FEDEX-EMBARQ MOBILITY AND ACCESSIBILITY PROGRAM

Annual Report 2014

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LETTER FROM THE EXECUTIVE TEAM

We are happy to report that the FedEx-EMBARQ Mobility and Accessibility Program (MAP) continued its successful journey in 2014. Work continued in MAP Centers across three countries, Brazil, India and Mexico, and expanded to China with a small pilot project. In the last few years, the FedEx-EMBARQ MAP has helped to avoid 30,000 metric tons of CO_2 emissions and now directly benefits 2,022,162 people annually. Collaboration with FedEx and its experts made it all possible.

Through MAP, EMBARQ is able to leverage FedEx's extensive know-how and expertise to accelerate our ability to help cities create mobility and access to the marketplace, jobs, schools, and communities in ways that minimize environmental impacts. From Memphis to Beijing, MAP has grown into one of our most successful corporate collaborations. Thanks to MAP projects, bus systems in Mexico and Brazil are safer and have higher quality of service, bus operators in India are well-equipped to manage efficient and sustainable bus systems, and decision-makers in China have been exposed to best practices on improving air quality. We will build on these results to replicate and grow successful projects in 2015. We invite you to read more about some important outcomes in this report.

As part of our work to increase our impact in cities, we also made some important organizational changes in 2014. Recognizing the incredible achievements EMBARQ has made on the ground, and the potential of the model to have even greater impact in rapidly growing cities, the World Resources Institute (WRI) launched a new program in 2014 called WRI Ross Center for Sustainable Cities. It will galvanize actions to help cities grow more sustainably and improve quality of life in developing countries around the world. The sustainable cities program will increase our reach in established and emerging cities, building on the work of the EMBARQ Network in transport, road safety, and urban planning. EMBARQ will be a centerpiece of the new program, continuing to deliver sustainable urban mobility solutions, but it will be joined by new practice areas focused on urban development, water, governance, energy, and building efficiency. The newly formed

ANI DASGUPTA

HOLGER DALKMANN

sustainable cities program now has more than 170 staff and experts focused on cities and transport, 80 percent of whom work on the ground in 55 cities in Brazil, China, India, Mexico, and Turkey.

With the generous support of FedEx, EMBARQ's impact will be further leveraged by this increased footprint. We look forward to growing the Mobility and Accessibility Program still further, and improving the lives of people in cities.

Thank you,

Ani Dasgupta
Global Director,
WRI Ross Center for Sustainable Cities

Holger Dalkmann
EMBARQ Director and Director of Strategy,
WRI Ross Center for Sustainable Cities

EXECUTIVE SUMMARY

EXPANDING COLLABORATION **TO ACCELERATE IMPACT**

Transportation's negative impact on the environment is increasing as the world's population grows. In 2010, transport was responsible for 23 percent of total energy-related greenhouse gas emissions, and this figure is growing.[1]

If society continues in a business-as-usual manner, "more people will choose to use private motorized transport, leading to 6.2 billion private motorized trips every day in cities of the world…[and] by 2025, worldwide transport-related greenhouse gas emissions will be 30 percent higher than 2005 levels…[and] half a million people will be killed in road traffic accidents every year."[2] The FedEx-EMBARQ collaboration is addressing these challenges by adapting FedEx expertise to the realm of public transport in order to help government officials make informed decisions. The use of FedEx expertise accelerates the rate at which EMBARQ can foster change in cities to improve quality of life for people in India, Mexico, Brazil, and China.

FedEx has been a valuable supporter of sustainable mobility through EMBARQ at WRI since 2010. The collaboration has proven to be a powerful model for engagement, leveraging FedEx expertise to accelerate EMBARQ's work to improve sustainable transport and mobility in cities. It was formalized as the FedEx-EMBARQ Mobility and Accessibility Program (MAP) in 2012. This program presents a model for corporate social responsibility based on shared values and highly skilled employee engagement, and has been successfully influencing the way in which people access the marketplace, jobs, schools and their communities in Brazil, India, Mexico, and China. In 2014, MAP's footprint included 40 cities across four countries. It solidified the process of transferring expertise between FedEx and EMBARQ, improved operational

MAP Vision

Cities in key FedEx markets are served by excellent public transportation; are more productive, healthier, and connected; and have fewer cars on the road, safer streets, cleaner air, and faster commutes and deliveries.

MAP Objective

To accelerate dissemination of FedEx and EMBARQ expertise to enable government officials to make informed decisions that will improve the quality of life of people.

MAP Impact

EMBARQ projects in key FedEx markets help reduce congestion and CO_2 emissions and increase the accessibility, road safety, and efficiency of public transportation systems.

MAP Program Structure

and service quality and safety, and increased institutional capacity in cities. In addition, the program successfully completed a pilot project in China, supporting the case for a new MAP center in Beijing.

The global components of the project have been enormously successful as well. 2014 marked the beginning of a second cycle of the FedEx Transportation Fellowship program. Fellows met at FedEx global headquarters in March 2014 for a training week with FedEx staff, where they learned about sustainable transport technologies and market strategies. They have utilized this learning to create proposals for on-the-ground FedEx Fellowship projects, to be implemented in fiscal year 2015.

In 2014, the Fuels and Vehicles project built on its previous body of research to assist local governments. In Mexico, the team is working with the city of Puebla to improve its fleet procurement process. In Brazil, the team is producing a full report on CO_2 emissions from the bus fleet in Brasilia. And, in India, work is being done to tailor recommendations to the country-specific context, making the tool more useful for local decision-makers.

This report outlines the most important accomplishments achieved by the global team and the MAP centers during fiscal year 2014 (October 2013—September 2014). MAP highlights include:

Global

- Five FedEx-EMBARQ fellows received one week of training at FedEx headquarters in Memphis, TN, including deep dives into the technical aspects of transport as well as leadership and management.

- The Fuel and Vehicles global team applied its research to help the city of Puebla, Mexico, to improve its fleet procurement process, and provided expertise to Brasilia, Brazil, in developing a baseline for air pollutants and a greenhouse gas emissions inventory of the city's urban bus fleet.

Mexico

- Based on the Safety First program, Mexico City Bus Rapid Transit (BRT) operators are implementing a set of institutional policies to ensure road safety in BRT operations. This will improve safety not only for the 800,000 passengers carried by Metrobús daily, but also for pedestrians walking alongside the BRT corridors.

- As part of the Quality of Service for bus systems project, the team developed a pilot for a diagnostic tool to help cities manage their transport systems in a more efficient and timely manner, from planning to operations. Using this pilot tool, the team prepared the "Customer Experience Diagnosis" report for Mexico City's BRT, providing a set of recommendations on how to improve quality of service.

