Cycling in Latin America and the Caribbean
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Emerging and Sustainable Cities Initiative
Inter-American Development Bank
About
This publication was prepared by a team of graduate research consultants from the American University School of International Service under the supervision of Favio Martinez. The team also benefitted from the guidance of Dr. Eric Novotny.

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Summary

Cycling is one of the most sustainable methods of urban transportation. With the exception of walking, it requires fewer natural resources and produces less waste than any other transport alternative. It can also improve health, cut costs, save time and strengthen communities. For these reasons and more, cycling represents a significant opportunity for the rapidly developing, intermediate-sized (“emerging”) cities of Latin America and the Caribbean.

The Emerging and Sustainable Cities Initiative (ESCI), a project of the Inter-American Development Bank (IDB), aims to help such cities learn from the successes and failures of their larger neighbors. This report — a cycling-focused partnership between graduate researchers from American University and representatives of the ESCI — includes an overview and analysis of the research team’s findings, based on surveys sent to municipal governments and community groups in 18 of the ESCI’s 21 designated emerging cities as well as six of the largest cities in the region by population, supplemented by secondary research. The research revealed five major observations particular to cycling in these cities:

▽ First, official support for cycling varies widely, and it is not a priority for some municipal governments. This can be attributed to faulty bureaucratic alignment, lack of legislation and enforcement, and deficient measurement and monitoring.

▽ Second, many cities are pursuing solutions in spite of limited existing infrastructure. These include ways to get around limited connectivity, overcome parking and storage constraints, replace cars with bicycles, find temporary solutions, surmount financial barriers, make strides in infrastructure and promote education and awareness.

▽ Third, a number of existing programs focus on access to bicycles among the population, including bicycle-sharing programs, interest-free loans and donations.

▽ Fourth, public sentiment toward bicycles is mixed due to safety concerns, fear of theft, aversion to physical exertion, and lack of experience — despite proven benefits and increasing demand.

▽ Fifth, efforts to make cities more bicycle-friendly by promoting cycling, drawing attention to barriers and spurring public and private action are largely community-driven.
In the Grand Tour of green urban transportation methods, cycling leads the pack.

With the exception of walking, this low-cost, high-impact mode of transportation requires fewer natural resources and produces less waste than any other means of getting around. Over the entire transportation lifecycle — from manufacturing and maintenance to fuel consumption — cycling-related emissions are over 10 times lower per passenger than those stemming from cars, and nearly five times lower than those from buses.

Beyond sustainability, urban cycling offers benefits to both riders and fellow residents. In the cities of Latin America and the Caribbean, for instance, the rapid rise of motorized vehicles has contributed to air pollution, traffic jams and suburban sprawl. Cycling, on the other hand, can improve health, slash costs and curtail commutes.
Cycling in Latin America and the Caribbean

The average adult burns 175 calories more per hour while cycling than while driving. Cyclists in Bogotá save an average of 55,000 pesos ($30) per month compared to their fossil fuel-powered neighbors, while one newspaper in Buenos Aires reported that a seven-kilometer journey to or from the city center at rush hour took nearly twice as long by car or bus as by bicycle.

Cycling also strengthens communities. The practice extracts people from their cars and forces them to interact with their neighbors; cycling-related enterprises create jobs and help rejuvenate impoverished areas.

For these reasons and more, cycling represents a significant opportunity for the rapidly developing mid-sized cities of Latin America and the Caribbean. Such municipalities have a unique chance to model the successes — and learn from the failures — of their more developed counterparts. Similarly, cycling offers the organizations that work with such cities, such as the Inter-American Development Bank (IDB), yet another avenue by which to promote sustainable development in the region.

1.1 The Emerging and Sustainable Cities Initiative

Latin America and the Caribbean is the second-most urbanized region in the world, and its cities continue to grow. The IDB classifies approximately 550 as “emerging” — possessing rapidly growing economies and populations of intermediate size (from 100,000 to 2 million).

“The Emerging and Sustainable Cities Initiative employs a multidisciplinary approach to address the sustainable urban development challenges facing emerging cities in Latin America and the Caribbean.”

The IDB created the Emerging and Sustainable Cities Platform in 2011 to help these cities make “more informed planning decisions” and take “immediate actions towards smart and sustainable development” — in other words, to preempt the challenges faced by their larger neighbors, including pollution, heavy traffic congestion and crowded slums.

The IDB piloted this new sustainable urban development platform in five cities: Trujillo, Peru; Port-of-Spain, Trinidad and Tobago; Santa Ana, El Salvador; Montevideo, Uruguay; and Goiânia, Brazil.
With the knowledge gained from these five pilot cities, the IDB officially launched the Emerging and Sustainable Cities Initiative (ESCI) in February 2012. The ESCI provides a set of tools to help emerging cities identify key bottlenecks on the path to sustainability; to weigh and prioritize problems in order to guide investment decisions; to find specific, adequate solutions (“prioritized interventions”) that can pave the way to increased sustainability; and to follow through on progress in closing gaps and reaching goals.

ESCI technicians complete an eight-phase plan in close collaboration with the municipal governments of select cities in the region. Selection criteria include population size, availability and accessibility of information, the existence of a planning framework to provide initial institutional support, and the presence of strong leadership from the local mayor’s office or urban and environmental sectors. At the time of publication in May 2013, the Initiative had agreements with 21 emerging cities; the IDB aims to reach approximately 50 cities throughout the region by 2015.

The Initiative’s technical staff begins its work by leading an initial analysis for each city using a rapid assessment diagnostic tool developed in partnership with McKinsey Consulting. The tool consists of approximately 150 indicators in three critical areas: 1) environmental sustainability and climate change, 2) urban development, and 3) fiscal sustainability and governance.

Following this analysis, the ESCI team prioritizes areas of need and designs an “action plan” comprising key interventions for each city. Then, it helps implement at least one of these prioritized interventions and, with the participation of local NGOs, the private sector and academia, contributes to the development of a monitoring and evaluation system.

