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SLOW JAM

Can Lima Finally Untangle Its Transportation Mess?



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“One, one, five!” shouts the *datero*. Luis, one of Lima’s more than 32,000 bus drivers, is slouched over the steering wheel. He curses. He knows what this means: He’s got competition.

It’s a typically raucous Friday night in the Peruvian capital, and the streets are starting to clog. Workers are streaming from office buildings and gathering at street corners, squinting to see which bus will carry them home. Plumes of dark gray smoke chug from tailpipes. Luis’s bus idles on the right side of the street, his seat rattling beneath him. The drivers behind us lean on their horns.

The *dateros’* voices waft above the din, their numerically coded cries informing the city’s competing bus drivers how far apart they are from each other. By yelling out “One, one, five,” this *datero* is telling Luis that the last bus drove by the same spot one minute ago, another drove past one minute before that, and yet another five minutes before that. Luis’s partner, the *cobrador* (Spanish for “collector”), has just stepped out of the dingy blue bus and is screaming out its route to potential passengers. He hands the *datero* 20 cents for his service.

Luis knows he has two options: Either catch up with the bus in front of him and pass it, reaching the passengers down the road first, or slow down and hope that new passengers arrive by the time he gets there.

He cranks into gear – Luis is ready to race.

This mayhem is what passes for a mass transit system in one of South America’s fastest growing cities. During rush hour, Lima’s gridlocked streets are a sea of multicolored buses. They compete for passengers at every corner, turning the streets into a frenzied fight to the death. (Traffic accidents are the number one cause of “lost healthy life years” in Peru). Incredibly, until three years ago, Lima, a capital city of eight million people, had no formal public transportation system whatsoever. Instead, it relied on a complex model that allows for-profit transportation firms to license public bus routes, operating them with their own private buses and employees. This model has turned public transportation in Lima into a free-for-all, with multiple private bus companies competing head-to-head on single routes. Today an average of 28 different transportation firms work any given kilometer of a bus route in Lima.

More than 32,500 private buses operate in the

Peruvian capital. (New York, a comparably sized city, has 5,600 public buses). “The city of Lima is the only city of its size in Latin America which has failed to provide an articulated urban transport system,” says Juan Tapia, a director of Protransporte, the city’s public transportation agency. But the system, for all its chaos, also provides cheap and plentiful transportation to the city’s working class, going places (and keeping fares lower) than the formal systems in many other cities.



Protransporte’s Juan Tapia has spent most of his life trying to fix Lima’s traffic woes. Photo credit: Elie Gardner

All of this may soon change, however. A growing city with a booming economy, Lima is eyeing a major overhaul of its mass transit system, aiming to tame and enhance it at once. The highest-profile element of this overhaul hit the streets in 2010: [The Metropolitan](#), a state-of-the-art bus rapid transit system. Ultimately expected to move more than 600,000 passengers every weekday, the city hopes the Metropolitan will soon become one of the most heavily used BRTs in the world.

Not just a more orderly way to get people around, the new system is a feather in the cap of a