India

- 50 officials from 15 cities received capacity building at a workshop on "Branding, Marketing, and Communication of Public Transport".

- Bus operators from seven cities were trained on safe and ecologically responsible driving, which also helped to achieve an increase of 70 percent in fuel efficiency.

- In collaboration with FedEx Human Resources (Global Leadership Corps Program), the team conducted two projects in Chennai with participation of FedEx employees. The first project focused on improving the business model for auto-rickshaw call services. The second focused on fuel efficiency improvements for the Adyar Bus Depot of the Metropolitan Transport Commission.

Brazil

- The team launched the Customer Satisfaction Survey for bus systems, with 20 modules that can be used by any type of bus system, enabling standardized survey results and fostering benchmarking across cities. This survey was well received by city officials. In 2014, the team assisted the cities of Curitiba, Rio de Janeiro, and Belo Horizonte to conduct the survey, and more cities will implement it in 2015.

Cumulative five-year KPIs

Environmental Benefit:

- Carbon reduced (tons CO_2e avoided): 30,000

Community Mobilization:

- Annual number of people directly benefitting from the project: 2,022,042
- Annual number of people directly influenced as a result of the project: 3,218

Team Member Engagement:

- Number of FedEx team member participants: 66
- Average satisfaction (1-10 with 10 outstanding) ratings from FedEx participants: 10

Brand Enhancement:

- Annual number of people reached with message/learnings from the project: 1,115,428

- Using the Safety First driver training, the city of Belo Horizonte trained 100 percent of its BRT drivers prior to the system's launch. The training ensured increased safety for the 700,000 passengers who use the BRT daily.

- Two pilots were carried out in Brasilia and Belo Horizonte, prior to the World Cup, to help those cities ensure excellent service on the first day of operation of their BRT lines.

China

- 100 Beijing government officials received capacity building training through the "International Workshop on Sustainable Transport to Combat Air Pollution." The workshop was attended by international experts and was organized in partnership with the Beijing Municipal Transport Commission. This work, which directly confronts one of the most pressing issues for Chinese cities, has excellent potential to grow in impact over the coming years.

EMBARQ will continue to consolidate the FedEx-EMBARQ Mobility and Accessibility Program and increase its impact in cities.

The success of the overall MAP strategy is shown in the improvement of our Key Performance Indicators (KPIs) since 2010.

EMBARQ MAP PROJECTS

PROVIDING **ACTIONABLE KNOWLEDGE** TO CITIES

Thanks to the FedEx-EMBARQ Mobility and Accessibility Program, the year 2014 saw cleaner air and lower carbon emissions in Brasilia, safer streets in Mexico City, shorter commutes in Bangalore, and higher-quality bus systems in Belo Horizonte. The MAP Program directly and positively affected more than 2 million people, and is on track to improve the lives of many more.

GLOBAL

The EMBARQ team, based in Washington, DC, coordinates efforts on the global level to accelerate the MAP strategy and ensure consistency and sharing of best practices.

Key Pillar: FedEx Transportation Fellowship FY14

The FedEx Transportation Fellowship (FTF) provides EMBARQ staff with the unique opportunity to garner expertise and knowledge from FedEx and apply it to on-the-ground projects. The second cycle of the fellowship consists of two phases: a training and a team project. The training took place in March 2014, at the FedEx World headquarters in Memphis, Tennessee. The fellows had the

FedEx-EMBARQ Transportation Fellows, 2015

- **Cristina Albuquerque**, Brazil
- **María Angélica Pérez Avendano**, Mexico
- **Montserrat Buendía**, Mexico
- **Manish Dutta Pandey**, India
- **Juan Miguel Velásquez**, Global

opportunity to learn about sustainable transport technologies and market strategies such as branding, vehicle and fuel technologies, asset management, vehicle maintenance and driver safety, etc.

Fellows were enthusiastic about the training week and appreciated FedEx's commitment to the fellowship program as demonstrated by the participation of Mitchell Jackson, Vice President of Environmental Affairs & Sustainability for FedEx Corporation, and Russ Musgrove, Managing Director of Global Vehicles for FedEx Express. The FedEx-EMBARQ fellows were especially impressed with FedEx's dedication to continuous innovation and their willingness to share information. In addition, fellows expressed appreciation for the culture of leadership displayed by FedEx and their efforts to focus on mobility for environmental and business benefits.

Next, the Fellows will apply their newly acquired knowledge to short-term and outcome-oriented projects. It will be implemented in one of the cities where MAP centers currently operate. Fellows were asked to submit project proposals. One of these projects will be chosen in early 2015 and implemented as a team project for the entire class.

FedEx Team Engagement: Fellowship Training Week

EMBARQ would like to thank the FedEx team members who made the FTF training week a huge success:

- Joe Anthamatten, Manager, IT Communications, FedEx Service—*Culture Initiative and Development*
- Dennis Beal, Vice President, Global Vehicle, FedEx Express—*Welcome*
- Cindy Conner, Director, Citizenship and Reputation, FedEx Services—*Overview*
- Rose Flenorl, Manager, Global Citizenship, FedEx Services—*Corporate Social Responsibility*
- Tom Fox, Interim President/General Manager, Memphis Area Transit Authority—*Memphis TA Visit*
- Neil Gibson, Vice President, Corporate Communications, FedEx Express—*Leadership*
- Thomas Griffin, Chief Engineer, Worldwide Fleet Engineering, FedEx Express—*Fuels and Technologies*
- Diego Guadalupe, Senior Manager, Global Vehicles, FedEx Express—*Vehicle Maintenance*
- Cory Hartquist, Marketing Specialist Advisor, FedEx Services— *Communicating Your Brand*
- David Hirte, Manager, Finance, FedEx Express—*Capital Cost and Planning*

- Keith Holmes, Corporate Safety Advisor, FedEx Express
- Mitch Jackson, Vice President, Environmental Affairs/Sustainability, FedEx Corporation—*Environmental Commitment*
- Tom Lopez, Managing Director, Safety, Health & Fire Prevention, FedEx Express—*Driver Safety*
- Russ Musgrove, Managing Director, Vehicle Maintenance, FedEx Express—*Global Management*
- Scott Payne, Manager, Asset Management, FedEx Express—*Asset Management*
- Tony Pittman, Project Engineering Specialist, Global Ramp and Hub Engineering, FedEx Express—*Telematics*
- Jack Poole, Manager, Fleet Maintenance, FedEx Express —*Tour of NQAA*
- Erin Wichtoski, Quality Advisor, Service Experience Leadership, FedEx Corporation—*Quality Driven Management*
- Gigi Wolfe, Manager, Global Engineering Support, FedEx Express—*Route Design and Management*
- With special thanks to Shane O'Connor, Communications Advisor, Global Citizenship, FedEx Services—*Introduction*

Global Research: Sustainable Urban Transport Fuels and Vehicles

In 2013, EMBARQ's Sustainable Urban Transport Fuels and Vehicles (SUTFV) project team applied its previous research to develop the pilot Fuel and Vehicle Selection Tool to compare the full lifecycle costs and emissions of buses using different technologies. In the pilot phase, the team will assess the tool's effectiveness in enabling transit agencies to make informed decisions that result in cleaner bus fleets in cities. In 2014, SUTFV advanced the research by tailoring it to country-specific contexts.

