

San Juan Tren Urbano Heavy Rail System

Project Description

Due to the ever spiraling traffic congestion problems faced by San Juan and surrounding urban areas, the Puerto Rican Department of Transportation and Public Works initiated its first-ever public transportation project in 1996, at an approximate cost of \$2.25 billion. This project involved building a 10.7-mile (17.2-km), 16-station heavy rail system connecting San Juan and the urban vicinity. Electric trains operate on a series of above-ground, below-ground, and surface tracks. The Tren Ur-

bano (translation: Urban Train) metro system opened to the public in December 2004.

GeoTesting Express' Role

Since the beginning of the project, GeoTesting Express has been called upon by multiple engineering firms on the project to provide rapid, high-end geotechnical testing services, as well as engineering support. We have conducted well over \$100,000 of testing, including various strength determinations (consolidations; UU, CU and CD triaxial shears; unconfined



Tren Urbano at Deportivo Station

compressions; and direct shears) and permeability tests in support of design efforts. Throughout this project, testing has been required on an immediate basis. In addition, our engineers have advised clients on interpretation of test results, as well as on very specialized subjects, such as complex aspects of residual soils.

Benefits to Client

Despite being over 2,000 miles away, six different engineering firms in Puerto Rico turned to GeoTesting Express because of our fast turnaround times and our ability to consistently produce quality results that they could trust and upon which they could base their engineering decisions. Our clients also benefited from our unparalleled professional technical support, assisting them in dealing with complex aspects of the unique soils encountered on the job.



Tren Urbano route