment Claudia Sheinbaum, and Ebrard's Minster of Transportation Armando Quintero, also played critical roles in implementing and advancing these projects. Originally, city officials championed Metrobús purely as a single-corridor pilot and framed it almost exclusively around environmental aims. Within a few years of its initial adoption, however, Mayors López Obrador and Ebrard leveraged the BRT as a powerful political strategy, not only to improve air quality, but also to transform the quality of surface transport citywide and catapult their relatively new political party, the Partido de la Revolución Democrática (PRD) into the public limelight and towards future electoral success. With a strong commitment to presenting the PRD as a viable alternative to the *Partido Revolucionario Institucional* (PRI), the political party that had dominated the city and nation for decades, these two mayors adopted Metrobús as a flagship initiative highlighting the effectiveness of their administrations, their nonauthoritarian approach to decision-making, and their commitment to incremental but visible transformation in public services across the city.

Where the PRI governments that ruled the city for most of the 20<sup>th</sup> century failed in improving surface transit, the PRD hoped to succeed. Where former PRI administrations relied on heavy-handed state authority to discipline bus and jitney drivers, the PRD would rely on compromise to gain the participation of key sectors in the industry. Where the PRI embraced a totalizing vision of metropolitan connectivity, built around the embrace of major infrastructural investments in roadways and subways, the PRD sought to progress incrementally, targeting a few strategic allies in the surface transit industry and using their compliance to encourage more small-scale transport providers to professionalize, consolidate, and invest in newer vehicles.

All this is not to say that the BRT strategy deployed by López Obrador and Ebrard was more successful in transport terms than all prior efforts by the PRI in Mexico City.

<sup>&</sup>lt;sup>3</sup> Twenty-first century Mexico has been replacing centralized state practices with newly democratic and decentralized decision-making structures as well as new political institutions. Decentralization has devolved new fiscal and political responsibilities down to the locality, with new measures for citizen participation introduced at the city level. State actors are trying to learn how to adjust to the new realities of citizen claim-making (Flores and Davis 2013). As for transportation governance, the federal authority responsible for transportation legislation is the Secretariat of Communications and Transportation (SCT) also known as the Ministry of Transport. However, state authorities hold a stronger influence over transport decisions and most local transportation legislation is enacted through the local mayor (Tsay and Herrmann 2013).

Despite its undeniable gains, Metrobús still carries only a small fraction of total vehicular trips in the metropolitan area (its mode share is around 4% of total trips, compared to roughly 50% by jitneys), and its growth potential in Mexico City is limited because not every street can accommodate BRT's exclusive bus ways, stations, and large vehicles. As such, what is most significant about this story is its political leadership dimension: how and why these PRD administrations were able to astutely leverage collaborative momentum and public support for the Metrobús project in ways that allowed for a slow but steady transformation of privately supplied surface public transit in the country's largest and most complex city - even beyond BRT.

### Mexico City's surface transit history: Putting the BRT in context

Part of the answer to this question is made clear through a closer examination of the historical context in which such strategies were selected, and the ways they departed from past practices and priorities. During the sixties and seventies when Mexico enjoyed the economic benefits of an oil-driven economic bonanza and when quasi-authoritarian governing arrangements made top-down decision-making relatively easy,<sup>4</sup> Mexico City authorities had similarly sought to transform and enhance the provision of mass transit. At the time, they successfully launched construction of the city's subway and nationalized the existing private bus companies to create a multimodal, integrated, publicly owned and operated transit system. This included the implementation of a large network of bus exclusive counter-flow lanes and a multimodal ticket offering free transfers. The route network was redrawn to ensure that buses complemented, rather than competed against the subway.<sup>5</sup>

However, this momentum proved impossible to sustain both fiscally and with respect to political legitimacy. Signs of a looming debt crisis triggered by the excesses of the oil

<sup>&</sup>lt;sup>4</sup> Although Mexico did indeed host elections for municipal, state, and federal office during this period, the same party had been in power for decades. Called the *Partido Revolucionario Institucional* (PRI), it faced little serious organized opposition and won practically every national election. It was only in the 1980s that opposition parties became electorally significant players in Mexican politics, and their power remained at the state and local level. At the federal level, the PRI governed until 2000. But most important for our purposes, before 1997 there were no local elections in Mexico City, where the mayor (or Regent), was appointed by the president. This structure helped enable the imposition of policies without the same degrees of compromise or consensus expected in more democratic settings. For more on the larger shifts in governance in Mexico City, see Davis (1998).

<sup>&</sup>lt;sup>5</sup> The projects and policies established during that period were well ahead of their time, briefly placing Mexico City at the forefront of transportation planning, at least among cities in the global south. The best local chroniclers have rightfully characterized this period and its immediate aftermath as "the golden epoch of public transport" in Mexico City (Legorreta 2004) and reflective of "the most systematic and consistent efforts taking place in any Latin American metropolis" (Navarro Benítez 1993b).

boom years began to emerge by the early 1980s. Between 1977 and 1982, Mexico contracted foreign currency debt totaling US \$51.8 billion dollars (Krauze 1999). These commitments may have seemed sustainable with the international price of oil approaching US\$100 dollars per barrel, but the price went into free-fall starting in 1981, ultimately dropping to US \$20 dollars per barrel in 1986. Subsequently, the national government adopted strategies of severe austerity, including deep cuts in subsidies to subnational governments, much of it mandated by the IMF and other international agencies (Lajous et al. 1988).<sup>6</sup>

In a context of economic crisis and fiscal austerity, local authorities in Mexico City soon confronted the need to increase transit fares dramatically, albeit at a terrible moment politically. Between 1982 and 1985, unemployment rose from 5% to 15% and real salaries fell 65% (Tello 1986). After three rounds of tremendously unpopular fare increases, the transport share of total family expenditures rose from practically 0% to 15% (Figueroa 1990a, 232).<sup>7</sup> Public support for the PRI in the capital city plummeted. Despite the precarious political implications, local authorities were faced with the fact that the subway remained the largest deficit-producing item in Mexico City's budget, siphoning resources from other urgent priorities even as its quality of service deteriorated. The most congested lines, 9-car trains designed to carry 1,500 passengers, were packed with up to 2,500 passengers, a situation that resulted in two 1985 traumatic accidents as tires blew out unable to hold the weight (Lajous et al. 1988). The popular multimodal ticket was eliminated, "because it reduced revenues for the public agencies, at a time when the dominant policy goal was to increase the financial coverage afforded by own-source revenues" (Figueroa 1990a, 230). The long-term goals of the city's ambitious subway master plan were adjusted downwards<sup>8</sup>, and after 1984 the intensity of subway construction receded significantly (Pradilla Cobos and Sodi de la Tijera 2006, 102).

In this context, local authorities scrambled to find a way to address the demands of citizens who suffered from the transportation chaos. While expanding mass transit infrastructure or service was not a viable option, reducing fares and integrating bus and subway services were a couple of ways to buy public patience. Such aims motivated a government takeover of private bus services, whose rates were previously controlled by a large cartel of bus owners and whose routes were fragmented and chaotic, thus increasing the aggregate individual costs spent on daily commutes. But, shifting the provision of bus services from the private sector to a government run company only offered temporary relief.

<sup>&</sup>lt;sup>6</sup> For example, 40% of the national budget for fiscal year 1983 was allocated to debt service, up from the 32% in the prior year.

<sup>&</sup>lt;sup>7</sup> As a result of these fare increases, the share of the per person costs of operating subway services increased from only 5% in 1984 to 40% in 1988, still leaving 60% to be covered by subsidies (Legorreta 1996, 127; Medina Ramírez 2013, 191-193).

<sup>&</sup>lt;sup>8</sup> From 400 to 306 kilometers, and from 19 to 15 subway lines.

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Much of this owed to a declining management capacity. As the economy tanked, inequality grew, and the city continued to grow beyond its bounds leaving the PRI increasingly unpopular. This also meant that its political capacity to control and discipline interest groups sharply diminished. One such group was the militant bus company labor union, which soon after the government took over bus company services succeeded in incorporating new benefits and incrementing the existing ones at a dramatic rate (Alvarez del Castillo 1995, 9). Between 1982 and 1988, the bus company doubled its workers' salaries (Monge 1995c, 11) and increased its number of employees from 18,000 to 24,062 (Legorreta 1995, 82) while the amount of service provided remained stagnant and quality deteriorated. The leaders of the union became the ultimate authority in the company.<sup>9</sup> In a 2014 interview, former Ruta 100 and SETRAVI<sup>10</sup> Planner Angel Molinero confided: "I saw signed papers, in which union leaders basically instructed the general manager of the company what to do." Scheduled new bus purchases were canceled and an alarmingly high number of older buses broke down with replacements unavailable.<sup>11</sup> So dire was the condition of the available bus fleet that the company commissioned 25 fulltime "yellow angels," or vehicles fully equipped with tools and mechanics, assigned to rescue the many buses breaking down across the city (Juárez and Trejo 1990; Islas Rivera 2000, 263). Motorists became annoved with the largely abandoned public bus exclusive lanes and began invading them.

The quality of transit services in Mexico City declined and for close to twenty years the city was caught in a vicious cycle where inadequacies in public transport provisions incentivized greater private automobile usage. So did the ambitions of those governing the system, which no longer sought to control and shape urban transport in the city. Rather, they focused their attention and scarce resources on sustaining existing services and, where possible, making very marginal improvements. Meanwhile, the region continued to grow and sprawl, leaving vastly unmet service needs. An increasing number of entrepreneurs, initially unlicensed, reentered the market to offer stranded passengers a transportation alternative along and beyond official bus routes. A dual system soon emerged: a planned, regulated and highly subsidized system of publicly operated buses and subways, and a loosely regulated, private, unsubsidized, self-organized, increasingly ubiquitous system of jitneys.

The share of vehicular trips served by these jitneys in the metropolitan area surged from 3.3% in 1972 to 54% in 2000 (Islas Rivera 2002, 161). While estimates vary, the number of jitney vehicles in Mexico City itself reached about 42,000, and more than 100,000 in

<sup>&</sup>lt;sup>9</sup> Union leaders "decided anything having to do with the administration, use of equipment, and personnel, including salaries, benefits and work conditions" (González and Vidrio 2011, 27; Cuellar Vázquez 2001, 188).

<sup>&</sup>lt;sup>10</sup> Ruta 100 was the former public owned bus operator and SETRAVI is the government-run Secretary of Mobility in the DF.

<sup>&</sup>lt;sup>11</sup> Wage and benefit expenditures increased from 62.4% in 1982 to 77.8% in 1992. In that same period, expenditures in supplies and maintenance materials declined from 27.2% to 17.2%. With few new vehicles to replace those frequently breaking down, only 52% of the total fleet remained in operating conditions by 1988 (Islas Rivera 2000, 275).

the region as a whole. These vehicles not only flooded the official bus routes and competed against the subway, but taking advantage of the smaller size of their vehicles (originally vans and small sedans) also created a multitude of their own new routes.<sup>12</sup> While the government always managed to regulate fares – the most sensitive issue politically – its ability to regulate other service characteristics, such as schedules and vehicle standards, was negligible, except on occasion in concert with organizations of jitney owners.<sup>13</sup> Jitneys were ubiquitous and relatively affordable, but were also dangerous, polluting, unreliable and uncomfortable.

#### The Party Politics of Surface Transit: Asset or Liability?

Given their importance in facilitating everyday mobility for large numbers of the urban population, jitney owner-operators became extremely well organized politically, and their leaders effectively leveraged their growing influence with PRI hierarchy. Rather than enforce regulation that banned jitney services, pragmatic party leaders began legalizing their operations. PRI authorities recognized the value these small-scale private providers brought to the table, not only as a suitable complement to highly formalized transport operations, but also as an important piece of the party's local political machinery; i.e. carrying votes, supplying patronage jobs and contributing funds to PRI candidates. Their existence also helped keep in check the leaders of the bus worker union, who frequently threatened with strikes. At their peak, four federations of jitney operators aligned with the PRI. Known as "dome federations" ("organizaciones cúpula"), they represented 80% of the jitneys operating in the city and negotiated policy directly with city mayors.<sup>14</sup> According to López Zaldivar (1997, 226), it was within dome organizations that "power, direction and control over routes [came to] reside." Wirth (1997, 164), citing journalistic accounts, concluded that by the early 1990s no more than 12 "leaders of leaders" controlled jitney services in Mexico City.