In Brazil, the team is tracking best practices related to the adoption of alternative technologies and understanding the main barriers to their implementation. The team's research on "Exhaust Emissions from Transit Buses," published in 2012, was used as a baseline to develop an emissions inventory for greenhouse gases and other air pollutants generated by the urban bus fleet in Brasilia. A report is being produced and will be published in 2015.

In India, the team has developed initial research to make the Fuel and Vehicles Selection Tool more practical in order to suit the needs of various government agencies.

In Mexico, the team is collaborating with the city of Puebla to provide assistance with their upcoming fleet procurement process. The team organized a workshop in conjunction with the government to train and educate the concessionaries on what considerations they need to take into account when choosing different buses. At this workshop, the team presented an assessment of Puebla's choices using the Fuel and Vehicle Selection Tool. The results of the workshop have been complied into a publication to be released in 2015.

The next phase of the project is to evaluate the results of these pilot activities to develop a more user-friendly format for ongoing engagement with cities.

Renewing Bus Fleets in Brasilia

Since 2013, Brasília has been investing in renovating its entire mass transport bus fleet. By the end of fiscal year 2014, 90 percent of the fleet had been replaced by buses with improved fuel and emissions technology. The city is also working toward restructuring routes and lines, which will help bring down the total number of kilometers traveled and improve efficiency.

These actions will have positive impacts, including a potential 13 percent avoidance of CO_2 emissions and a 77 percent reduction in particulate matter emissions—the number one contributor to local air pollution and respiratory health issues.

EMBARQ Brasil applied the Fuels and Vehicles selection tool, developed under the MAP Sustainable Urban Transport Fuels and Vehicles project, to measure CO_2 emissions. Based on the impressive potential for mitigation, EMBARQ Brasil encouraged the city to keep moving forward with the renewal of the bus fleet and with the optimization of its entire transport system. Implementation is expected to be completed by the end of fiscal year 2015.

MAP CENTER: EMBARQ MEXICO

Between 1980 and 2010, Mexico's cities experienced a doubling in population and a six-fold increase in their urban areas. Mexican cities are growing according to a 3D-model: distant, dispersed, and disconnected. They have been characterized by disproportionate, fragmented and unplanned expansion, which promotes urban inequality and poor mobility. With the support of FedEx, EMBARQ Mexico is working to mitigate the urban mobility issues facing Mexican cities.

Quality of Service

Mexico´s Federal Infrastructure Funding Program (PROTRAM) is approving an increasing number of transport-related projects. This expansion presents a massive opportunity to influence and improve transportation projects in Mexico on a large scale.

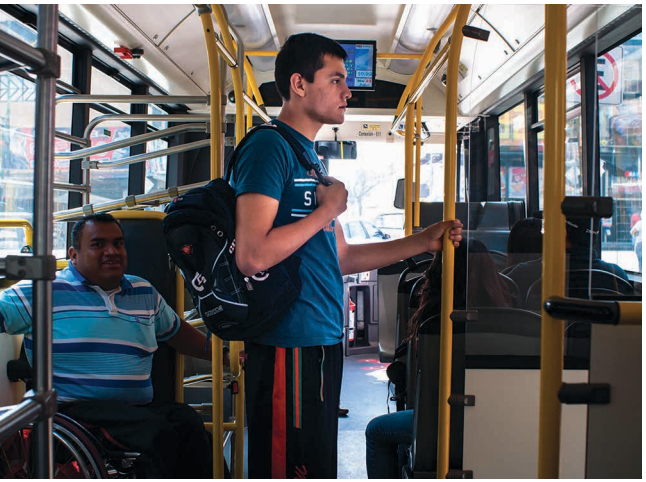
The technical, institutional, financial and infrastructural elements of integrated transport systems differ widely among cities, resulting in uneven levels of quality of service. In order to overcome these differences and to set service standards, EMBARQ Mexico developed a pilot diagnostic tool to help identify key factors that hinder the proper management of transit systems.

Using the pilot diagnostic tool, EMBARQ Mexico prepared a Customer Experience Diagnosis for Metrobús in Mexico City. When surveyed, riders said that the system was safe, fast, and reliable, but was also sometimes confusing, stressful, or too noisy. The report then made recommendations to address these challenges. These recommendations included, among others, focusing efforts on improving the clarity of information available to customers, and effectively utilizing feedback to provide a more customer-oriented service. The findings and recommendations were compiled into a report which will help to set standards against which progress can be measured. Additionally, the MAP center is providing technical assistance on specific quality-of-service elements to Metrobús, Macrobús in Guadalajara, RUTA in Puebla, Optibús in León, and Vivebús in Chihuahua. As a follow-up activity in 2015, EMBARQ Mexico plans to publish guidelines for the proper management of quality-driven transit systems.

Safety First

DRIVER TRAINING

In 2014, building on the FedEx Safety First Program, the driver-training project was scaled to a higher level. In 2012, EMBARQ Mexico created the Safety First Project, aiming to save lives and reduce the road accident rate in



Mexican cities by establishing a driver-training program and effective institutional policies to ensure road safety. In 2013, Mexico City's BRT system (Metrobús) adopted the Safety First project as part of its institutional policy in 2013. After this success, the project was replicated with Optibús, the transport system of León, Guanajuato, where another 200 drivers and driver trainers went through the training.

> "The baby (Metrobús system) grew up, and we have not upgraded our internal processes, standards, and listened to our clients. We need to take a moment to redesign our strategies, and focus on our goals. We are all Metrobús."
>
> **ING. GUILLERMO CALDERÓN**
> General Director of the BRT system "Metrobus"Location, after receiving the Diagnosis on Customer Experience, delivered by CTS EMBARQ México in September 2014

INSTITUTIONAL POLICIES FOR ROAD SAFETY

EMBARQ Mexico's Safety First project aims to reduce the rate of road accidents in urban public transport systems through the implementation of institutional and business policies that integrate international standards, performance indicators, and casualty analysis into a driver-training program and defensive safety manual.