1.2 Cycling in Latin America and the Caribbean

While cities in the region have traditionally favored motor vehicles over bicycles, a number have recently captured worldwide attention for their innovative endeavors to become more bicycle-friendly. Efforts to increase cycling among residents have sprouted in the region’s largest metropolises, and such ventures are also beginning to appear in its emerging cities.

Bogotá and Rio de Janeiro exemplify the successes that the larger urban zones have had in integrating cycling as an important consideration in their urban planning. They are home to the region’s largest networks of bicycle lanes, hosting over 250 kilometers of perma-
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Cyclists make over one million trips per day on these routes. Bogotá also boasts the oldest ciclorecreovía or recreational bicycle path program, in which municipalities give cyclists free reign by temporarily closing certain roads to motorized traffic. According to a 2011 report by the BBC, one out of seven people in Bogotá participates in the program, which takes place on Sundays and holidays.

The Americas Ciclovias Network (CRA), with support from the Pan-American Health Association (PAHO/WHO) and the University of the Andes, scores such “open streets” programs in the Americas. The highest-ranked programs of 2011, with scores of three bicis de calidad (“quality bikes”), were located in Guatemala City; Lima, Peru; three cities in Colombia including Bogotá; and six cities in Mexico. Programs in Santiago, Chile; Cuenca, Ecuador; and Mexico City received two bicis de calidad, while the program in Montevideo, Uruguay landed among the four receiving one bici de calidad.

Yet, for every article highlighting the region’s successes, there is another pointing out the work that remains to be done. The BBC report, for instance, indicated that only 2 percent of Bogotá’s weekend and holiday bicycle path users rode on the city’s permanent bicycle lanes during the week. One rider explained that heavy weekday traffic made commuting by bicycle slower; other deterrents include crime, limited connections between routes, and crowding by pedestrians and street vendors.

Frequent accidents also discourage commuting by bicycle. Certain cities, such as Lima, have some of the highest levels of annual road fatalities. Cyclists report feeling unsafe as they attempt to share roadways with motorists in cities that have yet to cultivate awareness, respect and bicycle-friendly infrastructure and traffic regulations. Cycling can also be an unreliable alternative in cities that lack permanent bicycle lanes — such as Montevideo, which has only eight kilometers of poorly maintained lanes — or that have limited connections between lanes and to public transportation.

#juntosenbici ... ganamos tiempo

In Buenos Aires, a seven-kilometer journey to or from the city center at rush hour takes nearly twice as long by car or bus as by bicycle.
However, there is strong and growing activism on the part of community groups to promote awareness and pressure governments to set aside more space for cyclists. Groups throughout the region have organized campaigns to make their cities safer places to ride and to bring communities together in demonstrations. These groups also often work with authorities to develop transportation plans that treat cycling as a critical component.

As a result, city governments have begun to prioritize cycling, and are garnering worldwide attention for their endeavors. Cities such as Buenos Aires, Mexico City, and São Paulo are now regularly compared to cosmopolitan centers with successful large-scale bicycle-sharing programs such as Copenhagen, Hangzhou and Paris.

Nevertheless, obstacles to the development of fully realized cycling cultures in the cities of Latin America and the Caribbean remain in place, particularly in the emerging, intermediate-sized municipalities. This report intends to address these obstacles and to give officials, activists and academics in the region the tools and knowledge necessary to begin overcoming them.
1.3 About This Report

Cycling in Latin America and the Caribbean is the result of a partnership between graduate researchers from the American University School of International Service in Washington, D.C. and representatives of the ESCI. The project was conceived as an examination of cycling trends and initiatives throughout the region, with a special focus on the ESCI’s emerging cities as they compare to the region’s most populated metropolises.

While the role and reach of cycling varies from city to city, innovative initiatives and promising practices throughout the region make it an ideal object of study. The ESCI’s emerging cities, in particular, serve as ideal reference points for the development of sustainable urban plans that integrate cycling as a viable alternative mode of transportation.

The report that follows provides an overview of the research team’s methodology and results, followed by an in-depth discussion identifying and analyzing key themes and their implications for the region. Throughout the report, readers will also find interesting facts and figures on the benefits of cycling, as well as a series of “spotlights” highlighting innovative programs and initiatives that offer particularly instructive models.

1.4 Methodology

Over the course of three months, the research team conducted a study of 18 of the ESCI’s 21 emerging cities, as well as six of the largest cities in the region by population, for a total of 24 subject cities (see Table 1).

The team collected secondary research from global and regional news sources, academic literature, and publications on urban development and sustainability. The researchers also created two surveys for each subject city — one for municipal governments and one for community cycling groups. Survey questions were informed, in large part, by a ranking framework developed by Mexico’s Ciclociudades initiative.

Between February 1 and March 31 2013, using a variety of online sources, the research team identified contacts within the municipal governments and community groups and made a series of international telephone calls to confirm the appropriate survey responders within each. The applicable survey was emailed to each responder. (See Appendix 6.1 for the complete municipal government survey and Appendix 6.2 for the community group
The researchers then carried out a series of two follow-up phone calls and two rounds of follow-up emails to the designated contacts.

Of the 24 total surveys sent to municipal governments, the team received 13 responses, representing a response rate of 54 percent. These cities include: Asunción, Cochabamba, Cuenca, La Paz, Manizales, Montego Bay, Montevideo, Bogotá, Buenos Aires, Lima and Mexico City. Due to concerns over the accuracy of one contact and representative nature of another, the team excluded survey responses from Valdivia and Santiago, respectively. The team conducted secondary research to answer survey questions regarding the municipalities from which it did not receive responses. Indicators stemming from secondary research and not directly provided by the city’s municipal government have been starred in the corresponding graphs.

From the 25 community groups identified, the team received six survey responses, representing a response rate of 24 percent. The groups that responded were located in Bucaramanga, La Paz, Montevideo and Santa Ana.

Information on cycling in the Caribbean cities was limited. The team encountered significant hurdles, both in reaching municipal governments and community groups and in identifying appropriate representatives with adequate knowledge of the topic.
Though hard data is difficult to come by, cycling is gaining speed in the region.

Over the course of three months, the research team contacted government officials and community groups in 24 Latin American and Caribbean municipalities.