Transportation planners in the city hoped that as the economic crisis passed, it would be possible again to expand the subway system and improve the public bus system. In the interim, they hoped that the public bus and subway systems, though deteriorating, would be somewhat insulated from jitney competition by their highly subsidized fares. Despite

<sup>&</sup>lt;sup>12</sup> The number of jitney routes increased from 100 in 1979 to 832 in 1986, spanning 10,400 kilometers.

<sup>&</sup>lt;sup>13</sup> According to López Zaldivar (1997, 81), "it was an epoch of disordered growth... At that time, the make, model and physical conditions of the vehicles did not matter... the only condition was getting approval from an organization leader to join."

<sup>&</sup>lt;sup>14</sup> The Coalición de Agrupaciones de Taxistas (CAT), the Federación de Taxistas de Mexico (FTM), the Federación de Cooperativas de Taxistas (FCT) and the Confederación Nacional Revolucionaria del Transporte (CNRT).

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these aspirations both subway and bus patronage consistently declined. Some new subway lines completed during the 1980s and early 1990s even saw patronage far below forecasted levels.<sup>15</sup> In 1995 protracted conflict with the transit worker union sprawled costs and sustained performance decline, resulting in the disablement of the public bus company by the local government. In short, the "transitory solution" of reliance on jitneys as the principal source of mobility in Mexico City "became permanent" (Navarro Benítez 1993, 183).<sup>16</sup>

Though authorities in the city's Transport Ministry eventually found a working political arrangement with the jitney federations that kept transport services viable, there were important downsides as well. Jitneys were among the most known contributors to local congestion, air pollution, and road accident rates in Mexico City, producing indices among the very worst in the world. Their owners were able to turn a profit only by ignoring traffic, environmental, labor, safety or other regulations. They drove with reckless abandon, often racing to reach waiting passengers ahead of their rivals; they under maintained their vehicles; they sought out cheap, high polluting fuels; and so on. Meanwhile, local authorities "used the instruments of control and regulation at their disposal with some flexibility, with the aim of not interfering with this now indispensable service" (Islas Rivera 2000, 309).

Yet even as urban transport conditions continued to spiral downward during the 1980s and early 1990s, changing political conditions in the city created new opportunities for breaking out of the constraints imposed by the fact existing jitney interests were so deeply entrenched within the city's governing regime. In particular, Mexico City faced an explosion of urban social movements calling for democratization of governance both locally and nationally. These mobilizations were inspired as much by criticisms of the priorities of PRI-appointed mayors in Mexico City, and their failures to take seriously the deteriorating urban conditions in a wide range of built environmental domains, particularly housing, as by the call for democracy itself.<sup>17</sup> But, both sets of concerns came together in ways that simultaneously shook up local governing capacities and the PRI's power at the national level.

Indeed, the nineties were a tumultuous decade in Mexico's history -featuring the assassination of a presidential candidate, the uprising of an insurgent revolt in the southeast state of Chiapas, and the collapse of the Mexican currency. Forced by these highly politicized circumstances, and attempting to bolster its democratic credentials, the

<sup>&</sup>lt;sup>15</sup> For example, patronage on subway line 4 fell from 139,000 passengers/day in 1987 to 102,000 in 1994 (Islas Rivera 2000, 290).

<sup>&</sup>lt;sup>16</sup> See Navarro Benítez, 1993, 183. The system entered a vicious cycle: With more jitney routes available, the official network became less effective. With more private competition, less passenger demand remained available to publicly operated modes. With less fare box revenue, there was less capacity to sustain quality services and more need to expand the policy of jitney "toleration".

<sup>&</sup>lt;sup>17</sup> The 1985 earthquake that struck Mexico City was a watershed point in the emergence of democratic movements in the city, and for linking urban social demands about livability to calls for democratization of the entire political system. For more on this see (Davis 2004).

national legislature introduced a bill ensuring that Mexico City mayors would have to be elected, rather than appointed, beginning in 1997.<sup>18</sup> In the first such election, a former PRI loyalist, Cuauhtémoc Cárdenas, ran on the ticket of a brand new party, the PRD, building his campaign around the promise of democratizing governance in the city. Cárdenas triumphed with double the number of votes of his closest competitor, and the PRD party won 38 out of 40 seats in the local Assembly. That same year the PRI also lost control of the national Congress, where for the first time in modern history no party held a majority.

Cárdenas was by far the most prominent figure in the political left in Mexico at the time, and had already been twice a candidate for president. His triumph in Mexico City represented a long sought opportunity to demonstrate that the PRD could govern effectively. The *cardenistas* had no sympathy for the PRI legacy. Their many years in political opposition had sensitized them to the way PRI governments combined discretionary enforcement of regulation and distribution of government benefits to nurture patronage networks and empower sympathizers. But, Cárdenas's team had an immediate political objective: they sought to dismantle the organizations and institutions that sustained the authoritarian practices of the PRI, and with only three years to do so. As the first democratically elected mayor since 1928, Cárdenas came into office with a truncated three-year term, a restriction imposed by Congress so as to get the city back in sync with the national electoral cycle. In addition, and perhaps because of the shortened term, Cárdenas was widely expected to resign early to run for president in 2000.<sup>19</sup> As such, the political calendar was a significant protagonist and strong taskmaster during his administration.

Cárdenas began his term with two main objectives for the transport sector. The first was for the government to reclaim an active role as a direct operator of surface transport, a topic long associated with his political program. Cárdenas first denounced the privatization of many publicly owned enterprises under PRI governments during the eighties. Throughout his mayoral campaign, he continued with this posture, publicly decrying the local government's decision to dissolve the public bus company. The second, was his support for the transit workers' union leadership, referring to them as "political prisoners" after they were incarcerated for allegedly mismanaging the union's pension funds (Story in La Jornada May 18, 1995). In Cárdenas's view, the close linkage between the PRI and leaders of the jitney dome federations was responsible for the demise of the public bus company and for much of the anarchy and inadequacy of urban transport in Mexico City.<sup>20</sup> Upon assuming office, Cárdenas immediately proposed the

<sup>&</sup>lt;sup>18</sup> This Constitutional amendment was enacted on August 22,1996. In addition to direct election of the mayor, the reform included an expansion of powers to the local Assembly, such as ratification of local borough chiefs *(jefes delegacionales)*. The federal government retained, however, some authority, such as appointing the local police chief and authorizing the city's debt ceiling.

<sup>&</sup>lt;sup>19</sup> Note that Mexican Mayors, Governors or President are limited by the Constitution to a single term in office. Cárdenas could not seek reelection.

<sup>&</sup>lt;sup>20</sup> Ibid.

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creation of a new public bus company, *Red de Transporte de Pasajeros* (RTP), to replace the former public bus company, RUTA 100.

An official involved in this transformation, Armando Quintero, describes in a 2014 interview how he sought to "*democratize*" the private jitney industry, a promise he also made during the electoral campaign. The leaders of the jitney industry had become powerful middlemen and authorities often struck political deals with them at the expense of both jitney owners and users of their services. Quintero, then chairman of the PRD in Mexico City, and who had also directed Cárdenas's mayoral campaign, further recalls in the interview that the new mayor believed that the jitney organizations, particularly the dome federations, "were among the prime arms of political operation of the PRI in the city." In their diagnosis, no credible reform could take place without first emancipating jitney operators from their allegedly corrupt leaders. The Cárdenas administration soon communicated to jitney owners that they no longer required the mediation of dome federation leaders to access government programs such as an attractive vehicle substitution subsidy first developed under the PRI. As another PRD official explained, Cárdenas was seeking to "individualize" the relationship of his government with each transport operator, ending a tradition of empowering organization leaders as mediators while also trying to create more political room for maneuver with respect to transport policy reform. In essence, he was laying the institutional and political foundations for taking a more active leadership role in transforming urban transport. Despite this transformative vision, Cárdenas would ultimately fail in this objective.

#### Fiscal and Institutional Barriers to Transport Policy Reform

Unfortunately, the first PRD administration lacked the financial strength to give these measures any weight. With the return of democratic elections to Mexico City, a more decentralized finance system also kicked in. Under authoritarian rule when the president appointed the mayor and a single party controlled Congress, local budget requests were routinely accommodated. With democratization, mayors now needed to negotiate with the national Congress for authorization to finance major projects. In the case of transport, this meant that Cárdenas was forced to ask Congress to extend loans for capital and service improvements. But the PRD minority faction in the Congress was unable to bring this about. Primarily because the PRI still dominated Congress, partly because they were a relatively new party without much institutional sway, and partly because none of the longstanding political parties were willing to reward the political platform of a new

opponent, particularly one riding the wave of enormous citizen enthusiasm.<sup>21</sup> That this new political upstart was considered to be a likely presidential candidate for the next election may also limited congressional enthusiasm for bolstering his policy objectives. Complicating matters, the outgoing PRI mayoral administration had hurriedly launched construction of a new subway line before the election, further limiting the ability of the incoming administration to acquire any additional debt.<sup>22</sup> As a result, Cárdenas's RTP new public bus company and the vehicle substitution program remained severely underfinanced.<sup>23</sup>

The new administration's idea that it could effectively engage directly with the many thousands of private jitneys proved naïve in retrospect. If anything, the longstanding leaders of the jitney industry proved more necessary than before, given the new fiscal limitations on developing alternatives. As Robert Cervero wrote in 1998 (395), the highly hierarchical dome organizations had become "absolutely indispensable... for coordinating and rationalizing service delivery." When it became clear that the PRD government would not authorize a long awaited fare increase because it undermined the campaign's commitment to equity,<sup>24</sup> Cárdenas was caught between a rock and a hard place. He needed jitney operators to pick up the transport slack in the city; but because the system of political reciprocity put together under the PRI was now broken, jitney operators became more militant in their demand for fare increases. In this context, the fragile order that remained in the system evaporated.

Some of this owed to emergent conflicts among transport service providers themselves. Jitney operators, many of them facing past due payments on their vehicle loans, raced madly on the streets in competition for passengers (Leon Salazar 2011, 168). Groups claiming autonomy from the dome federations quarreled over access to the most profitable corridors or for control over key facilities, sometimes violently. Some operators stopped honoring student discount fare cards, and many decorated their vehicles with posters that read "first class service is impossible with third class fares." As the leader of one dome federation, Nicolás Gómez explains in a 2014 interview, "the system broke down when the city government was no longer from the PRI. Before '97

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<sup>&</sup>lt;sup>21</sup> Cárdenas sought to contract debt for \$7,500 million pesos (US \$760 million dollars) during his tenure, but the Federal Congress only authorized \$1,700 (US \$172 million dollars). Congress also excluded Mexico City, for the first time, from accessing federal grants earmarked for "municipal social infrastructure." under the argument that the city had no municipalities (Marván Laborde 2012, 555).

<sup>&</sup>lt;sup>22</sup> The decision to further subway expansion before the long awaited election served PRI interests more broadly, as it ensured that if the next mayor was non-PRI, which was increasingly anticipated, he would have essentially no free resources with which to launch new urban transport initiatives. As an added bonus, the PRI could claim credit for the subways as they were completed, highlighting the contrast with the new elected mayor, who would not have resources for any remotely comparable initiatives.

