

THE PHILIPPINES

Daang Hari-SLEX Link Road



OVERVIEW

Location

Muntinlupa to Cavite/Las Pinas, Philippines

Sector

Transport – Roads

Procuring Authority

Department of Public Works and Highways

Project Company

Ayala Corporation

Project Company Obligations

Build, Transfer and Operate

Commercial Close

3 April 2012

Capital Value

Php 2.23 billion
(USD \$54.35 million – 2012 exchange rate)

Contract Duration

30 years

Key Events

Variation due to interface with other projects,
delays due to land acquisition issues

SUMMARY

The Daang Hari-SLEX Link Road, locally known as Muntinlupa-Cavite Expressway, is a 4km 4-lane toll road project. The project is a build-transfer-operate PPP and has been operational since 24 July 2015 with no material issues during the operations phase. The challenges faced in this project started early in the construction phase, where a variation had to be introduced to ensure its success. In addition to the variation, challenges were faced in acquiring land for the project, causing delays in the construction phase. The effectiveness of the parties in dealing with these challenges highlights the benefits of effective contract management in infrastructure projects. This case study is also an example of the positive role PPP units can have in advising procuring authorities. At the time of conducting this case study, the Daang Hari-SLEX Link Road project has been operational for two years.

SUMMARY LESSONS LEARNED

- Potential interface issues with other projects should be considered during the project development and evaluation phase.
- Training of the Procuring Authority's contract management team by a national PPP unit can benefit the team by providing visibility of all challenges faced nationally in PPPs.

- Land acquisition should be dealt with at an early stage (preferably before or during the bidding stage) as it carries significant risk of additional costs and delays.
- Independent consultants may act as a mediator to prevent disputes as they offer an impartial evaluation of any issues, which can then be presented to the parties for agreement.

PROJECT INCEPTION

Goals and Objectives of the Partnership

The PPP contract is for 30 years and has a provision allowing for an extension of up to 20 years (50 years in total from commencement of construction). According to the Procuring Authority, the objectives of the project were to benefit commuters, motorists and the general public, and to deliver strategic benefits to the region such as:

- Providing an alternative route to/from Metro Manila/Cavite
- Improving the regions' competitiveness as an investment destination
- Decongestion of the traffic in Cavite, Las Piñas, and Muntinlupa
- Reducing travel time by an average of 45 minutes from Daang Hari to Alabang Interchange
- Providing new access to the National Bilibid Prison (NBP) property, which is intended to be redeveloped into a mixed commercial, residential, and institutional estate

The Economic and Political Environment during Inception

As of April 2012 when the PPP contract was signed, the Philippines central government was ambitious in promoting privately financed projects to improve the country's infrastructure. The PPP unit, known as the "PPP Center", was formed by the central government to promote and drive the development of PPP projects in the Philippines. It champions the country's PPP program and aims to create an enabling environment for private investment in local infrastructure projects. In addition to enabling and promoting infrastructure investment, the PPP Center advocates policy reforms to improve the legal and regulatory frameworks governing PPPs in order to de-risk projects such as the Daang Hari-SLEX Link Road project.

MANAGEMENT OF THE PPP CONTRACT

Construction Phase

The Procuring Authority was responsible for acquiring the land necessary for the project at no cost to the Project Company. The Procuring Authority granted the Project Company the exclusive rights and obligations with respect to undertaking the construction works. The Project Company was responsible for bearing the costs relating to construction.

As a sufficient amount of land was made available for construction, the Project Company commenced the works immediately upon contract signature. However, there was a delay in construction completion due to a major variation and challenges related to the acquisition of remaining land which had not been acquired as of commencement of construction. The variation delay was due to the process of redesigning the road for the inter-connection and inter-operation with another expressway. The details of the variations and land acquisition delays are further explained under the heading "Key Events" below.

Operations Phase

The Daang Hari-SLEX link road has been operational since 24 July 2015. The project was designed for a daily capacity of 126,000 unit cars. Following the transition to operations, monthly traffic volume reports are submitted by the Project Company to the Procuring Authority. At the time of writing this case study, no issues or challenges had been faced during the operations phase.

Performance Monitoring and KPIs

For the construction phase, an independent consultant was employed by both the Procuring Authority and the Project Company to review, monitor, and certify the milestones. Throughout the construction phase, the Procuring Authority regularly monitored, inspected and evaluated the quality of the works undertaken by the Project Company to ensure that the road was designed, constructed and equipped in accordance with the contract requirements.

In the operations phase, the Project Company is required to comply with the minimum Key Performance Indicators (KPIs) for operation and maintenance stipulated by the Procuring Authority. There are over 15 KPIs for the expressway operation and over 15 KPIs for road maintenance. Some of the KPIs include; ensuring that queuing length of 10 vehicles at the toll gates does not exceed 20 minutes during peak hours, and maintaining the transaction capacity of the toll plaza at a minimum of 400 vehicles per hour per lane for manual or mixed booths, and 900 vehicles per hour per lane for the express gates.

