Operating Subsidies in Urban Public Transit in Latin America A Quick View

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Operating Subsidies in Urban Public Transit in Latin America: A Quick View

Abstract

Operating subsidies to urban transit systems are ubiquitous in Latin America, and most systems lack transparency about them. In 2019, the level of subsidization ranged from 26 percent of transit systems' total operating expenditure to 69 percent. Although demand-side subsidies are better at targeting beneficiaries, most subsidies in the region are supply-side subsidies (subsidies provided to transit system operators). Both demand-side and supply-side subsidies may be needed to ensure that services are affordable, including to middle-income users. The restructuring of public transit subsidies provides an opportunity to improve the efficiency of transit systems and ensure that subsidies benefit those who need them most.

Definition and Classification of Public Transit Subsidies

The definition of *transit subsidies* varies widely. A broad welfare approach defines them as all transit costs that are not covered by users, including externalities and infrastructure costs (Nash 2002, cited in EEA 2007). According to this approach, if revenues from fares do not cover the costs of negative externalities, such as pollution or noise, there is a subsidy. The same reasoning applies if revenues do not cover infrastructure investment and maintenance. In contrast, a fiscal policy approach defines subsidies as "economic advantages that are granted from public budgets that do not provide a direct service in return" (EEA 2007, 11), such as grants and tax deductions. This study adopts the second definition, comparing total operating expenditures and revenues to analyze the extent to which users pay the total costs.¹

Public transit subsidies can be classified according to their purpose, how they are channeled, and how they are funded (Figure 1). They can be used for capital or operating purposes. Capital subsidies are used to cover transit infrastructure such as buses, land acquisition, Bus Rapid Transit (BRT) lanes, or metro lines. Operating subsidies are used to run public transit. They cover current costs, such as salaries, fuel, and maintenance. Supply-side subsidies are channeled to suppliers of transit services. These transfers reduce the cost of services to users by lowering the share of costs funded from fares. Demand-side subsidies are channeled directly to beneficiaries. Subsidies can be funded through general taxes, specific taxes, and/or cross-subsidies.

Figure 1 | Classification of subsidies to public transit



Source: Based on Serebrisky et al. (2009).

Level of Subsidization

Operating subsidies to infrastructure services are high in Latin America. In 2018, they averaged 0.6 percent of GDP (Figure 2), equivalent to a third of total public investment in infrastructure.² On average, transit subsidies represented a third of all operating subsidies (0.23 percent of GDP) in the region, ranging from 0.4 percent of GDP in Chile to 0.8 percent of GDP in Argentina.



Figure 2 | Operational subsidies to transportation, energy, and water and sanitation as percentage of GDP in selected countries in Latin America, 2018

Note: Figures include governmental transfers to institutions, businesses, and individuals not associated with capital investments. Subsidies were calculated using budgetary information at the national level, except in Brazil, for which data come from the five states with the highest GDP. Data for Panama and Uruguay are for 2017.

Source: Author's estimation based on budgetary information.

Subsidies are ubiquitous in urban transit systems all over the world, and Latin America and the Caribbean is not an exception. The degree of subsidization of urban transit varies significantly across cities and transit modes in the region.³ The share of total operating expenditure of public transit covered by subsidies ranged from 26 percent in Bogotá to 69 percent in Buenos Aires in 2019. This heterogeneity is not exclusive to the region. A sample of cities from advanced economies reveal a comparable level of dispersion (Figure 3).

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2 This estimate can be considered a lower bound, as it does not include state-owned enterprise deficits not financed by direct government transfers or subsidies provided by local governments (the most prevalent financing source of water utilities in Latin America). Fiscal credits that may act as subsidies are also not incorporated unless they were explicitly stated as subsidies in the budgetary information.

3 Transit subsidies can be funded through general tax, specific taxes, and/or cross-subsidies. Crosssubsidies are made when low-cost users (such as passengers on short trips) fund part of the travel cost of high-cost users (such as passengers on longer trips). The analysis in this technical note considers funding from general or specific taxes only. Funding from cross-subsidies is significant in the region, because transit fares are flat in many cities (independent of distance travelled).

Figure 3 | Operating transit subsidies in selected cities, by transit mode, 2019







d. Bus







e. Metro



Note: Panel b: Transantiago was renamed the Red Metropolitana de Movidad in March 2019. Panel d: Figures for São Paulo include metropolitan and municipal buses. Panel e: Figures for São Paulo include Metrô SP, ViaQuatro, and ViaMobilidade.