<sup>&</sup>lt;sup>23</sup> In addition to financial constraints, the launch of RTP strained the relationship of the city government with the jitney organizations. For these reasons, the company did not begin operations until January 2000, after Cárdenas resigned to run for president. The vehicle substitution program, in turn, only introduced 100 new buses to the network during Cardenas' period. At that rate, it would take several decades to improve the city's jitney fleet (ALDF1999).

<sup>&</sup>lt;sup>24</sup> The fare increases ordered under former PRI Mayor Oscar Espinosa had been widely unpopular and severely hurt the poor. The PRD pledged to keep them frozen.

our transport power group was modeled on the PRI, vertical and pyramidal. There was a line, which everyone followed. When the PRD arrived, this system broke to pieces." In an effort to proactively intervene, Cárdenas hired close to 300 new inspectors and deployed them to the most problematic jitney routes where they imposed fines and impounded vehicles for long-ignored code violations. However, taking the disciplinary approach did not yield positive results. Disagreements between jitney owners and inspectors ended frequently in street blockades and on one occasion in 1998, a daylong citywide bus stoppage. PRD strategists believed political interests close to the PRI fueled these conflicts with the hope of sabotaging the new authorities and increasing their party's chances in the next mayoral election. In any case, any hope that jitney operators would abandon the PRI and embrace the PRD and its transportation objectives seemed more and more like wishful thinking. Officials at the city's transportation ministry found themselves spending nearly all their time seeking to manage the conflicts, unable to pursue a service improvement agenda.<sup>25</sup>

Just as Cárdenas prepared to run for president, polls taken in 1999 showed that a majority of the public felt many critical services and urban problems in the city including transportation and air pollution, were "the same as before," and thus without significant improvement (Marván Laborde 2012, 555). The only significant urban transport legacy of his maiden PRD administration, beyond freezing fares, was the previously mentioned subway line, which much of the public credited to the PRI. Concerned about the longer-term political impact on the party's defining aims to democratize Mexico and undermine PRI electoral hegemony, Cárdenas backtracked on his disciplinary stance against jitney owners. Neither Cárdenas nor the PRD felt they could afford to enter a new electoral cycle with so little to show for their efforts, particularly amidst escalating conflict with the jitneys. PRD strategists thus concluded the only politically defensible course of action was to defuse tension with the jitney organizations as much as possible.<sup>26</sup>

#### Overcoming Obstacles by Expanding Administrative Alliances

Thirteen months into his term, Cárdenas sacked his first Transportation Minister and replaced him with Joel Ortega, a former PRI lieutenant. Ortega had previously worked

<sup>&</sup>lt;sup>25</sup> Magdaleno Barragán, a jitney organization leader, described in a 2014 interview how the government efforts during this period in the following way: "they acted like firemen, except each time they put out a fire on one side of the city they started a new one elsewhere."

<sup>&</sup>lt;sup>26</sup> As party leader Quintero concludes in his interview, "It was urgent to stabilize the system, because it was thrown into upheaval, and given the little time remaining in the administration it was not appropriate to have conflict with an organized group with so much damage potential going, especially since it could still be financed and encouraged by the PRI at the national government. It simply was not advisable to stir up that pot."

under the PRI mayoral administration of Manuel Camacho (1988-1993), and had been in charge of negotiating policy with key jitney organization leaders. His new task would be to reestablish communication with the much-maligned leaders of the jitney industry and to forge a more collaborative ambiance. According to Ortega, his mandate was to "strengthen the margins of governability in the sector" (Zúniga 1999). This appointment caused dismay among many PRD members, but reflected an emerging rapprochement between Cárdenas and former PRI mayor Manuel Camacho, rooted in Cárdenas's growing desire to draw lessons from Camacho's experience and growing estrangement from the PRI.<sup>27</sup> This alliance had a profound impact in Mexico City politics for years to come and re-established a tradition of negotiation in the Transportation Ministry, which, although rooted in PRI-style pragmatism would now be aimed at advancing PRD goals.

While BRT would not emerge as a possibility for Mexico City until much later, Ortega was the first Transportation Minister to concentrate on improving 33 corridors of "strategic importance" in the city. Former General Director for Transportation Planning, Alejandro Villegas, describes in a 2014 interview how these corridors had been identified during past PRI mayoral tenures as critical to sustain urban mobility if the union of public bus company workers went on strike. Lacking time and resources (political and financial) to attempt citywide reform, Ortega's strategy was to prioritize the attention of his Ministry to these corridors, intervening in manageable stages and flexibly deciding the order of improvement on the basis of evolving negotiations with key actors -- most notably, the dome federation leaders in control of each corridor. The details of this strategy evolved gradually with an initial decision to earmark available funds from the small but still ongoing vehicle substitution program to incentivize the replacement of older, individually owned minibuses with larger, corporate-owned buses in those corridors. To sweeten the prior program, Ortega later offered to pay \$100,000 Mexican pesos (roughly US\$10,000) for each microbus destroyed and replaced by a bus, enough to cover the down payment requested by manufacturers. This incentive, framed internally as a reward for cooperating jitney leaderships, later became a key enabler of BRT implementation.

To rebuild trust with the dome federations, Ortega also reined in the Ministry of Transportation inspectors,<sup>28</sup> offered to ban the new public bus company RTP (slated to begin operations shortly) from competing in select central areas, and promised a fare increase to jitney organizations serving these corridors with new buses. Very few of the existing operators were inclined to participate at first, as many of them still believed the reinstatement of the PRI in the upcoming 2000 election was likely, especially given the

<sup>&</sup>lt;sup>27</sup> With Camacho identified with the PRI and Cárdenas the PRD, some observers saw this as an unlikely alliance. Yet both candidates shared a personal history and common objectives that help explain their willingness to collaborate in pushing a more democratic and urbanistically-oriented agenda for Mexico City. Both developed their careers in the PRI, and both identified themselves as independent voices with this party, eventually abandoning the PRI for other parties in which they were founding members.
<sup>28</sup> Ortega promoted changes to the Transport Law to "limit the discretion of authority" and to address the

<sup>&</sup>quot;excesses on the part of the team inspecting transport services" (ALDF 1999, 8).

poor results of the Cárdenas's administration. However, Ortega began to bridge the brewing conflict between incoming PRD authorities and dome federation leaders. In the process, he helped shape a new functional role for the Transportation Ministry, which would also soon prove critical in future efforts to identify and recruit those jitney organizations most open to partnering with the city.

On the heels of these institutional reforms, the PRD retained the mayoralty in the 2000 elections, though just barely. Its candidate, Andres Manuel López Obrador, the PRD's national chairman, prevailed in the polls by four percentage points.<sup>29</sup> His success was mirrored by the PRI's national failure, as this longstanding ruling party finally lost the presidency for the first time in modern history, although to a conservative candidate, Vicente Fox Quesada rather than to former Mexico City Mayor Cárdenas, the PRD candidate. The new mayor and president would rule for six years. With a return of the PRI to power no longer likely or imminent, the willingness of jitney organizations to cooperate with PRD administrations increased significantly.

López Obrador was not originally assumed to be in a good position to create new political alliances at the level of the city. He was a national figure who had begun his career in the southern state of Tabasco with limited connections in Mexico City's local political landscape. His disconnect from local politics was so evident that he was almost banned from running for not meeting residency requirements. Many attributed his victory in Mexico City to the PRD's alliance with former Mayor Camacho, who had finally quit the PRI and created a new political party, the *Centro Democrático* or Democratic Center, with Marcelo Ebrard as its candidate for mayor. Ebrard had strong political relationship with Camacho, having served in the top cabinet-level position in the city. A week before the mayoral election, Ebrard withdrew his candidacy and announced his support for López Obrador. With key members of former Mayor Camacho's team joining López Obrador's administration, Ebrard and Ortega included, the new mayor was in a much better position to confront jitney owners. He lost no opportunity to widen and strengthen his political connections among those who gave him the greatest administrative capacity and proven experience to negotiate with transport providers, ultimately naming Ebrard as Mexico City's police chief.<sup>30</sup>

With the PRI in decline and the PRD confirmed in office, and with knowledgeable and experienced officials on board to confer on the new mayor's behalf, the position of the city government vis-a-vis transport dome federations grew markedly stronger. López Obrador would become a very successful mayor, and he would use his record in the city to run for president twice, coming very close to winning in both 2006 and 2012. Marcelo

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<sup>&</sup>lt;sup>29</sup> The PRD edged the conservative PAN by only one percentage point, but this difference increased to four percentage points thanks to votes cast for López Obrador under other parties.
<sup>30</sup> Marcelo Ebrard became Minister for Public Security during López Obrador's tenure and was

<sup>&</sup>lt;sup>30</sup> Marcelo Ebrard became Minister for Public Security during López Obrador's tenure and was subsequently, in 2006, elected to succeed him. Joel Ortega was elected to head the *Delegación Gustavo A Madero*, a large borough in Mexico City. Camacho served as close political advisor to the mayor, joined the PRD, and was elected to the National Congress in 2003 and to the Senate in 2012.

Ebrard followed López Obrador as mayor, also becoming a figure of national political prominence with presidential aspirations of his own. Even so, it was because of their strong connections to both Camacho and Cárdenas that they, as a tag-team of mayors, were collectively able to implement many of Cárdenas's initial objectives for transportation, although by different means.

The PRD has not done away with jitney organizations, nor has it relied on the publicly owned RTP bus company to leave its mark. However, surface transport service has noticeably improved. Through a series of incremental steps, built on savvy political negotiations with the jitney industry, both López Obrador and Ebrard enlarged the role of the public sector in surface public transport provision, building these transformative policies around the slow but steady implementation of the BRT corridor strategy. As such, the adoption of this transformative strategy by López Obrador and its continuation under Ebrard should not be seen as the product of preconceived design, but rather, as the cumulative result of several previous, albeit less successful experiments taking place since the PRD was first elected in 1997, which laid the path for more skillful and impactful negotiations after 2000.

#### The Importance of Negotiation

The importance of negotiation in the successful implementation of the BRT corridor expansion, and the fact that these gains were arrived at incrementally and with the participation of high-level administrators from prior administrations that already had significant experience in such matters, cannot be under-estimated. When López Obrador came to office in 2000 he faced 30,000 members of roughly 100 jitney organizations who could have been expected to mobilize in opposition to BRT, precisely because most jitney owners interpreted the city's plans as a forceful attempt to take over the most profitable transit routes. If imposed unilaterally, jitneys would have been less likely to accept relocation to other parts of the city and many would have entered the BRT corridors illegally to compete against the new service. Surprisingly, no such opposition materialized. A significant number of Mexico City jitney organizations partnered with the city government to make the project possible. They willingly professionalized their organizations, consolidated their associations into firms, removed their old jitneys from service, purchased newer BRT vehicles, and accepted enhanced regulatory oversight.

How this happened is not just a story of institutional continuity across PRD administrations, although the party's ongoing electoral successes and political permanence in Mexico City government did provide opportunities for city leaders to develop, deepen, and expand their transport strategies with the support of an ever expanding network of loyalists within various city agencies and without partisan opposition. Nor is it just an automatic response to the inclusion of high-level

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administrators with a track record of negotiation and engagement with the jitney industry. It also is a story of framing and strategy, built around the introduction of an environmental lens to justify transportation sector reform, and the incremental use of pilot programs in targeted sites to establish the initial grounds for success among jitney owners.

That López Obrador's triumph in the election neither guaranteed a close relationship with the jitney industry nor translated directly into the adoption of the BRT is made obvious by the timing of his formal embrace of the policy. Specifically, the BRT corridor strategy did not figure prominently in his arsenal of transportation policies until the second half of his administration, only after the city's Environment Minister Claudia Sheinbaum advocated for it as a way of balancing various transportation and environmental objectives.