In 2013, EMBARQ Mexico conducted an assessment of best practices in road safety in Latin America by interviewing 63 transport directors, operators, and drivers in ten cities throughout Colombia, Brazil and Mexico. In 2014, the team compiled data collected from the assessment into a benchmarking study titled "Road Safety Benchmarking for BRT Systems in Latin America." This study, along with an additional diagnosis report on road safety for Mexico City, was used to inform discussions at a workshop for managers and directors of the Metrobús system. The objective of the workshop was to identify key elements required to achieve a comprehensive road safety plan. The plan contains 37 actions, one of which is an agreement to create a committee on road safety and infrastructure. The materials and lessons learned from the workshop were compiled in a final report, "Comprehensive Road Safety Institutional Policies for BRT Systems," and Metrobús is currently implementing the recommended actions.

International Sustainable Transportation Conference

Since 2011, FedEx has participated in the International Sustainable Transportation Conference (Congreso) organized by EMBARQ Mexico. Congreso brings together civil society leaders, academics, and government officials to explore and address transportation challenges around the world. It creates a strategic opportunity for the public and private sector to network and solve challenges facing sustainable transportation. FedEx has been an active participant and sponsor of Congreso.

At the ninth annual conference in October 2013, EMBARQ Mexico, FedEx, and Metrobús presented on their experiences and successes in implementing the Safety First program. The presentation was followed by a cocktail party sponsored by FedEx. Shane O'Connor, the Communications Advisor, Global Citizenship for FedEx Services, and Gabriel Osorio, Director of Planning and Engineering for FedEx Express Mexico, were among the FedEx team members in attendance.

MAP CENTER: EMBARQ INDIA

India will be one of the last major countries in the world to experience large-scale urbanization. In 2010, 31 percent of India's population lived in cities. By 2030, this proportion is expected to rise to 40 percent. As a result, an additional 220 million people will be living in urban areas. The immense scale of this urban demographic shift means that the existing urban area will need to expand by between 200 percent and 400 percent to accommodate the growth. This massive growth in population and urban land area will put a strain on already overcrowded urban transportation systems.[3] The lack of technical capacity available to manage these systems hinders their ability to grow and meet increasing demand.

In 2011, with support from FedEx, EMBARQ India launched Bus Karo Plus (Bus Karo means "Do the Bus" in Hindi). Bus Karo Plus is designed to build capacity by serving as a best practice and peer-learning network for public transport planners and city officials. The program has three focus areas: Talking Transit, Mentoring Transit, and Learning Transit.

"Attending this workshop has made me realize the importance of branding and communication in the field of public transport."

R.S. MINHAS
Senior Manager
Delhi Transport Corporation
At the Talking Transit Workshop in Indore, February 2014

Talking Transit

From 2012 to 2014, the Talking Transit workshop series has engaged 23 cities. This year's workshop, "Branding, Marketing, and Communication of Public Transport," was held in February of 2014, in collaboration with Atal Indore City Transport Services Limited (AICTSL). Altogether, EMBARQ India hosted 50 officials from 15 cities, state transport agencies, and municipal corporations, as well as other city and state level planning agencies from across India. EMBARQ India provided best practices on marketing, branding and communications to the user for public transport systems.

Mentoring Transit

Through the Mentoring Transit program, EMBARQ India worked with seven cities on a safe and eco-driving training program which helped cities achieve an increase of 70 percent in fuel efficiency. EMBARQ India specifically worked with the Andhra Pradesh State Road Transport Corporation to develop a comprehensive four-step framework for fuel efficiency that includes driver training, vehicle maintenance, managerial controls and performance incentives. This has been documented in the form of a video. The video highlights the work that several city bus agencies have undertaken as part of the Fuel Efficiency program and the impacts of the process. Completed in FY2014, the video is slated for release in FY2015. The team has also made progress in Bangalore by finalizing a route rationalization plan for three major arterial road corridors in the Big Bus system.

Learning Transit

The BusKaro 2.0 – Case Studies from India publication seeks to understand and document the implementation of significant advancements in bus transport in India, related to infrastructure, service and design. A variety of case studies was examined, including the use of data collection and surveys in the Hubli-Dharwad bus system, operational planning and strategy in Gulbarga, and route and service rationalization in Bangalore. In each case, the different aspects of implementation were investigated in order to assess the success of a project.

BusKaroPlus

TALKING transit

"Talking Transit" is a workshop series that convenes public transport agencies in order to discuss various aspects of city bus services as well as providing capacity building training.

MENTORING transit

"Mentoring Transit" involves assisting public transport agencies in implementing pilot projects that aim to improve city bus services.

LEARNING transit

"Learning Transit develops and disseminates materials documenting Indian and international best practices in city bus service operation.

FedEx Global Leadership Corps Program in Chennai

FedEx Team Engagement: Global Leadership Corps

EMBARQ would like to thank the FedEx team members who made the auto-rickshaw programs a huge success:

- Duncan Castellino, Marketing Manager, FedEx Services
- Suresh Natarajan, Technical Principal, FedEx Services
- Munnamar Versey, Global Product Manager—Healthcare Solutions, FedEx Services
- Tony Webber, Senior Manager, People Development
- Erin Wichtoski, Quality Advisor, Service Experience Leadership, FedEx Corporation
- Stephen Woodgate, Marketing Manager—US International Express, FedEx Services

In 2014, EMBARQ teamed up with FedEx Human Resources to deploy a set of projects as part of the FedEx Global Leadership Corps Program. The Global Leadership Corps is a FedEx HR initiative for employee development, where FedEx team members are assigned for one month to support corporate citizenship initiatives around the globe. Based on this program, EMBARQ India initiated two projects to improve performance in the auto-rickshaw sector and bus system in Chennai, the largest city in the state of Tamil Nadu with a total metropolitan area of 1,189 km2. Chennai is a prominent example of India's rapid urbanization in recent years, experiencing a growth in population from 4.7 million to 6.5 million between 2001 and 2011. The two projects are summarized below:

Project 1: Business Model Review for Auto-Rickshaw Call Services

Auto-rickshaws have a significant market share in the transportation sector in India. In Chennai, they transport over 1.5 million commuters daily. However, auto-rickshaw services demonstrate significant inefficiencies and low quality of service. For instance, Chennai has become notorious for auto-rickshaw drivers refusing to comply with meters or to go to certain destinations, charging exorbitant rates, and driving rashly.

AutoRaja, a startup auto-rickshaw call service company, was dealing with issues of revenue, operational processes, and costs. Although the FedEx-EMBARQ MAP team determined that there was a demand for 60,000 rickshaw rides per day (four percent of market-share), the company was grappling with how to make its business model sustainable and how to develop vehicle-tracking parameters and bring down wait times for their call-autos.