Source: Information from city governments.

The dispersion is also observed when analyzing the degree of subsidization by transit mode. For buses, for example, the level of subsidization ranges from 35 percent in Montevideo and São Paulo to 72 percent in Mexico City. The level of subsidization also differs across modes within the same city. In Panama City, for example, it ranges from 20 percent for the metro system to 59 percent for the bus system.

The level of subsidies varies with the size of cities, the characteristics of the city's transit systems,⁴ and the effectiveness of farebox recovery. Of the seven cities shown in Figure 4, Buenos Aires has the largest total subsidies. The \$2.1 billion it granted in 2019 for the city's public transit system, including metro, train, and bus subsystems, covered 69 percent of operating expenses. At the other extreme is Montevideo, where subsidies to the public transit (bus) system totaled \$107 million in 2019, reaching a level of subsidization of 35 percent (Figure 4, panel a).

The ranking of cities changes when per inhabitant rather than total subsidies is measured (Figure 4, panel b). For instance, Santiago de Chile ranks second in subsidies per inhabitant in 2019 (\$125) instead of third place in the total subsidies ranking. Montevideo and Panama City achieve third and fifth places, at \$79 and \$56, respectively, up from of last two places in the total subsidies ranking.

Figure 4 | Ranking of selected cities in Latin America based on total transit subsidies and transit subsidies per inhabitant, 2019



Sources: Information from city governments.

4 Transit systems in Latin America differ widely in terms of size, coverage, modes, efficiency, and quality. Differences in transit policies and public transit supply across cities, especially because of variations in quality standards, affect comparability. Analysis of the level of subsidization should be seen in the light of these limitations.

Types of Transit Subsidies

In most places in the world, including Latin America, supply-side subsidies are more prevalent than demand-side subsidies, even though beneficiaries can be better targeted (Serebrisky et al. 2009). Supply-side subsidies take various forms, including direct transfers to transit operators (lump-sums transfers or transfers based on travelled kilometers or number of passengers) and fuel subsidies. Demand-side subsidies are a more effective instrument when the policy objective is to reach the poor (Cavallo et al. 2020; Rivas, Serebrisky, and Suárez-Alemán 2018). A combination of both types of subsidies may be desirable to ensure affordable services for all transit users.

Supply-Side versus Demand-Side Subsidies

Supply-side subsidies are less targeted than demand-side subsidies, because transit operators do not identify types of users (except for subsidies conditional on performance targets or specific services, such as rural services). Demand-side subsidies traditionally include discounts for students, seniors, and people with disabilities.⁵ Buenos Aires, Bogotá, and other cities also provide subsidies based on socioeconomic characteristics, such as income and employment status, supported by smart card technologies. In 2012, Argentina's Ministry of Interior and Transport set a 50 percent discount on the public transit tariff for users of the SUBE smart card (mainly vulnerable people and seniors). In 2013, it reduced the discount to 40 percent; in 2016 it increased it to 55 percent and added other groups of beneficiaries.

In 2014, Bogotá implemented a pro-poor public transit subsidy channeled directly to users through the national social policy targeting mechanism called SISBEN (Figure 5, panel a). The subsidy considers socioeconomic characteristics of households and individuals to build a score that is a proxy for poverty (Guzman and Oviedo 2018). The subsidy increased the number of trips by beneficiaries by 56 percent (Rodríguez Hernández and Peralta-Quiros 2016). It is progressive, with a positive impact on accessibility and equity (Guzman and Oviedo 2018). SISBEN subsidies represented just 4 percent of the subsidies TransMilenio received in 2019 (Figure 5, panel b).⁶ Other demand-side subsidies include subsidies for senior (1 percent of all subsidies) and people with disabilities (3 percent). The remaining 92 percent of subsidies were delivered through the Transport Stabilization Fund (FET).

⁵ For a detailed description of subsidy typology and selected examples in the region, see Rivas, Serebrisky and Suárez-Alemán (2018).

⁶ Between 2014 and 2016, the SISBEN subsidy grew significantly. It reached its maximum in 2016 before falling 50 percent in 2017 after implementation of Decree 131/2017, which changed access conditions by lowering the score needed to qualify for the subsidy (from 40 to 30.1 points) and the number of subsidized trips (from 40 to 30 per month) (Veeduría Distrital 2018).