Sheinbaum holds a Ph.D. in engineering from the National University of Mexico (UNAM) and had previously participated as a researcher in a Mexico City air quality study funded by the World Bank Global Environment Fund (GEF). In that role, she became acquainted with the network of researchers, funders and development bankers that promoted environmental "best practices" across the global south. One of these contacts was Lee Schipper, under whom she had previously studied while visiting the University of California, Berkeley.<sup>31</sup> Drawing heavily on Schipper's counsel, Sheinbaum took the lead in promoting the BRT idea in Mexico City, first to the mayor and then to other constituencies on his behalf. With her persistence, the concept of strategic corridors of rapid bus transit was incorporated into the Environment Ministry's 2002-2010 Air Quality Improvement Program, primarily because the spatial targeting of certain high-polluting transport corridors was seen as a way to achieve environmental gains through acupuncture-like tools designed to focus on the most egregious sites of pollution.<sup>32</sup> Sheinbaum further argued that participation of the existing transport groups would be indispensable to the successful implementation of any BRT system.

At this time, however, the mayor's office was more centrally focused on a different kind of transport intervention. Early in his administration, López Obrador announced he would build a 12.4-km elevated highway over the city's ring road. It may seem paradoxical that López Obrador would prioritize such a large highway project – over, for example, BRT or subway construction -- when most of the PRD's likely voters did not own a car. One

<sup>&</sup>lt;sup>31</sup> Schipper, a renowned scholar, had spent his professional life looking at the intersection of transport, energy and the environment. In 2000 he was a Senior Scientist at the International Energy Agency, focusing on sustainable transport initiatives. He was also working on establishing the Embarq Network, a program of the World Resource Institute supported with money from private international foundations, which over the next decades provided technical advice to dozens of cities implementing Bus Rapid Transit across the world.

<sup>&</sup>lt;sup>32</sup> Sheinbaum not only led the negotiation for BRT. She also can be credited for transforming the abstract "strategic corridor" idea, introduced in the prior administration by Joel Ortega, into a specific, detailed vision for López Obrador, including estimates of its benefits for both the public and the private suppliers of service.

aide to the former mayor, interviewed for this project, explains that after nearly losing the mayoral election to the conservative PAN -- a party whose core constituency was upper middle class voters -- he judged that the PRD's long-term electoral prospects depended on its ability to cater to wealthier car owners as well as the PRD's historic constituencies. Some observers also have suggested that pressure from the construction industry factored into the decision as well. Whatever the constellation of backers, with the PRI now practically powerless in the city, PRD strategists felt they could safely move rightward on the political spectrum without suffering much backlash from their traditional electoral base.

Viewing Sheinbaum as one of his most effective managers, the mayor tasked her with overseeing its construction, despite having both transport and public works ministers in his cabinet. This meant that as Environment Minister she became responsible for managing the least "green" infrastructure project in López Obrador's administration -- an initiative that produced considerable ire among transport specialists who had long maintained the folly of building more roads if sustainability was an objective. This contradiction was not of her choosing, but it did insure that she was to become one of the most visible members of the López Obrador administration. She frequently interacted with the mayor and was given access to a wide range of city ministries, seizing these opportunity to feature the BRT and promote its potential gains for Mexico City, particularly as a counter-balance to the larger roadway construction project.

With the aid of consultants financed with seed money from the Hewlett Foundation in 2001, Sheinbaum developed the case for BRT in Mexico City. The final report made frequent reference to Transmilenio, the BRT system inaugurated just two years earlier (1999) in Bogota, Colombia, and some of the consultants had participated directly in its implementation. The Transmilenio system, they explained, delivered high speed, high capacity service using enhanced buses, at a small fraction of the cost of rail rapid transit.<sup>33</sup> However the most enticing feature of the BRT, Sheinbaum soon came to believe, was that it might be organized in a way to include current jitney owners as employees and stockholders, even if not as independent entrepreneurs. Fare collection would occur at the stations and be a responsibility of the overall BRT manager. This would insure a predictable revenue stream, enabling new, private BRT companies to be highly bankable (if the fares were set at an adequate level). Jitney owners could forego individual ownership of their microbuses and jointly invest in the purchase of state-of-the-art BRT vehicles (articulated buses with capacity for up to 160 passengers).

<sup>&</sup>lt;sup>33</sup> More generally, they noted, BRT systems have the following characteristics. The vehicles enjoy an exclusive right of way of at least one full lane in each direction. Passengers pay to enter enclosed, handicapped-accessible stations, as if they were accessing a rail rapid transit system. Other similarities with rapid transit include high vehicle frequencies and provision for rapid, multiple-door access and egress. The stations are typically located on street medians. These features in combination vastly increase the speeds and carrying capacity of bus transit systems, insulating them from traffic congestion while reducing air pollution and accident rates.

How Mexico City is Transforming a Jitney System into a World Class Bus Rapid Transit System TUT-POL Draft: May 2016; Do Not Quote, Cite or Distribute Without Permission.

With control over the flow of payments, the government would then be in a position to structure rules that rewarded operators for good performance, and could even allocate some revenue to help finance the state's planning and regulatory functions. This meant that the BRT could be used for negotiation and engagement with jitney owners, rather than confrontation, a posture that itself appealed greatly to the mayor. That the BRT had design features making it virtually impossible for unauthorized competitors to operate in its reserved, uncongested lanes further reduced the potential for confrontation and conflict among jitney operators. The enhanced buses would have doors on the left side, and could only be boarded from a platform too high for ordinary jitney vehicles.

With all these features, it soon became clear that BRT technology could do much more than improve air quality. It could also be used to modify the structure of the industry, even as it expanded local government authority over transport routes and servicing. For individual operators, transitioning from a jitney association to a BRT operator held the promise of long-term permanence in the system and greater profits. It could facilitate private investment and entice incumbent jitney operators into new, more efficient institutional arrangements, while also relieving local authorities from expending large sums of money to offer additional public surface transit. When Sheinbaum finally presented this project to the mayor early in 2002, she argued that most of the initial expenses could be financed with external grants. With the mayor's authorization, she subsequently raised US \$11.86 million to carry this project forward, including U.S. \$5.8 billion from the World Bank; US \$1.31 million from the Japan Policy and Human Resources Development (PHRD) Fund; and US \$1 million each from the Shell and the Hewlett Foundations.

Despite its financial viability, political conditions in the city were less than opportune to explore such a fundamental surface transit industry restructuring at this time. During his first year as mayor, López Obrador had confronted a general strike by the jitney operators who were demanding a fare increase, and he preferred not to antagonize them again. Further, López Obrador had fully committed his transport capital investment budget several years ahead to purchase new subway trains and to build the `second floor' expressway. But Sheinbaum's background work paid off and in early 2002 she authorized the creation of a working group to formulate a BRT proposal, subject to four conditions listed in our 2014 interview: "Keep the cost from getting out of hand. Deliver something aesthetically pleasing, consulting architects and urbanists. Specify a precise implementation time line. And come up with a strategy that minimizes social conflict." The first and last of these directives were clearly the most important.

#### From Proposal to Pilot

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With the mandate to seriously evaluate the viability of the BRT proposal, Sheinbaum turned her sights to generating a wider base of support for the project. Her leadership of the mayor's signature highway initiative gave her much higher standing in the administration than any of her predecessors in the city's Environment Ministry, enabling her to begin making inroads among the city's transportation stakeholders. The mayor had already made it clear that an order from Sheinbaum should be treated as an order from him. This standing came in handy during 2003 when she began chairing weekly meetings attended by the managers of the subway, the public bus company, and the head of the Transportation Ministry. Years of informal negotiations between Transportation Ministry officials and dome federation leaders had made it very difficult to present disruptive ideas without stepping on one or another past agreement. Sheinbaum hoped to build on past negotiating experience, but sought ways to avoid being hamstrung by prior commitments. To do so, she recommended the creation of a new public agency, Metrobús, charged with planning and regulating privately operated bus services on BRT corridors.

The Transportation Ministry would still grant the necessary permits for operation as it did for other surface transit services, but this new Metrobús agency would oversee day-today functioning of the system. Private operators would finance the buses and fare collection equipment, and would in turn be paid a fixed amount per vehicle-kilometer (vkm) of authorized service. Fares would be collected by still another contractor to Metrobús and deposited into a trust fund, which would distribute revenues according to a fixed formula. Each of the individual bus owners would be guaranteed an income at least as great as he was currently earning. If all went well, the only public subsidy would be city financing of the stations and roadway. Posing a possible setback to these negotiated arrangements, several consultants worried that the income guarantee to individual owners might require significantly more public money. But López Obrador and Sheinbaum deemed this clause essential in order to secure operator buy-in. Luis Ruiz, who represented the Transport Ministry throughout this process and would later head this agency, recalls in our 2014 interview: "We were not displacing them, not taking advantage of them. Our quest was to find a healthy equilibrium, that allowed them to participate in good terms....[T]hat was our commitment, and the data, the financial runs, and everything was structured around this commitment."

With operational and financial issues settled, the task force put together by Sheinbaum composed by consultants and representatives from key agencies, including the Transportation Ministry- evaluated Ortega's list of 33 strategic corridors. They identified 10 that they judged had physical characteristics and passenger demand suitable for BRT. Two of these seemed most attractive as potential pilots: (a) *Eje 8 Sur*, running eastbound towards the southeastern fringe, and (b) *Avenida de los Insurgentes*, the city's main north-south axis. The first of these promised significantly heavier ridership -- more than half a million daily users. It ran through a densely populated lower income area with no access to the subway system. Projected demand for BRT on the Insurgentes route was only half as great, and eight subway lines already crosscut this corridor. This alternative

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had several advantages over Eje 8 Sur as a potential pilot. First, it was located in a very prominent area, ensuring that the pilot would attain maximum publicity. Second, it was very close to the "segundo piso," which would highlight the mayor's balanced highway-transit agenda. Finally, and perhaps most importantly, the task force anticipated that political negotiations with the jitneys would be simpler and cost less in Insurgentes.

Part of this owed to the fact that only 262 firms operated on the Insurgentes corridor, a relatively small number compared to other corridors.<sup>34</sup> Yet equally significant was the fact they all 262 owner-operators were represented by a single jitney organization. In contrast, there were about 2500 jitneys providing service on the Eje 8 route, and they belonged to eight different, often feuding organizations.<sup>35</sup> Based on these considerations, Sheinbaum received authorization from the mayor to initiate discussions with the Insurgentes operators. In our 2014 interview she recalls how "he said, 'take a go at it, and come back if you can get them to agree'."

Theorizing the ease of getting compliance was easier said than done, Sheinbaum soon realized. The dome federation representing jitneys on Insurgentes, known as *Ruta 2*, was one of the largest in the city. It had originated in the eighties, when the PRI-controlled city government city granted formal permits to the taxis that had long competed with public buses on the centrally located Avenida Reforma. Once taxis from this organization obtained permits to offer "collective" service, Ruta 2 extended its reach to dozens of other routes ("*ramales*"). By 2000 it represented 2,300 members owning 3,000 microbuses. It was governed by an executive committee elected periodically by delegates that represented each of the organization's routes. For most of its history, however, one man, Heriberto Flores, known as "El Pollo" (the chicken), had led Ruta 2. And as former program official at SETRAVI Arturo Moreno explained in our 2014 interview, Insurgentes was the 'crown jewel' of Flores' jitney empire, accounting with fewer than 10% of its vehicles for about 30% of its total revenue. If Flores did not personally sign on, the deal would fall through.