Municipal government representatives, who included officials from a variety of departments and offices, provided information on a number of topics: mobility as public policy; cycling regulations; permanent bicycle lanes; bicycle storage options and integration with public transportation; recreational bicycle paths; bicycle-sharing programs; the scale of urban cycling; and education and promotion. Community group respondents, on the other hand, detailed their purposes, activities, financing and achievements.
2.1 Municipal Governments

Mobility as Public Policy
With the exception of Montego Bay, all subject cities have some degree of public policy in place to favor or promote cycling. Municipal government respondents in all cities except Montego Bay and La Paz reported the existence of air quality monitoring systems.

Cycling Regulations
Regulations on urban cycling in traffic exist in Bogotá, Buenos Aires and Mexico City, as well as in the ESCI cities of Asunción, La Paz and Montevideo.

Permanent Bicycle Lanes
The team defined permanent bicycle lanes as designated lanes intended for use throughout the entire year. They can be either separated from or integrated with public roadways.

All but Asunción, Manizales and Montego Bay have permanent bicycle lanes, although Asunción is in the process of building them. Although the respondent in Manizales cited topography as a barrier to construction of permanent lanes, the city government has opened a space for recreational bicycle paths on Sunday mornings, with daily attendance estimated at 5,000 people. The region’s largest cities each reported the existence of an interconnected network of permanent bicycle lanes; every emerging city except for Manizales and Montego Bay either has such a system or plans to build one. Fewer cite direct connections between bicycle lanes and the greater public transportation system.

Bicycle Storage and Public Transportation
Public bicycle racks exist in all of the larger cities and in some of the emerging cities; however, few public transportation methods provide bicycle storage options. Most cities do not allow passengers to carry their bicycles onto buses or trains.

In Asunción, public bicycle racks have been installed in tourist locations, and will form part of permanent bicycle lane construction. In La Paz, public bicycle racks can be found

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Bogotá offers ciclopaseos — programmed visits to patrimonial, cultural, recreational and athletic sites — during its recreational bicycle paths.
in supermarkets, while Montego Bay has them in some private establishments. Bogotá only offers racks along recreational bicycle path routes, while Cochabamba and Manizales have none.

Recreational Bicycle Paths
For the purposes of this report, the term “recreational bicycle path” refers to the closing of streets to motorized vehicles during designated hours to allow for public participation in physical activities such as running, walking, cycling and more.

Buenos Aires and Montego Bay are the only cities without such paths. They are generally held on Sundays during the day; their lengths span from one kilometer in Asunción to 120 kilometers in Bogotá. In addition to weekend mornings, Asunción is the only city with recreational bike paths during the week. Exceptions to a weekly schedule include La Paz and Montevideo, with monthly recreational bicycle paths, and Cochabamba, where recreational bicycle paths open three times per year surrounding the local Día del peatón (“Day of the Pedestrian”), which attracts more than 20,000 participants.
Complementary activities offered during recreational bicycle path operating hours include cultural, artistic and health-related programs as well as cycling competitions and walking. In Manizales, residents can enjoy aerobics, recreational dance, didactic games and beach soccer. Montevideo offers inclusive sports that provide for the participation of people with disabilities, as well as road safety classes that include simulations and marked routes. Depending on the event, bicycle lending, pedal cars for two to four people, health and nutrition counseling, blood pressure testing and physical education classes may also be available.

Bogotá offers a cycling school and Reciclóvia program that promotes recycling, while Mexico City provides programming in environmental education, physical activity, bicycle training, yoga classes and tandem bicycle trips for people with special needs.

Recreational bicycle paths also offer money-making opportunities for permanent and temporary businesses. These include beverage and food sales, arts and crafts, sporting goods, and rental and maintenance services for bicycles and skates.

**Bicycle-Sharing Programs**

A bicycle sharing program is a service in which bicycles are made available to individuals at zero or low cost for short-distance trips in an urban area. All of the larger cities have bicycle-sharing programs, and plans for such programs are underway in Cuenca and Montevideo. Bicycle sharing is free in each of the larger cities except for Mexico City, while Cuenca plans to charge tourist, monthly and annual fees and Montevideo plans to charge after the first half hour of use.
Scale of Urban Cycling

Municipal respondents reported relatively low numbers of bicycle use as a primary form of transportation, ranging from 0.4 percent to 10 percent of the population. Respondents from Cuenca, La Paz, Lima and Mexico City cited official government surveys, while the rest reported estimates; Manizales, Montevideo, and Montego Bay did not have statistical data necessary to answer this inquiry.

Total daily trips made by bicycle in the emerging cities that responded to this inquiry ranged from 1,947 to 47,642, while the larger cities reported daily trips ranging from 84,000 to 1 million.

Education and Promotion

The majority of subject cities, excluding Montevideo and Montego Bay, conduct programs or campaigns to promote bicycle use. Cochabamba indicated that it conducts its only cycling support programs on the three days surrounding the annual Day of the Pedestrian. Institutions supporting such initiatives include departments of sports, recreation, police and public safety, public health, transportation and roads, and education; they also include civic organizations and private institutions, such as hospitals. These programs generally focus on bicycle safety and on cycling as part of a healthy lifestyle.

2.2 Community Groups

Purpose

Most community groups are volunteer-driven and some are publicly supported. They promote cycling as a viable transport alternative and focus on its benefits to the environment and health. Groups such as Bucaramanga’s Ciclaramanga highlight the health, environmental and financial benefits of cycling, while Ciclovida Urbana in Montevideo hopes to help people “restore [their] sense of liberation and well-being.” Groups battle a variety of barriers to cycling in their cities beyond lack of infrastructure, including difficult terrain, extreme heat, lack of respect from motorists, theft, and a dearth of official educational campaigns.

#juntosenbici ... nos beneficiamos todos

Cuenca’s soon-to-be-launched bicycle-sharing program is expected to benefit approximately 20,000 people — particularly area university students.
Activities
The groups offer a variety of activities. Ciclaramanga organizes two monthly riding events with municipal support, as well as “cine-forums” centered on cycling culture and sporadic free bicycle repair days. It also rents out and repairs bicycles, offers workshops on basic mechanics and bicycle operation, and sells apparel.