Other KPIs include:

- Permanent presence of the traffic safety and control system (i.e. patrol system, security surveillance system, immediate response to accidents or vehicle breakdown, etc.)
- Regarding road quality, surface roughness should not exceed three units based on the international roughness index (IRI)
- In cases of road damages, the repair of pavements or markings should not exceed the prescribed time

The KPIs are monitored by both the Project Company and the Procuring Authority during the operations phase with no involvement of an independent consultant. However, the final approval of compliance with KPIs is the responsibility of the Procuring Authority. Penalties apply for the Project Company if the KPIs are not met. So far, the KPIs seem to be working well and there have not been any complaints on the functionality of the KPIs from the Project Company or the Procuring Authority.

Minimum performance standards and specifications are generally monitored by the Procuring Authority. The Toll Regulatory Board also conducts monitoring activities for compliance with regulations on toll systems and facilities. While the Project Company is currently meeting all the agreed KPIs, it can be noted that during the defects liability period, i.e. the one-year period after construction completion during which the contractor must remedy defects as identified by the Procuring Authority prior to the acceptance of construction works, a few KPIs (i.e. road roughness and repair of the road drainage system) were not complied with. All these performance failures have since been corrected.

Payment Mechanisms

There are no investment fees payable to the Procuring Authority during the operations phase of the toll road and no minimum traffic demand guarantee was given by the Procuring Authority. The agreement allows the Project Company to use the toll revenue collected as the primary source of income to recover the cost of its investment. Poor performance leads to fines levied on the Project Company. The fines are issued based on the monthly performance reports submitted by the Project Company.

The toll rates are assessed in each direction at the toll barrier, based on the class of vehicle. In accordance with the law, all toll rates include a 12% Value-Added Tax. The toll rate is reviewed periodically every two years and is adjusted to reflect current economic conditions. The adjustment is made based on a specified formula and is tied to the Consumer Price Index in the Philippines. Since the Project Company has taken construction and demand risk, it is not allowed to implement a toll adjustment on its own to cover construction cost overrun or lower than forecast traffic volume. Approval for the toll adjustment must be granted by the Toll Regulatory Board, a government regulatory body on toll expressways.

It is worth noting that any wrongful disallowance in toll rate adjustments may result in remedies, such as compensation from the Procuring Authority of revenue foregone by the Project Company as a result of disallowance. The reason for this is that decisions made by the regulatory authority are influenced by multiple factors, including political and economic factors. Thus, the Procuring Authority guarantees to provide a remedy for foregone revenue if toll rate

adjustments were disallowed when the Project Company had a valid reason to request the adjustment. The remedies can be in the form of direct payments or an extension of the operations period.

In addition to the toll revenue, the Project Company is allowed to develop areas in the land available within the corridor to provide commercial services for the users of the toll road. The Procuring Authority is entitled to receive 5% of the revenue generated from commercial services and activities by the Project Company.

ROLE OF GOVERNMENT

The central government of the Philippines provides support to local governments and agencies in their PPP projects. The PPP Center operates closely with the National Economic and Development Authority and was set up to help support PPP projects. The PPP Center serves as the central coordinating and monitoring agency for all PPP projects in the Philippines. It champions the country's PPP Program by enabling Procuring Authorities in all aspects of PPP procurement and it is in regular contact with the Procuring Authority in the operations phase.

The PPP Center supports the Procuring Authorities by providing:

- Project Development and Monitoring Facility Services
- Project Development Services
- Policy Formulation, Project Evaluation, and Monitoring Services
- Capacity Building and Knowledge Management Services
- Legal Services

The PPP Center's PPP monitoring role continues into the operations phase. The PPP Center is involved in coordination activities to ensure smooth project operation. While monitoring is primarily at a high level, relying on reports submitted by the Procuring Authority, the PPP Center may also conduct in-depth monitoring and evaluation of PPP projects. This may involve focus group discussions among all concerned stakeholders.

While the PPP Center supports Procuring Authorities in setting up and promoting PPP projects, the final approval of any project lies with the Investment Coordination Committee (ICC) and the National Economic and Development Authority Board, depending on the project cost. Their decision is influenced by recommendations from the ICC's technical working group, which is made up of the PPP Center, the Finance Ministry, the Economic and Development Authority, and the Environment Department.

The Philippines government structure offers a lot of autonomy for local governments, including rights to impose restrictions, requirements, and taxes. As a result,

the Procuring Authority and the Project Company had to conduct extensive consultation and coordination activities with the Local Government Units (LGUs) to ensure compliance with all local regulations and ordinances.

RELATIONSHIP BETWEEN THE PROCURING AUTHORITY AND PROJECT COMPANY

Team Set-Up and Staffing

The Procuring Authority was actively involved on a daily basis in monitoring the project during the construction phase. An independent consultant was appointed to certify progress of works and make recommendations for the Procuring Authority's approval of all documents relating to the construction phase of the project. The independent consultant owed a duty of care to each of the parties with a duty to act professionally and independently. The parties shared the cost of the independent consultant's remuneration equally and have established arrangements where the payment of the remuneration will be made by each party on the same day each month, based on the invoice received from the independent consultant.

During the operations phase, the Procuring Authority has been satisfied that the number of resources it currently has is adequate to monitor the performance of the Project Company.

