

Article

**The Red Devil is in the Details:
Formalizing Bus Transport in Panama City, Panama**

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Panama City is currently undertaking a dramatic reorganization of its public transportation system which includes the construction of a metro line and the modernization of the city's bus network. This paper looks to the makeover of the bus system—known as *Metro Bus*—and seeks to contextualize the initiative within the discussion of formalization of informal regimes. First, a conceptual framework for informality is presented, which includes discussions of the traditional problems presented by informal regimes and applies that framework to the traditional system of bus transport in Panama City. Second, the various responses of the state to informal regimes are presented and the *Metro Bus* initiative is examined within that context. Third, the current status of the implementation of the *Metro Bus* plan is assessed within the context of formalization and alternative strategies are examined. Last, conclusions are offered on applying the language of informality to development initiatives.

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I. INFORMALITY AND THE *DIABLOS ROJOS*

A. CHARACTERISTICS OF INFORMALITY

Recent decades of scholarship in urban economics, sociology, and legal theory have examined in some detail the concept of “informality”, broadly defined as market activities that occur outside of the regulatory framework of the state.¹ In developed countries where state regulatory frameworks are relatively strong, informal markets may include “black markets” for contraband goods and services or informal labor markets for work performed “off the books” or “under the table.”² In developing countries, where state regulatory frameworks are much weaker and the state generally provides far fewer social services, informality is considerably more prevalent, and a developing economy may have a significant ‘informal sector.’³ This may include a large sector of informal employment, a significant secondary market for unregulated non-contraband goods, and perhaps even entire communities, which exist mostly outside the formal sector.⁴

Given the relative prominence of informality in developing countries and its relative invisibility in developed countries, scholars have generally concentrated their studies on regions in the developing world, and some have gone so far as to define informality as a phenomenon present primarily in the cities of the developing world or in emerging economies of the first world.⁵ Informality is often framed as a response to the mass urban-

1. Omar E. Garcia-Bolivar, *Informal Economy: Is It a Problem, a Solution or Both? The Perspective of the Informal Business* 1-26 (Berkeley Elec. Press, Working Paper No. 1065, 2006), available at <http://www.bg-consulting.com/docs/informalpaper.pdf>.

2. *Id.*

3. Gudrun Vande Walle & Paul Ponsaers, *Formal and Informal Pharmaceutical Economies in Third World Countries: Synergetic, Symbiotic or Parasitical?*, 45 *Crime L. & Soc. Change* 361, 362 (2006).

4. Garcia-Bolivar, *supra* note 1, at 4.

5. Alejandro Portes & Richard Schauffler, *Competing Perspectives on the Latin American Informal Sector*, 19 *POPULATION & DEV. REV.* 33, 33 (1993).

ization of many developing countries in the period following World War II and the inability of the state to establish sufficiently robust regulatory systems to effectively provide necessary services.⁶ Scholars have come to characterize such informal systems as adaptive measures by marginalized individuals to the lack of adequate state presence instead of as anti-social or criminal activities.⁷

While the term “informality” itself implies a stark binary between formal and informal activities, it may be more accurate to conceive of “formality” as a spectrum ranging from the most informal in which goods and services are provided entirely outside the purview of the state—such as contraband trade which is explicitly prohibited by the state—to the most formal in which goods and services are provided exclusively by the state in a sanctioned monopoly—the classic example being national defense.⁸ Between these extremes, markets can be characterized as more or less formal or informal depending on the degree of state regulation.⁹ The labor market lends itself most readily to such analysis as individuals in developing or emerging countries may have to augment formal employment with additional informal work.¹⁰ Such a semi-formal (or semi-informal) regime will exist whenever consumers have a choice between goods or services provided by formal providers and those provided by informal providers.

Moreover, a market may become more formal or more informal depending on the changing policies of the state.¹¹ In some cases a market can become “informalized” if the state weakens its regulatory hold. This may be the unintentional consequence of the state failing to effectively enforce its laws, a phenomenon known as “regulatory slippage.”¹² Alternatively, a lack of state regulation or a loosening of the same may represent an explicit policy of the state wishing to maximize free market activity in a particular sector.¹³ Privatization of publicly owned state enterprises may be considered a form of informalization, likewise the der-

6. *Id.*

7. See, e.g., HERNANDO DE SOTO, *THE OTHER PATH: THE INVISIBLE REVOLUTION IN THE THIRD WORLD* 11 (June Abbott trans., Harper & Row 1990) (1989).

8. Manuel Castells & Alejandro Portes, *World Underneath: The Origins, Dynamics, and Effects of the Informal Economy*, in *THE INFORMAL ECONOMY: STUDIES IN ADVANCED AND LESS DEVELOPED COUNTRIES* 12 (Alejandro Portes et al. eds., 1989).

9. *Id.*

10. See, e.g., Isabel Gunther & Andrey Launov, *Informal Employment in Developing Countries*, 97 *J. DEV. ECON.* 88, 89 (2012).

11. Vande Walle & Ponsaers, *supra* note 3, at 368.

12. Sheila Foster, *Urban Informality as a Commons Dilemma*, 40 *U. MIAMI INTER-AM. L. REV.* 261, 265 (2009).

13. Clara Olmedo & Martin J. Murray, *The Formalization of Informal/Precarious Labor in Contemporary Argentina*, 17 *INT'L SOCIOLOGY* 421, 422 (2002).

egulation of industries or the reduction of labor regulations.¹⁴ Indeed, if the formal to informal spectrum is conceived of as representing degree of market freedom then many of the neo-liberal policies of the Washington Consensus can be characterized as informalization efforts. On the other hand, formalization techniques—discussed in greater detail below—include the complete displacement of an informal market through criminalization and policies to progressively formalize existing informal providers through subsidies or regulatory incentives. While deliberate actions by the state to promote informality through deregulation certainly exist, the dominant tendency is for developing states to move towards greater formality.

B. COSTS OF INFORMALITY

Four problems associated with informal regimes generally motivate a state to formalize a market. Three of these problems can be classified as market failures, in that they are elements of inefficient allocation of resources, and the fourth problem is principally political.

First is the cost born by providers of goods and services, since without a minimum regulatory floor, providers are forced to aggressively undercut each other for market share, diminishing their own profit margin.¹⁵ In an unregulated labor market this can be seen in poverty-level wages accepted by the providers of labor.¹⁶ In informal land occupations, occupiers will seek to possess land at the lowest marginal cost possible through low-quality construction or construction in precarious areas.¹⁷ The inability to effectively communicate with other providers to coordinate action places each provider in a prisoner's dilemma, which forecloses the possibility of greater total returns for all.

The second cost of an informal market is the costs borne by consumers through unrealized economies of scale.¹⁸ In a fractured market of many producers, the cost of modernization through investment in new technology may be too high for any individual firm; therefore production and distribution are carried out through outdated and less efficient methods leading to higher prices and lower quality.¹⁹ This problem is reinforced by the fact that such small firms are also unlikely to be able to

14. *Id.* at 423.

15. See Vande Walle & Ponsaers, *supra* note 3, at 361-62.

16. T.H. Gindling & Katherine Terrell, *Legal Minimum Wages and the Wages of Formal and Informal Sector Workers in Costa Rica 1-2* (William Davidson Inst., Working Paper No. 647, 2004), available at <http://wdi.umich.edu/files/publications/workingpapers/wp647.pdf>.

17. E.g., Ayse Pamuk & Paulo Fernando A. Cavallieri, *Alleviating Urban Poverty in a Global City: New Trends in Upgrading Rio-de-Janeiro's Favelas*, 22 *HABITAT INT'L* 449, 450 (1998).

18. See DE SOTO, *supra* note 7.

19. *Id.*

secure credit or investment capital that would permit even small-scale modernization.²⁰

Third, third parties bear the cost of the negative externalities that are often associated with an informal market.²¹ For an example, an informal labor market with limited protection for workers imposes costs on society at large when injured workers must be treated by the emergency public health system at the public's expense. Given the absence of regulation, there is no way to impose this highly foreseeable cost onto either the party in the transaction as would be done under a traditional worker's compensation system. In terms of informal settlement, negative externalities imposed on non-residents may include unsightly construction, noise pollution, and crime. Since these total costs are born only partially by residents, residents are incentivized to expand construction beyond a sustainable level.