When Sheinbaum first apprised Flores of the administration's BRT ideas in 2003, he was thoroughly skeptical. He was familiar with a long history of government promises turning sour. His own firm had experienced a financial bust following earlier government calls to replace smaller vehicles with microbuses. The Cárdenas administration had also promised him that the government would not run RTP buses on Insurgentes and had not honored this. This had diminished Flores's own credibility within Ruta 2 members, and

<sup>&</sup>lt;sup>34</sup> RTP, the small public bus company established by Cardenas, also operated in this as in most other major corridors, but it carried many fewer passengers than the jitneys. It operated 26% of public transport vehicles working on Insurgentes, but due to the relatively larger size of its buses transported 38% of the passengers.
<sup>35</sup> Striking a deal on Eje 8 would be very complex, uncertain and time consuming. As Nicolás Gómez

<sup>&</sup>lt;sup>35</sup> Striking a deal on Eje 8 would be very complex, uncertain and time consuming. As Nicolás Gómez describes in his interview, it would require "getting eight different leaders to agree, and then ensuring each of those eight got their people to agree."

particularly among the operators running microbuses in Insurgentes.<sup>36</sup> And based on his long experience in Mexico City affairs, it was likely that he might expect an offer of personal compensation for getting members of his organization to buy into the proposal.<sup>37</sup>

As the discussion with Flores proceeded, the Insurgentes jitney operators became aware of the negotiations, effectively disowning 'El Pollo' as their spokesperson and demanding to be consulted directly. It is not clear whether this occurred spontaneously, or at the instigation of local officials from the Transportation Ministry, who were increasingly doubtful that they could conclude an acceptable deal with Flores. In any case, Sheinbaum was soon negotiating with a new leader -Jesus Padilla- who was supportive in principle of the administration's proposal and, perhaps of equal significance, had no historic ties to the PRI.

Transport official Martin Mejia later explained in our interview, "what do we do when the government commits to do a project? The Transport Ministry throws its support behind a dissident leader, empowering him. In contrast, doors are closed to enemies of the government, weakening their ability to solve problems on behalf of its members. Before long, their leadership deteriorates. And so, we began strengthening Jesus Padilla."<sup>38</sup> For over a year a committee of jitney operators led by Padilla negotiated with Sheinbaum's team. International consultants who had played key roles in the implementation of Bogota's Transmilenio<sup>39</sup> also participated, detailing elements of that plan and helping to assuage operator fears. In response, the operators expressed particular disquiet about the substantial investments they would be expected to make in new buses

<sup>&</sup>lt;sup>36</sup> Former Director for Surface Transport Regulation at SETRAVI Martin Mejia describes in a 2014 interview how at that time, "El Pollo" promoted the sale of microbuses -and in fact made a personal business out of it- only to find that authorities did not increase fares for several years, leading to a quick deterioration of the fleet and to a mountain of overdue payments from members.

<sup>&</sup>lt;sup>37</sup> Heriberto Flores, as many other dome federation leaders, extracted personal profit from his organization. According to transport officials, most of the real estate assets of Ruta 2 were not owned by the organization, but by the Flores family. A firm owned by Flores' sons also sold advertising on the Ruta 2 jitneys, without sharing the gains with members or paying duties to the government. This was cause for severe distrust among the jitney owners in Insurgentes. According to Ruta 2 member Jesus Padilla, a self-interested source, the opposition of Flores to the project had two explanations. "First, he did not understand the concept, and by not understanding it, he could not explain it. The second is that he was used to being a bully (gandalla). He had already set up a company, and wanted money to allow us to participate. We did not trust him -we knew how he conducted business- and refused" (personal interview). Heriberto Flores denied requests for an interview for this project.

<sup>&</sup>lt;sup>38</sup> There are several other versions that suggest this "pressure" was exerted much more actively. One was that authorities ordered a round of audits on the advertising company run by El Pollo's son, which placed billboards on Ruta 2 buses without paying the required contributions to the city. Another, more obscure version, points to attempts to make El Pollo responsible for the murder of one of the dissident operators, which happened to occur on the date the Insurgentes BRT corridor was announced publicly. These are of course unconfirmed, but converge on the key point: Authorities may have supported dissidence within Ruta 2 to facilitate implementation of the project.

<sup>&</sup>lt;sup>39</sup> In particular, Édgar Enrique Sandoval and Ignacio de Guzman, who had been key officials in the administration of Enrique Peñalosa.

and the possibility of reduced net income, as well of the possibility of losing control of the company.

For each concern, Sheinbaum proposed a solution, at times involving a sweetening of the government's financial commitment. Each operator would own stock in the new BRT company, although they would be prohibited from selling any of this stock for five years. The government would pay Mx\$100,000 pesos (approximately US\$10,000) for each existing vehicle, and these funds along with a small contribution from each member, would be pooled as down payment for the new fleet.<sup>40</sup> The remainder of the cost of the new buses would be borrowed and repaid from BRT system revenue. RTP, the public bus company, would also continue to operate on Insurgentes, but would never increase its share of vehicles servicing the corridor to more than 25%. Finally, the price per kilometer of service that the system would pay to each stockholder would include a monthly "fixed payment" -akin to a salary-, equivalent to his or her current average income as a jitney operator.<sup>41</sup>

#### Reaping the Benefits: BRT as a Tool for Citywide Transformation

In October 2004, more than a year after the conversations on the pilot project had begun, an agreement was reached and a majority of the Insurgentes operators created a new corporation, *Corredor Insurgentes, S.A. (CISA)*. According to government records, 180 of their 262 vehicles were scrapped and the pooled money obtained from the government's vehicle-substitution subsidy deposited in an escrow account.<sup>42</sup> This money was later paid

<sup>&</sup>lt;sup>40</sup> Each BRT vehicle cost Mx \$3.5 million pesos (US \$318,750), meaning that to pay for the 20% required downpayment, the jitney-owned company had to cover Mx \$700,000 (US \$63,750) per new vehicle. The company had 262 stocks, but had only pooled a total of Mx \$18 million pesos (US \$1.64 million) from the subsidies paid by the government for 180 scrapped microbuses (as part of the vehicle-substitution program). According to our interviews with both Jesus Padilla and Arturo Moreno, both CISA executives, stockholders agreed to make an additional out of pocket capital contribution of Mx \$70,000 (US \$6,375) per stock to reach a technically acceptable fleet size of 60 buses, raising in this way an additional Mx\$18.3 million.

<sup>&</sup>lt;sup>41</sup> The basic premise of the negotiation was that operators would earn at least the same amount of money by participating in the BRT; yet, determining pre-BRT earnings implied significant haggling. Many operators overestimated their income, ignoring unpaid taxes, non-existing insurance policies, high maintenance expenses, frequent bribes, social security contributions and even their own salaries as drivers and mechanics. Only after further protracted discussions did they agree that the new system should be able to guarantee \$15,000 pesos/month (US \$1,366) per stock share.
<sup>42</sup> Official records accessed August 2011 at the Public Transit Financing Trust Fund (*Fondo de Promocion*)

<sup>&</sup>lt;sup>42</sup> Official records accessed August 2011 at the Public Transit Financing Trust Fund (*Fondo de Promocion para el Financiamiento del Transporte Publico*) confirmed only 180 vehicle-substitution subsidies were paid for Ruta 2 buses previously operating on Insurgentes. Owners of the remaining vehicles may have joined the company despite not receiving the subsidy, or sold their stock option to others. A jitney leader, referring to a different corridor, suggested a plausible rationale for choosing to become (or not) a

to Volvo as down payment for 60 state-of-the-art articulated buses. In March 2005 the Transport Ministry formally awarded CISA the permit for BRT operation on the Insurgentes BRT corridor without accepting bids from any other group. While it might have been more economical to hold a competition for this permit, doing so would likely have derailed the whole endeavor. This decision allowed López Obrador and Sheinbaum to frame the modernization of urban transport in Mexico City in a way that was not only pragmatic, but also politically palatable.<sup>43</sup> Further, the strategy is best understood in citywide context. López Obrador and Sheinbaum knew that every dome federation leader in the city was watching, so that the operators' experience in the pilot would reverberate in all future BRT corridor negotiations. Of no less significance, the mayor was eager to position himself as a 'different,' more inclusive kind of politician. The agreement guaranteed that every jitney operator previously operating on Insurgentes would profit from the new BRT system. Such approach contrasted starkly with the federal government's failed attempt a few years earlier to build a new airport in Mexico City, where the conservative administration's decision to evict rather than negotiate with large numbers of small property owners had resulted in violence and project cancellation (2002).<sup>44</sup>

Even so, some opposition to the BRT did arise, including from some who participated in the negotiation. CISA rehired less than 200 of the approximately 500 drivers that previously worked for jitney owners in Insurgentes. While most of the redundant workers reportedly found employment working in other jitney routes, a few street protests were recorded in the media.<sup>45</sup> Further, environmentalists complained of the large number of trees cut to make room for stations. Restaurant owners threatened to sue after realizing they would lose on-street parking for their customers. A historic preservation association put signs on the street, demanding to reroute the line to avoid damaging the traditional neighborhood of San Angel. The highly respected dean of the National University (UNAM), located next to the BRT corridor, opposed the design and location of the two stations planned for his campus. Eventually these problems were resolved, often by tweaking the project to mitigate its claimed negative impacts. However, every source interviewed agreed that obtaining the support of the jitney operators had been the critical hurdle. In our 2014 interview with former Minister of Finance of Mexico City Arturo

stockowner of a BRT company. For younger jitney owners, who often served as drivers, the option of working the streets seemed a more profitable venture than passively receiving a fixed monthly check. In contrast, older jitney owners, who hired drivers and were forced to police the appropriate use of their vehicle and the timely payment of their share of the profits, welcomed the stock option for peace of mind. <sup>43</sup> Sheinbaum always considered an open bid a non-starter. As she put it, jitney operators would interpret the proposal as structured to replace them, and would mobilize in opposition. The confrontation would severely jeopardize the project -and lead to questions about the differences of the PRD with the PRI. <sup>44</sup> For details of the failed attempt to build a new airport in Mexico City in 2002, see Flores Dewey and Davis (2013).

<sup>&</sup>lt;sup>45</sup> In our 2014 interview with Arturo Moreno he explains how the transition from 262 jitney vehicles to only 60 BRT buses implied that many drivers would be left redundant. With only 60 buses in CISA's fleet, only 180 of the approximately 500 drivers could continue to work at the company. Sources provided no clarity regarding what happened to the approximately 320 redundant drivers. CISA officials suggested that they were quickly hired to work in other jitney routes, but this remains unconfirmed.

Herrera, he explains how "negotiation with the operators took 2-3 years. The construction of the corridor took only 3 months." Luis Ruiz, who acted as liaison between the Ministry of Transport and the Ministry of the Environment, recalls in his 2014 interview how "95% of the project was striking an agreement with transport operators. The rest was easy, a project like any other." The first BRT corridor in Mexico City, spanning 19.6 kilometers and 37 stations across Insurgentes, commenced operations in June 2005. A few days later Mayor López Obrador resigned to run for president.<sup>46</sup> The Insurgentes BRT line carried 74.2 million person-trips in its first year, reducing the time required to traverse the city north south by 40%, from two and a half hours on a jitney (employing microbus vehicles) to only one and a half hours with Metrobús. The BRT design and operation were far from perfect but presented such a stark contrast with the thousands of jitney microbuses still operating throughout the rest of Mexico City that support for BRT expansion to additional routes surged. In a poll taken to compare different transport modes in the city, 85% responded that the BRT was better than the jitneys, and 64% mentioned it was better than regular RTP services (CTS-Mexico 2009). The corridor hit the 100 millionth passenger mark soon after its first anniversary and in the same period accidents on the corridor decreased by 40%.<sup>47</sup> Delegations from cities all over Mexico visited to learn how the new mode functioned, and the federal government modified its program of financial aid for urban transport systems nationwide to encourage BRT adoption and implementation.