Gente en Bici, from Montevideo, organizes cycling trips to promote bicycle use and to inform participants of transit laws and basic safety practices. Ciclovida Urbana offers cycling picnics, free bicycle repair workshops and a map of bicycle-friendly spaces and recommended shops. It has also organized activities for World Bike Day, celebrated by some around the world every April, and World Car-Free Day in September.

Most groups have a strong online presence, while some also use free press and publicity materials to promote their activities.

Financing
Most organizations report no consistent financial support. They are primarily volunteer-operated and only receive small occasional donations during events or activities.

Achievements
Ciclaramanga collects quantitative data on its activities and outreach efforts. The organization states that it has mobilized a total of more than 7,500 people in 15 official ciclopaseos (group rides). It reports over 500 participants in each and more than 1,200 in select cases. The organization has attracted over 10,000 visitors to its official website, boasts more than 2,000 fans on Facebook and counts almost 300 followers on Twitter. Ciclaramanga has noted an increase in bicycle use for errands and general transportation since it began operations in the city; in addition, a number of other pro-cycling activist groups have emerged in its wake.

Gente en Bici and Ciclovida Urbana, both from Montevideo, gathered more than 10,400 signatures on an online petition asking the local government for increased cycling infrastructure. The petition was received by city officials and has inspired subsequent government action.

In Cuenca, university students struck a deal with local bicycle vendors to secure 25% discounts.
Cyclists on an evening ride in Buenos Aires share the streets with motorists. © AP Photo/Natacha Pisarenko
More and more cities are turning to cycling to improve their quality of life.

The research reveals five major observations particular to cycling in Latin America and the Caribbean:

- Official support for cycling varies widely, and it is not a priority for some municipal governments.
- Many cities are pursuing innovative solutions in spite of limited existing infrastructure.
- A number of existing programs focus on access to bicycles among the population.
- Public sentiment toward bicycles is mixed despite proven benefits.
- Efforts to make cities more bicycle-friendly are largely community-driven.
3.1 Cycling a Low Priority

The research reveals that, despite a number of recent efforts and standout cases such as Bogotá and Buenos Aires, cycling has not historically been a high priority of municipal governments in the region. Anecdotal evidence and secondary research expose widespread sentiment that overall funding is inadequate to devote to cycling projects, particularly in the face of higher-priority urban development tasks. Cycling infrastructure efforts are often sporadic and incomplete, and projects are sometimes abandoned soon after being announced; for instance, construction on bicycle lanes promised to residents of Goiânia in July 2011 had still not begun a year later.5

However, evidence shows not only that cycling projects are cost-effective and beneficial to residents’ quality of life, but also that they demand early and substantial integration into urban development plans in order to avoid future problems. As the region’s emerging cities continue to grow, they have begun to encounter many of the challenges associated with the sizeable populations and pervasive motor vehicles of their larger neighbors. Bi-
cycle lanes can help to mitigate pollution and traffic congestion; however, they are much more challenging to install ex post facto. In addition, exploring ways to keep populations active as lifestyles in growing cities become more sedentary should be a key priority for policymakers.

Some cities have recognized the significance of growing traffic. Mar del Plata, where the number of cars on the city’s roads has grown by half in five years — from 192,000 in 2007 to 300,000 in 2012 — offers one example. The city’s transportation and transit master plan calls for the installation of 150 kilometers of bicycle lanes in order to curtail the rising problems of its high vehicular traffic. In Bogotá, the law requires that every new street constructed must include a bicycle lane. However, cycling has yet to take its proper place among the top priorities of urban planning authorities in other cities.

**Faulty Bureaucratic Alignment**

In many of the region’s cities, cycling is ignored as a matter of policy and considered a recreational pursuit; it is thus relegated to sports and recreation or tourism departments. Of the 24 municipalities contacted, seven referred the research team to their sports and recreation departments, two to their tourism and culture departments, one to its environment department, and only eight to their departments of traffic, transportation or mobility. Whether cycling is promoted as part of the transportation system or treated as a recreational activity has major implications for perceptions among the general population.

**Lack of Legislation and Enforcement**

Placing a higher priority on cycling requires integrating relevant provisions into official traffic codes, which most of the cities do (or plan to do).

However, even in those cities with proper legislation and traffic code provisions, enforcement is far from guaranteed. Vehicles often disregard marked bicycle lanes by driving or parking in them, rendering the lanes inaccessible and unsafe for cyclists. Enforcement to ensure that only cyclists use these lanes is often inadequate.

#juntosenbici ... *creamos consciencia*

In Asunción, communities and organizations can “adopt” stretches of the city’s bicycle lanes, providing much-needed maintenance.
Cycling in Latin America and the Caribbean

Sharing Best Practices
The project began as a joint gift from the Embassy of the Netherlands in Mexico City and a variety of Dutch companies. Based on their experiences in the Netherlands — home to some of the world’s most bicycle-friendly cities — the authors wrote Ciclociudades to contribute to the gathering momentum for cycling as a sustainable and healthy transportation alternative in Mexico.

Expansion
The initiative has since expanded to address a lack of official cycling data in Mexican cities. It has developed a ranking and award system — Ranking Ciclociudades and Premio Ciclociudades — to conduct studies, compare cities and reward progress. The project awards automatic traffic and cycling meters to cities to help them measure and manage the flow of cyclists. The manual is available online as a free resource to other cities in the region.

Ciclociudades: Putting People Over Cars

Ciclociudades is a comprehensive mobility manual created by the Mexican Institute for Policies on Transportation and Development (ITDP) and the Interface for Cycling Expertise (I-CE). It gathers best practices from around the world on designing public policies, infrastructure and educational programs to promote bicycle- and pedestrian-friendly urban development in Mexico.

About the Manual
The manual describes the benefits of urban cycling and priorities for public policy; outlines how to incorporate cycling into government initiatives; offers ideas to engineers, architects and planners on creating mobility networks; details cycling infrastructure design; discusses how to integrate bicycles with public transportation; and addresses private sector and nonprofit programs.