While it is unlikely that informal firms will have the desire or the political capital to motivate state action to regulate an informal regime, a state may choose to do so anyways, to either address the problems associated with negative externalities or to minimize overall efficiency losses. An additional cost of informality and motivation for a state to formalize an informal regime is that the presence of informality intrinsically undermines total state power.²² By existing outside the reach of the state, an informal regime points out the limitations of state power and may diminish overall confidence in the state's authority or prestige. From a purely monetary perspective, the presence of an informal system decreases tax revenue both because informal transactions are not taxed and because rampant informality may cultivate a tendency to evade taxes even in the formal sector. As stated, the precarious nature of informal firms makes them unlikely to be the recipients of investment including total foreign direct investment, which would benefit the state. Not to be underestimated as well is the decrease in prestige that informality presents for the governments of developing countries.²³ It has been observed that in anticipation of mega-events in cities in the developing world, governments tend to resolve or hide examples of clear informality in sectors of the city most likely to be observed by event attendees or recorded for worldwide broadcast.²⁴

20. *Id.*

21. See Paul Wellings & Michael Sutcliffe, 'Developing' the Urban Informal Sector in South Africa: *The Reformist Paradigm and its Fallacies*, 15 DEV. & CHANGE 517, 519 (1984).

22. *See id.*

23. *See id.*

24. Special Rapporteur on Adequate Housing, *Rep. on Adequate Housing as a Component of the Right to an Adequate Standard of Living, and on the Right to Non-Discrimination in this Context*, 4, Human Rights Council, U.N. Doc. A/HRC/13/20 (Dec. 18, 2009) (by Raquel Rolnik), available at <http://www2.ohchr.org/english/bodies/hrcouncil/docs/13session/A-HRC-13-20.pdf>.

C. THE *DIABLOS ROJOS* AS AN INFORMAL REGIME

For the past thirty years, one of the most recognizable and distinctive elements of the urban experience in Panama City has been the iconic *diablos rojos*, the imported, second-hand American school buses that have served as the primary means of public transport for the city.²⁵ Driven to Panama in fleets through Central America, the buses were originally primarily red but were later refurbished and modified by their owners who commissioned elaborate and sometimes outrageous decorations for the buses including detailed murals on the outside of the bus and strands of blinking lights on both the inside and outside.²⁶ Drivers, who usually owned the buses themselves, also often installed additional seats and hung polyvinyl chloride pipe from the ceiling so as to accommodate more passengers.²⁷ According to a 2007 report commissioned by the World Bank, 1847 of these buses were operated by 1717 drivers over 31 official routes through the city.²⁸

It is important to note that this model of mass transit dominated by the *diablos rojos* (hereinafter the “traditional system”) is not an informal regime per se. The buses operate on concessions from the Panamanian government through the Traffic and Land Transport Authority (*Autoridad del Tránsito y Transporte Terrestre* or ATTT).²⁹ Panamanian law provides an organizational framework for the operation of the *diablos rojos*, requiring owners to associate as corporations, cooperatives or labor groups and setting system wide prices at \$0.25 for most routes, \$0.60 and \$0.70 for express routes, and \$0.15 for students.³⁰ This paper argues that while ostensibly formal, the traditional system should be considered an informal regime because of the government intention when it was implemented in the mid-1970s, the lack of consistent enforcement of existing regulations and the fact that the regime generates the same problems for providers, consumers, third parties and the government as do other informal regimes. Establishing this baseline allows the *Metro Bus* modernization plan to be more appropriately examined as a formalization initiative.

The traditional Panamanian bus system that emerged in the mid-1970s during the regime of Gen. Omar Torrijos may first be considered informal because it was explicitly designed to deregulate and fracture the

25. Nina K. Müller-Schwarze, *Diablos Rojos: Painted Buses and Panamanian Identities*, 22 *VISUAL ANTHROPOLOGY* 435, 437 (2009).

26. *Id.* at 437-38.

27. *Id.* at 438.

28. BANCO MUNDIAL, *LA MOVIBILIDAD URBANA EN EL AREA METROPOLITANA DE PANAMA: ELEMENTOS PARA UNA POLITICA INTEGRAL* xi (2007).

29. *Id.*

30. *Id.* at xiv.

formal system.³¹ Since the 1940s, the bus system had been dominated by large conglomerates backed by interests who generally opposed Torrijos's government.³² As such, Torrijos replaced the large concession framework which had operated a relatively modern fleet of traditional buses for principal routes and smaller buses for shorter routes with an individual concession system that emphasized the autonomy of small bus owners.³³ Indeed, a primary fear of Torrijos was that a bus system controlled by few players might be able to successfully stage a strike opposing his government, and so the individual owner model was a way to avoid successful collective action.³⁴

Moreover, the regime may be considered informal in that the little regulation that does exist is not generally enforced.³⁵ Although the *diablos rojos* are issued concessions by the government, a 2007 report commissioned by the World Bank revealed that the number of *diablos rojos* operating in Panama City did not correspond to the number of concessions issued by the Panamanian government, and that apart from the *diablos rojos* a fleet of unregistered vans was also operating an informal shuttle system.³⁶ The report also revealed that there was little review of safety compliance regarding the renewal of concessions, thereby removing one of the few regulatory checks in place in the system.³⁷

Perhaps the most fundamental reason why the traditional Panamanian system may be considered informal is that it has been plagued by the same sets of problems that afflict other informal systems. The system of a large number of individual owner/operators each responsible for one bus created a fractured, atomized market-place that incentivized owners to minimize costs through neglecting maintenance and safety standards and incentivized drivers to maximize revenue through unsafe driving practices.³⁸ Regarding safety standards, despite their distinctive paint jobs, the *diablos rojos* are generally considered to be in a poor state of maintenance.³⁹ The 2007 World Bank report declared that in that year the average age of the Panamanian bus fleet was over 15 years and that buses

31. Armando Rodolfo Mora, *La Historia Se Repite en Espiral: Francisco Franco y el Transporte en Panamá*, PRENSA (Jan. 17, 2007), <http://mensual.prensa.com/mensual/contenido/2007/01/17/hoy/opinion/860891.html>.

32. *Id.*

33. *Id.*

34. Omar Upegui R., *Bidding Goodbye to the Diablos Rojos of Panama*, LINGUA FRANCA (June 30, 2010), <http://epiac1216.wordpress.com/2010/06/30/bidding-goodbye-to-the-diablos-rojos-of-panama/>.

35. BANCO MUNDIAL, *supra* note 28, at 18.

36. *Id.*

37. *Id.* at 19.

38. *Id.* at 20.

39. *Id.* at 18.

were generally in disrepair and this analysis is repeated widely in the popular press.⁴⁰ Moreover, the payment framework for the owner/operators incentivizes unsafe driving.⁴¹ Under the traditional model, owners' revenue depends directly on the number of fares they are able to pick up, and as such, owners are motivated to compete directly for waiting passengers with other drivers, which has resulted in dangerous driving practices.⁴² The payment model based on ridership is not unique to Panama. In Bogotá, Colombia, the phenomenon was known as the "war of the penny" (*guerra del centavo*) and was cited as a major motivation for the system's reform in the early 2000s.⁴³

Furthermore, the persistence of the traditional system imposed on consumers the opportunity cost of not having access to a safe, comfortable, and efficient transport system. In the 2007 World Bank report, 85 percent of transport users classified the system as normal (neither good nor very good), bad or very bad with their primary complaints being safety and lack of comfort.⁴⁴ The concerns regarding comfort are certainly understandable given that the *diablos rojos* are not air conditioned, generally overcrowded, poorly policed, and often require individuals to enter through the rear emergency exit door.⁴⁵ Regarding safety, a 2005 study found that drivers of *diablos rojos* were eight times more likely to be involved in a fatal accident than were drivers of private cars.⁴⁶

Additionally, the traditional Panamanian system dominated by *diablos rojos* has created severe negative externalities for parties besides drivers and passengers such as noise and air pollution, and general congestion on the roads.⁴⁷ As noted, the *diablos rojos* are on average more than 15 years old and in substandard repair which means they are significantly louder than modern buses and emit significantly greater quantities of emissions.⁴⁸ Moreover, the erratic driving patterns of the operators present an immediate danger to pedestrians in Panama who, due to large distances between crosswalks on major thoroughfares, tend to cross principal avenues without the right of way leading to numerous deaths per

40. *Id.* at 20.

41. See Ricardo Montezuma, *Del "Problema del Transporte a la Movilidad": Transformaciones Culturales y Espaciales*, in BOGOTÁ: EL RENACER DE UNA CIUDAD 169 (Gerard Martin et al. eds., 2007).

42. BANCO MUNDIAL, *supra* note 28, at 20.

43. Montezuma, *supra* note 41.

44. BANCO MUNDIAL, *supra* note 28, at 20.

45. *See id.* at xi.

46. Sady Tapia, *Víctimas de los 'Diablos Rojos'*, PRENSA (May 15, 2006), <http://mensual.prensa.com/mensual/contenido/2006/05/15/hoy/panorama/601400.html>.