Figure 5 | Composition of and changes in the distribution of transit subsidies in Bogotá

a. Distribution of subsidies, 2011–19

b. Composition of subsidies, 2019



Source: Inforrmation from Alcaldía Mayor de Bogotá-TransMilenio for 2016–19.

Supply-Side Subsidies and Affordability by Middle-Income Users

The use of demand-side subsidies based on socioeconomic characteristics can improve the targeting of subsidies. But supply-side subsidies can also play a role in ensuring affordable transit services for all users, especially middle-income users. The analysis of the distributional incidence of a subsidy often involves estimating how much of it ends up in the hands of the non-poor. This exercise assumes that it is possible to create a mechanism that allows subsidies to be perfectly targeted. It establishes a lower bound on the funds needed to subsidize a target population. This benchmark can be used to compare the effectiveness of different demand-side subsidy schemes, with a focus on devoting resources to people who cannot afford the services at market prices.

Although it is useful, this type of analysis ignores other reasons to subsidize services. In addition to making services affordable by the poor, subsidies can be used to address environmental, social, and economic externalities. A transit subsidy aimed at reducing congestion, for example, is likely to be more efficient if it targets people who own cars, even though they are better off than people who do not.

The overall recommendation of using demand-side over supply-side subsidies because of the capacity to target specific populations, in particular the poor, should therefore be assessed taking into account the objective of the intervention. In some cases, well designed supply-side subsidies can be part of a policy with goals that go beyond affordability for low-income users.

Brichetti (2020) provides an example of how switching supply-side subsidies to targeted demand-side subsidies could have undesirable effects on broader policy objectives for the case of Santiago de Chile. Santiago de Chile has an integrated transit system that includes subways, buses, and trains. It provides transit services to the Santiago metropolitan area, where 7 million people live. Fares cover about half of the cost of operating the system; the rest is subsidized by transfers from the Chilean government. Demand-side subsidies are provided to seniors and students, but 75 percent of subsidies are provided directly to the service providers, conditional on compliance with some predetermined performance-based metrics.

The subsidy scheme reduces the cost of transit for users across income levels (Figure 6). But the lack of an effective targeting mechanisms makes it one of the most costly in the region. Moreover, as the most intensive users of the system are middle-income people, only \$1 of every \$3 used to subsidize services ends up helping families from the two lowest income quintiles (Figure 7). This finding provides a strong rationale for switching from supply-side to demand-side subsidies as a way to reduce the public funds required to support the system.



Figure 6 | Affordability of transit in Santiago de Chile in 2017, with and without subsidization, by income quintile

Source: Data from Chilean Household Budget Survey (EPF for its Spanish acronym, Encuesta de Presupuestos Familiares) 2017.

But Figure 6 reveals another problem. If the targeting mechanism excludes the middle-income population (typically the third and fourth quintiles of the income distribution), a significant percentage of those families may face an affordability problem comparable to the one affecting the poorest quintiles under the current subsidy scheme. Such an outcome could reduce the use of public transit by its most intensive users, increasing road congestion, reducing access to jobs and social activities, and worsening air quality.



Figure 7 | Concentration curves for transit expenditure and income in Santiago de Chile

Source: Data from the Chilean Household Budget Survey (EPF for its Spanish acronym, Encuesta de Presupuestos Familiares) 2017

Brichetti (2020) suggest solving this trade-off between targeted mechanisms to increase affordability to the poor and non-targeted mechanisms to deal with externalities using two complementary subsidy assignment mechanisms: a demand-side subsidy focused on the poor using social security information and a discount for packages of trips though as a self-selecting mechanism for the most intensive users⁷. Combining these two policies makes the subsidy scheme more progressive and improves affordability to the poor while keeping incentives to promote an intensive use of the public transportation system. Of course, despite the proposed solution relies on demand-side subsidies, this may not be optimal (which will depend on the policymaker preferences) nor the only solution to deal with this trade-off; the bottom line of this analysis is that different policy goals may require using different tools to achieve results and that, in that regard, policymakers should not exclude well design supply-side subsidies from the toolkit.

As supply-side subsidies have some advantages, such as simplicity and reduced implementation cost, compared with demand-side alternatives, transit systems may require both type of subsidies to provide affordable services for all users and to reach other policy goals as well. Attention needs to be paid to middle-income groups, which are usually not among the beneficiaries of demand-side subsidies based on socioeconomic characteristics but often have difficult paying for public transit services.