Riding on these and several other urban successes attributed to the López Obrador administration,<sup>48</sup> PRD candidate Marcelo Ebrard prevailed in Mexico City during the 2006 mayoral election. Paradoxically, perhaps, Mayor López Obrador's bid for the presidency failed by the thinnest of margins (1.5%), with Felipe Calderon of the conservative PAN party emerging as the victor.<sup>49</sup> López Obrador's supporters demanded a recount, and were never satisfied with the result. Large numbers of his supporters claimed for years that he was the "legitimate president" and indeed he organized a "shadow cabinet."<sup>50</sup> Of greater significance here, however, he urged subnational PRD elected officials – including his successor as Mexico City mayor – to refuse interaction with the new federal administration, and many did. This partisan tension persisted for years. It resulted in unprecedented levels of autonomy for the new Mexico City mayor, at

<sup>&</sup>lt;sup>46</sup> The presidential election was not scheduled until July 2006, but López Obrador resigned early to defend himself against a lawsuit that threatened to prevent his candidacy. He was accused of authorizing construction of a road on private land, despite a judicial ruling against the city's use of eminent domain. In April 2005, the PRI and PAN representatives in Congress voted to deprive the mayor of judicial immunity. López resigned soon after, to lead a nationwide protest in defense of his candidacy. Popular reaction was such that federal authorities soon withdrew the lawsuit.

<sup>&</sup>lt;sup>47</sup> Ibid.

<sup>&</sup>lt;sup>48</sup> Among these successes are the resurgence of the historic downtown, adoption of a construction code concentrating growth to core areas, implementation of a pension program for the elderly, and a conspicuous public works program (including construction of the elevated highway).

<sup>&</sup>lt;sup>49</sup> The official vote tally was 35.89% for Felipe Calderon (PAN) vs. 35.33% for Andres Manuel López Obrador (PRD).

<sup>&</sup>lt;sup>50</sup> Claudia Sheinbaum, by the way, went on to serve in this shadow cabinet and has not returned to public office.

the cost of minimal assistance from the federal government. It also provided a strong incentive for the new mayor to prioritize surface transportation, since it was a policy arena in which he enjoyed full legal authority and in which progress seemed feasible without large public expenditures.

As noted earlier, Ebrard was no stranger to Mexico City politics, having served as Secretary of State (*Secretario General de Gobierno*) under Mayor Camacho. In that post he also had served as lead negotiator with urban transport interests. While out of office, he had remained closely informed of how the jitney industry was evolving and which dome federation leaderships still truly mattered. Now as mayor, he made the scaling up of BRT one of his highest priorities. But his strategy, perhaps necessarily, was somewhat different. The first BRT line, or the city's pilot project, materialized out of careful, protracted negotiation, in which government authorities carefully chose their counterparts and gradually turned skepticism into wholehearted support, even if this was achieved by offering a few participants very attractive and perhaps financially unsustainable, conditions.

In contrast, Mayor Ebrard used the momentum and goodwill built by his predecessor to aggressively push for the simultaneous implementation of several BRT corridors –and many other sustainable transport initiatives, including the enhancement of several traditional (non BRT) bus corridors, the implementation of a bike share program and the pedestrianization of some streets. He also succeeded in defusing conflict, a tremendous feat considering that the attractive terms offered in the pilot round had to be adjusted downwards to contain costs, and that BRT could no longer be presented as a small, innocuous initiative with no losers. But achieving all these aims required a new form of politics, focused on citizen participation and with more transparent public discussion of urban servicing and governance than had been associated with López Obrador.

During the very early days of his administration, Ebrard organized an unprecedented "consultation" with the broad Mexico City public. He had 1600 booths set up across the city at which residents were encouraged to answer a series of questions, mainly worded so as to elicit expressions of support for actions to reduce air pollution and fight global warming. Among these were the following about urban transportation: "Do you want the city government to build 10 Metrobús lines and one subway line?" and "Should the government replace all microbuses with new vehicles by the year 2012?" The results of course were non-binding, but they were also notable as the city's first attempt to draw the general public into the discourse about major public choices. Ebrard's hope was that an aroused and informed public might enhance his leverage in negotiations with vested interest groups.

To a great degree, this strategy paid off, at least in terms of moving the transport needle beyond a single pilot corridor to a much more well-designed and integrated surface transit system. Yet far from a choice grounded only in a commitment to democracy and transparency, the turn to public sentiment was practically required if Ebrard was to have

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sufficient negotiating capacity to integrate a larger number of jitney owners into the BRT system. The 2004 adoption of BRT on Insurgentes may have got the ball rolling, but as discussed above, the characteristics that made this maiden corridor so successful were in many ways quite exceptional, enabling the government in effect to purchase the jitney operators' collaboration without committing to subsidize the new service. Such a strategy was not easily implementable in in corridors with much larger numbers of jitney operators sharing a similar or smaller demand pie. In order to make an inclusionary transition financially feasible, jitney operators in the other corridors would have to contribute more of their own funds to finance the new BRT buses, and/or would need to accept a monthly payment guarantee considerably below that provided the Insurgentes operators. Indeed, it had turned out that small, but increasing, subsidies were needed to fulfill the Insurgentes guarantee agreement itself.<sup>51</sup> If the network was to grow, therefore, it was essential to drive harder bargains than in the Insurgentes "pilot" corridor, but to do so without sabotaging negotiations in the process.

Ebrard selected Armando Quintero to serve as both Transportation Minister and leader of the surface transit improvement effort. Quintero had been a labor leader, state assemblyman, congressman, and chairman of the PRD in Mexico City. He had no experience in transportation, but Ebrard viewed the main challenges he faced as mainly about negotiation with organized groups in the city. As one of his first steps, Quintero convened the leaders of over 100 jitney organizations in a breakfast. The invitation came as a surprise as many of these leaders were accustomed to the mediation of dome federation leaders to communicate with the Transport Minister.<sup>52</sup> "At that meeting," Quintero later recalled, "I reminded them of my own political history, long associated with the political left and its fight against authoritarianism. Then, I reminded them that I grew up in the tough neighborhood of Tepito, where I learned to honor my commitments and to punch in the face those who do not." This veiled threat, confirmed in interviews with several jitney leaders, created the ambiance for upcoming negotiations. A change of pace and emphasis was in the works: Whereas López Obrador had instructed Minister Sheinbaum to avoid conflict above all, Ebrard instructed Minister Quintero to avoid conflict, insofar as *possible*; and this meant that a certain degree of conflict was seen as inevitable if city leaders were to institutionalize and expand the BRT strategy beyond a few pilot corridors.

Quintero established a formal negotiation with the jitney organizations in each candidate corridor for bus service enhancement. Each negotiation began with the government

<sup>&</sup>lt;sup>51</sup> Most of these subsidies were hidden from the public eye. For example, the share of fare revenue that was in principle reserved to fund planning functions was seldom collected, and the 20 government owned BRT buses that operated on Insurgentes were paid from the city's general fund. For more on this see Flores Dewey and Zegras (2013).

<sup>&</sup>lt;sup>52</sup> The distinction between jitney organizations and dome federation federations merits clarification. Vehicle owners join jitney organizations (rutas), and jitney organizations are, in turn, affiliated to federations (dome federations). Organization names can be misleading, however, as some jitney organizations grew very large -such as the previously mentioned Ruta 2- and splintered from their federation, becoming dome federations of their own.

laying out its proposals. In the ensuing discussions, Transport Ministry officials working under Quintero's direction sought to craft an agreement acceptable to the largest possible number of parties. When it seemed infeasible to include every jitney owner in the new system, alternatives were sought; such as awarding taxi medallions to those displaced or awarding them jitney permits for other routes in the city. The Transport Ministry used all tools at its disposal to empower cooperative jitney organization leaders, and to isolate intransigent opponents. In consequence, many of the old dome federation leaders who remained committed to the traditional business model of individually owned vehicles soon found their ability to influence members greatly diminished.

#### **Expanding Mexico City's BRT system**

The first agreements reached were for a 9-kilometer southbound extension of the Insurgentes BRT line (opened March 2008) and a new 20-kilometer east-west BRT line (opened December 2008). As with the pilot line on Insurgentes, previous independent microbus operators attached to each corridor became joint owners, via stock ownership, of its new BRT corporation. Pooling their entitlements for vehicle substitution subsidies to make down payments, the new corporations were able to purchase all-new vehicle fleets. City authorities also adjusted public bus company (RTP) operations to minimize displacement and defuse potential protests.<sup>53</sup> For example, the east-west BRT line (estimated demand: 142,847 passengers/day) was designed to operate with 71 new buses, which would replace 433 microbuses operated by four different organizations. The deal originally struck contemplated that RTP would operate 20 BRT vehicles in this line and that the remaining bus slots would be allocated to companies created by the jitney organizations. However, a fifth organization whose routes only marginally touched on the corridor, took to the streets demanding to be included. After protests threatened to cause a delay to the project and destabilize ongoing negotiations in other corridors, the mayor ordered RTP to make room by giving up 12 of its 20 bus slots.<sup>54</sup>

Despite the above, the deals were considerably less generous to the new operatorstockholder in terms of both price per kilometer of service, and guaranteed monthly

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<sup>&</sup>lt;sup>53</sup> While not the result of any strategic design, the participation of the public bus company RTP as BRT operator proved to be an important instrument for Mexico City's government. It was through this company that subsidies were channeled into the system, and the number of RTP buses could be adjusted to make room for more jitney operators, or to minimize their out of pocket financial contributions.

<sup>&</sup>lt;sup>54</sup> In his interview, Martin Mejia, who led the negotiations for the Transportation Ministry, confirmed the Mayor's direct intervention in this decision. Jorge Coxtenica, a planner also participating in the negotiations, confirmed how the Ebrard administration monitored the apparently technical discussions at the Ministry, and intervened selectively: "Our position was that they should not participate, but there were public protests. The matter escaped the technical negotiation managed by us, and was moved into a political negotiation managed at the Secretariat of State (Secretaria de Gobierno), where conditions changed."

earnings, than those in the pilot Insurgentes corridor. Because the previous system was marked by lax regulation and atomized ownership, it had resulted in a vast oversupply of service. If the new corporations were to be self-supporting they needed to reduce their memberships or accept less guaranteed compensation for each. In addition, Transport Ministry officials realized that the participation of RTP in each subsequent corridor would require a significant public expenditure commitment, both to purchase the new buses and provide operating subsidies. To minimize the projected cost, they sought to negotiate agreements whereby the public bus company's vehicles would also be financed from fare revenues, even when this implied that the terms offered to jitney organizations would need to worsen as a result.<sup>55</sup> To ameliorate the necessary cuts, Quintero authorized payment of the vehicle substitution subsidy without proof that the old vehicles had been destroyed, enabling some operators to "double-dip."<sup>56</sup> Such concessions did not fully suffice to make the deal attractive to everyone, but they did facilitate buy-outs of operators who chose to drop out by some of their peers.

All this proved to be an exhausting process during which much of the initial enthusiasm of jitney operators dissipated. As a result, the pace of corridor negotiations dramatically slowed during 2009 and 2010, leading Ebrard to pursue bus service enhancement in some additional corridors that were deemed unsuitable for BRT (in that they lacked space for exclusive lanes, or where median stations were appropriate) but that would benefit from centralized management and modernization of their bus fleets. Working closely with organizations with well-established leaders, such as Ruta 2, now led by Jesus Padilla, Mexico City officials brokered deals to replace 502 microbuses from the iconic Avenida Reforma and 369 microbuses from the city's main ring road, known as the Periferico. With financial support and technical advice from city authorities, Padilla explains how he organized two different companies, one owned by the jitney operators that previously serviced these corridors, and two the newly supplied 390 buses (Ciudad de Mexico 2010).

Toward the end of his term, and with these additional successes under his belt, Ebrard decided it was time to shift gears. While his associates would often imply that the non-BRT corridors should be counted toward the administration's ten-corridor commitment, Ebrard did not want to end his term with partial results. To break the stalemate, Quintero proposed using the negotiations for a third BRT corridor as an example.<sup>57</sup> For months, jitney owners in this corridor had remained noncommittal, haggling about the terms and

<sup>&</sup>lt;sup>55</sup> The General Manager of Metrobús, Guillermo Calderon, explained in our 2014 interview the logic behind the change of terms: "Inserting the public bus company into each corridor implied that we had to purchase 25% of the fleet with city funds, and probably that we would end up subsidizing the services of 25% of the fleet. We did not want to do that anymore. Why? Because it implied an immediate investment to buy the buses, and because it created a financial hole that had to be covered with subsidies.