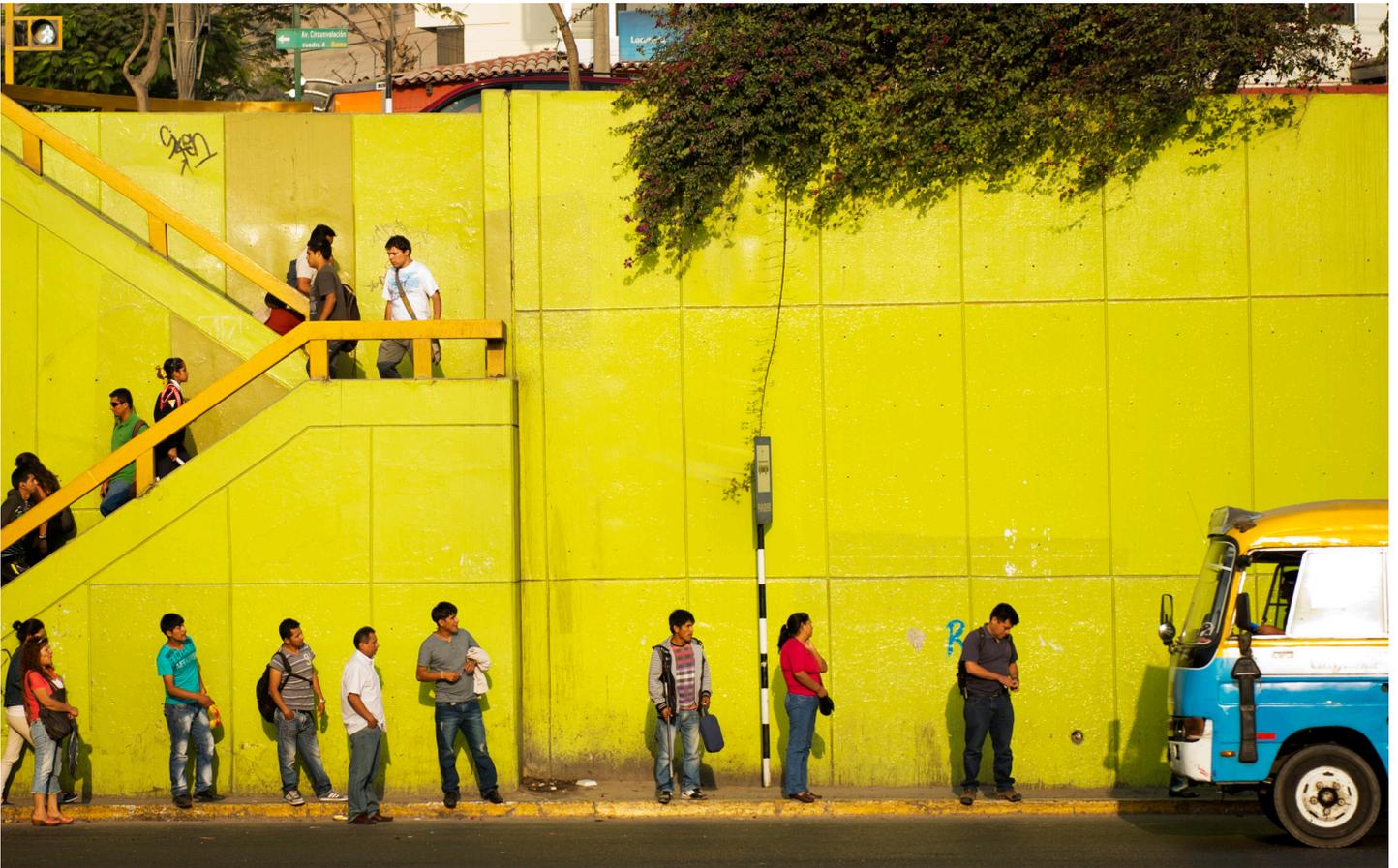


Photo credit: Oscar Durand

city that's working hard to reinvent itself as a modern capital of the Global South. It's a phenomenon taking place all over Latin America – as cities like Bogota and Mexico City become economic forces, they're racing to create transportation systems that match the new personas they hope to project. "During the last ten years, 97 cities have implemented BRT corridors, many of them located in Latin America," the Brookings Institution [reported](#) in 2011.

But not everyone's on board with the plans for reform. Although bus drivers and *cobradores* acknowledge a need for changes to the system, there is widespread fear in the informal transportation sector that reform will leave them in the dust. It's not just drivers – by some estimates, millions, from *dateros* to roadside vendors to window washers, rely in some way on the current system for employment.

But if there's one thing virtually everyone agrees on, it's that some kind of change is necessary, and that Lima's future depends on finding a way out of its transportation mess. The current reform effort

is a make-or-break moment for the Peruvian capital, and could lead to a highly functional system that covers 50 percent of the city's demand for public transportation. Failure to act, on the other hand, could drop the average travel speed on Lima's roads to a projected 13 kilometers per hour, bringing the city to a virtual standstill.

A TRAFFIC JAM OF TRANSIT

"First they tried to kidnap my children, then they tried to kill me," says Juan Tapia, sitting in his office overlooking Javier Prado Avenue and sounding thoroughly unimpressed. Tapia has been in the transportation business in one way or another for 38 years, and is deeply passionate about the reform of a system that once nearly cost him his life. In 1991, as head of the state-owned National Urban Transport Company (ENATRU), he was targeted by the Shining Path terrorist group, which assassinated government officials in the 1980s and '90s.

“In the 1990s the Shining Path declared ‘armed strikes,’ and during these strikes transportation workers could not go to work,” says Tapia. “If they went out to work [the Shining Path] would burn their buses.” Under Tapia’s orders, the state-owned ENATRU buses continued to operate anyway, with armed police officers on board.

In response, says Tapia, “In 1990 and part of 1991, [the Shining Path] burned over 100 buses.” Tapia responded by painting the buses with fire-retardant paint.