7 This recommendation is a second-best solution; the first-best solution is to estimate the costs of congestion externalities and internalize them into the price faced by private transit users through congestion charges.

Adjusting Subsidies to Mitigate the Effects of the COVID-19 Pandemic

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The crisis produced by the coronavirus pandemic has had a profound impact on the use and provision of transit services. The drop in demand has drastically reduced fare revenues, with demand for public transit falling by an average of 75 percent in many cities in the region after social isolation measures were put into effect (Figure 8). Despite lower revenues, transit operators must continue to provide adequate public transit services. To help them do so, the region's governments have provided extraordinary levels of subsidies.

Figure 8 | Use of public transit in selected cities in Latin America during first six months of COVID-19 pandemic



Note: Figures show the percentage difference in usage of the Moovit app during the previous seven days relative to the week ending January 15, 2020 (before the pandemic hit Latin America). *Source*: Moovit 2020.

The coronavirus pandemic provides an excellent example of the reasonable use of supply-side subsidies. During the crisis, the main priority should be to ensure the provision of essential services (allowing transit of essential workers and facilitating access to healthcare facilities, among others), even if doing so creates short-term economic losses. Given the uncertainty about several dimensions of the crisis (its depth, duration, and long-lasting consequences), recalibration of tariff schemes to represent the current costs of the services and provide adequate incentives for users is infeasible, and a full rescaling of services could not be efficient, given the adjustment costs for society, providers, and transit workers.

Financial support to transit systems during the crisis must be complemented by efforts to improve the efficiency of systems in order to reduce the need for public funds, which are scarcer than ever. After the acute phase of the coronavirus pandemic passes, efforts to improve the targeting of subsidies should be made, given that the massive slowdown in economic activity has caused huge declines in household income, which will increase the burden of paying for transit services, especially for the most vulnerable. The problem of affordability of transit services is a multidimensional challenge that the pandemic has exacerbated.

Better targeting subsidies is one of the best ways to improve the efficiency of public funds devoted to supporting transit systems.⁸ It can help them mitigate the long-lasting effects of the pandemic. Better targeting reduces leakages of public funds to users who do not need them. Recent estimates of Santiago de Chile's public transit system indicate that \$4 out of every \$10 spent on subsidies reaches users belonging to the richest 40 percent of the city's population (Brichetti 2020). Bogotá provides subsidies based on socioeconomic characteristics (targeted through SISBEN), but they represented only 4 percent of total subsidies in 2019.⁹ Eliminating subsidies to the two top quintiles of the population would yield significant savings in Santiago de Chile and Bogotá (figure 9).





Source: Brichetti et al. 2020.

Transparency of Public Transit Subsidies

Transparency is crucial for monitoring how governments spend public money and make decisions. Transparency mechanisms (a) institutionalize public discourse, starting a dialogue between the discloser and the interested partied; (b) compel actors to tell the truth, making it difficult for one loud, deceitful actor to manipulate discourse; (c) cut through the flood of information and sometimes contradictory claims to focus attention on facts; and (d) empower actors to comply with their own standards and norms (Hale 2008).

Data and analysis are key to prioritizing reforms of subsidies and monitoring their effectiveness. Moreover, transparency is crucial to increase the support of users, particularly when subsidy reforms are planned.¹⁰

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8 Short-term measures include reducing the frequency of transit services and providing credit facilities for transit providers.

9 For the purposes of this simulation, it is assumed that the inclusion errors of non-targeted subsidies for Bogotá (the remaining 96 percent of total subsidies) are similar to those of Santiago de Chile—that is, that \$4 out of every \$10 end up benefiting the richest 40 percent of the population.

10 Users' knowledge of the level and type of subsidization may affect their willingness to pay for public transit services. An empirical study demonstrates a crowding-in effect on willingness to pay as a consequence of access to information about public subsidies related to fairness concerns (Drevs et al. 2014). Crowding-out effects also exist, but they are minor, related to concerns about double financing and free-riding. Urban transit authorities generally do not report the total amount of subsidies. Determining the amount is extremely difficult, because subsidies are often hidden in intricate institutional and administrative schemes involving an array of sources, legal entities (such as trusts), and levels of government.