Discussion

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Deficient Measurement and Monitoring

The establishment of citywide systems to measure and monitor progress is critical to improving the environment for cycling, yet research reveals that many cities lack such systems. This adversely affects their ability to assess their efforts and investments. Fortunately, initiatives such as Ciclociudades in Mexico and CRA’s Bicís de Calidad have developed frameworks for data collection and analysis that cities can adapt for their own purposes. In addition to the larger cities, the emerging municipalities of Asunción and La Paz report having carried out some form of cyclist satisfaction survey.

3.2 Efforts Underway Despite Limited Infrastructure

Nearly all the cities reporting a lack of permanent cycling infrastructure indicated that discussions were underway, plans had been made or funds had been allocated toward developing it. For those with some permanent infrastructure in place, connectivity, storage and financing prove to be key issues.

Getting Around Limited Connectivity

For urban bicycle lanes to be a viable option for commuters, they must form a network with extensive connections both to each other and to public transportation. In many cities, existing lanes are often randomly dispersed, limiting the extent of possible travel beyond recreational use. However, the region’s cities are undertaking efforts to better plan and connect their bicycle lanes; some, such as Buenos Aires and Santiago, have developed interactive online maps of lanes and parking stations to facilitate travel.

Urban activists in Mexico City painted green bicycle lanes on busy roads throughout the city when the government did not deliver on its promise to install 300 kilometers of bicycle lanes by the end of 2012.

Commuters often rely on a mixture of cycling and public transportation; however, the majority of cities surveyed do not allow cyclists to carry their bicycles onto buses or trains, which presents yet another barrier. One way cities are confronting this challenge is by instituting bicycle-sharing programs. Cyclists can pick up and drop off shared bicycles near bus stops and train stations, allowing them to transfer smoothly during their commutes. São Paulo has even announced plans to integrate its Bike Sampa program into other public transportation methods under one payment pass, the Bilhete Único. Montevideo intends to do the same with the bicycle-sharing program it plans to implement by the end of 2013.7
Bicycle Storage for and by the Community

The Association of Bicycle Users of Mauá, otherwise known as ASCOBIKE, runs the largest bicycle parking facility in the Americas. It houses over 1,700 bicycles per day at a commuter train station in Mauá, a suburb of São Paulo. The organization, formed in 2001 by a railroad engineer, created the facility to clean up the hundreds of bicycles tied to fences and obstructing pedestrian walkways at the station.

Community Support

Official support for cyclists is limited, and the key to the success of the Mauá facility has been its community backing. While the São Paulo Metropolitan Train Company (CPTM) donated and financed renovations for the space, ASCOBIKE manages the facility with the money it collects from monthly membership fees and daily pass sales. The association aims to be an instrument in the promotion of cycling in addition to a simple storage facility; it offers low-cost maintenance, “loaner” bicycles, safety education, air compressors for inflating tires, and social services including legal advice and discounted health care plans. It also provides hot coffee, cold water, shoe polishing and sanitary facilities.

Design and Operation

The facility is designed to maximize parking spaces, safety and efficiency. A mixture of horizontal and vertical spaces allows for easier access by women, children and the elderly while providing room for up to 1,960 bicycles. Users must provide their own locks and chains, but both members and bicycles are registered to ensure against theft or damage.

Sharing Best Practices

The concept has been replicated in 44 train stations in the São Paulo metropolitan area, offering a total of 10,600 parking spaces, and ASCOBIKE has created a manual to share best practices with other cities.
Overcoming Storage Constraints
For those who commute using their own bicycles, parking and storage are critical issues. Some of the largest cities, as well as Montevideo, have bicycle racks in or near bus and train stations; however, they are often scarce and poorly managed. Many cities have left the installation of bicycle racks elsewhere to the private sector. Buenos Aires is the only city surveyed that reported mandating that private garages accept bicycles; Cuenca is reportedly taking steps to integrate free bicycle parking in private and public spaces. In an effort to avoid the heavy traffic that accompanies large concerts, Lima has facilitated free parking at venues for up to 1,000 bicycles.8

Where government has failed to provide adequate parking options, civil society has stepped in. Urubike, a Uruguayan nonprofit organization, placed bici amigo (“bike-friendly”) stickers throughout the city in an effort to reclaim parking spaces for cyclists.9

Replacing Cars With Bicycles
Some cities have instituted measures to motivate residents to use bicycles instead of cars. Santiago and São Paulo, for instance, restrict motor vehicle use on particular days of the week based on license plate numbers.10 However, these strategies are not sustainable.11 One expert, for example, notes that Mexico City’s vehicle restriction program, Hoy No Cırcula, has actually increased air pollution because citizens purchase additional automobiles to circumvent it. Other cities around the world have implemented demand-management measures — such as vehicle registration caps, parking controls, and congestion and air pollution pricing — to increase the use of sustainable transportation.12 Car-free days also help to draw attention to the issue, and often offer incentives to cyclists to give up their vehicles for the day.

Finding Temporary Solutions
Despite a dearth of permanent cycling infrastructure, many cities have found solutions in temporary programs. Ciclocreovías — recreational bicycle paths — are one notable example. Because these recreational bicycle paths involve only temporary street closures,
Cycling in Latin America and the Caribbean across the region, highlights the urgency of adopting sustainable transportation alternatives. It not only threatens the environment, but also affects safety and quality of life for all. As population and median family incomes continue to grow rapidly in the region’s emerging cities, it is critical that they take legislative steps to curb the traffic and pollution associated with increased car use. Día sin auto provides a model for these cities.

luz verde en bogotá

Día sin auto: A Day Without Cars

In response to the rising traffic congestion associated with a rapidly increasing population — and to make a statement about its commitment to sustainable commuting — Bogotá officially instituted the Día sin auto, or “Day Without Cars,” by referendum in 2000.

Implementation
From 6:30 am to 7:30 pm on the first Thursday in February each year since, the municipality has closed roads to all automobiles with few exceptions. Drivers who flout the rules face steep fines; city officials estimate that the restrictions take approximately 1.5 million cars out of circulation.