47. BANCO MUNDIAL, *supra* note 28, at xviii, 47.

48. *Id.* at xi, 69.

year.⁴⁹

The *diablos rojos* are also seen as a cause of the congestion and disorder on the streets of Panama.⁵⁰ Average travel times in Panama for automobile users are twice as long as those in Santiago, Chile, a city with almost three times as many residents, and during morning and evening rush hour travel speeds on principal roads for all traffic drops to between 10 and 11 mph.⁵¹ Although this increase in congestion is certainly also a result of increased car ownership, which is currently growing at a faster rate than the population due to the country's economic growth,⁵² the role of the bus system cannot be discounted.⁵³ This is a classic commons dilemma problem because the common resources of the air and the street are gradually eroded through the actions of individual operators who do not bear the total cost of their actions.

Finally, the outdated and dangerous *diablos rojos* have undermined attempts by the Panamanian government to present Panama City as a modern 21st century city.⁵⁴ Panama is in the midst of a significant economic boom and is seeking to position itself as a hub for multinational corporations and NGOs.⁵⁵ To many Panamanian boosters, the traditional bus system dominated by the *diablos rojos* is an anachronism and an impediment to the realization of that goal.⁵⁶

II. FORMALIZATION AND THE *METRO BUS* PLAN

A. STATE OPTIONS: DISPLACE, INCORPORATE OR RECOGNIZE

States have three principal options in dealing with informal regimes. The first is the displacement of the informal regime through criminalization and judicial enforcement.⁵⁷ This is the strategy employed by most states with regards to recreational drugs, prostitution, and certain forms of pornography. It is also the strategy periodically employed in the developing world with informal settlements.⁵⁸ A displacement strategy can be employed when the state is able to frame the informal activity as a social ill and thus garner the political support to establish a consensus in sup-

49. *Id.* at 33.

50. *Id.* at ix.

51. *Id.* at xii.

52. *Id.* at 151.

53. *Id.* at ix.

54. *A Singapore for Central America?*, THE ECONOMIST (July 14, 2011), <http://www.economist.com/node/18959000>.

55. *Id.*

56. Randal C. Archibold, *In Panama City, Colorful Red Devil Buses Yielding to Paler, Safer Kind*, NEW YORK TIMES (Dec. 29, 2011), http://www.nytimes.com/2011/12/30/world/americas/in-panama-city-red-devil-buses-yield-to-paler-safer-kind.html?_r=0.

57. See Vande Walle & Ponsaers, *supra* note 3, at 368.

58. See, e.g., Pamuk & Cavallieri, *supra* note 17.

port of the prohibition of the activity.⁵⁹ While a displacement strategy has the benefit of greatly reducing the presence of an informal regime, in practice such attempts are not entirely successful since the demand for the desired product will likely motivate some segment of producers to take on the additional costs associated with operating illegally.⁶⁰

The second option is to expend state resources to reconcile the degrees of regulation of the informal and formal sectors and incorporate the informal sector either through “formalizing” the first or “informalizing” the second.⁶¹ Formalization efforts have been employed frequently in the developing world in the context of street vendors who are perceived to represent an impediment to the effective functioning of pedestrian traffic.⁶² In Mexico City, during the 1990s, the government enacted a plan prohibiting street vendors from operating in certain zones of the city while at the same time providing infrastructure such as public markets to help stabilize and formalize their activities.⁶³ Such a plan is possible where the goods or services provided by the informal market are not perceived to be a social ill and the state is prepared to make the expenditures necessary to facilitate participants’ transfer to the formal sector.

Conversely, deliberate informalization may occur when the state seeks to increase the economic activity present in the informal sector and decrease its own regulatory costs.⁶⁴ In response to its financial crisis of the early 1990s, Argentina reformed its labor laws through measures which sought to reduce costs of labor by permitting low-wage contracts, reducing employer contributions to social security, and loosening regulations concerning conditions under which employers could fire workers.⁶⁵ These mechanisms were intended to stimulate economic activity, increase formal employment, and stop the spread of informal employment by lowering the requirements for entry into the formal economy.⁶⁶

The third option is to permit the informal regime to continue to function parallel to the formal sector without interference from the formal sector. In some cases, this may mean doing nothing. If the state determines that costs of the informal regime are not unbearable or the costs of eradication and reconciliation are prohibitive, the state may decide that it is not worth the effort to intervene in an unregulated market and turn a

59. Vande Walle & Ponsaers, *supra* note 3, at 370.

60. Wellings & Sutcliffe, *supra* note 21, at 519-20.

61. See Sergio Peña, *Regulating Informal Markets: Informal Commerce in Mexico City*, 20 INT’L J. SOCIOLOGY & SOC. POL’Y 37, 38 (2000).

62. *Id.*

63. *Id.*

64. Olmedo & Murray, *supra* note 13, at 422-23.

65. *Id.* at 429.

66. *Id.*

blind eye to the informality.⁶⁷ This tacit approval is often found in cases where informality emerges as a result of regulatory slippage, where the state lacks resources to effectively enforce its regulations and an informal market becomes a fundamental element of the functioning economy.⁶⁸

Beyond tacit approval, in some instances a state could formally recognize an informal regime and legitimize its extra-legal status. While legal monists foreclose the possibility of normative structures besides the state, legal pluralists advocate that the state acknowledge that such structures do exist and perhaps go so far as to protect them in certain cases.⁶⁹ Such writers look to the high degrees of informality in the developing world as a refutation of the descriptive power of the monists' argument and note that such alternative regimes are already recognized in the cases of indigenous communities and communities sharing the characteristics of indigenous groups.⁷⁰ Moreover, they argue that such informal regimes may merit protection because they could be more responsive to changing social dynamics and more easily negotiated by the individuals who engage with them.⁷¹

B. AN OVERVIEW OF THE *METRO BUS* PLAN

The Martinelli government approved *Metro Bus*, its plan to renovate the system of bus transport in Panama City, and the adjacent municipality of San Miguelito in January 2010.⁷² Approval of the plan opened a public bidding process for a single concessionaire to provide bus service along the “trunk routes” (*vias troncales*), or major transportation arteries, throughout the metropolitan area effectively displacing the fleet of *diablos rojos* from these routes.⁷³ Although previous administrations had also expressed the goal of modernizing the city's transport system and replacing the *diablos rojos*—indeed the previous President Martín Torrijos had introduced a plan to do so in the last years of his presidency⁷⁴—

67. Peña, *supra* note 61, at 47.

68. See Foster, *supra* note 12, at 261.

69. Daniel B. Maldonado, *Extralegal Property, Legal Monism, and Pluralism*, 40 U. MIAMI INTER-AM. L. REV. 213, 215 (2009).

70. *Id.* at 219-20.

71. *Id.* at 225-26.

72. *Presidencia Realizará Homologación del Metro Bus*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Jan. 6, 2010, 12:36 PM), http://www.presidencia.gob.pa/ver_nodo.php?cod=833.

73. Autoridad del Tránsito y Transporte Terrestre, Gobierno Nacional de Panamá, *Concesión para el Diseño, Suministro y Operación del Nuevo Sistema de Movilización Masivo de Pasajeros en el Area Metropolitana de Panamá, Metro Bus*, at 23, Licitación por Mejor Valor No. 2009-1-03-0-08-LV-001408 (Nov. 2009), available at <http://v1.panama compra.gob.pa/documentosconvertidos/2009-1-03-0-08-LV-001408-PC.pdf> [hereinafter *Concesión*].

74. Irma Rodríguez Reyes, *Bases Transportistas Proponen Modificar Los “Diablos Rojos”*, PANAMA AM. (Dec. 7, 2008), <http://www.panamaamerica.com.pa/notas/722414-bases-transportistas-proponen-modificar-los->

the *Metro Bus* plan was significantly more dramatic and comprehensive than previous efforts.

In May 2010, three multi-national consortia submitted bids for the *Metro Bus* contract: *Metro Bus* Panamá (Brazil and Panama), *Grupo Express S.A.* (Colombia and Chile) and *Transporte Masivo de Panamá* (Colombia and Panama).⁷⁵ The last of these was selected in June of 2010.⁷⁶ The first buses began operation in December 2010 and have been gradually replacing the *diablos rojos* of the traditional system.⁷⁷ Four hundred and ninety-nine buses were operational by April 2011, and after initial delays, the project to replace the fleet is on schedule.⁷⁸

The most fundamental changes between the *Metro Bus* system and the traditional system dominated by the *diablos rojos* are the shift from multiple concessions to a single-concession system and the nature of that concession. Instead of granting a right to operate, the concession imposes a responsibility to provide “efficient and uninterrupted” bus service on all trunk routes 24 hours a day, every day of the year and imposes financial penalties on the concessionaire for failing to comply with quality standards set out by the state.⁷⁹ This has been the model in numerous transport modernization efforts in Latin America and has been described by observers as representing a hybrid model between state provision and complete deregulation by replacing competition in the market with competition for the market.⁸⁰ This model also allows for an overall increase in bus service because the concessionaire is able—indeed required—to operate at times and in places that will have fewer passengers than the most frequented routes at rush hour.⁸¹

A second important element of the plan—and certainly the most visible—is the introduction of modern buses to replace the *diablos rojos* on all major trunk routes.⁸² All new buses must comply with domestic and international construction and safety standards as well as provide access for individuals with reduced mobility.⁸³ Besides stressing that the new buses are more comfortable for passengers than the *diablos rojos*, the

75. *Instalan Comisión Evaluadora de Metro Bus*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (June 1, 2010, 2:21 PM), http://www.presidencia.gob.pa/ver_nodo.php?cod=1403.

