



Public Private Partnership: Rosario-Victoria Bridge, Argentina

Background

The Mesopotamia Provinces are located in the north eastern part of Argentina and are the principal location for much of Argentina's commercial and industrial activity. Lack of adequate transportation infrastructure to transport goods between these provinces and to the rest of Argentina was impediment to economic development of the region and access to the rest of nation.

By the early 1990s, the Government of Argentina (GOA) recognised the need to improve accessibility between several of these provinces and as a step towards its achievement decided to build a major bridge that could provide a direct connection between the capital cities of the Province of Santa Fe and the Province of Entre Rios.

Project Description

The bridge facility selected by the GOA to integrate the Mesopotamia provinces and the rest of the nation was the Rosario-Victoria Bridge, named after the two provincial capitals it directly linked (Rosario -the capital city of Santa Fe Province and Victoria- the capital city of Entre Rios Province). The project involved construction of a new 59.43 km road linking the towns of Rosario and Victoria on the Parana river, with a toll concession contract. The road layout included the following main structures:

- **The main bridge:** The bridge is a cable-stayed structure, 608 m long, with a central 350 m span and two lateral spans of 129 m each. The navigable canal has a free horizontal width of 300 m and a free height of 50.30 m.
- **The east viaduct:** The east viaduct provides access to the main bridge on the Victoria side, and is 2,368 m long. It consists of 39 spans, each 60 m long, and an initial span of 46 m.

- **The west viaduct:** This viaduct provides access from the Rosario side, and is 1,122 m long. It consists of 32 spans, each 35 m long.

The areas of Entre Rios and southern Santa Fe, separated by the Parana river, will be the principal focus for commercial and industrial growth in the country. The Rosario-Victoria project was the fourth land link to cross this intermediary region, which has felt major increases of both interprovincial and international traffic.

PPP Arrangement

The bridge would also serve to facilitate the interaction between the Mercosur countries. Due to lack of adequate internal funds to build and operate the bridge, the Government decided to enter into a PPP arrangement to provide private funding and accelerate the completion of the project.

On September 29, 1997, following a competitive bid, the GOA through the Minister of Economy and Public Works awarded a design-build-operate-maintain (DBOM) concession to the Puentes del Litoral SA¹. The consortium has a Design, Finance, Build, Operate and Transfer contract with the Argentine government for a period of 25 years, including construction period of approximately four years. During this time the consortium is responsible for full maintenance. The concessionaire took ownership of the facility as it was being designed and built and after the completion of the bridge, the ownership was transferred to the Federal Government.

The project was awarded in 1998 and construction started immediately. The construction of the bridge

¹ Puentes del Litoral SA is a consortium comprising of a number of local and international construction companies: Impregilo SPA (Italy), Iglys SA (subsidiary of Impregilo), Hochtief AEG (Germany), Techint SACEI (Argentina) and Benito Roggio e Hijos SA (Argentina).

connecting Rosario and Victoria was completed in 2002 and the bridge was opened to public in 2004.

Financing

The cost of the project was estimated to be \$430.8 million, out of which GOA contributed \$207 million (48 per cent), the consortium provided US\$150 million (35 per cent) and remaining cost was covered through two loans from the Inter-American Development Bank (IDB) amounting \$ US73.8 million (17 per cent), divided into:

- Ordinary capital loan of US\$33.1 million.
- US\$40.7 million syndicated loan from funds provided by commercial banks with subscription of participation agreements with the IDB.

To cover debt service costs associated with project of bridge development, operations, maintenance, the Federal Government charged tolls on the bridge.

Key Issues and Learnings:

The case study provides several insights of PPP projects that need to be highlighted so that lessons can be drawn and applied wherever required.

- **Revenue Risk:** Federal Government in association with the directly impacted provinces has undertaken this project, involving the construction of a new bridge link between these two provinces. Due to uncertainty about the level of traffic that would use the toll facility, there was risk and uncertainty in the level of revenues that would be produced.
- **Construction Risk:** In addition, the large amount of capital required for this ambitious project presented construction risks to the members of the DBOM consortium. But Government's commitment to finance almost half of the project development costs significantly mitigated the revenue risk as well as the construction risk to the project partners.
- **Beneficial Impacts:** The project has been highly desired by the local population, due to following beneficial or positive direct impacts associated with the project:
 - Improved transportation
 - Enhanced communication between residents in Rosario and Victoria

- Increased employment during construction phase, as well during operation phase for maintaining toll booths.
- **Public support for the project:** For projects like this public support is necessary to ensure proper implementation. GOA ensured adequate public support for road expansion activities by a dialogue with the affected individuals.
- **Quality of Life:** As a result of development of new bridge, traffic can move smoothly from one province to other, which has further has led to development of existing as well as new business opportunities.
- **Reduced travel time:** After the completion of the bridge, average travel times and vehicle operation costs have declined significantly between the two key provincial capitals and capacity to handle additional goods and passenger traffic has significantly increased.

Conclusions:

After development of bridge, the city of Rosario developed as a major transportation and distribution centre for the Mercosur region. The Rosario-Victoria project is the fourth land link to cross this intermediary region, which has felt major increases of both interprovincial and international traffic.

This project has improved the road network and traffic capacity in and around Rosario and Victoria (provincial capital of Santa Fe Province and Entre Rios Province) by building a new bridge crossing. The bridge developed under PPP model has provided significant benefits to economy, both in environment and economic terms. The emergence of PPPs and toll-funded facilities developed through innovative project delivery approaches has enabled timely opening of linkages that promote improved traffic and communications. These investments in transportation infrastructure have enhanced greater economic development on a regional and national level. PPPs have become the contracting vehicles for enabling these benefits to occur in a timely manner. This PPP between GOA and private player sets a successful example of effectively working together as a team to achieve the desired results of the project within limited budget and given time period.

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