



DEVELOPING RAIL AND MASS TRANSIT INFRASTRUCTURE

The ability to move products and people around quickly and efficiently is key to a country's ability to promote economic growth and foster development. For this reason, transportation projects, including rail modernization and expansion, are a central component of the U.S. Trade and Development Agency's (USTDA) program.

USTDA advances economic development and U.S. commercial interests in developing and middle-income countries. The agency funds various forms of technical assistance, early investment analysis, training, orientation visits and business workshops that support the development of a modern infrastructure and a fair and open trading environment. In carrying out its mission, USTDA gives emphasis to economic sectors that may benefit from U.S. exports of goods and services.

The following is an illustrative list of projects that USTDA has supported in this sector:

East Asia

China Guangzhou Metro Line 4 – USTDA awarded a \$500,420 grant for a study on the technical standards and system requirements for Line 4 of the Guangzhou metro system. This high-speed light rail project, the first in China, will expand the municipality's existing metro system and provide the city's growing population greater access to environmentally friendly transportation. The Louis Berger Group, Inc. of Washington, DC, is the prime contractor.

China Railway Intermodal Container Transport Development – USTDA approved a \$679,550 grant to review China's approach to intermodal container business, recommend options to improve the service, develop a plan to increase intermodal rail transport business, and build on the prior work by the World Bank and others. Transportation Economic Research Associates was selected to undertake the study.

Europe and Eurasia

Russia Construction Equipment – USTDA provided a \$120,000 grant to partially fund a study on a construction equipment leasing joint venture. Hoffman International of Piscataway, NJ, conducted the study. As a result of the study and a related visit by Russian

officials to the United States, Hoffman and its Russian partner have established the joint venture, and U.S. companies have sold over \$10 million in highway construction equipment.

Latin America and the Caribbean

Brazil Belo Horizonte Intelligent Transportation System – A \$294,000 USTDA grant is helping the Belo Horizonte Traffic and Transportation Company to evaluate the expansion of an Intelligent Transportation System (ITS) and Integrated Traffic Information Management System in Belo Horizonte. The objective of the project is to improve the city's supervision and control of traffic and to collect real-time information about traffic flows.

Mexico SCT Multimodal National Plan – USTDA provided a \$1,323,900 grant to assist Mexico's Secretaria de Comunicaciones y Transportes (SCT) in developing a comprehensive national plan for modernizing Mexico's multimodal trade transportation infrastructure. Implementation of this project will strengthen Mexican competitiveness by creating greater commercial efficiencies and lowering costs along supply chains.

Paraguay Road Pavement Technology – A \$362,432 grant, funded through USTDA's Evergreen Fund at the Inter-American Development Bank, is helping Paraguay's Ministry of Public Works and Communications address performance problems related to road construction in the country's Chaco region. The technical assistance will support the implementation of IDB-financed road projects by improving design and construction through the development of technical specifications, construction guidelines and test protocols for long-lasting pavements, and the provision of training on the new guidelines.

Peru Urban Rail Project in Lima – USTDA provided a \$325,000 grant to assist the Lima and Callao Transit System Special Project Authority in its efforts to alleviate Lima's severe urban transport congestion problems. The project supports the construction of a system of infrastructure and rolling stock that will operate over two main axes from Callao to Chosica, as an initial step.

Middle East and North Africa

Iraq Railway Sector – In 2004, USTDA funded two visits by Iraqi Republic Railway officials to the United States to meet with U.S. officials and U.S. railway companies and railway equipment suppliers. As a follow-up to these activities, USTDA funded the development of a strategic business plan, environmental management plan, and priority investment plan that included recommendations on the organization, management, and regulatory structure of the Iraqi rail sector.

Egypt Railway Traffic Management System – USTDA is providing a \$755,310 grant to the Egyptian Ministry of Transport to assist in developing a railway traffic management system for the Egyptian National Railways (ENR). The technical assistance will assist in the creation of an independent railway safety oversight and enforcement authority, which will monitor ENR's compliance with safe operating practices, and includes a site visit to the U.S. focusing on traffic management and safety technology.

South and Southeast Asia

India Diesel Retrofit Project – USTDA awarded a \$296,000 technical assistance grant to the Pune Municipal Corporation to retrofit a subset of local diesel buses in Pune, India with cleaner fuel and innovative emissions control technology. The long-term objective of the diesel retrofit project is to develop and transfer experience, tools, technologies and approaches for characterizing and controlling emissions from heavy-duty diesel vehicles to other municipalities in India.

Philippines Metro Manila Rail Transit Integration Study – USTDA provided \$103,566 for advisory services to the Philippine Department of Transportation in their efforts to link six separate light railroad lines in Manila. The project involved providing project scopes, designing stations and interchange facilities, and developing recommendations on the operations of existing and future light rail projects. The assistance was completed by Parsons Brinckerhoff International.

Sub-Saharan Africa

African Trade Lanes Partnership – USTDA launched a two-year, \$4 million initiative in April 2008 to promote the development of sub-Saharan Africa's trade lanes and transportation networks to facilitate local,

regional and global trade. The initiative is designed to promote regional cooperation and connectivity in all modes of transportation, including aviation, maritime, land, and rail.

Road Construction Planning and Equipment – USTDA sponsored an orientation visit to the United States in Fall 2008 to expose key African stakeholders and decision makers in the road planning and construction industry to U.S. technologies, companies, policies, and best practices in road building. The visit was inspired by the Millennium Challenge Corporation's compact agreements with Tanzania, Mozambique, Ghana and Burkina Faso, which cover road investments totaling approximately \$1.1 billion.

East African Community Transportation Sector Senior Policy Dialogue – USTDA hosted a visit to Washington, DC, in Fall 2008 by ministers from East African Community (EAC) member states to meet with the U.S. business community and discuss the EAC's plans for transportation infrastructure development and regional integration. The delegation was also exposed to operating facilities that best exemplify U.S. equipment, technologies and international best practices.

Upgrade of the Dar es Salaam to Isaka Railway – A \$653,600 USTDA grant is partially funds a study on the technical and financial feasibility of upgrading the 1,000 kilometer rail link from Dar es Salaam, Tanzania to Isaka, Tanzania from narrow gauge to AREMA standard gauge. The goal of the study is to improve rail service in Tanzania, promote the extension of rail service into land-locked Rwanda and strengthen regional integration.

TransKalahari Corridor Improvement – USTDA is co-funding a \$375,807 study that will develop a business plan for the Walvis Bay Corridor Group in Namibia. The plan will examine the operation of an integrated multimodal transport system on the TransKalahari Corridor, now an all-road link between northern South Africa and Walvis Bay in Namibia, traversing Botswana. TERA International, Inc., of Sterling, VA, is completing the study on a cost-share basis.

South Africa Transport Sector Orientation Visit – USTDA sponsored an orientation visit to the United States in 2007 for delegates from South Africa's Department of Transportation. The visit exposed the delegates to U.S. technologies, companies, policies, and practices in the transportation sector, especially in ITS.