76. *Consortio Colombo-Panameño Gana Licitación de Metro Bus*, TELEMETRO.COM (June 23, 2010), <http://www.telemetro.com/noticias/2010/06/23/nota53929.html>.

77. *Id.*

78. *New Buses in Panama City, Panama – Goodbye Diablo Rojos*, ENCUENTRA24.COM (Mar. 2, 2013), <http://www.encuentra24.com/content/panama-en/business/view/new-buses-in-panama-city-panama-goodbye-diablo-rojos>.

79. *Concesión*, *supra* note 73, at 118, 140.

80. Antonio Estache & Andrés Gómez-Lobo, *Limits to Competition in Urban Bus Services in Developing Countries*, 25 *TRANSP. REVS.* 139, 150 (2005).

81. *Concesión*, *supra* note 73, at 164.

82. *Id.* at 23.

83. *Id.* at 34, 51, 151.

government has also emphasized the safety features of the new buses that distinguish them from the buses of the traditional system.⁸⁴ These include fire resistant seats, ample emergency exits, and mechanisms that prohibit the buses from traveling faster than 60km/h or from advancing when the doors are open.⁸⁵ This regulatory floor serves to mitigate the incentive for the concessionaire to reduce costs through irregular maintenance. Indeed the request for proposals details that failure to maintain buses in adequate working order can result in fines or the rescinding of the concession entirely.⁸⁶

A third element of the *Metro Bus* plan is the professionalization of bus drivers, both through their payment model and their social position. As stated before, under the traditional concession system, bus drivers were paid based on the number of fares they collected which resulted in unsafe driving practices.⁸⁷ Under the *Metro Bus* plan, drivers are salaried and evaluated based on their efficiency and professionalism in complying with company regulations, thereby eliminating the perverse incentives present in the traditional system.⁸⁸ Additionally, the *Metro Bus* plan requires drivers to undergo 50 hours of training each year, a process which is designed to improve driver quality and to professionalize the status of bus drivers in Panamanian society.⁸⁹ In his comments to the first class of graduates from the state-sponsored driver training program, government minister Dimitreo Papadimitriu explicitly expressed the shift in incentives and culture that the *Metro Bus* plan intends to enact:

We need to understand where we're coming from. We're coming from a system that we've inherited for the past thirty years which made us compete one against another in these drag-races that we see every day. . . . You have graduated from being 'levers' (*palancas*) to being 'operators' (*operadores*), a profession that we are going to dignify in our country as it is in other countries, where every one of you is a professional who leaves each day to work, who earns a salary. You are going to have access to social security. You are going to have a series of promises from the company for each one of you and your families.⁹⁰

84. *Metro Bus Cuenta Con Estrictos Protocolos de Seguridad*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Jan. 17, 2011, 3:32 PM), http://www.presidencia.gob.pa/ver_nodo.php?cod=2205.

85. *Id.*

86. *Concesión*, *supra* note 73, at 118, 140.

87. BANCO MUNDIAL, *supra* note 28, at 18.

88. Don Winner, *Metro Bus Drivers to Get a \$100 Per Month Raise – Salary Will Be \$680 Base*, PANAMA-GUIDE (Dec. 27, 2011, 5:05 PM), <http://www.panama-guide.com/article.php/20111227170528670>.

89. *Concesión*, *supra* note 73, at 32-33.

90. *Papadimitriu Inaugura Centro de Formación de Operadores de Transporte Colectivo*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Dec. 2, 2010, 6:14 PM), http://presidencia.gob.pa/ver_nodo.php?cod=2075 (see embedded video) (translated by author).

A fourth element of the *Metro Bus* plan is the introduction of an electronic card-based system for fare collection that is administered through a separate concession apart from the concession for bus operation.⁹¹ This model is consistent with models introduced in both Santiago and Bogotá and has three primary functions. First, it applies the logic of the salaried bus driver to the operating company as a whole, further reducing the impact of the profit motive on the concessionaire by basing payment entirely on compliance with the concession contract. Second, it reduces costs for consumers by permitting them to transfer between buses in the *Metro Bus* system for a period of 90 minutes without additional charge.⁹² Third, it increases overall efficiency in the system at the consumer level by facilitating faster transport for passengers who no longer have to count coins or wait for change. The Chilean company, *Sonda*, was awarded the contract in January 2011 to operate as financial administrator of the system which entails providing the electronic cards as well as establishing over one thousand recharging facilities throughout the system.⁹³ The card system was introduced in a trial phase in December 2011 and was implemented throughout the system over the following two months.⁹⁴ On February 15, 2012, the system switched over entirely to the card system as the only method of payment.⁹⁵ In an interview on April 1, 2012 a representative from *Sonda* stated that in the time since the card system had been introduced, passengers had made a total of 400,000 transfers amounting to a savings of \$100,000.⁹⁶

A fifth element of the *Metro Bus* plan is the introduction of dedicated lanes for *Metro Bus* buses so as to facilitate their movement along major routes.⁹⁷ Dedicated lanes have been introduced in select areas through the city, but have not yet been implemented at a large scale nor have plans been released suggesting a final plan for their eventual imple-

91. *Sistema de Tarjetas de Pago del Metro Bus Arranca en Diciembre*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Dec. 1, 2011, 6:59 PM), http://presidencia.gob.pa/ver_nodo.php?cod=3107 [hereinafter *Sistema*].

92. *Id.* (see embedded video).

93. Meredith Serracín, *Sonda Gana Administración Financiera del Metro Bus*, PANAMA AM. (Jan. 12, 2011), <http://www.panamaamerica.com.pa/notas/1005341-sonda-gana-administracion-financiera-del-metro-bus>.

94. *Sistema*, *supra* note 91.

95. *Inicia Fase de Prueba del Sistema de Tarjetas del Metro Bus*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Dec. 28, 2011, 1:39 PM), <http://presidencia.gob.pa/noticia-presidente-numero-3164.html>.

96. Viola Guevara, *Unas 568 Mil Tarjetas de Metro Bus Circulan en 1er Mes de Uso*, TELEMETRO.COM (Mar. 15, 2010), <http://www.telemetro.com/noticias/2012/03/15/95470/unas-568-mil-tarjetas-metro-bus-circulan-1er-mes-uso>.

97. *Ministro Papadimitriou Anuncia Operación de Nuevo Carril Exclusivo para Metro Bus*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Nov. 29, 2011, 4:17 PM), <http://www.presidencia.gob.pa/noticia-presidente-numero-3101.html>.

mentation.⁹⁸ These lanes represent a dramatic formalization initiative in that they explicitly regulate the common space of the roads, limiting access through government authority.

A sixth element of the plan is the proposed prepaid improved bus stops (*zonas pagas*) for major transit stops.⁹⁹ These stops resemble traditional subway stops in that they are accessed through a turnstile, enclose improved space in which passengers wait for a bus and are elevated so as to permit access to buses at grade level.¹⁰⁰ Improved bus stops with exclusive passenger access have become a cornerstone of bus system modernization programs in Latin America in recent years having been implemented most famously in Curitiba, Brazil and Bogotá, Colombia.¹⁰¹ Transportation economists point out that besides expediting passenger boarding and exiting, the stops serve to reinforce the exclusivity of the bus system itself by limiting the ability of alternative providers to poach possible passengers waiting for the bus without contributing to the infrastructure expenditures needed to establish a steady passenger base.¹⁰²

C. THE *METRO BUS* PLAN AS A DISPLACEMENT STRATEGY

In the context of formalization the *Metro Bus* plan must be viewed as a displacement strategy. On its face, the plan seeks to completely replace the traditional multi-concession regime with a single concession framework to the exclusion of previous concessionaires. In December, 2008, then-President Martin Torrijos announced a plan to remove the *diablos rojos* from the streets of Panama through a program of indemnification through which owners of the buses would be paid \$25,000 to sell their buses and relinquish their operating concessions.¹⁰³ President Martinelli has continued that agreement and began making payments to owner/operators in December, 2010.¹⁰⁴

Besides providing formal incentives for operators of *diablos rojos* to exit the market, the state has taken steps to facilitate *Metro Bus*' displace-

98. *Id.*

99. *Panama Tenders \$28 Million in Bus Stops*, CENT. AM. DATA (Mar. 14, 2011), http://www.centralamericadata.com/en/article/home/Panama_Tenders_28_Million_in_Bus_Stops.