FedEx team members worked directly with AutoRaja for one month to review its business operations and marketing plans in order to help the company to develop a sustainable business model. At the end of the project, the FedEx team delivered a strong set of recommendations to AutoRaja on go-to market strategy, streamlining processes, cost analysis, communications with drivers, and communications between drivers and customers. Additionally, the team held a webinar to present its findings to a broader community of rickshaw call service companies. AutoRaja is currently implementing the recommendations received from the FedEx team.

Project 2: Fuel Efficiency Improvements for MTC buses

The Metropolitan Transport Corporation (MTC), the transport operator in Chennai, carries over five million passengers daily. However, the MTC faces many challenges and inefficiencies in its operations. In order to further optimize the operations of the MTC fleet, FedEx volunteers worked to enhance fuel efficiency in the MTC's Adyar Depot. This study built on a previous project that EMBARQ India had conducted with MTC, where 30 drivers were trained on safe and fuel-efficient driving. In order to sustain fuel-efficiency improvements, human behavior, technology, and process all required targeting. The FedEx volunteers provided recommendations for establishing a comprehensive framework for improved fuel efficiency. For instance, they recommended keeping a daily fuel log, replacing manual data collection with direct electronic collection, providing incentives to the best performing drivers, and using existing databases to track individual drivers' fuel-efficiency performance. These recommendations represent a potential reduction of 442 tons of CO_2 emissions every year in the Adyar Depot alone, and they were presented to the transport secretary of Tamil Nadu.

MAP CENTER: EMBARQ BRASIL

Brazilian cities are growing at a rapid rate and on an unsustainable development trajectory. By 2050, 95 percent of Brazil's population is expected to be living in urban areas. Poor planning and coordination have resulted in inadequate transportation systems and a lack of effective policies. Cities are unprepared to secure a sustainable quality of life for Brazil's growing urban population. Currently, transportation in Brazil is increasingly centered on individual motorized transport, and public transit is losing market share to cars and motorcycles. As a consequence, CO_2 emissions are increasing and crashes, deaths and injuries related to traffic are on the rise.

QualiÔnibus: Quality of Bus Service Program

EMBARQ Brasil is committed to addressing these challenges by increasing the quality, performance and safety of bus systems. As part of MAP, EMBARQ Brasil created QualiÔnibus ("Quali-bus" in English). This program aims to provide transit agencies and private operators with the necessary tools to capture accurately the needs of mass transportation users, as well as to increase the overall efficiency and safety of transport systems. The program consists of three components: challenges faced by Bus Rapid Transit (BRT) systems on day one of operations; perception and image surveys of transit systems, which aim to help improve operational processes and performance; and

Safety First for BRT systems, a component dedicated to driver training and safety management for bus companies that builds on the FedEx Safety First Program. The program released three publications on these topics in December 2014.

BRT DAY ONE OF OPERATIONS

To help cities ensure excellence in service on the first day of operation of their BRT lines, two pilots were carried out in Brasilia and Belo Horizonte prior to the World Cup. In Brasilia, a one-week fieldwork was held in collaboration with the Secretary of Transport. It included a workshop with 65 key technical staff from the Secretary of Transport, DFTRANS (transport agency) and bus service companies, along with visits to the BRT construction site. In Belo Horizonte, a one-week fieldwork with key technicians and a one-day workshop were held for 50 staff of BHTrans, who are directly involved with the operation of the BRT. A very high level of satisfaction was reported by participants.

"EMBARQ Brasil helped us to overcome the big challenge we had in delivering a high quality BRT corridor in time."

JOSÉ WALTER VAZQUEZ FILHO
Transport Secretary of Brasilia

Based on the lessons learned from this work, EMBARQ Brasil released, in December 2014, the publication, "Experiences that teach us: case studies and guidelines for developing manuals, operational procedures and contingency plans for the beginning of BRT operation." The report was delivered to the Transport Secretary and to other high-level authorities in Brasília to help them prepare for the inauguration.

SYSTEM PERCEPTION AND IMAGE SURVEY

In 2013, EMBARQ Brasil developed a quality-of-service survey for transit agencies. The survey was piloted in Belo Horizonte, and many cities in Brazil have since undertaken the survey or expressed interest in implementing it. The survey allows cities to assess the quality of service of their transit systems and benchmark customer satisfaction to measure progress over time. Additionally, it is useful in transferring best practices between cities, allowing all cities to benefit from innovations and proven methods. The publication "QualiÔnibus Satisfaction Survey," which summarizes the basis of the survey and the principal benefits of benchmarking BRT and conventional bus system, was launched in December 2014.

The following cities carried out the survey in 2014:

- Curitiba: A partnership was formed between EMBARQ Brasil, SIBRT, URBS (the Transit Agency of Curitiba) and the Federal University of Parana to conduct 1,400 interviews

throughout the city. The survey yielded a general satisfaction rate of 5.6 on a 10-point scale.

- Rio de Janeiro: The BRT agency carried out the QualiÔnibus Satisfaction Survey in June 2014, before inaugurating BRT TransCarioca, which serves 450,000 people every day, connecting the west zone of the city (Barra da Tijuca) to the International Airport. It is also a key transit corridor for the 2016 Olympic Games.

The city of Joinville has also expressed interest in undertaking the QualiÔnibus Satisfaction Survey, and is expected to do so in 2015.

SAFETY FIRST FOR BRT SYSTEMS

Safety First for BRT systems (*Segurança em Primeiro Lugar* in Portuguese) is a component of the QualiÔnibus project that contains driver training and institutional road-safety incentive programs. The team created a publication also named Segurança em Primeiro Lugar, which EMBARQ safety specialists have shaped into an effective tool that supports bus operators in making safety a priority issue in their service. It was published in December 2014.

In Belo Horizonte, a safe-driving manual specific to the city was included in the Safety of Operations module of the official training course for BRT operators in the city. The module was presented by Rogerio Rubim, of FedEx Corporation São Paulo, to over 117 instructors from the more than 30 bus companies involved in operating the city's BRT lines. The instructors are training bus drivers to start operating on BRT and, by the end of 2014 more than 3,000 bus drivers were trained. An evaluation was made at the end of the course, and 97 percent of attendees indicated their approval.

NEXT STEPS:

- As part of the System Perception and Image project, a set of indicators is being developed to help cities manage services delivered to users. The project is compiling several indicators to be applied in combination with the QualiÔnibus Satisfaction Survey.
- EMBARQ Brasil is developing an online web platform that will consolidate information and generate reports and analysis using data from cities.