His war-weary demeanor suits a man whose job it is to attack Lima’s god-awful traffic problem. Today, the average commuter spends over two hours getting to and from work. A billion dollars evaporates every year in lost productivity and pollution-related

owned ENATRU was dissolved, and its buses sold to private transport enterprises. “We went from having 10,500 buses to having 50,000,” says Tapia. “Lima was total chaos.”

By the end of the decade the city had 570 bus routes prowled by 257 different transportation companies. Making matters worse, the total number of vehicles in the city had doubled during the same period. “It was like science fiction,” says Tapia. Something needed to be done, and it almost was. In the late 1990s, the World Bank proposed an urban transportation project in Lima. “We worked [on it] between 1996 and 1999, but it was blocked by Fujimori because he didn’t want to give Alberto Andrade [Lima’s then-mayor] any credit,” says Luis Gutierrez, an urban transportation specialist who worked for the World

“We went from having 10,500 buses to having 50,000. Lima was total chaos.”

health problems. Sensational stories of gangs robbing gridlocked drivers make the nightly news. But Limeños are also public transportation nuts – fully 80 percent of the city’s residents use mass transit, says Tapia. With that kind of ride-share, successful reform has huge potential.

Such reform has been a pipe dream for decades. In fact, Tapia’s been doing this long enough to remember when Lima’s problem was exactly the opposite of what it is today. In the ’80s, when the city’s public transportation was highly regulated, ENATRU operated more than 600 buses, but they were small and unreliable. Meanwhile, the city’s population was exploding – Lima has quadrupled in size over the last 50 years – and the sprawling informal settlements at the city’s outskirts where it was growing fastest weren’t even connected to the system.

This all changed in the early ‘90s when President Alberto Fujimori began deregulating Lima’s urban transportation network as a way to curb unemployment. The move opened the floodgates: In 1993, more than 323 new bus routes were created, and private firms were allowed to work the routes, import buses and set their own prices. By 1992, the state-

Bank at the time. Gutierrez would go on to become one of the founders of the Lima-Callao Transport Council, an organization created to address the city’s transportation woes.

When Fujimori resigned in 2000, both Lima and the world had changed. The city’s transportation mess was bleeding it of \$500 million per year, according to the [World Bank](#), and the expanding bus fleet had helped make Lima one of Latin America’s most polluted cities. Meanwhile, nearby Bogota was putting the finishing touches on its grand new BRT system, the TransMilenio. “We restarted the dialogue – in a slightly different fashion,” says Gerhard Menckhoff, who then worked for the World Bank. Menckhoff had started the transportation reform process in Lima in the 1990s and stayed on as a consultant until 2010. “TransMilenio had started operations, and a lot was learned about how one could do it better than what we had designed at the time,” he says.

Funding for Lima’s BRT was finally approved in 2003, with the Inter-American Development Bank and International Bank For Reconstruction and Development each committing to lend the city \$45 million. It was agreed that the Metropolitano would

be developed under a public-private partnership, with concessions for bus feeder routes, and would be located in segregated lanes on the Paseo de la Republica Expressway, where a network of private bus operators was currently covering the route. Construction began in 2006, and the system opened to the public with fanfare in 2010.

Looked at in isolation, the Metropolitano's first three years have been a success. Its ridership has

solution. In reality, the Metropolitano's reach is still quite low. "Building a Metropolitano takes about eight years," says Tapia, "and it attends to five percent of the demand." Flashy, large-scale projects like this, he says, are not the answer to Lima's transportation crisis. "Doing it project by project, it would take the city 100 years [to solve its problems]," Tapia says. "The city can't withstand 100 years. This needs to be solved today."



Passengers cram their way into a private bus on Javier Prado Avenue. Photo credit: Oscar Durand

grown steadily to 500,000 passengers daily, just shy of its optimal capacity of 600,000. On any given day thousands of people stand in line, charge cards in hand. They make their way to the turnstiles and file into open-air stations, exposed to Lima's characteristically warm, gray skies. On the buses, passengers are packed tightly, bunching near the door, afraid they won't be able to squeeze out when the bus arrives at their station.

But despite its popularity, it would be a mistake to confuse the cutting-edge system for a wholesale

This has historically been a sticking point for cities trying to get their streets under control. Megan McConville, program manager at the U.S. [National Association of Development Organizations](#), spent a year in Lima studying its transit system in 2006 and 2007. At the time, she says, "There was a disconnect between the different entities that were planning the different parts of the transportation system. Back then I was newer to the field, and this struck me as a big problem. Since then I've learned it's a big problem in cities around the world, including the U.S. Each agency



Lima's new BRT system offers residents a more orderly way to get around the city. Photo credit: Elie Gardner

looks at their specific project... without considering how it fits into the larger picture.”