One of the main difficulties in identifying how subsidized transit systems in the region is that most of the systems are not integrated; subsidies are channeled from different sources to each transit mode. Some integrated systems, such as those in Bogotá and Santiago de Chile, clearly report the total cost of subsidies on an annual basis (Figure 10).

Figure 10	Cities ir	ו the	region	reporting	the t	total	amount	of	operating	subsidies	of	urban	transit
systems													

	Transport modes	Transport integrated system	Reports total amount of subsidies in the transportation system
Bogotá	Transmilenio (Bus, BRT, Cable Car)	\checkmark	\checkmark
Buenos Aires	Bus, Train, Metro	×	×
Mexico City	BRT, Bus, Trolleybus and Light Rail, Metro	×	×
Montevideo	Bus	×	×
Panama City	Bus, Metro	×	×
Santiago de Chile	Red Metropolitana de Movilidad (Bus, Train, Metro)	\checkmark	\checkmark
São Paulo	Bus, Train, Metro	x	×

Source: Author's elaboration based on information from city governments and public transit providers.

Various levels of government provide operating subsidies to urban transit. Buenos Aires, for example, receive funding from national, state, and local governments. In 2015, subsidies covered 78 percent of the bus fare in Buenos Aires. Of the \$2,133 million allocated to transit subsidies, \$1,178 million came from the national government (53 percent), \$593 million from the provincial government (28 percent), and \$361 million from the municipal government (17 percent) (Bondorevsky and Estupiñán 2019). In Montevideo, subsidies covered 35 percent of bus fares in 2019. Of the \$107 million in subsidies, 37 percent was funded by the local government, 32 percent by the national government, and 31 percent by the "ticket trust" (*Fideicomiso del Boleto*) (Intendencia de Montevideo 2020). Support from different levels of government makes it difficult to identify the total level of subsidization, because funding comes from administrations with different procedures and commitments to transparency.

Trusts also hinder transparency. They are generally created to improve public transit funding by channeling specific resources (from taxes or fare increases, for instance). Their independent legal structure can help ensure proper management and use of specific resources, but their complex structure and lack of proper reporting make it difficult to clearly identify the total amount of urban transit subsidies (Box 1). Subsidies provided through trusts are not always explicitly reported or included with other subsidies to transit systems. Their lack of openness and accountability reduces their effectiveness and efficiency.

11 This management trust was created to channel the resources generated by an increase in the price of diesel, in accordance with the provisions of Decree No. 347/006.

Box 1 | Transit trusts in Mexico City

Several cities in the region have implemented transportation trusts to ensure the proper allocation of revenues, including fare revenue and tax collection. Mexico City showcases how the use of transit trusts increases the complexity of the funding mechanisms of transit systems if the information is not clear, easily accessible, and integrated, reducing transparency for users and policy makers (Box Table 1.1).

ltem	Fideicomiso Maestro del Sistema de Transporte Colectivo (FIMETRO)	Fideicomiso para el Fon de Promoción para el Financiamiento del Transporte Público (FIFINTRA)	do Metrobús (private trusts)
Implementation	2014, after increase of two pesos over rate approved in 2013.	In 1999, the Transport Law of the Federal District established the creation of a Promotion Fund for the Financing of Public Transport. In 2001, the trust was created.	Lines and start operations: • Line 1: 2005, enlargement 2008 • Line 2: 2009 • Line 3: 2011 • Line 4: 2012 • Line 5: 2013 • Line 6: 2016 • Line 7: 2018
Objective	Allocate resources to urgent needs for rehabilitation, upgrading, replacement, and maintenance of trains and fixed installations.	Support and promote renewal of vehicle fleet of urban passenger transit.	Concentrate and manage resources generated by payment of fees. It is through these trusts that payments to the system's service providers are made.
Structure	 Trustor: Collective Transport System (STC). Fiduciary: BBVA, Bancomer. Trustee: Providers of each project/STC. 	Trustor: Secretary of Finance. Fiduciary: Nacional Financiera S.N.C.	 Depends on trust: Trustor: Red de Transporte de Pasajeros (public transport network)/ Transport operator /Metrobús. Fiduciary: Banco Interacciones S.A. Trustee: Metrobús/Transport operator/Red de Transportes Publicos RTP (Public Transport Network).