FedEx Team Engagement

- Julie M. Belfort, Senior Communications Specialist
- Silvia Imakufu, Senior Brand Specialist
- Rogerio Rubim, Safety Specialist

MAP PILOT: EMBARQ CHINA

Rapid urbanization, motorization, and GDP growth in China are opening up enormous opportunities for local economies; however the challenges associated with the speed of urbanization in many Chinese cities are multiplying. In Beijing, the transport sector alone accounts for 26 percent of the city's total CO_2 emissions, and it is expected to be the most rapidly growing source over the next 10 years.[4] In parallel, the Air Pollution Index hit a record high of 755 in 2013 and remained at this level for nearly a month, causing a great public outcry. The rise in air pollution was triggered by tailpipe emissions, which account for 22.2 percent of particulate matter 2.5 (PM 2.5).[5] The growing traffic congestion also imposes high economic costs; Beijing loses an estimated RMB 10 billion annually, surpassing any other Chinese city.

In order to curb congestion and address air quality issues, the municipal government of Beijing promised to reduce the particle density by 25 percent or more on the PM 2.5 scale by 2017. To achieve this goal, Beijing Municipal Government (BMG) released a set of policies to cut vehicle emissions and industrial pollution in its five-year Clean Air Action Plan (2013-2017), in which the urban transport sector is emphasized.

On top of the city-wide strategy, the municipal government is also developing a sector-specific strategy for the transport sector, discussed in "White paper on transport energy-saving and emission-reduction in Beijing (2014–2020)," to guide the city in emission mitigation.

Pilot Project:

In 2014, FedEx and EMBARQ agreed to pilot an expansion of MAP into China. The specific objective of the pilot project was to build capacity in the BMG, and assist multi-departmental efforts to develop the strategic white paper, through the "International Workshop on Sustainable Transport to Combat Air Pollution."

The workshop was held in partnership with Beijing Municipal Commission of Transport (BMCT) and included the participation of four FedEx employees. The aim was to disseminate lessons and best practices on sustainable transport. The workshop convened over 110 officials and field professionals from key municipal departments in Beijing (including BMCT, Development and Reform Commission, Planning Bureau and Environmental Protection Bureau). Workshop speakers were experienced professionals from the public transport sector in large international cities, including London, Vancouver and New York. The workshop focused on policies, strategic plans, regulations, and best practices for mitigating transport-related emissions. The workshop highlighted two elements that are central to emission reduction: proactive policy-making and effective public communication.

In the future, EMBARQ hopes to make work in China a permanent part of MAP, and to continue achieving impacts in the country.

FedEx Team Engagement

EMBARQ China would like to thank the following FedEx team members for their active participation:

- Jia LV, Government Communication, FedEx China
- Land Wang, Government Communication, FedEx China
- Tony Zhou, Corporate Communications Manager, FedEx China
- Helen Zhou, Senior Corporate Communications Specialist, FedEx China

LOOKING BEYOND 2014

THE ROAD AHEAD

The success of the FedEx-EMBARQ Mobility and Accessibility Program (MAP) is clear as we look back at 2014. Looking forward, 2015 will quite literally be a precedent-setting year which will provide opportunities for MAP to further expand.

2015 marks the halfway point of the Global Decade of Action on Road Safety, prompting cities globally to double down on efforts to prioritize safe and equitable mobility for cities. And it links with global climate negotiations this year, which has all eyes on Paris in December when The United Nations Climate Change Conference will convene its 21st session of the Conference of Parties (COP21) to negotiate legally binding and universal agreement on climate. And, this year will see the announcement of a whole new set of Sustainable Development Goals, establishing a new development agenda for the next fifteen years, which will, for the first time, integrate transport and cities.

These actions have implications for the private sector. As the world's main source of economic activity, business is at the heart of virtually any widespread improvements in living standards. Public policies, financial markets and priorities for economic development will be set for years to come.

But the private sector also has a leadership role to play. In fact, corporations are increasingly taking the lead on implementing sustainable practices. Many corporations have committed to zero-deforestation in their operations. Twenty-five companies have demonstrated their dedication to a future powered by renewable energy by signing on to the "Corporate Renewable Energy Buyer's Principles." These shifts at the political and sector levels create not only an opportunity but also an impetus to scale the FedEx-EMBARQ MAP.

The FedEx-EMBARQ MAP demonstrates how change on the ground can happen when corporate and public values are aligned. In the coming years, our team will move to consolidate and expand MAP around four central themes: Quality of Service, Road Safety, Fuels and Vehicles, and Capacity Building--all areas in which FedEx expertise can be leveraged for maximum impact on quality of life. We foresee a focus on developing synergies between MAP centers and platforms to share learning even more efficiently across borders. Examples of this include the first global team project of the FedEx Transportation Fellows and establishment of a MAP center in China.

We will accomplish these goals by continuing to utilize the methods that have been proven to be successful in the first three years of MAP operation. We will transfer and adapt FedEx knowledge to develop tools and pilot new approaches to engage with cities, and grow our successful projects to achieve even greater impact on the quality, safety, and efficiency of transport systems.

The entire MAP team is hopeful and excited about the future of the project, and we look forward to continuing work with FedEx in 2015 and beyond.

MEASURING IMPACT AND PERFORMANCE

METRICS LEAD TO SUCCESS

Reports form an important part of the accountability mechanisms of any grant and ensure that the project is on track to meet the goals specified at the beginning of the grant. Measuring impact and performance also provide a vital tool to analyze the effectiveness of EMBARQ's projects.

"For FEDEX nothing is more important than people´s time."

RUSS MUSGROVE
Managing Director,
Global Vehicles for FedEx Express

KEY PERFORMANCE INDICATORS

The FedEx-EMBARQ MAP works across a broad range of programs and a key challenge is to coordinate and measure our impact. Given the geographic spread and high demand for our programs, we continually try to ensure that our work aligns with our goals, in order to make the best use of all available resources. The KPIs enable us to measure how our work has improved human wellbeing, while also remaining focused and efficient. KPIs also allow us to create a streamlined and effective approach to project planning that has resulted in the successful growth of our organization and impact.

FedEx Project Impacts – Ex-Post Reporting

A. Environmental Benefit: Carbon reduced (tonnes CO_2e reduced).

2010	2011	2012	2013	2014	Total
0	0	10,000	10,000	10,000	**30,000**

B1. Community Mobilization: Annual number of people directly benefitting from the project (for example, through learning, improved service)

2010	2011	2012	2013	2014	Total
110	350	470	920,828	1,100,663	**2,022,042**

Note: People attending programs, workshops, and seminars in Brazil, China, Mexico and India regarding safety training for bus drivers, improved bus operations, improved vehicle and fuel selection, and telematics. This also includes improved expertise among EMBARQ staff through workshops and data collection.

