

# Tren Urbano Heavy Rail Project Before-and-After Study (2008)

San Juan, Puerto Rico



U.S. Department  
of Transportation

**Federal Transit  
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## 2.1 Puerto Rico Highway and Transportation Authority– Tren Urbano Light Rail Project

Puerto Rico Highway and Transportation Authority (PRHTA) and FTA signed an FFGA in March 1996 for the 10.7 mile double track heavy rail system. An amended FFGA was signed in July 1999 and increased the number of stations by 2 for a total of 16 and the number of rail vehicles by 10 for a total of 74, with an anticipated revenue operations date of May, 2002. From 1999 to 2004, total estimated project cost increased from \$1.65 billion to \$2.25 billion. Thus, in 2000 amid concerns about schedule, costs and project management, FTA and OIG required PRHTA to submit a Recovery Plan. However, as of 2004, FTA and OIG had not been able to approve of the cost recovery plan causing PRHTA to absorb the rise in construction costs locally. Consequently, no additional federal funds were obligated after the 1999 FFGA amendment. In May 2002 FTA approved an extension of the Revenue Operations Date to June 30, 2004. The project opened for revenue service on December 17, 2004.

### 2.1.1 Project Background

Rail transit has been considered in the San Juan region since 1967 when a 27-mile, 2 route heavy rail system was proposed in the Regional Transportation Study. A feasibility study conducted in 1979 proposed a one line 14-mile heavy rail alternative that incorporated aerial structures, underground and at grade segments into a route that traversed from Miramar to Bayamon and was dubbed the “Bayamon Crescent.” This project was approved into the Regional Transportation Plan in 1982. Almost a decade later, a 31-mile heavy rail system was again proposed with a 7.4-mile initial segment to be constructed from Old San Juan to Rio Piedras. This system, and particularly the initial segment, was designed to replace existing bus service and would run at grade in existing right-of-way. It was decided in 1993 that the work performed in support of the 1979 feasibility study could be submitted as an alternatives analysis and therefore the project was allowed to enter the New Starts pipeline. However, to reduce costs, the alignment would eliminate the underground segment and was reduced in length from 14 to approximately 12-miles running from Santurce to Bayamon. The total construction cost was estimated to be \$670 million excluding the purchase of right-of-way.

### 2.1.2 Report Status

FTA received the Tren Urbano Before and After Study in March, 2008. There are a number of outstanding questions that remain on this study and project. The study lacks sufficient documentation to understand the reasons for capital cost overruns, delays in the construction schedule and the difference in forecasted versus actual ridership on the project. FTA is currently conducting a cost and ridership review and will present their findings to PRHTA for review and response.

## 3 Conclusions

While each of the Before and After Studies submitted this year offer a wealth of information and the opportunity to improve the collection and analysis of major capital transit investments, there remain a number of outstanding questions to be answered. Tri-Met and the Puerto Rico Highway and Transportation Authority conducted a good faith effort to assemble project data that, in some cases, involved collecting data that may not have been archived in the original

planning process. FTA anticipates that these Draft Before and After Studies will be completed during the current year and the final results will be presented in the August 2009 Before and After Study Report to Congress. Following these studies, the next Before and After Study is not anticipated until July, 2010.