100. *EUPAN Construirá Paradas y 'Zonas Pagas' del Metro Bus*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Dec. 7, 2011, 4:53 PM), <http://www.presidencia.gob.pa/noticia-presidente-numero-3131.html>.

101. See Roberto Santoro & Josef Leitmann, *Innovative Urban Transport in Curitiba, Brazil*, in *LEADERSHIP AND INNOVATION IN SUBNATIONAL GOVERNMENT: CASE STUDIES FROM LATIN AMERICA* 235 (Tim Campbell & Harald Fuhr eds., 2004); María Francisca Yáñez et al., *The Santiago Panel: Measuring the Effects of Implementing Transantiago*, 37 *TRANSP.* 125, 128 (2010).

102. Estache & Gómez-Lobo, *supra* note 80, at 143.

103. Rodríguez Reyes, *supra* note 74.

104. *Gobierno Entrega Primeros Cheques de Compensación a Dueños de Buses*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Dec. 13, 2010, 5:48 PM), http://www.presidencia.gob.pa/ver_nodo.php?cod=2119.

ment of the traditional regime through short term fare subsidies.¹⁰⁵ Although the contract with *Transporte Masivo* specified that the company would charge fares of \$0.45 cents for non-express, non-toll routes, the government is currently providing a subsidy to keep the price at \$0.25, the price currently charged for service on comparable routes by *diablos rojos*.¹⁰⁶ The government initially agreed to maintain this subsidy only through December 28th, 2011,¹⁰⁷ but has since stated it will extend the subsidy until the entire fleet has been replaced with *Metro Bus* buses.¹⁰⁸

Additionally, one important element of the enactment of the *Metro Bus* plan has been enforcement of the exclusivity of the concession awarded to *Metro Bus* against *diablos rojos* operating outside their concession and unregulated or “pirate” buses operating along *Metro Bus* routes.¹⁰⁹ Enforcement operations began in March, 2012 with officials from the ATTT stopping unsanctioned buses along major *Metro Bus* routes and transporting the passengers to *Metro Bus* stations.¹¹⁰ The current maximum fine for operating an unofficial service is \$500, but ATTT has suggested that it will attempt to raise that level to \$2,500.¹¹¹

Lastly, the strategies used by the government to promote the conversion from the traditional transport system to the *Metro Bus* system are consistent with strategies used by states to displace informal regimes.¹¹² Formal regimes often use techniques such as vilification and appeals to emotion to support efforts to eradicate informal markets in contraband goods and sexual services or to justify greater regulation of a particular sector.¹¹³ This is not to suggest any attempt at manipulation on the part of the government, only that the rhetorical techniques are consistent with a policy of displacement rather than incorporation or recognition.

One tactic has been the attempt to classify the traditional system as a social ill, so as to garner support for their removal.¹¹⁴ Although the

105. *Ministro Supervisa en Pedregal el Inicio de Ruta Troncal del Metro Bus*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (July 15, 2011, 10:03 AM), http://presidencia.gob.pa/ver_nodo.php?cod=2671 [hereinafter *Ministro Supervisa*].

106. *Id.*

107. Don Winner, *Fares On New “Metro Bus” System will be About 65 Cents*, PANAMA-GUIDE (May 27, 2010, 9:09 AM), <http://www.panama-guide.com/article.php/20100527100916821>.

108. *Id.*

109. Denise Lara, “Operativos Contra ‘Piratas’ es en Pro de Seguridad de Pasajeros”, TELEMETRO.COM (Mar. 22, 2012), <http://www.telemetro.com/noticias/2012/03/22/96039/operativos-contra-piratas-pro-seguridad-pasajeros> (see embedded video).

110. *Id.*

111. *Id.*

112. See Peña, *supra* note 61, at 37; Vande Walle & Ponsaers, *supra* note 3, at 368.

113. See Wellings & Sutcliffe, *supra* note 21.

114. See *id.*; see also *Primer Metrobus Llega a Panamá*, GOBIERNO NACIONAL: REPÚBLICA DE PANAMÁ (Oct. 23, 2010, 11:29 AM), http://www.presidencia.gob.pa/ver_nodo.php?cod=1939 [hereinafter *Primer Metrobus*].

diablos rojos were criticized well before the Martinelli government, the current government has taken deliberate steps to highlight the perceived dangers of the traditional system and associate the *Metro Bus* plan with their resolution.¹¹⁵ The first bus in the *Metro Bus* system was presented on October 23, 2010 at a ceremony marking the fourth anniversary of the Tragedy of La Cresta, where 18 people were killed in a fire on a bus in the traditional system.¹¹⁶ The new bus bore the name “23 de octubre” at the presentation, and after a tearful presentation by public minister Papadimitriou the bus was blessed by the archbishop of Panama who was leading the commemoration for victims’ families.¹¹⁷

Also noteworthy is the rhetoric used by the ATTT in justifying its enforcement efforts against unofficial transport in zones controlled by *Metro Bus*, services which it characterizes as “piracy” (*piratería* or *servicio pirata*)¹¹⁸ In statements to the press concerning the efforts, ATTT representatives consistently have stated that their primary concern regarding unofficial transport is lack of safety mechanisms on the unofficial buses themselves and lack of insurance protection for passengers in case of a crash.¹¹⁹ Protecting against unfair competition for *Metro Bus* is occasionally mentioned as an additional issue but always after other concerns.¹²⁰

III. IMPLEMENTATION AND ALTERNATIVES

A. IMPLEMENTATION OF THE *METRO BUS* PLAN

The *Metro Bus* plan shares many characteristics of other mass transportation plans implemented in Latin America over the past fifteen years, most notably the *TransMilenio* system implemented in Bogotá, Colombia in 2002 and the *TranSantiago* system adopted by Santiago, Chile in 2007.¹²¹ All three models utilize a Bus Rapid Transit (BRT) system based on competitive tendering, salaried drivers and improved boarding infrastructure, and all are heavily influenced by the much lauded BRT system of Curitiba, Brazil which has been in operation since the 1970s.¹²²

115. See *Primer Metrobus*, *supra* note 114.

116. *Id.*

117. *Id.*

118. Lara, *supra* note 109.

119. *Id.* (see embedded video).

120. See *id.* (see embedded video explaining: “There are two reasons for these efforts. First it is against the security of the users of this . . . this system of transport, and the second is that it is an illegal practice that goes against the good drivers who have all their papers in order.”) (translated by author).

121. See Yáñez et al., *supra* note 101, at 127-29; see generally Alan Gilbert, *Bus Rapid Transit: Is TransMilenio a Miracle Cure?*, 28 *TRANSP. REVS.* 439 (2008) (explaining the Transmilenio bus system in Bogotá, Colombia and its main characteristics).

122. See Santoro & Leitmann, *supra* note 101, at 236, 243, 246-47.

BRT systems have been shown to be more cost effective than both light and heavy rail in terms of implementing or improving mass urban transport for cities.¹²³ Moreover, BRT plans can resolve many of the economic inefficiencies and market failures presented by unregulated bus systems often present in developing countries.¹²⁴

The implementation of the *Metro Bus* plan is currently a topic of significant debate in Panama.¹²⁵ While the government position continues to be that progress is steady and the plan will be fully implemented by the middle of June 2012,¹²⁶ concerns involving the displacement of current service providers and overall capacity of the system are persistent.¹²⁷ The first set of concerns relates to the displacement of the existing drivers on both the trunk routes where the *Metro Bus* will operate and the feeder routes (*rutas alimentadoras*) which will be reorganized so as to better facilitate access to the *Metro Bus* system.¹²⁸ The government has begun making the indemnification payments of \$25,000 to owners of *diablos rojos* on trunk routes for them to sacrifice their route and bus as was promised by President Torrijos,¹²⁹ and recently approved an additional \$6 million to cover payments to the last 240 owners.¹³⁰ Delays in these payments, however, have caused significant problems in implementation.¹³¹ On March 5th, when *Metro Bus* attempted to begin service to the neighborhood of *Las Mañanitas* in the eastern region of Panama City it was met with significant opposition from operators of *diablos rojos* who claimed they had not been paid their indemnification and then physically blocked the *Via Panamericana*, the principle artery which connects *Las*

123. See Alejandro Tirachini, David Hensher & Sergio Jara-Díaz, *Comparing Operator and User Costs of Light Rail, Heavy Rail and Bus Rapid Transit Over a Radial Public Transport Network*, 29 RES. TRANSP. ECON. 231, 231 (2010).

124. See generally Estache & Gómez-Lobo, *supra* note 80 (explaining the various market failures inherent in unregulated bus systems and the potential ways a regulated system would address them).