B2. Community Mobilization: Annual number of people directly influenced as a result of the project (that is, taking action, changing behavior)

2010	2011	2012	2013	2014	Total
0	0	0	1,777	1,441	**3,218**

Note: In Mexico City, the road safety workshops trained 237 drivers who transferred their knowledge to 100 percent of the 1,080 drivers of Metrobus.

C1. Team Member Engagement:[1] Number of FedEx team member participants

2010	2011	2012	2013	2014	Total
2	5	29	7	23	**66[2]**

Notes:
1: A FedEx team member engaging in two projects in one year is counted as two team member engagements.
2: In Brazil and Mexico, FedEx experts spoke at conferences and workshops.

C2. Team Member Engagement: Average satisfaction (1-10 with 10 outstanding) ratings from FedEx participants

2010	2011	2012	2013	2014	Total
0	0	0	0	10	**10**

Note: Reporting for this metric began in 2014.

D1. Brand Enhancement: Annual number of people reached with message/learnings from the project (that is, indirect influence)

2010	2011	2012	2013	2014	Total
0	1,200	304,822	379,478	428,888	**1,114,388**

Notes:
In Mexico, this includes those who attended the annual sustainable transport conference. In India, this includes staff of the 270 participants in transit workshops. In Research and Practice, this includes those outside of EMBARQ who have had access to research findings.

D2. Brand Enhancement: Annual number of people indirectly influenced as a result of the project (that is, indirect influence)

2010	2011	2012	2013	2014	Total

Notes:
1. Reporting will begin in 2015.
2. The methodology for this KPI has been re-evaluated. As a result, the 160 people reported as being influenced in 2013 were added to D1.

Final Financial Report

October 2013 to September 2014

Expense Line Items	Expenses This Period
Salaries	$218,314
Benefits	83,233
Facility Costs (e.g., rent, utilities, office services)	47,962
Research Expenses	19,675
Conference Expenses	15,073
Publications	22,999
Communications	$60,904
Travel	27,387
Reproduction, Supplies and Equipment Maintenance	4,095
Telephone	9,592
Electronic Network, Support, and Equipment	15,188
Research Materials & Services, Misc. Project Expenses	9,592
Subgrants*	198,298
Other Direct Costs	1,506
G & A Expenses**	66,376
Total	**800,000**

** Subgrants to EMBARQ Mexico and EMBARQ Brasil*
*** General and Administrative Expenses: organization-wide costs including senior management, accounting, grants management, human resources, web management, audit and legal services, and corporate insurance.*

EMBARQ prioritizes solutions that address the long-term roots of urban mobility problems, rather than ones that marginally improve the status quo.

APPENDIX 1: SELECTED OUTREACH

INFLUENCING **POSITIVE CHANGE** THROUGH COMMUNICATIONS

The FedEx-EMBARQ Mobility and Accessibility Program expands its impacts through outreach. Communication through multiple channels with experts, decision makers, and the public builds the program's reputation, facilitates its work, and helps influence change on the ground.

EMBARQ Global

Article Title	Publication and Date	Link
Vehicles and Fuels work in Brasilia		
Brasilia, Brazil Inaugurates First Bus Rapid Transit (BRT) Corridor with Presidential Flourish	EMBARQ: June 18, 2014	http://www.embarq.org/news/bras%C3%ADlia-brazil-inaugurates-first-bus-rapid-transit-brt-corridor-presidential-flourish
Brasilia Commemorates the Arrival of its First Bus Rapid Transit (BRT) System	EMBARQ Brasil: June 16, 2014	http://embarqbrasil.org/news/bras%C3%ADlia-comemora-chegada-de-seu-primeiro-sistema-brt
Architecture for Planned Public Transport	EMBARQ Brasil: June 30, 2014	http://embarqbrasil.org/content/bras%C3%ADlia-da-arquitetura-para-o-transporte-coletivo-planejado
The "Welcome" Expresso DF Sul in Brasilia	CityFix Brasil: April 22, 2014	http://thecityfixbrasil.com/2014/04/22/o-bem-vindo-expresso-df-sul-em-brasilia/
Studies from EMBARQ Network Highlighted in the International Scientific Community	CityFix Brasil: April 3, 2014	http://thecityfixbrasil.com/2014/04/03/estudos-da-rede-embarq-em-destaque-na-comunidade-cientifica-internacional/

EMBARQ Brasil

Article Title	Publication and Date	Link
QualiÔnibus Project		
National Seminar of NTU highlights quality of service and safety in public transit	EMBARQ Brasil: August 28, 2014	http://embarqbrasil.org/news/semin%C3%A1rio-nacional-ntu-debate-demanda-social-pelo-transporte-urbano
BRT Day One of Operations Project		
To Maracanã and Beyond: World Cup Brings Sustainable Transport Benefits to Brazil	The City Fix: July 3, 2014	http://thecityfix.com/blog/maracana-beyond-world-cup-brings-sustainable-transport-benefits-brazil-guillermo-petzhold-benoit-colin/
MOVE inaugurates new phase in Belo Horizonte	EMBARQ Brasil: August 15, 2014	http://embarqbrasil.org/news/nova-fase-para-o-brt-move
Satisfaction Surveys Project		
Curitiba present the results of QualiÔnibus Satisfaction Survey application	EMBARQ Brasil: March 27, 2014	http://embarqbrasil.org/news/curitiba-apresentados-resultados-de-pesquisa-de-satisfa%C3%A7%C3%A3o

EMBARQ India

Article Title	Publication and Date	Link
Mentoring Transit Project		
Improve Services, Increase Ridership	EMBARQ India: August 25, 2014	http://embarqindia.org/improve-services-increase-ridership
"That's MyBus," says Bhopal	EMBARQ India: October 3, 2013	http://www.embarqindia.org/node/351
Surat Rings in Republic Day with a New BRT System!	EMBARQ India: January 28, 2014	http://www.embarqindia.org/SuratBRT
Driver Training in Jaipur	EMBARQ India: November 11, 2013	http://www.embarqindia.org/Jaipur+Driver+Training