Training and Development

The PPP Center has been responsible for providing training to the Procuring Authority. As the PPP Center has visibility of all PPP challenges faced nationally, and is closely linked to the central government, it has the ability to act as a catalyst for knowledge sharing and training.

Communications

There is a continuous line of communication between all parties, as the Procuring Authority has an office near the facility, to monitor the project closely and have an open dialogue with the Project Company.

The PPP contract stipulates that any formal notices should be issued in the form of a written letter and delivered personally or scanned and sent by electronic mail.

KEY EVENTS

Design Variation

Before the project was tendered, a preliminary design was developed by the Procuring Authority. However, when the Project Company submitted its initial detailed design to the Procuring Authority, it was discovered that the planned expansion of another nearby expressway was not taken into consideration in the preliminary design. Consequently, to allow for this expansion, a change in the scope of the

project design developed by the Procuring Authority was needed. This resulted in extra costs to the Procuring Authority, as it had to compensate the Project Company for the additional work. As a result, the project had to be delayed to allow time for the redesign and cost estimations.

The variation procedure is contractually defined and starts by either party sending a written notice ("Variation Notice") to the independent consultant describing the change in scope. In this case, it was the Procuring Authority that initiated the Variation Notice. The independent consultant then certifies that the proposed variation was in accordance with the minimum performance standards and specifications agreed at contract execution. The Project Company subsequently prepares a proposal setting out the necessary details and the additional cost estimates (with supporting particulars), including how the costs would be recovered. Should the variations cause a cost increase of 10% or more above the contract value, formal approval from the ICC is required. If the increased costs are below 10%, the Procuring Authority and Project Company can proceed with the agreed variation subject to notifying the ICC.

The variation in this project did require approval from the ICC as it was above 10% of the contract value. The cost of the variation was paid in a lump sum once the Project Company provided all supporting evidence to justify the cost increase.

The PPP Center has recognised the lessons learned from this variation and the identification of any adjacent and/or competing projects has now been introduced to the PPP Center's project development and tender evaluation processes to mitigate the associated risks from the outset.

Land Acquisition Challenges

Prior to the start of construction, all parties had knowledge of the land needed for construction. Initially, a sufficient amount of land was successfully acquired to start the construction on time. However, further into the construction phase, challenges in acquiring the remaining land needed for the remaining construction activities started to emerge. The process of land and property acquisition starts with an offer based on a fair market valuation. If negotiations with the owner fail, the issue may have to be referred to the courts to seek permission for expropriation.

For one narrow piece of land, negotiations with the owners were initially unsuccessful, and high-level intervention was needed to facilitate the agreement on the use of the land. For the acquisition of some areas of the project land, negotiations with the owners were not successful and a court order had to be obtained. This process is lengthy and has resulted in delays to the completion of the works. As the Procuring Authority was responsible for land acquisition risk, there was no financial impact on the Project Company resulting from this delay. No extension of time for

construction works was required, as the issue associated with the outstanding land acquisition led only to minor delays.

LESSONS LEARNED

Potential interface issues with other projects should be considered during the project development and evaluation phase.

Failure to detect issues with adjacent and competing projects can lead to cost increases and time delays. The late identification of the clash between this project and another road expansion project has resulted in variations at the expense of the Procuring Authority. The PPP Center recognised the severity of this particular challenge in this project and other projects across the country. Therefore, in order to mitigate risks associated with adjacent and competing projects, the identification of projects which may have an interface with the project in question was introduced in the project development and evaluation phase. Projects with identified interface issues are not allowed to proceed to the next stage of evaluation until the interface issues are addressed, depending on the severity of their impact.

It is important to recognise that interface issues vary in complexity and impact on a project. Thus, it is difficult to give specific advice on how to handle interface challenges. Some interfaces are easy to remedy and are not significant enough to affect the decision on the project's evaluation, while others are. Therefore the 'Philippine's solution' is attractive, as it requires flagging interfaces during the development and evaluation process but leaves the decision to proceed without a remedy plan at the discretion of the project technical working group. This proactive method presents an example of good practice to be adopted during project inception and evaluation, as it facilitates awareness of any potential issues at an early stage.

Training of the Procuring Authority's contract management team by a national PPP unit can benefit the team by providing visibility of all challenges faced nationally in PPPs.

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Land acquisition should be dealt with at an early stage (preferably before or during the bidding stage) as it carries significant risk of additional costs and delays.

Land acquisition carries significant risk of additional costs and delays. It is often a risk retained by the Procuring Authority.

The process of obtaining the necessary land requires careful stakeholder management and engagement planning. It can be

a lengthy process, and it is recommended that land acquisition challenges are addressed at an early stage in the project to avoid delays and additional costs during construction.

Independent consultants may act as a mediator to prevent disputes as they offer an impartial evaluation of any issues, which can then be presented to the parties for agreement.

It was highlighted by the interviewees that independent consultants are helpful in reaching agreements between the parties involved. In this project, the consultant was commissioned by both parties, ensuring a non-biased and transparent opinion. In some respects, the independent consultant acts as a mediator in preventing disputes, as it offers an impartial evaluation of any issues, which can then be presented to the parties for agreement.