Box Table 1.1| Description of use of transit trusts in Mexico City

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ltem	Fideicomiso Maestro del Sistema de Transporte Colectivo (FIMETRO)	Fideicomiso para el Fondo de Promoción para el Financiamiento del Transporte Público (FIFINTRA)	Metrobús (private trusts)
Source of revenues	Resources from increase of two pesos for each metro ticket and associated interests and financial incomes.	 Annual budget approved by legislative body of Mexico City. Budget expansions approved by technical committee of the fund. Interest generated. Reimbursed payment for destroyed units. 	Resources generated by payment of fees.
Main results	 Period 2014–18: Nine commissioned projects with share of advance between 0 and 80.1 percent*. Total income: \$682 million. Total expenditure: \$540 million. 	 Period 2001–18: 5,680 units replaced. Total income: \$29.8 million. Total expenditure: \$29.5 million. 	 Total income in 2018: \$157 million. Total expenditure in 2018: \$156 million.
Main challenges	 Distribution of expenses does not correspond to hierarchy of priorities established in the trust contract. Objectives of projects were not realistic. Although almost all resources have been used, the proposed projects have been partially implemented Solid diagnoses of projects were not conducted. No comprehensive vision was forged. 	 In 2018, 161 units were replaced through FIFINTRA, bringing the total number of units to 5,680 units since 2001. In 2014, 2016, and 2017, no units were replaced. The number of units replaced represented about 35 percent of the units that need to be replaced. 	 Metrobus does not have the financial, organizational or systems capacities to effectively regulate the operation of projected transit corridors by 2024.

Note: Project 1: Purchase of 45 trains for the L-1 line (30 percent); Project 2: Maintenance of 45 trains on the L-2 line (55 percent); Project 3: Reduction in travel times on the L-4, L-5, L-6, and B lines (80 percent); Project 4: Re-levelling of tracks on A line (75 percent); Project 5: Repair of 105 out-of-service trains (constant); Project 6: Reincorporate 7 trains on the A line (16 percent); Project 7: Purchase 12 trains for the L-12 line (0 percent); Project 8: Renovate the L-1 (16 percent); Project 9: Modernize turnstiles (0 percent).

Source: Based on Gobierno de la Ciudad de México (2019); Metro CDMX (2014); Metrobús (2019a, 2019b, 2019c); and SEMOVI (2019a, 2019b).

Conclusions and Recommendations

The analysis conducted in this technical note reveals that mass transit system in Latin America are heavily subsidized. This is not an exception compared with other regions of the world. Transit subsidies in the region are channeled mainly through supply-side subsidies. As a result, a significant share of the public funds devoted to support mass transit systems ends up in the hand of users who could afford to pay the full cost of the services provided.

Tackling this issue requires a switch from supply-side to demand-side subsidies. Using demand-side subsidies allows populations in need to be targeted while saving scarce public funds that currently end up in the hands of people who do not need them. Mechanisms based on administrative, tax, and socioeconomic data can be used to target beneficiaries, as Bogotá has done.

Affordability is not the only reason to subsidize public transit, however. Subsidies can also be used to deal with externalities, such as congestion and pollution (by, for example, incentivizing people who drive cars to use public transit). Governments that want to achieve multiple policy goals must use different tools to achieve them. Supply-side subsidies can and must play a role, given their advantages, such as simplicity and lower implementation costs. During the COVID-19 crisis, for example—during which the main priorities should be to ensure the provision of services that allow essential workers to get to work and people to access healthcare facilities, among others—supply-side subsidies are appropriate.

Public transit systems differ widely across the region. Subsidies should therefore be analyzed in the light of the context of each city and transit system. Cities should conduct in-depth analyses of the level and structure of subsidies of their transit systems, in order to help policymakers improve and adjust their subsidy policy designs. In particular, analysis of affordability by income level can help policy makers design subsidy structures that include both demand-side and supply-side subsidies, in order to ensure affordable services for all. In this sense, the lack of transparency is a major obstacle to increase accountability and the quality of public transit policies.

Few urban transit systems in the region are transparent about the total amount of subsidies they receive, partly because funds come from multiple sources and levels of government. The exceptions are the integrated transit systems in the region. The authorities in Bogotá and Santiago de Chile, for example, clearly report the total subsidization of their transit systems annually. Increasing the availability of public data, simplifying the financial instruments used to channel public funds, and avoiding overlapped funding from several governmental levels would increase the efficiency of public transit system management.

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