EMBARQ Mexico

Article Title	Publication and Date	Link
Road Safety		
Dialogues for Road Safety	EMBARQ Mexico: November 11, 2014	http://www.embarqmexico.org/node/871
New Road Safety Campaign for the City of León	EMBARQ Mexico: August 31, 2014	http://www.embarqmexico.org/node/853
Road Safety Program for Queretaro State 2014–2020	EMBARQ Mexico: June 9, 2014	http://www.embarqmexico.org/node/823
The high cost of road incidents to developing countries Vol. I	Forbes: June 25, 2014	http://www.forbes.com.mx/el-alto-costo-de-los-incidentes-viales-para-los-paises-en-desarrollo-i/
The high cost of road incidents to developing countries Vol. II	Forbes: August 27, 2014	http://www.forbes.com.mx/el-alto-costo-de-los-incidentes-viales-para-los-paises-en-desarrollo-ii/
Safety First		
[Video] Safety First: For Public Transport, the User's Security Comes First	EMBARQ Mexico: January 9, 2014	https://www.youtube.com/watch?v=jqRlu-vOxtQ
[Video] Safety First: The Experience of León, Guanajuato	EMBARQ Mexico: January 9, 2014	https://www.youtube.com/watch?v=XXrfIQALNJo
Launch of Campaign on the Use of Seatbelts	Pan-American Health Organization: September 10, 2014	http://www.paho.org/MEX/index.php?option=com_content&view=article&id=773:reunion-regional-sur-sureste-en-seguridad-vial&catid=827:noticias&Itemid=499

EMBARQ China

Article Title	Publication and Date	Link
Pilot Project		
International Workshop on Sustainable Development of Transportation at the Background of Air Pollution Control Held	Ministry of Transport: July 16, 2014	http://www.moc.gov.cn/st2010/beijing/bj_yaowensd/ywsd_wenzibd/201407/t20140716_1650388.html
Beijing to Invite Foreign Experts to Discuss Sustainability	Sohu: July 9, 2014	http://roll.sohu.com/20140709/n401982311.shtml

APPENDIX 2: GLOBAL STRATEGY FOR CITIES AND TRANSPORT

STRATEGY SUMMARY FOR **WRI ROSS CENTER FOR SUSTAINABLE CITIES**

About WRI Ross Center for Sustainable Cities

WRI Ross Center for Sustainable Cities, a program of the World Resources Institute, aims to influence 200 cities to be more accessible, healthy, equitable and environmentally-friendly.

Building on the EMBARQ global and local reputation in urban planning and mobility, the program develops proven solutions and action-oriented tools to help cities increase building and energy efficiency, transport people in cities more sustainably and safely, manage water risk, practice effective governance, and ensure resilience to new challenges.

The program was established in 2014 thanks to a generous contribution from The Stephen M. Ross Foundation.

OBJECTIVE: To spur action that will create accessible, healthy, equitable, environmentally friendly cities

- **Catalyze compact urban growth** to achieve highly accessible, equitable, resource efficient city development.
- **Implement game-changing solutions and policies** in the urban development, transport, water, and energy sectors.
- **Develop performance tools and research.** Targeted research to evaluate the economic benefits and costs of low-carbon transport and urban development and document lessons of sustainable urbanization and best-practice solutions. Tools to help cities diagnose problems, set measurable goals, prioritize solutions, improve accountability, and leverage finance.
- **Scale-up best practices to other cities.**

The biggest challenges and opportunities are in cities. The pace of urbanization today is unprecedented, creating huge challenges and vast opportunities for progress. By 2030, the world's cities are expected to add another 1.5 billion people and possibly 1 billion more vehicles. The urban built area will expand beyond what has been developed in the entire human history.

Too often cities are associated with problems. Today, they account for 70 percent of global greenhouse gas emissions and for the great bulk of the 1.2 million deaths each year from traffic fatalities. Air pollution in many developing country cities far exceeds WHO air quality guidelines. The share of people with access to clean water and sanitation is dropping in many cities. These challenges are driving social tensions and have fueled protests in a number of countries.

Yet cities are also crucibles of innovation and powerful engines for progress. Cities account for 70 percent of the world's GDP, and in recent years have lifted hundreds of millions of people out of poverty. In several major cities around the world mayors are showing that the best policies for growth, competitiveness and job creation are those that also promote environmental improvement, livability, and social equity. Programs such as PlaNYC (in New York) and coalitions such as the C40 Cities Leadership Group are presenting a new vision for how to combine cleaner and more efficient cities and economic growth.

WRI has more than a decade of experience working with cities to address problems and leverage opportunities. Our early work in cities was on sustainable transport through EMBARQ. Spurred by the growing urgent need in cities, and confident in our strong technical base and reputation on the ground, WRI established WRI Ross Center for Sustainable Cities to consolidate and coordinate urban work. EMBARQ remains the sustainable urban mobility workstream of the program, and is complemented by additional expertise in planning, energy, climate resilience, water risk management, and low carbon economics. Today, the team focused on cities

and transport numbers more than 170 staff and experts, 80% work on the ground in 55 cities in Brazil, China, India, Mexico and Turkey. They work at four levels:

- Provide integrated support to cities;
- Provide targeted analytical and advisory services to cities;
- Support national policy development; and
- Develop tools, identify best practices, and seek to influence action through global knowledge and outreach.

WRI partners with leading financial, business, and city institutions, such as the World Bank and Regional Development Banks, the World Business Council for Sustainable Development (WBCSD), C40, ICLEI, and UN Habitat.

EMBARQ at the core

EMBARQ is a core focal point for WRI Ross Center for Sustainable Cities because transport is accountable for 24% of energy-related CO_2. In addition, $1.6 trillion is spent annually around

WRI Ross Center for Sustainable Cities: Target Results by 2019

- **4+ large countries**—with priority on China, India, Brazil, and Mexico—are implementing new national policies that significantly advance urban sustainability.
- **4+ cities** in these countries are establishing sustainable practices in multiple sectors, via integrated planning, healthy governance, and innovative projects.
- **200+ cities** (one in six cities globally with a population of 250,000+) in mostly emerging economies are adopting innovative ideas and implementing at least one high-quality, sustainable solution.

the globe on transport infrastructure, but much of it is focused on unsustainable solutions. The scale of these challenges demands an effective scalable solution. The EMBARQ reputation is based on scaling up best practices. The key framework is three-pronged: Avoid-Shift-Improve. The objectives being to avoid long trips or reduce motorized trips whenever possible, shift to more sustainable options, and improve fuel and vehicle technologies where needed.

The EMBARQ approach is to: 1) deliver "game changer" transport and road safety projects in cities; 2) replicate best practices via technical assistance, capacity building, and national policy guidance; and 3) shift international transport and road safety policy to leverage sizeable sustainable investments from national governments.

The EMBARQ global strategy is localized and implemented in five countries—Brazil, China, India, Mexico and India. Each country team defines and implements projects according to the local context but with the intention to build programs that are replicable around the world. In addition to supporting real change on the ground, they serve as iconic case studies which are cited by WRI to influence policies and investments at national and international levels.

ENDNOTES

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