Valuable Lessons
In 2000, there were approximately 665,600 cars in a city of 6 million people. Today, Bogotá has nearly 1.6 million cars for 7.5 million citizens. This drastic rise, a trend in cities across the region, highlights the urgency of adopting sustainable transportation alternatives. It not only threatens the environment, but also affects safety and quality of life for all. As population and median family incomes continue to grow rapidly in the region’s emerging cities, it is critical that they take legislative steps to curb the traffic and pollution associated with increased car use. Día sin auto provides a model for these cities.
they are cost-effective and relatively easy to implement. These programs increase interest in cycling among residents and provide a number of benefits to local quality of life, including recovery of public space; increased inclusion, interaction and social cohesion; economic revival of communities; air quality improvements and environmental protection; and physical recreation and promotion of healthy lifestyles.

While Bogotá is famous for hosting the longest-running recreational bicycle path, many other cities in the region have begun to follow its lead; most now have a temporary program of some sort. Nine of the surveyed cities reported the existence of some form of recreational path; secondary research revealed that there are also such paths in Barranquilla, Bucaramanga, Goiania, Pereira, Santa Ana, Trujillo, Santiago and Sao Paulo. In 2011, CRA noted a total of 37 in cities with populations large and small throughout Latin America and the Caribbean.

Surmounting Financial Barriers

Budget constraints are a primary cause of the inadequacy of cycling infrastructure in many of the region’s cities, given the absence of defined policies allocating money for such purposes. In the emerging cities that did report such investments, amounts were small, ranging from $19,000 to $360,000 USD.

However, there are other ways to finance cycling projects, including investment in temporary solutions, innovative legislation aimed at raising funds, sponsorship from the private sector and grants from international institutions. Because recreational bicycle paths involve only temporary street closures, for instance, they can be a viable option for even the smallest cities that lack resources for large infrastructure development projects. In Brazil, the Bicycle Program Brazil (PBB) bill requires 15 percent of the money collected from traffic fines to be directed to cycling projects in all municipalities with over 20,000 inhabitants.

Table 2. Does your city have recreational bicycle paths?
Other cities have focused on cooperation with the private sector, pursuing a variety of partnership and sponsorship opportunities. Companies often partner with bicycle-sharing programs to use the bicycles and paths as advertising opportunities. In São Paulo, private companies sponsor multiple bicycle-sharing programs; for example, Itaú Bank funds Bike Sampa, while one of the country’s largest insurance companies backs Usebike.

Finally, some cities have relied on support from international institutions. In the 1990s, the World Bank designed a $200,000 project in Lima to facilitate bicycle purchases and develop infrastructure, while the United Nations Development Program (UNDP) provided funds for the construction of 49 kilometers of bicycle lanes in Managua over four years.  

Making Strides in Infrastructure

Latin American and Caribbean cities have made significant strides in recent years to integrate cycling into their urban transportation planning. Many of the region’s largest metropolises, such as Buenos Aires and São Paulo, have gone from having virtually no bicycle lanes as recently as 2009 to planning nearly 100 kilometers of lanes by the end of 2013.

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**Table 3. Total kilometers of bicycle lanes per capita**

See notes i–viii for information.
In addition, the ESCI’s emerging cities have recently approved plans to facilitate more cycling in their cities. For example, in December 2012, Valdivia announced the development of 50 kilometers of bicycle lanes within its jurisdiction.20

**Promoting Education and Awareness**

Municipal governments have an essential role to play in promoting cycling — not only through legislation and enforcement, but also via education and outreach. Cities have recognized that encouraging citizens to use bicycles is an essential part of making cycling infrastructure investments worthwhile; officials in many cities are often pictured participating in car-free days or recreational bike paths in order to draw attention to cycling’s benefits. The cities surveyed also noted a variety of programs designed to increase awareness of cyclists and relevant traffic regulations among motorists.

### 3.3 Access a Primary Focus

Often, people in Latin America and the Caribbean do not use bicycles simply because they do not have access to them. Bicycles can be prohibitively expensive in countries with high tariffs like Brazil and Argentina; high rates of theft in others make purchasing a risky investment. Finally, historically high rates of income inequality often put such purchases beyond the reach of many. Therefore, making bicycles accessible to the widest possible segment of the population is part of many municipalities’ cycling-promotion strategies.

**Bicycle-Sharing Programs**

As previously discussed, several cities either have implemented or are planning to implement bicycle-sharing programs, which offer ready access to the general public. These systems may include yearly or monthly enrollment plans, or they may offer an initial period of free usage with each ride followed by charges based on a predetermined scale.

Stated program goals include promoting increased use of existing cycling infrastructure,
Interest-Free Loans: Making Bicycles Affordable

The city of Buenos Aires has joined forces with the private sector to make bicycle ownership possible for everyone through its Mejor en Bici (“Better by Bike”) program. In partnership with the city government, Banco Ciudad offers interest-free loans for bicycle purchases. Citizens can purchase the bicycles in registered shops throughout the city, making payments for up to six years at 20 pesos (roughly $3.90) per month or up to 30 percent of their net salary.

How It Works
Buyers must present an invoice for the total cost of the chosen bicycle from a participating vendor along with identification and proof of an acceptable credit score. Banco Ciudad has established a free customer service line to respond exclusively to bicycle loan inquiries.

Reception
The program has been very popular. In its first 15 days, the bank granted 738 loans and was processing 4,000 more; buyers borrow an average of about $534 per bicycle. According to one shop owner, the initiative has attracted people who were not previously interested in bicycle ownership and allowed people to buy bicycles for their entire families. Banco Ciudad President Federico Sturzenegger calls it “a program with a profoundly democratic vision.” According to the mayor of Buenos Aires, Mauricio Macri, it will contribute to improving “environmental quality and coexistence” and makes up a critical part of the city’s greater green agenda.
complementing existing public transportation systems, providing an alternative to motor vehicles for short trips, and making bicycles more widely available to the public. Examples include EcoBici in Mexico City, Mejor en Bici in Buenos Aires and B’easy in Santiago; Montevideo and Cuenca have announced plans to install sharing programs by the end of 2013, while Goiânia’s plan is still being hashed out.