<sup>&</sup>lt;sup>56</sup> This decision had a perverse result on the finances of Line 2 of the BRT system. Many individual vehicle owners continued to offer service in streets parallel to the functioning BRT. In consequence, BRT ridership was below expectations during the initial months of operation.

<sup>&</sup>lt;sup>57</sup> Ebrard, it will be recalled, had previously opened a second BRT corridor and an extension of the original Insurgentes corridor service.

demanding the same deal as their peers in the first BRT corridors, despite the financial impact on the city. Ebrard and Quintero rejected the extortionary practices of jitney owners, precisely to keep the price of citywide BRT manageable, itself a necessity if BRT was to be the dominant mode of surface transit. They also announced that the project was moving forward with or without the participation of the jitney organizations.

The third corridor in question was a 17-kilometer north-south route (estimated demand: 123,293 passengers/day). Transport officials calculated that a fleet of just 54 articulated vehicles could replace the 702 microbuses currently in service. The current operators were represented by three jitney organizations, all of whose leaders appeared receptive in principle. The negotiations dragged for months, however, as these leaders faced internal revolts and kept coming back for better terms.<sup>58</sup> In May 2010 the city authorities abruptly suspended talks, leaving the jitney leaders and members to wonder if the government had decided to shelve plans for this corridor. When the Transport Ministry invited the leaders to resume talks in July, Armando Quintero was in the chair instead of a mid-level official. In our 2014 interview with the leader of Ruta 3, Felipe Núñez describes how "the tone changed dramatically as well as the data."

Quintero explained that according to his revised passenger demand estimates, there was no way the system could sustain monthly payments for the owners of the 702 incumbent vehicles. At best, only the owners of 430 vehicles could be integrated into the BRT, and the rest would have to accept relocation to provide service on "feeder and complement routes" (SETRAVI 2010). He also announced that the public bus company (RTP) would not operate BRT service in this corridor, so the jitney organizations would need to supply the entirety of the required fleet. Finally, he explained that their companies would have to come up with 40% down payments for the new BRT buses instead of the 20% required of the previously established BRT corporations, so as reduce projected debt service costs and alleviate future pressure for fare increases.

On the surface this appeared to be a deal-breaker. In order to come up with the 40% down payment, each operator who wished to join the new BRT company would need to contribute somewhere between US\$23,000 and US\$31,000 dollars<sup>59</sup> over and above proceeds from the vehicle substitution subsidy. Very few could possibly do so and government authorities knew it. However, Quintero had a sweetener to offer: each operator should bring on an outside "investor-partner." This suggestion came as a bomb to all three leaders, who quit the negotiation and sought to recruit their peers citywide to

<sup>&</sup>lt;sup>58</sup> The three organizations were Ruta 1, Ruta 3 and Ruta 88. Francisco Aguirre, who had previously facilitated the implementation of the southbound extension of the Insurgentes, led Ruta 1. The city "owed" him, and he had already proven his capacity to enforce agreements. Felipe Nuñez led Ruta 3 and Magdaleno Barragan led Ruta 88. Both had already obtained authorization from the affected members of their organizations to create firms to participate in Metrobús.

<sup>&</sup>lt;sup>59</sup> These figures derived from conversations with officials and organization leaders.

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protest this government effort to "privatize transportation" (i.e. to recruit new, much larger private actors into to the industry).<sup>60</sup>

Between August and November 2010, several demonstrations took place, including one outside the local Assembly on the day Mayor Ebrard delivered his annual "state of the city" speech. Anti-riot police prevented 4,000 microbus operators from marching into the Assembly Hall, with the confrontation ending in a major traffic jam. Mejia also described how members from the majority of the 106 jitney organizations that existed at the time participated, including, notably, the leaders of the companies that were now running existing BRT services. A few weeks later these organizations threatened to disrupt two international events hosted by Mayor Ebrard: The World Summit of Local and Regional Leaders and the World Mayors Summit on Climate. Approximately 800 mayors from around the world were scheduled to visit the city that week, and Ebrard was scheduled to receive a prize as "Best City Mayor." To have public transport break down and to create a blockade on major streets on those days would have been tremendously embarrassing. especially for a mayor who already had his eyes on the presidential election of 2012. So, Ebrard successfully defused the protests, brought the discussions back to a corridor-bycorridor negotiation, brokered a deal that included his 'investor-partner' proposal, received his award unmolested, and on February 2011 inaugurated Line 3 of the BRT system. How did he do it?

Soon after threatening to disrupt the events, leaders Felipe Núñez (Ruta 3), Magdaleno Barragán (Ruta 88) and Noe Rendón (Ruta 1-dissidence) finally received an invitation via the Secretary of State (Secretario de Gobierno) to talk with the mayor directly. At this meeting, Ebrard told them that he was not personally sold on the investor-partner proposal, and that his concern was rather centered on ensuring that the system remained financially viable. He also invited them to present an alternative proposal. As further evidence of his goodwill, he ordered the Transport Ministry to deposit their vehiclesubstitution subsidies into an escrow account with Mercedes Benz, the company with which these leaders had pre-negotiated the required BRT bus purchase. With this, production of the buses could start. Jitney leaders called off the protest and Ebrard both hosted the international meetings and received his prize without complications.

In fact, there was little indication that Ebrard actually intended to shift course. Negotiations with Francisco Aguirre, the leader of Ruta 1 who had never opposed the partnership, continued even as the protests mounted. Several officials interviewed referred to Aguirre as the most cunning leader in the pack ("el de más colmillo"), who had a clear vision of what he hoped to achieve. User forecasts suggested that if built, BRT line 3 would soon have be extended southbound, to the National University (UNAM). According to government negotiator Martin Mejia, "Francisco Aguirre pointed out that this profitable southbound extension would inevitably happen within 2 to 3 years. So we made a deal, authorizing him to offer service in the interim from Etiopia (the BRT terminal station) to the University with his existing bus fleet... We will eventually extend

<sup>&</sup>lt;sup>60</sup> The phrase "privatize transportation" was used by one of the jitney organization leaders interviewed for this project who??.

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the BRT, and Francisco is already there." With this agreement in hand, Aguirre announced that a majority of his members in this corridor (149 out of 199) accepted the government's offer to partner with an outside investor, severely weakening the positions of the two other jitney organizations in the corridor (as well as of his own dissidents). The Transportation Ministry also built upon this agreement as it reopened negotiations in the other potential BRT corridors, making clear both that it intended to proceed with investor partners if negotiations with the jitney organizations remained stalled, but that it was also very open to proceeding with them alone if acceptable agreements could be reached.

The proposed investor-partner for Line 3 was ADO, a long-established Mexican interurban bus company that carried 120 million passengers a year, with a fleet of 4500 buses.<sup>61</sup> It had been a cooperative of vehicle owners itself until the 1990s when it reorganized as a corporation. It was well capitalized and had long-established relationships with global bus manufacturers and suppliers, but had been losing market share to low-cost air carriers and was looking to diversify.<sup>62</sup> Ebrard had induced it to commit to operating Line 3 with no public subsidy, to require no contribution from the jitney members who joined as shareholders beyond their vehicle substitution subsidies from the government, to guarantee the monthly stipends, and to finance the required bus fleet at an interest rate below that available from banks.<sup>63</sup>

In December Mercedes Benz unilaterally voided the contract signed with jitney leaders to supply them with the new buses.<sup>64</sup> The affected jitney leaders threatened Mercedes with legal suits, with burning the buses, even with traveling to Germany and hosting protests there. However, at this point it was clear to them and to the members they represented, that Ebrard had made his choice. Soon after the bus manufacturer recanted, jitney operators began accepting or selling their stock options,<sup>65</sup> and in February 2011 Mayor

<sup>&</sup>lt;sup>61</sup> Gonzalo Garcia, ADO General Manager, personal interview. ADO was so well established and known to the public, that one of the songs of *El Tri*, Mexico's most famous rock band, was about someone waiting for a bus on ADO's terminal (*"Estoy esperando mi camión en la terminal del ADO..."*).

<sup>&</sup>lt;sup>62</sup> In a 2014 interview with, current Finance Minister of Mexico City Edgar Amador, he explains: "ADO was created as a transport coop. It has about 500 stockholders. If there was any company comfortable with partnering with jitneys it was ADO."

<sup>&</sup>lt;sup>63</sup> In a 2014 interview with ADO's Director of Metropolitan Transport Gonzalo Garcia, he explains: "We offered to internalize the social costs of the project... freeing up funds, eliminating subsidies, and delivering a profitable model that considered the social part... and that allowed authorities to make much faster progress."

<sup>&</sup>lt;sup>64</sup> In a 2014 interview, one of the affected jitney leaders, Noe Rendon describes: "Mercedes knew this corridor only had 54 bus slots. They could not produce a second set of 54 buses for ADO, as one of the two groups would not be able to pay for them, and so had to choose: Producing them for us, or producing them for one of their largest clients in Mexico, perhaps worldwide, with the blessing of authorities."

<sup>&</sup>lt;sup>65</sup> Transportation Ministry authorities again helped catalyze this process, throwing in taxi medallions or route authorizations to entice participation, and shunning holdout leaders. For example, Magdaleno Barragan, leader of Ruta 88 recalls in a 2014 interview how, "The Ministry officials started calling on my deputies rather than me. It empowered leaderships within my organization that wanted to join ADO. In fact, one of these deputies is now vice- president of MIVSA (the BRT company established by ADO). When we saw that we no longer had the majority, many of us decided to sell."

Ebrard inaugurated the 17 kilometers and 32 stations of Metrobús line 3. The entry of ADO clarified to jitney organizations across the city that their participation in "strategic corridor" projects was desired but not indispensable. The city could tweak its plans and remained eager to treat the existing operators fairly, but would not allow them to dictate policy or threaten the bus enhancement plan. As another concession, Quintero added that the city would not authorize further ADO expansion into new BRT corridors if it could arrive at reasonable agreements with the existing operators alone.

Soon Quintero was making progress in most corridor negotiations. BRT Line 4, running 28 kilometers from downtown to the airport, commenced service in April 2012. Negotiations for Line 5, 10 kilometers in length, were concluded in the final weeks of the Ebrard administration, and it commenced service in November 2013. In October 2014, with a new mayor in office, construction of Line 6 broke ground, and in January 2015, the site of Line 7 was publicly announced. In none of these cases was an "investor-partner" required again. Interestingly, the new PRD candidate for mayor featured Metrobús on his platform, using a televised debate to promise a 100-kilometer expansion of the BRT network under his watch. The PRD won that election in a landslide and soon after being sworn in promoted legislation that promises to apply features of the Metrobús "model" to jitney operations throughout the city. Apparently, the negotiated transformation of Mexico City's surface transport system continues.

#### Conclusion

Cities that rely for most of their transit service on a privatized, atomized, loosely regulated bus industry are the rule rather than the exception in Latin America, Africa, and South East Asia, and where a significant proportion of the world's future urban growth will be concentrated. Leaders committed to bringing about major service improvements are challenged to do so without incurring major new fiscal commitments or approving major fare increases. This is particularly true of those functioning within frameworks of democracy. Lacking the ability to bulldoze plans through, these leaders will have to rely on persuasion to overcome the concerns of existing service providers, who can easily paralyze their cities to make their voices heard. Mexico City provides at least one attractive template for such change, involving a mix of strong leadership with genuine negotiation, persuasion, and sensitivity to the claims of the low-income providers who have long been the mainstay of their transit systems.

The sustained expansion of BRT in Mexico City under the PRD can be compared to the expansion of the city's subway and the nationalization of bus services in the late sixties and seventies under the helm of the PRI. In the earlier period, however, Mayors were appointed members of the national president's administration, and required at most passive local support because they could count on national resources and federal backing.