125. See, e.g., *Debate Abierto Dominical: Analizan Alternativas para Mejorar Servicio del Metro Bus* (RPC debate broadcast Apr. 3, 2012), available at <http://video.telemetro.com/video/Analizan-alternativas-para-mejorar-servicio-del-Metro-bus/c3e8e23e0ca8447f7fde0eb809e80592> [hereinafter *Debate Abierto Dominical*] (translated by author).

126. *Id.*

127. *Id.*

128. Manuel Vega Loo & Yanela Ortiz, *Diputados Aprueban \$6 Millones para Indemnizar a Dueños de 'Diablos Rojos'*, PRENSA (Apr. 9, 2012), <http://www.prensa.com/uhora/locales/diputados-aprueban-6-millones-para-indemnizar-duenos-de-diablos-rojos/83001>; Rosalía Simmons, *Aún no se Define Fianza de las Concesionarias de Rutas Alimentadoras*, PRENSA (Mar. 1, 2012), <http://www.prensa.com/uhora/locales/aun-no-se-define-fianza-de-las-concesionarias-de-rutas-alimentadoras/68634>.

129. Loo & Ortiz, *supra* note 128.

130. *Id.*

131. See *Transportistas Abren Vías; Frenan Entrada de Metro Bus en Las Mañanitas*, LA ESTRELLA (Mar. 5, 2012, 8:28 AM), <http://www.laestrella.com.pa/online/noticias/2012/03/05/transportistas-abren-vias-frenan-entrada-de-metro-bus-en-las-mananitas.asp>.

Mañanitas with Panama City and on which the *Metro Bus* buses were to operate.¹³² The event created a significant disruption in traffic in the city and very negative press coverage for *Metro Bus*.¹³³ Explaining the incident as a result of a lack of coordination and communication, *Metro Bus* announced that it would delay its entry into the neighborhood so that it could “sit down and negotiate” (*para que nos sentemos a negociar*) with operators.¹³⁴ Service to *Las Mañanitas* began in June 2012 with some indemnification payments still pending.¹³⁵

The demands of the drivers on trunk routes have been clearly identified. More complicated, is the problem of how to negotiate with drivers on feeder lines who will be negatively impacted by *Metro Bus*' plans to redesign these sub-systems.¹³⁶ Although the *Metro Bus* plan does not require the primary concessionaire to provide service on feeder routes, it does enable ATTT to redraw these routes in consultation with *Metro Bus* so as to maximize efficiency in the system as a whole. Operators of these smaller routes have expressed concerns that such reorganization will have dramatic effects on their livelihoods, and indeed *Metro Bus* officials have admitted that the planned reorganizations will likely result in the elimination or consolidation of some currently operating feeder routes.¹³⁷ The government has identified six major owners of buses on feeder routes and appears to be in negotiation with them.¹³⁸ Limited information has appeared in the press about the substance of these negotiations, but one report has suggested that the operators on feeder lines have suggested an indemnification price of \$50,000 for routes which are displaced entirely, which at least raises the possibility of a protracted struggle.¹³⁹

Beyond the concerns raised by operators within the traditional system are the criticisms that the *Metro Bus* system does not have the capacity to fully meet the transportations needs of the city.¹⁴⁰ Since the implementation of the system, observers have complained both about

132. *Id.*

133. *See id.*

134. <http://adservern.prensa.com/uhora/locales/cierre-en-las-mananitas-obedecio-una-falta-de-coordinacion-dice-mora/69533>.

135. <http://www.laestrella.com.pa/online/noticias/2012/06/01/metrobus-llega-a-las-mananitas-dos-unidades-danadas-en-el-camino.asp>

136. *See* Rosalía Simmons, *Transportistas Dicen que los Gobiernos los Dejaron; Cuestionan Subsidios*, *PRENSA* (Sept. 20, 2012), <http://especial.prensa.com/movilidad-urbana-panama/2012/09/20/transportistas-dicen-que-los-gobiernos-los-dejaron-solos-cuestionan-subsidios/>.

137. *Debate Abierto Dominical*, *supra* note 125.

138. *See* Gilberto Soto, ‘*Diablos Rojos*’ *Tienen Tres Meses para Desaparecer y Darle Paso al Metrobús*, *PANAMA AM.* (Apr. 2, 2012), <http://www.panamaamerica.com.pa/notas/1170309-%E2%80%98diablos-rojos%E2%80%99-tienen-tres-meses-para-desaparecer-y-darle-paso-al-metrobus>.

139. *Id.*

140. *See* *Siguen Quejas por el Servicio del Metro Bus*, *LA ESTRELLA* (Dec. 18, 2011, 4:45 PM),

long wait times between buses, long lines and overcrowding on the buses themselves.¹⁴¹ In September 2011 a Facebook page was established entitled “Panama’s *Metro Bus* is Deficient” (*Metro Bus de Panama es Deficiente*),¹⁴² and on April 9, 2012 a lawyer in Panama City filed a formal complaint against *Metro Bus* for failing to meet its contractual obligation to keep wait-times under 15 minutes during its service hours.¹⁴³ Such critics claim that *Metro Bus* has simply not provided enough buses to meet the demand for transport that the traditional system had satisfied.¹⁴⁴

In response to these concerns, the government’s general position is that that the process of modernizing the bus is necessarily difficult but that they are on the right path.¹⁴⁵ Regarding the concerns of operators of the current system, the government insists that they will have effectively replaced the fleet on major routes and negotiated the reorganization of the feeder routes by June 30, 2012.¹⁴⁶ In terms of calls for an increase in total capacity, the response of the government has been less unified. One explanation presented by the government is that the current delays and overcrowding are a result of the growing pains of introducing the new system and will work themselves out once the system is fully implemented.¹⁴⁷ According to the local newspaper, *La Prensa*, Director of ATTT, Rafael Escobar has stated that *Metro Bus* will consider adding additional buses to existing lines only after the system has been fully implemented and users of the system “have gotten over the learning curve” (*hayan sobrepasado la curva de aprendizaje*).¹⁴⁸ The meaning of this reference to the learning curve is somewhat unclear since the government has been quick to stress the capacity of the Panamanian people to adapt

<http://www.laestrella.com.pa/online/noticias/2011/12/18/siguen-quejas-por-el-servicio-del-metro-bus.asp>.

141. *Id.*

142. *Metro Bus de Panama es Deficiente*, FACEBOOK, <http://www.facebook.com/pages/Metro-Bus-de-Panama-es-Deficiente/146481918776695> (last visited Mar. 27, 2013).

143. Manuel Vega Loo, *Denuncian a Mi Bus por Incumplir con Periodicidad en el Servicio de Buses*, PRENSA (Apr. 9, 2012), <http://www.prensa.com/uhora/locales/denuncian-mi-bus-por-incumplir-con-periodicidad-en-el-servicio-de-buses/82994>.

144. *See id.*; *see also Metro Problems: Lots of Buses but no Drivers*, NEWSROOM PANAMA (Mar. 9, 2011, 10:33 AM), <http://www.newsroompanama.com/panama/2468-metro-problems-lots-of-buses-but-no-drivers.html> (mentioning that although *Mi Bus* possesses 1500 new buses, they only employ 500 drivers).

145. *See Aún Hacen Falta Conductores para el Metro Bus*, PRENSA (Apr. 3, 2012), <http://www.prensa.com/uhora/locales/aun-hacen-falta-conductores-para-el-metro-bus/81457>.

146. Soto, *supra* note 137.

147. *Debate Abierto Dominical*, *supra* note 125.

148. Manuel Vega Loo, *Nuevos Servicios del Metro Bus Transportarán por Día a 90 mil Personas*, PRENSA (Apr. 10, 2012), <http://www.prensa.com/uhora/locales/nuevos-servicios-del-metro-bus-transportaran-por-dia-90-mil-personas/83282> (translated by author).

to the new electronic card payment system.¹⁴⁹ Officials have stated, however, that one cultural element of the problem of traffic is the driving habits of residents in the city, which they suggest is an additional cause for delays for the *Metro Bus* drivers.¹⁵⁰ In April, 2012, *Metro Bus* introduced a public awareness campaign called “Give Way” (*Dale Paso*) encouraging drivers to cede the right of way to *Metro Bus* buses, the drivers of which are presumably less aggressive than drivers of the *diablos rojos*.¹⁵¹

A second response by the government to the perception of increased travel times as a result of the introduction of the *Metro Bus* plan is to stress the efficiency gains likely to be realized by other elements of the plan, namely the dedicated bus lanes during rush hour.¹⁵² While dedicated lanes have opened in limited areas and are planned for others, their impact thus far has been limited.¹⁵³ Current projections suggest that the implementation of such lanes in high traffic areas could dramatically reduce travel times and as a result would diminish wait times and crowding.¹⁵⁴ This argument seems to concede that newer buses alone cannot provide service at the level as was provided by the traditional system.