Interest-Free Loans

Some cities encourage citizens to purchase their own bicycles by offering low- or zero-interest loans or discounted purchasing programs. The first such program began in Lima in the 1990s, when the World Bank gave the municipal government a grant to provide low-interest credit for bicycle purchases to low-income workers in order to increase employment access. Due to contractual issues, the program did not have the success its backers had anticipated; however, in light of the renewed focus on cycling in the region, programs to facilitate purchases are again on the rise. In Cuenca, for instance, university students reached an agreement with local bicycle shops to secure a 25 percent discount.
Cycling in Latin America and the Caribbean

Taking Action for Road Safety

Road safety is a major problem in Peru, and many organizations are taking action, pressing the government for solutions. Cicloaxión, a group of urban cyclists in Lima, has generated attention for its annual “naked rides,” during which hundreds of cyclists ride along a 10-kilometer stretch of one of Lima’s principal thoroughfares in the nude. While the nudity causes a commotion, it is meant to draw attention to road safety by representing the cyclist’s vulnerability and lack of protection from vehicles.

Achieving Results

As a result, the Peruvian government has made important strides in increasing road safety. A law implemented in 2010 prioritized strong cycling legislation, mandating that the government provide safer traffic conditions for cyclists; it also declared September 22 “National Car-Free Day.” The government also partnered with the private sector to produce the Incentive Plan of 2012, which gave $7,400 to 249 Peruvian cities for achieving two road safety-related goals: 1) identifying areas at high risk for traffic accidents, and 2) creating recreational bicycle and pedestrian zones. The private company EMBARQ Andino proposed the second requirement, which required that cities offer at least two kilometers of recreational bicycle and pedestrian zones for eight Sundays in 2012. Under the plan, EMBARQ Andino, the Peruvian Ministry of Health and the national government of Peru sponsored Trujillo’s first recreational bicycle path.
Bicycle Donations

Bicycles provide many low-income populations the means to go to school or work. Because of the significant impact bicycles can have, charitable organizations such as Wheels4Life and Bikes for the World have donated them outright. In the public sector, Brazilian President Dilma Rousseff created “Way to School,” a national program that provides 100,000 donated bicycles and helmets to students in public schools.

3.4 Public Sentiment Mixed Despite Benefits

Public sentiment surrounding cycling in the surveyed cities varies widely, and while many praise its benefits, much of the population remains skeptical or unsupportive. Many in Latin America and the Caribbean still view bicycles as a symbol of low socioeconomic status. However, research indicates a shift from perceptions of the bicycle as a necessity of the poor to a sign of wealth and cosmopolitanism. Other barriers include safety concerns, fear of theft, inhospitable weather, aversion to physical exertion while commuting to work and lack of riding experience.

Safety Concerns

The greatest barrier cyclists in the region face relates to their safety on the roads. Concerns stem from a lack of proper cycling infrastructure in the form of protected, permanent bicycle lanes, as well as limited awareness and respect for cyclists on the part of motorists.

While bicycle lanes in large cities like Buenos Aires and Mexico City include concrete dividers to protect cyclists, they are still vulnerable due to driver carelessness and lack of knowledge. The issue is exacerbated in cities that lack such infrastructure, where cyclists must openly share the road with cars. Frequent collisions involving automobiles and bicycles have inspired community activists throughout the region to intensify their calls for governments to provide safe spaces for cyclists to ride.

Fear of Theft

Theft is a serious concern for many cyclists, especially in cities where high costs facilitate a black market for stolen bicycles. Reports show that it is in fact on the rise in some municipalities, such as Mexico City. Women in particular express fears of theft; within Peruvian families that own bicycles, it is thus usually the males who use them. In an effort to counteract theft, Buenos Aires has forced downtown parking garages to accept bicycles at low rates.
Aversion to Physical Exertion
An additional deterrence to commuting by bicycle comes from an aversion to physical exertion on the way to work. Many citizens would like to commute to work by bicycle, but do not want to face associated effects such as fatigue and perspiration. To address these problems, some companies have begun offering locker rooms and showers in addition to bicycle racks. Mexico City has even explored deploying electric bicycles to ease commutes.

Lack of Experience
Sometimes, antipathy toward cycling comes from lack of basic experience. Training citizens how to ride bicycles is an integral part of a comprehensive cycling promotion strategy. The recreational bicycle paths in Bogotá and Lima offer lessons, incorporate information stations and pay staff to monitor and assist participants.

Benefits of Cycling
Support for cycling is growing as more and more governments and citizens throughout the region recognize its benefits. Motor vehicle traffic produces smog and noise pollution and diminishes quality of life in the larger metropolises; the emerging cities recognize that they will face the same issues if they do not take a more active role in promoting sustainable transportation options early on.

Another incentive for the emerging cities to get more people out of their cars and onto bicycles is the alarmingly high rate of road deaths in the region. Car accidents are among the top 10 leading causes of death in many Latin American and Caribbean cities, where over 130,000 fatalities and six million serious injuries result from car crashes every year. In collaboration with the United Nations Decade of Action for Road Safety campaign, officials in the region have identified cycling as one way to reduce the number of cars on the roads and, therefore, the number of road deaths.

Cycling initiatives also offer economic benefits. For example, 96 percent of Bogotá’s recreational bicycle path vendors are from the lowest economic strata of the city; working at the

#juntosenbici ... compartimos las calles
Over 8,000 cyclists gathered in Cuenca to share the streets and celebrate the city’s annual Pedaleando event on April 19, 2013.
ciclovía is the only source of employment for one third of them. Young entrepreneurs have also embraced cycling and have capitalized on greater awareness and improved infrastructure for cyclists by increasing bicycle-related ecotourism offerings, such as La Bicicleta Verde in Santiago, La Bicicleta Naranja in Buenos Aires, and Good Bike in Montevideo, which aims to “contribute to a cultural change observed in society with regard to the use of the bicycle as a means of transportation and lifestyle.”