Today Mexico City's mayors are elected and since 1997 they have come from different parties than the national president, providing essentially no support at all. Where early PRI-appointed mayors could rely on the threat of force to overcome opposition, Mayors López Obrador and Ebrard's toolkit was essentially limited to incentives, cunning, persuasion, and a commitment to negotiation. Whereas the PRI was (at the time) securely in power, mayors from the PRD are intensely concerned about retaining the mayoralty for the party and to become themselves a viable candidate for the national presidency. During the three decades separating these two periods of transit renaissance, the capacity of mayors to discipline transit interest groups has gradually declined.

In these complex political conditions, considerable headway has been made in reforming a highly fragmented, under-capitalized, inefficient, and politically unruly surface transport system into a BRT success story. These gains have materialized incrementally, starting with the selection of a single corridor, and expanding steadily throughout the city. The story of the first BRT line, opened during the administration of López Obrador, is one of careful protracted negotiation in which government authorities carefully chose their counterparts and gradually turned skepticism into wholehearted support -even if this was achieved by offering a few participants very attractive, and perhaps financially unsustainable, conditions. In a subsequent period, Mayor Ebrard scaled up the experiment, using the momentum and goodwill built by his predecessor to aggressively push for the simultaneous implementation of several BRT corridors – and of many other sustainable transport initiatives, including as the enhancement of several traditional (non BRT) bus corridors, the implementation of a bike share program and the pedestrianization of some streets. This mayor also succeeded in defusing conflict, a tremendous feat considering that the attractive terms offered in the pilot round had to be adjusted downwards to contain costs, and that BRT could no longer be presented as a small, innocuous initiative with no losers.

During his six years as mayor, Ebrard extended the Insurgentes BRT line 8.5 kilometers to the south, built three new lines (65 km), and greatly advanced the negotiations for two more. These new BRT lines all had well-designed stations, state-of-the-art buses, and were fare-integrated with the subway system. Ebrard also utilized the "model" of service enhancement by negotiation with the operators to five additional "strategic corridors" that were not deemed suitable for BRT. In these as well, former microbus services were replaced with new full-size buses and the jitney organizations transitioned into firms.<sup>66</sup> Overall, Ebrard oversaw 246 kilometers of "strategic corridor" bus service enhancement, including 73 kilometers of Bus Rapid Transit (Ciudad de Mexico 2010). Ebrard also promoted the redevelopment of the city's 45 intermodal stations (CETRAMs), the physical point of interphase between the subways and surface transit. For years street vendors and colectivo organizations had colonized these critical facilities, making multimodal transfers a painful, uncomfortable and dangerous experience for passengers.

<sup>&</sup>lt;sup>66</sup> 668 new buses and trolleybuses replaced the full fleet of microbuses that previously offered services in these five non-BRT "strategic corridors." See Ciudad de Mexico (2010, 19).

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first one –at El Rosario- opened only months after he left office. Ebrard's goal was not simply to expand the BRT but, as he put it during our 2014 interview, "to replace a very primitive model where neither users nor authorities could hold operators accountable, with a much more advanced and complex model more compatible with the city we need for this century."

In addition to his bus initiatives, Ebrard also launched an extensive bike share system (Ecobici) comprising 1114 bikes and 85 stations, established Sunday bike-only circuits, and built 35 kilometers of protected bike lanes, including two on the beautiful (but oftencongested) Reforma and Chapultepec Avenues. He also improved the pedestrian realm downtown<sup>67</sup> and installed modern parking meters in the traditional neighborhood of Condesa, efforts that required the controversial displacement of street vendors and parking hawkers ('franeleros'), and a successful neighborhood referendum to implement the meters. Finally, days before leaving office, Ebrard inaugurated the city's 12<sup>th</sup> subway line, the first built in twelve years, and the only one fully credited to a PRD administration.<sup>68</sup>

Considered less conflict-averse than his immediate predecessor, Ebrard was determined to move well beyond pilot projects. He often leaned hard on the surface transport stakeholders to reach agreement when negotiations stalled. He later recalled: "If we talked only about isolated projects nobody would care, no one would support us." At the same time, he was sensitive to the need for flexibility. "We never said 'all microbuses [in the city as a whole] must do x'," he observed, "because we could not enforce that, [particularly] if buses stopped running in protest. Instead, we intervened corridor by corridor." These two statements may seem contradictory except for the fact that his administration was actually negotiating over a dozen of these corridors at the same time, and communicated to jitney organization leaders that it was committed to implementing several BRT lines during his term. Indeed, Ebrard made a public commitment to build 10 BRT corridors during his administration. This combination of strategic determination and tactical flexibility (particularly in corridor selection, and in determining the program for each selected corridor) enabled Ebrard, although building on the foundation laid by López Obrador, to bring about far greater improvements in Mexico City surface transit that had previously seemed conceivable.

In retrospect, it is clear that all this is a story of political leadership, albeit distributed across administrations with key actors responding in different ways depending on the challenge at hand. When officials at the Transportation Ministry felt trapped, cognizant of the limitations of the jitney system, but also of the lack of a credible alternative to

<sup>&</sup>lt;sup>67</sup> Ebrard pedestrianized the beautiful Avenida Madero, only blocks away from the city's main square.
<sup>68</sup> The other relevant transportation initiative undertaken by Ebrard was to extend the "second floor" over the existing ring road. Much to the dismay of his greenest supporters, and perhaps placing a stain on his sustainable transport record, Ebrard extended the elevated section 9.8 kilometers to the north and 11 kilometers to the south from the section built by López Obrador. In contrast to his predecessor, however, Ebrard financed this project by charging motorists a toll for access.

transform the status quo, López Obrador and Ebrard found pathways out of this trap, delivering very significant service improvements and developing a momentum for change that has so far persisted into the term of their successor, the current mayor of Mexico City, also from the PRD.

Nor must one forget the key roles played by several mayoral aides in the stories of leadership, in particular Joel Ortega, Claudia Sheinbaum and Armando Quintero - who served in ministerial roles under elected Mayors Cárdenas, López Obrador, and Ebrard respectively. Ortega played the lead role in developing a rough master plan for urban transport improvement in Mexico City, which could be implemented flexibly, depending on fiscal capacity and political circumstances. Sheinbaum took the lead under Mayor López Obrador in transforming an apparently impossible bus enhancement project on one boulevard into a highly conspicuous success itself, and an attractive (if still preliminary) model for similar efforts citywide. Quintero, working closely with Mayor Ebrard, insisted successfully on the government's need to proceed more quickly, and within tighter fiscal constraints -- squaring the circle by identifying a new source of private capital and expertise to co-venture with the existing providers rather than by reverting to authoritarian methods. None of these three were transportation specialists at the time of appointment, but all brought strong analytic, negotiating, and communication skills to their roles and, having quickly learned what they needed to know about the transport system, played indispensable parts in the transformative enhancement of Mexico City's surface transport system.

Within each jitney organization, finally, there were leaders charged with safeguarding the interests of their members. Their basic orientation was toward defense of the status quo. During the late 1990s and early 2000s, though, it became increasingly apparent that this might prove infeasible. So they were increasingly challenged to appraise options far outside their traditional zone of expertise and persuade their members when they deemed it appropriate. The city did, to be sure, tilt the scales within jitney organizations, building up more supportive individuals at the expense of some older line leaders. These nonetheless had to have arisen from the ranks of individual operators themselves, and to win their confidence. The successes of those, like Padilla, who embraced reform early and who brought along their members, have inspired many others to follow suit.

As a result, a significant share of Mexico City's surface transit industry has now transitioned from a precarious, artisanal operation to one that is more professional, modernized, faster, safer, less polluting, and more convenient.<sup>69</sup> The new companies pay

<sup>&</sup>lt;sup>69</sup> While this case has focused exclusively on shaping surface public transport *within* the political jurisdiction of Mexico City, we must not forget that the metropolitan region of this city -where roughly half of the population of this megapolis lives- continues to face tremendous surface public transportation challenges. In those municipalities, where jitney organizations are even more dominant and pervasive, the influence of Mexico City's success begins to be felt nonetheless. In October 2010, local authorities established their own BRT system, Mexibus, and have since built two BRT lines, and begun construction of a third, all with the participation of the jitney organizations.

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taxes and provide their stockholders with stable incomes and their employees with good salaries and social security benefits. Jitney operators across the city have now realized that there are pathways enabling them to invest profitably in better vehicles and facilities, and that transitioning their organizations from quasi-informal associations into professional companies can leave them better off. They frequently approach local authorities to explore possibilities in their own corridors. In short, the implementation of Bus Rapid Transit in a few corridors inspired a process of citywide reform and service enhancement, with the cooperation and support of those interest groups previously most opposed.

## DRAFT

#### List of Interviewees, Mexico City case.

**Alejandro Villegas** served as general director for transportation planning at the Transportation Secretary of the Mexico City government (SETRAVI) from 1995 to 2000, serving under the last PRI mayor and the first PRD mayor. Until recently, he served as consulting program officer for the Hewlett's Foundation's Environment Program in Mexico.

**Angel Molinero** is a transportation consultant that has advised several local administrations. During the 1990s he worked as planner for the Ruta 100, and later for SETRAVI, and from these positions contributed to several modernization plans under both Oscar Espinosa (PRI) and Cuauhtémoc Cardenas (PRD), making him a key source to understand the differences between appointed and elected mayors.

Armando Quintero (PRD) is a politician who served as chairman of the PRD during Cuauhtémoc Cardenas' tenure as mayor. He was elected to head a city borough in 2000, and later became Minister of Transport (SETRAVI) during Marcelo Ebrard's government. From this position, he negotiated the implementation of several "strategic corridors".

Arturo Herrera was Minister of Finance of Mexico City under Lopez Obrador.

**Arturo Moreno** was a program official at SETRAVI, and now works as operations director for CISA, the company that operates the BRT in Insurgentes.

**Claudia Sheinbaum.** Minister of Environment, Mexico City (2000-2006). She was the champion behind the implementation of Metrobús, the city's BRT project.

Felipe Nunez is the leader of Ruta 3, an organization of colectivo operators in Mexico City.

**Fernando Peña Garavito** has had a long career in transportation agencies during PRI administrations. He worked as adviser to the general manager of Ruta 100 during the term of Mayor Manuel Camacho, and later became Director of Urban Transport under Mayor Oscar Espinosa. In this position, he was directly in charge of negotiating with *colectivo* organizations and of planning the possible partition of Ruta 100 services among private companies.

**Florencia Serrania** served as General Manager for Mexico City's subway under Lopez Obrador, and participated in the BRT planning committee established by Claudia Sheinbaum

Guillermo Calderon is the General Manager of Metrobús, a position held since 2004.

**Jorge Ramirez de Aguilar** was General Manager of Ruta 100 and Minister of Transport under Oscar Espinosa Villarreal. From these positions, he oversaw the bankruptcy and dissolution of Ruta 100.

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Luis Ruiz was Minister of Transport, Mexico City (2005-2006).

**Marcelo Ebrard (PRD)** served as Minister of the Interior under Mayor Manuel Camacho, and after a brief stint in Congress came back to serve as Minister of Public Security under Mayor Andres Manuel Lopez Obrador (2000-2006). In 2006 he was elected Mayor of Mexico City (2006-2012).

**Martin Mejia** was director for surface transport regulation at SETRAVI (2006-2012). He served as the frontline of the government when negotiating with bus operator organizations.

**Magdaleno Barragan** is the leader of Ruta 88, an organization of colectivo operators **Nicolas Gomez** is a colectivo organization leader, head of BARTCE, one of the cupulas that remain in Mexico City.

**Oscar Espinosa Villarreal (PRI)** was the last appointed Mayor of Mexico City (1994-1997), and decided the dissolution of Ruta 100, the government owned bus company.



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