
U.S. TRADE AND DEVELOPMENT AGENCY



EXECUTIVE SUMMARY

Commuter Lane Barrier/Quickchange Moveable Barriers

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U.S. Firm: DBR & Associates
Main Contact Name: Mr. Daniel Rathbone
Current Phone: 703-764-0512
Fax: 703-764-0516
E-Mail: drathboneix.netcom.com

Project Sponsor: Autopistas Urbanas
Main Contact Name: Ms. Maria Raquel Casco
Current Phone: 4361-2872

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Region: Latin America
Country: Argentina
Sector: Transportation

1. Introduction

1.1. Background

This study was funded under a grant provided by the U.S. Trade and Development Agency (MA) to Autopista Urbanas S.A. (AUSA), a privatized toll road operating company owned by the Government of the City of Buenos Aires.

AUSA selected transportation consulting firm DBR & Associates of Fairfax, Virginia, to conduct the feasibility study. DBR & Associates was supported by John D. Cutrell, Inc. and Barimont S.A. from Buenos Aires.

The study was initiated in April 2000 and completed in August 2000.

1.2. Problem and Problem Statement

Buenos Aires is the political, economic, and cultural center of Argentina and one of the most important cities in Latin America. The *Area Metropolitana de Buenos Aires* (AMBA) has an area of 17,000 sq. km consisting of the Federal District and 42 municipalities. The ANIBA has a population of 13 million, 37% of the national total.

Until recently, Buenos Aires was a compact city, but urban sprawl is transforming the traditional development pattern centered around the *Area Central*. Numerous suburban subdivisions are being developed based on automobile access, rather than mass transit access. This new urban development pattern is having a profound effect on travel behavior and patterns.

Overall, there are 20 million person-trips/day in the AMBA, of which 50% are by public transport and 50% by automobile. The mode share for private automobiles has increased from 15% in 1970 to 34% in 1995. There are reportedly three million automobiles in the AMBA, giving an auto-ownership rate somewhat higher than other middle-income countries.

The bus system has hundreds of routes on a 25,000 km network, and has a 40% mode share. There are over 200 private bus companies operating 15,000 vehicles.

The passenger rail system has a 10% mode share and includes the subway, seven suburban rail lines, and a light rail line, all operated by private and mixed concessions.

Responsibility for managing the regional expressway network is divided among three agencies:

Organo de Control de la Red de Accesos a Buenos Aires (OCRABA), under the Secretariat of Public Works of the federal Ministry of the Economy *Autopistas Urbanas S.A. (AUSA)*, under the Secretariat of Transport of the municipal government of the City of Buenos Aires The solid waste disposal agency CEAMSE, which owns a single road, the *Camino Parque Buen Aire*

The roads under the jurisdiction of OCRABA have been concessioned to different private organizations under contractual arrangements having varying degrees of risk and requiring different levels of investment for construction or rehabilitation. Many of these roads are still under development or are undergoing widening to increase capacity.

The majority of City-owned highways are operated directly by AUSA. AUSA is governed by a board of directors appointed by the mayor, and administered by a General Manager appointed by the municipal Secretary of Public Works. AUSA is responsible for toll collections, operation and maintenance, as well as for any incremental investment that may be required from time to time. The City's main toll roads, 25 de Mayo and Perito Moreno, are older and do not carry any debt. Users of the roads pay a single toll of \$2.00. AUSA is financially autonomous in that it has its own dedicated revenues (toll collections) and independently manages the budgeting and procurement of goods and services for its operations, maintenance and investment activities.

1.2.1. Problem Statement

The most heavily used roads in the AMBA are the radial freeways connecting the Central Area of the City of Buenos Aires with the inland suburbs: *Autopista 25 de Mayo*, *Autopista Perito Moreno* and *Autopista Dellepiane*. Traffic flow volumes on all of the existing autopistas have grown rapidly during the past few years, spurred by increasing automobile ownership and by the decentralization of the city. In the 25 de Mayo-Perito Moreno corridor, growth has reached the carrying capacity of the roads.

The existing cross section of 25 de Mayo consists of two elevated viaducts, each having four lanes and a narrow shoulder. The Autopista was built through an existing urbanized area. The land immediately alongside the right of way is densely developed. Therefore any capacity enhancement that requires additional right of way would have enormous environmental consequences. For this reason, municipal officials have ruled out any actions that would require the expropriation of additional right of way. The implementation of reversible lanes is seen as one promising solution to the peak period congestion problem because it would allow for expansion of peak direction capacity by taking advantage of excess capacity in the non-peak direction.

In addition to general congestion on the west portion of the 25 de Mayo, a severe bottleneck exists on the easternmost portion of Autopista Perito Moreno, between the Avellaneda toll plaza and the junction with 25 de Mayo. At this point, Perito Moreno changes from an 8-lane section (4 lanes in each direction) to a 6-lane section (two 3-lane connector ramps).

The purpose of this study is to: a) identify all reasonable alternatives to decrease congestion on 25 de Mayo and the bottleneck during the next 10 years; b) evaluate the alternatives and recommend the most appropriate alternatives for 25 de Mayo and the bottleneck; c) prepare a preliminary design of the preferred alternatives.