Finally, awareness continues to grow of the personal health benefits associated with cycling. A 2002 PAHO study found that between 50 and 60 percent of adults in Latin America and the Caribbean are overweight. Participating in a recreational bicycle path program for three hours per week would meet the weekly requirement for moderate-intensity physical activity defined by the U.S Department of Health and Human Services. Community cycling groups help to promote these benefits through events, blogging and social media engagement; the private sector has taken an active role in encouraging its employees to pursue more physical activity in their commutes by offering a variety of incentives.

Demand Increasing

Interest in cycling is on the rise in the largest Latin American and Caribbean cities, but whether this trend has reached the region’s emerging cities remains to be seen. According to secondary research, in Barranquilla, 3 percent of the population uses a bicycle as their primary mode of transportation, 0.6 percent for Bucaramanga, 2.6 percent for Valdivia, and 3 percent for Santiago. In the survey, Mexico City reported notable growth in cycling interest — daily bicycle trips increased from 433,000 in 2007 to an estimated 1 million in 2012. Manufacturers have also observed increased interest in the region and have been
Cycling in Latin America and the Caribbean

The petition also cited a deficiency in regulations to protect cyclists, the lack of a bicycle “culture,” the scarcity of safe places for cyclists to ride — the city has only eight kilometers of permanent bicycle lanes — and the absence of future government plans to address these concerns.

The Petition’s Impact
Despite the lack of official support, Montevideo is at the forefront of a regional rise in advocacy groups like CicloVida Urbana, Gente en Bici and Urubike. These groups are composed entirely of volunteers and receive negligible funding for their efforts. Their petition was the culmination of a long-term grassroots effort to call attention to the lack of support for cyclists in the city, and it has already had an impact. By March, the city had announced plans to install a bicycle-sharing program in the historical city center in September 2013. The program will operate on the same transit cards used by the city’s public transit system, and the plan also involves refurbishing some streets for simultaneous bicycle and car circulation.

Community Groups Making Space for Cyclists
On February 28, 2013, the community groups CicloVida Urbana and Gente en Bici delivered a petition with over 10,300 signatures to Montevideo city officials. It called for the installation of bicycle lanes throughout the city, bicycle parking in public areas and education campaigns aimed at both cyclists and motorists. As one group member told online newspaper El Espectador, “When several cyclists move together, the bicycle ceases to be invisible; if we move individually, we are at the mercy of traffic.”

Cycling in Montevideo
Latin American and Caribbean cities have historically been unfriendly to cyclists. A 2009 study found that only 10 percent of citizens use bicycles to get to work. A survey conducted by CicloVida revealed safety concerns and lack of proper infrastructure to be the primary culprits.
working on efforts to produce and sell more bicycles there. However, these manufacturers have yet to shift their focus from the Brazilian and Argentinian markets, as demand is still relatively low in neighboring countries.

### 3.5 Efforts Largely Community-Driven

Community groups have played a significant role in the struggle to get cycling onto planning agendas throughout the region. Through a variety of events and campaigns, they continue to be the driving force behind cycling promotion and education efforts in most cities.

**Promoting Cycling and Drawing Attention to Barriers**

Generally, the activities of these community groups revolve around “critical mass” rides and festivals meant to promote the benefits of cycling and celebrate cycling culture. Critical mass is a worldwide movement of events typically held on the last Friday of every month where cyclists gather to ride together through the city. These events also serve to highlight the challenges faced by cyclists. From Lima’s famous nude ride to events in Santiago to Cuenca, groups in cities throughout the region organize gatherings of as many cyclists as possible to ride together down their city’s main thoroughfares with the intention of drawing attention to their presence and advocating for more respect from cars on the roads. Cuenca’s Pedeleando event, which is driven by university groups, drew 4,200 cyclists from a population of only 330,000 in 2012; a number that they then doubled on April 19, 2013.
Community groups also fill in gaps in their municipalities’ pro-cycling efforts. In Asunción, groups can adopt stretches of bicycle lanes, providing needed care for the lanes. Urban activists in Mexico City stepped in to paint green bicycle lanes on busy roads throughout the city when the government did not achieve its promise to install 300 kilometers of lanes by the end of 2012; the group crowd-sourced funds to run the path right up to Congressional Hall, where discussions about the city’s transportation infrastructure were taking place.39

**Driving Public and Private Action**

As interest in cycling outpaces government efforts, examples of such work continue to appear throughout the region. A year after officials in Goiânia promised to install bicycle lanes, protests by cyclists held them accountable. More than 80 civil society organizations across Mexico have petitioned the government to commit 5 percent of transportation budgets to walking and cycling infrastructure.40

These groups have not only pushed for government action, but have also provided valuable input on public opinion by polling citizens on the barriers to cycling they face throughout their cities. Such groups are increasingly included in city planning discussions in order to help policymakers plan appropriately to meet cyclists’ needs; for instance, cycling group EnBICIa2 has actively participated in and shaped discussions concerning a future network of bicycle paths in the city of Valdivia. Research shows community groups have also driven the cultivation of partnerships with private sector entities in order to help fund cycling projects by matching resources with needs.

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#juntosenbici ... formamos una masa crítica

Cyclists in Montevideo gather at least once a month for a “critical mass” ride to raise awareness of the societal and individual benefits of cycling.
A cyclist in São Paulo demonstrates in the nude to promote the use of bicycles. © AP Photo/Nelson Antoine
Demand for cycling programs and support is high throughout the region’s cities. However, there is a significant difference between the emerging and larger cities in terms of official effort and investment. While budgets certainly have a hand in a municipality’s ability to make cycling an urban development priority, this report has highlighted a number of cost-effective measures and fundraising mechanisms — from recreational bicycle paths and community-run parking facilities to private-sector sponsorship and traffic fine collection — that smaller cities can implement or incentivize without much difficulty.

It is imperative that emerging cities take steps toward sustainable development now in order to avoid large-scale problems in the future. Our hope is that the examples in this report help them ensure a healthy, livable future.
5.1 Notes

Body:


35. Ibid.


40. Ibid.

Tables:


rotas, recommended paths for cyclists that may or may not be flagged, are not included


5.2 Bibliography


Cycling in Latin America and the Caribbean


6.1 Municipal Government Survey
6.2 Community Group Survey