The third explanation for the delays that the government has grudgingly offered is that *Metro Bus* has been unable to provide adequate bus service because it does not have enough drivers on its payroll.¹⁵⁵ The lack of drivers has been observed since 2011 and has been attributed to a lack of qualified drivers in Panama and, alternatively, low pay and poor working conditions offered by *Metro Bus*.¹⁵⁶ In January, 2012, *Metro Bus* raised the monthly starting salary for drivers from \$580 to \$680, but it appears that this increase has not had the desired effect of increasing employment.¹⁵⁷ On April 2, 2012, President Martinelli spoke directly on the subject, admitting that there was a scarcity of buses in the city and attrib-

149. Kathyria Caicedo, *Sonda Califica de Positiva Introducción de Tarjetas del Metro Bus*, TELEMETRO.COM (Feb. 17, 2012), <http://www.telemetro.com/noticias/2012/02/17/92579/Sonda-califica-positiva-introduccion-tarjetas-metro-bus>.

150. *Debate Abierto Dominical*, *supra* note 125.

151. *Dale Paso al Metrobus*, YOUTUBE (Apr. 2, 2012), http://www.youtube.com/watch?v=Sjbqlj4o_ns.

152. *Debate Abierto Dominical*, *supra* note 125.

153. *Id.*

154. *Id.*

155. Manuel Vega Loo, *Martinelli: No es un Problema de Buses, Sino de Escasez de Conductores*, PRENSA (Apr. 2, 2012), <http://www.prensa.com/uhora/locales/martinelli-no-es-un-problema-de-buses-sino-de-escasez-de-conductores/81271> [hereinafter *Martinelli*].

156. Vidal González, *Denuncian Anomalías en Empresa Mi Bus*, EL SIGLO (Dec. 17, 2011), <http://www.elsiglo.com/mensual/2011/12/17/contenido/454391.asp>.

157. *Mi Bus Busca Conductores para Trabajar en Panamá*, PORTAFOLIO (Jan. 3, 2012, 8:40 PM), <http://www.portafolio.co/negocios/mi-bus-busca-conductores-trabajar-panama>.

uting it to the low salaries offered by *Mi Bus*.¹⁵⁸

Considered in the context of formalization of an informal regime, these consequences are the logical result of the displacement strategy adopted by the Panamanian government. As stated above, displacing an informal regime is an inherently confrontational act as the government seeks to first present the regime as a social ill and then garner sufficient support for displacing it through the exercise of state police powers. Such conflict is perhaps most apparent when the state seeks to eradicate the sale of contraband goods or displace informal security systems, but it can occur whenever state regulatory action prohibits market activity. The conflict with operators in the traditional system was foreseen in the 2007 World Bank report on Panama's transportation system which stated that one of the most important concerns of such a project would be "the way in which it addresses the problem of the current operators of public transit (2824 operation licenses) and their problematic insertion in the new realities which will be created."¹⁵⁹

These new realities, the report suggested, include greater quality requirements in terms of service and greater professionalism and organization in terms of business operations; the report stressed that addressing this concern is fundamental for the efficient implementation of a comprehensive mass transit system.¹⁶⁰ Among the recommendations offered by the report were: 1) the purchasing of antiquated buses by the state as a form of indemnification for the operators for their loss of income; 2) a program of training for eligible operators to enable them to work within the new system; and 3) a program of job retraining and labor reinsertion for operators who will likely be ineligible for work in the new system because of lack of qualifications or advanced age.¹⁶¹ While the indemnification program offered by the government appears to directly respond to these recommendations, there appears to have been limited efforts to retrain displaced drivers or facilitate their employment in the new system.

The second problem related to the implementation of the *Metro Bus* system—the perceived lack of overall capacity—is a problem inherent to the economics of displacement strategies. With few barriers to entry, an informal market will often be characterized by an oversupply of firms offering non-optimized goods or services. As such, Panama's traditional transport system with a fragmented market of many providers resulted in an oversupply of bus service of non-optimized quality. Such oversupply has been observed in other Latin American cities with unregulated bus transport sectors, and is reinforced by the fact that only 68 percent of the

158. *Martinelli, supra* note 154.

159. BANCO MUNDIAL, *supra* note 28, at 68 (translated by author).

160. *Id.*

161. *Id.* at 69-70.

concessions granted to operators in the traditional system were in use in 2007.¹⁶² Although easy market entry results in oversupply, which forces operators to undercut each other in terms of bus maintenance and safe driving practices, it also ensures the adequate provision of transport services, albeit at a minimal level of quality.¹⁶³ Indeed, in its 2007 report, the World Bank found that supply of transport was satisfactory in terms of the frequency with which buses circulated and the location of stops.¹⁶⁴ Formalization through the displacement of the competitive operators and the installation of a single operator decreases ease of market entry, caps total possible supply, and increases the possibility of shortage. Moreover, a compensation model unrelated to ridership reduces the incentive for a sole provider to increase services in the case of miscalculated demand or insufficient supply. This exact phenomenon has been observed in Bogotá since the implementation of the *TransMilenio* system.¹⁶⁵ Without a check from the government to ensure sufficient capacity, the single concessionaire is no different from an inefficient state-run monopoly. Long lines, therefore, should not be surprising nor should the emergence of unofficial or “pirate” buses to satisfy the highly inelastic demand for transport.¹⁶⁶

B. ALTERNATIVE STRATEGIES: DISPLACEMENT

Considering the problems faced by *Metro Bus* in its implementation, efforts in the context of formalization also provides a framework for how these problems may be addressed. If the government wishes to continue its policy of complete displacement of the traditional system, its first priority should be the improvement of services for passengers in the short term so as to address the imminently foreseeable undersupply of service. If the informal system is conceived of as a rational response to the market demand for transport, the only way to displace that system is to fully satisfy the public’s demand. Policing the provision of unauthorized transport may seek to reduce informal services, but, as has been observed in all attempts to prohibit the traffic in contraband goods, in the face of

162. *Id.* at 18.

163. *Id.* at 18, 20-21.

164. *Id.* at 20-21.

165. A 2005 evaluation of the system bears a striking resemblance to current complaints about *Metro Bus*: “Passenger jamming has become the rule, and the problem is an especially severe problem during peak hours. Long lines to purchase access cards are coupled with crowds waiting at the curb to enter the buses. People find it difficult to board the buses. Waiting time, a critical variable in any public transportation system and one of *TransMilenio*’s big achievements early on, has started to rise. Security has deteriorated, and theft is common. As a result, people have begun to complain about the *TransMilenio* monopoly.” Juan Carlos Echeverry et al., *The Economics of TransMilenio, a Mass Transit System for Bogotá*, 5 *ECONOMIA* 151, 182-83 (2005).

166. Reports suggest that pirate operators are able to charge higher rates than formal operators. See, e.g., *Debate Abierto Dominical*, *supra* note 125.

legal prohibition, some number of service providers will simply recalibrate their business models to incorporate the cost of evading enforcement and continue operating if it is profitable to do so. The fact that an unofficial, “pirate” bus service is charging up to four times the fare charged by *Metro Bus*—and is remaining in operation— suggests that there is significant unmet demand and that criminalizing unofficial transport will not be sufficient to fully implement the formal regime.

Given the contractual relationship between the state and *Mi Bus*, the state can accomplish the goal of increasing the supply of formal bus service using either the proverbial carrot or stick. On one hand, it could provide additional funds for the concessionaire through direct subsidies or a renegotiation of their contract. The state’s policy of subsidizing passenger fare during the process of displacement and its willingness to extend this period of subsidy in the face of delays in implementation suggest that there may be political support for such a policy. Alternatively, the state could seek to coerce *Mi Bus* to increase its provision of buses through enforcement of its concession. President Martinelli’s comments about the need of *Mi Bus* to hire more drivers suggests that the state may be open to criticizing the concessionaire or employing a more confrontational approach in regulating the company’s performance of its contractual obligations. The recent formal complaint filed against *Mi Bus* also provides an avenue for holding the company directly responsible for failing to provide service as specified in its contract, and it will be interesting to see what response the state offers.

Whatever strategy is used to increase service, it is important to consider how the situation will change once the traditional fleet is completely replaced and *Metro Bus* achieves operation on all major trunk routes, which the state has announced will occur by June 30, 2012.¹⁶⁷ At this point, the state has announced that it will cease subsidizing bus fare and will let the fare rise to \$0.45, the level announced at the time of the bidding.¹⁶⁸ This price appears to have been selected because it is still lower than the cost of two fares under the traditional system, meaning that for the average Panamanian commuter, who completes at least one transfer between lines while commuting, the total fare is less than under the traditional system.¹⁶⁹ Given that the fare has been subsidized for over a year, however, this perceived increase in price may drive more passengers towards unofficial transport and thereby incentive more unofficial suppliers to enter the market. On the other hand, the position of the state appears to be that by the time the fleet renovation is complete, service will have

167. Soto, *supra* note 137.

168. *Ministro Supervisa*, *supra* note 105.