Though it has its problems, Bogota's TransMilenio system is so well regarded in part because the city made sure it never lost sight of this larger picture. Though the BRT system is the most visible component of that city's transportation reforms, it's only the centerpiece of a much broader effort that encompasses both infrastructure and policy. In addition to BRT, Bogota raised its gas tax from 14 to 20 percent, erected barriers to prevent cars from parking on sidewalks (until then a common practice) and implemented the “pico y placa” program, which restricts cars from driving on certain days based on their license plate numbers, a tactic used with success in some Asian cities. “What did the TransMilenio do?” Tapia asks. “Start with the transport reform — restructure the system first, and *then* the infrastructure, because ultimately what people want is to travel comfortably.”

This is what Tapia means when he says Lima learned from the TransMilenio — not just how to build a better bus system, but how to build a more agile city. Lima, he says, is implementing complimentary

corridors to the Metropolitano and focusing on reducing the current number of buses. “The number of private buses is now frozen at 32,500 vehicles, and if we're introducing articulated buses there can be an oversupply... And we have to reduce this, so that the system has an economic balance.”

A bus-scraping system based on the one used in Bogota kicked off in Lima in January 2012, and saw 1,000 older buses scrapped within a year. Once the buses were taken off the streets, they could not be replaced; in exchange, their owners got between \$4,000 to \$10,000 USD for each unit. “Many people were happy,” insists Tapia. “They said, ‘Finally I'm out of this damn business.’”

Furthermore, the central government recently introduced a law that will phase out even more older buses over the next decade, dropping the age of the average bus from 32 years to 15.

Tapia says a lack of financing has halted the city's scrapping program, but plans to introduce the five non-BRT complementary bus corridors to the Metropolitano remain in place. If successfully implemented, the system's complementary corridors

would expand the Metropolitano's service dramatically. "We are implementing complementary corridors, which can reach 50 percent of the demand," says Tapia. "This is a reach of five to six million people, transported in buses with conditions similar to that of the Metropolitano, with a tiny investment."

The complimentary corridors, Tapia says, would be fully integrated with the Metropolitano as well as the new **Lima Metro**, an electric train line

be that more taxis start clogging the streets in those buffer zones." (Tapia says this has not been the case, and that the Metropolitano has led to fewer taxis along these routes).

McConville also stresses that while reforms by themselves are commendable, creating transit-oriented development is the mark of true greatness when it comes to a transportation system.

But how do you build transit-oriented



The BRT is the first formal transit system to exist in the city since the early 1990s. Photo credit: Elie Gardner

opened last year. A single charge card would integrate both systems.

The city is hoping that the increased quality of public transportation will ease the city's congestion and decrease the demand for taxis. But striking the right balance is tricky business. For instance, McConville points to the city ordinance forbidding private buses from operating within 400 meters of the Metropolitano, a rule meant to boost ridership on the new BRT. "But that's a temporary fix," she says. "I think an unintended consequence of that rule might

development in a city where development itself seems naturally predisposed to informality, sprawling at the fringes and changing by the day? This is how Lima has grown for decades now – and why the private bus system, for all the problems it causes for the city as a whole, has thrived on its nimble, adaptable merits.

"There's a reason transportation works the way it does in Lima," says McConville. "The system's flexibility, it's coverage – a lot of the people most in need of good transit service are the low-income communities on the periphery of the city. These

communities are growing and changing all the time. It's very hard to serve that with a formalized transit system." A big reason transit ridership in Lima is sky-high, in fact, is precisely because of the way the current system works. Private buses go directly to where the people are, and charge them what they can afford. Formalizing that system may be a risk worth taking, but it's still a risk.

"The challenge that Lima has is to [reform the system and still] retain the 80 percent of residents that use public transportation," says Tapia.

Part of what made the city's private bus network so appealing was that it was able to adapt to Lima and its expanding population. Before the influx of privately owned buses, the city's residents – especially those at the periphery – had inadequate access to transport.

Faced with these expansive plans, many in the city's private transportation companies feel they have reason to worry, as it seems many of them could see their routes displaced or eliminated. In the past, when officials have attempted to tighten regulations over the private buses, these have been met with citywide transport strikes. "The reform is a big social problem, it wouldn't just affect us," says David Lopez, a bus driver who's been behind the wheel of a combi for the past 16 years.

"When a combi works, you have the owner, the driver, the *cobrador*, sometimes two *cobradores* and two drivers, then you have the guy who comes and cleans the bus, then the lady who sells the corn, the lady who sells cakes, the lady who sells drinks – this generates jobs, and they would all lose their jobs [if these bus routes were formalized]."