169. BANCO MUNDIAL, *supra* note 28, at 17.

improved generally throughout the system and there will be sufficient acceptance of the *Metro Bus* system that a price shock will not destabilize the formal regime.

C. ALTERNATIVE STRATEGIES: INCORPORATION OR RECOGNITION

In the face of the current difficulties faced by *Metro Bus*, it is also worth examining what policy options could be available if the state chose to adopt a strategy of either incorporating or recognizing the informal regime. Incorporating the traditional system—or elements of it—into the modern system could be accomplished in a variety of ways. While it would be very difficult to make the buses themselves comply with the specifications imposed on the *Metro Bus* buses, the *diablos rojos* could perhaps be incorporated into the service provision model offered by *Metro Bus*. They could be equipped with GPS tracking devices and fares could be collected through the unified system administered by *Sonda*. Indeed, given the success of the electronic card reader system on the new buses, efforts are currently underway to expand its use to the toll-roads of the Corredor Norte.¹⁷⁰ Drivers could be retrained to comply with *Metro Bus* company policies and compensation could be shifted to the *Metro Bus* model.¹⁷¹ Such a policy could greatly expand the supply of transit service and relieve the pressure on the current system. It could also represent an intermediary step in the gradual formalization of the system as *diablos rojos* could eventually be removed entirely from the system as they are replaced with modern buses.

Even if the buses themselves were not incorporated into the new system, incorporation could also mean the hiring en masse of the former drivers of the traditional system. Two explanations are generally offered for why the drivers of the *diablos rojos* have not simply become *Metro Bus* drivers: 1) they do not meet the qualifications under the new system, and 2) salaries under the new system are significantly lower than what they were earning before and lower than wages in other sectors for unskilled labor such as construction.¹⁷² If the lack of drivers is a result of *Mi Bus*' qualification requirements, the number of drivers could likely be increased by relaxing these requirements. This is consistent with the “informalization” labor policy instituted in Argentina during the 1990s

170. *Panama: Public Transport*, MY DESTINATION, <http://www.mydestination.com/panama/usefulinfo/6182189/public-transport> (last visited Mar. 27, 2013).

171. Or not. In Bogotá, compensation in the feeder routes continues to be based partially on ridership.

Echeverry et al., *supra* note 164, at 164.

172. *Falta de Conductores Quita Velocidad al Metrobus*, PANAMA AM. (Jan. 9, 2011), <http://www.panamaamerica.com.pa/notas/1004321-falta-de-conductores—quita-velocidad—al-metro-bus>.

which was discussed above.¹⁷³ While such an effort would likely result in increased cost of insurance, it might also facilitate a smoother transition to the more formal system. If drivers from the traditional system are found not to be joining *Metro Bus* due to low wages, the solution is simply to raise wages.

Finally, the state could consider permitting the traditional system to continue to operate with formal state recognition in a more limited capacity. A policy of recognition may be appropriate where the informal regime has significant institutional integrity or political strength, as in the case of an indigenous group or informal settlement. Indeed, recognition may be the de facto option for the state with regards to the operators of the feeder routes who are to be reorganized under the *Metro Bus* plan but whose routes will not be directly serviced by *Mi Bus*.¹⁷⁴ Negotiations with these groups have been going on since February 2012 without a final decision.¹⁷⁵ The indemnification plan for operators on the major trunk routes was already in place when *Metro Bus* began operations, but there has been no such consensus with regards to these routes; the fact that the only number that has emerged from the negotiations is twice the amount paid to trunk operators suggests that a resolution may be difficult to finalize.¹⁷⁶ Moreover, the success of the trunk operators in disrupting the *Metro Bus* implementation strategy may also empower the operators of the smaller routes to assume a more aggressive bargaining position. The state may be in place where it cannot effectively coerce the drivers to reorganize or exit the market and will be forced to acknowledge their regimes in the feeder zones.

Regarding the trunk routes, however, a policy of recognition would be difficult to implement as the informal regime would be in direct conflict with the formal system undermining the efficiency of the formal system and the authority of the state. If *Metro Bus* had instituted a phased implementation model, such a hybrid system could have been possible. In Bogotá, Colombia, the *TransMilenio* system introduced in 2002 sought to replace the traditional system progressively and has left in its place a fragmented system in many parts of the city that is much like the traditional system in Panama.¹⁷⁷ While a progressive transition may decrease the initial shock of implementation, it is not without its drawbacks. Observers have noted that in Bogota such a progressive transition has increased the bargaining power of the later operators to be displaced, and

173. Olmedo & Murray, *supra* note 13, at 423, 435.

174. *Reorganizan Rutas Alimentadoras*, PANAMAON.COM (Feb. 2, 2012), http://www.panamaon.com/periodico/panama/reorganizan_rutas_alimentadoras-12961.html.

175. *Id.*

176. Soto, *supra* note 137.

177. Gilbert, *supra* note 121, at 443-44, 455, 458.

leaving the informal regime in place has resulted in unfair competition from informal operators intruding on formalized routes.¹⁷⁸

As such, a hybrid system seems unworkable for *Metro Bus* unless the remnants of the traditional system are somehow funneled into a framework that is explicitly distinguished from the formal system. The traditional system could perhaps be permitted to operate only during specific times such as rush hour or at night, or it could be redirected to the markets of Arraiján or La Chorrera which lay outside the area operated by *Metro Bus*. One interesting idea for maintaining some element of the *diablos rojos* would be to permit a small number to operate as tourist buses.¹⁷⁹ Use of antiquated transportation systems as tourist attractions is not uncommon—Rio de Janeiro's *bonde* to Santa Teresa and the streetcars of New Orleans immediately come to mind—although the system would likely have to operate on a much reduced scale.

IV. CONCLUSIONS AND RECOMMENDATIONS

While policies of incorporation and recognition provide interesting alternatives, it seems certain that the Panamanian government will continue its displacement strategy for implementing the *Metro Bus* plan. ATTT director Jorge Fabrega has stated that significant traffic jams will likely continue through 2013 as the additional elements of the plan—such as improved stops and dedicated lanes—become operational, so it also appears unlikely that the government will take steps to dramatically increase services in the short term to respond to the apparent unmet demand.¹⁸⁰ At the same time, the current intense public outcry, the still unresolved negotiations with operators of the traditional system, the persistence of unsanctioned providers, and President Martinelli's remarks concerning salaries offered by *Mi Bus* suggest that the system still has significant difficulties ahead in terms of full implementation.

Whether the new system will survive its birthing pains may depend on whether President Martinelli can maintain the political power he has amassed since taking office. Martinelli's term has been marked primarily by its ambition, both in the implementation of mega-projects like the *Metro Bus* system and the underground/elevated metro train system and in his consolidation of the authority of his *Cambio Democrático* political

178. *Id.* at 443-45, 458-59.

179. David Young, *Flamenco, a Local Dance of Death*, LA ESTRELLA (Jan. 13, 2009, 12:00 AM), <http://www.laestrella.com.pa/mensual/2009/01/13/contenido/50818.asp>.

180. Priscilla Pérez, *Escasez de Conductores Afecta Reemplazo de 'Diablos Rojos', Según Fábrega*, LA PRENSA (Dec. 2, 2011), <http://www.prensa.com/uhora/locales/escasez-de-conductores-afecta-reemplazo-de-diablos-rojos-segun-fabrega/44443?page=2>.

organization.¹⁸¹ As he enters into the second half of his term, it remains to be seen whether he can complete the projects he has begun and facilitate a continuation of his policies.

What the implementation of the *Metro Bus* plan reveals is that the dynamics of informality can be present in situations wholly separate from traditional subjects of inquiry such as the sale of contraband goods, illegal land occupations, or unofficial labor markets. Indeed, such dynamics will be present whenever the regulatory power of the state interacts with the regimes that have developed in its absence—virtually every development project. In Latin America this question is fundamental as the region as a whole enjoys sustained economic growth at record levels. High degrees of urbanization, robust and increasingly self-sufficient economies, and political leaders seeking international prestige and geopolitical influence will likely cause the states of the region to continue to expand their regulatory reach—especially in cities—and to collide with the traditional, unregulated and informal regimes that its absence has nurtured. Without question this process of development through formalization is generally good for developing countries as it will ultimately offer individuals greater possibilities for realizing their potential and will increase the state's ability to respond to the needs of the people. To call this process simply modernization, however, is to ignore its nuances and perhaps to foreclose the various options available to the state in enacting its policies. The choice of whether to displace, incorporate, or recognize an informal regime is a complicated one, and it is a choice that should be made deliberately, not only to maximize the likelihood of effective implementation but also to truly respond to the needs of a country's citizens.

181. *With Friends Like These*, THE ECONOMIST (Sept. 14, 2011, 12:02 AM), <http://www.economist.com/blogs/americasview/2011/09/panamanian-politics>.

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