There could be anywhere between 1.5 and 2 million people making a living off of public transportation.

Today Lima is attempting to reconcile city-run transportation with fringe settlements through the use of non-BRT feeder lines. The feeder lines **branch out** from the Metropolitano's north and south terminals, linking traditionally underserved communities with the Metropolitano's main route. In the process, they're integrating some of Lima's poorest communities with the rest of the city, an ideal reflected in the Metropolitano's official motto: "Lima's transport, for everyone."

A SYSTEM THAT SUPPORTS MILLIONS

For reform to succeed, it will not only need to serve the people who use the system, it will have to take shape with the needs of the city's current private operators taken into account.

When the city issued its ordinance forcing private buses operating within 400 meters of the Metropolitano to change their routes or face substantial fines, it was initially met with resistance. Eventually, however, the private bus lines complied with the rule. In total, some 1,800 buses were affected by the move.

Lopez is right. Even Tapia – a numbers man – admits that there could be anywhere between 1.5 and 2 million people making a living off of public transportation, a staggering figure in a city with a population of just more than 8 million. "There has to be a system that integrates everyone," says Lopez. "There definitely has to be a change. I think it is normal for me to worry, but I can't oppose a change, because this system is atrocious."

Lima officials say they are aware of the need to integrate existing bus drivers into the reform plans, and Tapia says the current bus operators are an important part of the new system. Other cities have grappled with this before. Mexico City, which **recently launched** its own BRT system, turned over some of its formalized operations to the private bus operators who had previously worked on the routes that were displaced. Those operators gave up their buses, and in return, collect a guaranteed steady paycheck that amounts to about 80 percent of their former earnings.

But the transportation workers I talked to in Lima say that while the city has paid them such lip service, they have never felt part of the decision-

making process, and haven't been approached about being part of a new system.

"The biggest hurdle is in implementing social mitigation plans. That requires a lot of money," Tapia says. For instance, the city has set up special schools to retrain drivers and *cobradores* to work in the new system. "The idea is to retrain current drivers so that they can drive behind the new buses, and to try to retrain *cobradores* so they can be drivers," he says. Tapia says other transportation workers would be retrained to carry out administrative tasks, or so they could be part of other industries, such as tourism.

Some informal workers I spoke to were skeptical about their prospects for new employment in the formal system. "How many people will lose their jobs?" asks Gina Granados, who works as a *cobradora* alongside her husband, a combi driver. "The city has its Metropolitano, but it will only employ its own people. They have never talked to us about the possibilities."

As Limeños become more desperate for some kind of solution, however, their empathy for those in the private bus system may be wearing thin. "There have been 14 transportation strikes, and they just tried

to do another one and no one listened to them," says Tapia. "There is a sector [of transportation workers] that is becoming aware that the city doesn't want the current system."

That system has served the city for over 20 years now, and has kept fares unchanged for well over a decade. By contrast, late last year the Metropolitano raised its fares on the BRT to make the line profitable. The increase from 1.50 to 2 soles (USD \$0.77) on the main line's flat fare makes the Metropolitano's cost almost double that of the private buses.

In many ways, this is a familiar story. As cities around the developing world rise to prominence in the global economy and strive to attain the status of so-called world-class cities, the tension between how those cities operate – and at what cost – only becomes more complex. For Lima, how transportation reform plays out will say a lot about what kind of future the city is headed toward.

"If you worked at this, day to day, like a driver, or cobrador," says Lopez, "you'd understand the problem too."



ABOUT THE AUTHOR

Manuel Vigo is the Lima-based blogger for the Informal City Dialogues. He also writes about politics, business, tourism, and culture for *Peru This Week*, where he is the news editor. A Peruvian-American who grew up between both countries, he has written for several Peruvian publications, and has been featured on BBC Radio. He holds a B.A in International Relations and Philosophy from Florida International University.



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Oscar Durand is a visual journalist whose work has been featured in the *New York Times*, Catholic News Service, GlobalPost, PRI's The World, the *St. Louis Post-Dispatch* and the *Dallas Morning News*, among others.



Elie Gardner has worked as a staff photographer and multimedia editor at the *St. Louis Post-Dispatch* and her work has appeared in *National Geographic Traveler*, *Virtuoso Life* and *Nature*. Elie and Oscar formed a storytelling collaboration in 2011 called Inti Media to tell stories using words, pictures, video and sound for newspapers, magazines, NGOs and corporate clients.