EXCLUSIVE ONLINE ARTICLE

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Case Study:

Sydney's M4 Motorway

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At midnight on February 15, 2010, with little coverage from the industry or media, a landmark infrastructure transaction reached completion. On that day, a 20-year concession on the M4 Western Motorway, a major highway in the State of New South Wales (NSW), Australia reached its close and tolling ceased.

Infrastructure investors may find the lack of interest disappointing, but not surprising. Infrastructure assets by nature are essential assets that are mostly taken for granted in peoples day-to-day lives.

The M4 concession agreement proved to be a deal that benefited the government, investors, and users alike. While not all of the financial returns to investors are publicly available, the underlying consistency of demand and cash flows plus the relative ease with which the concession changed hands on a number of occasions attests to the underlying investment appeal of infrastructure assets. Ultimately, the M4 concession became the template for future transport infrastructure projects in the State of NSW. Furthermore, it continues to provide a number of interesting insights for infrastructure investors, such as:

- the role concessions can play in supporting a government's budgetary needs
- the efficiencies offered by concession agreements and similar structures to investors and users
- the ability of infrastructure assets to meet a range of investors' risk appetites

History & Scope of Project

The M4 Western Motorway is a 26-mile road running east to west on the outskirts of Sydney. The NSW State Government began its construction in the late 1960s. However by 1985, the government had to halt construction in its final stages because they lacked the funding to support the project any further. For the next four years, the project was a dormant political embarrassment.

In December 1989, the government agreed to a 'Build-Own-Operate-Transfer' (BOOT) financing structure with a Macquarie Bank-backed private consortium, State Wide Roads, to complete the project. The agreement involved upgrades to existing sections of the motorway, construction of a new 6.2 mile section and concessions for two proposed service centres with fuel, food, and convenience outlets.

In return for funding construction, State Wide Roads was given permission to toll a separate 7.8 mile section of the motorway where traffic volumes were high and strong demand would support a shorter toll period with lower tolls. The toll road provided an alternative to the heavily congested Parramatta Road and eliminated 60 sets of traffic signals. As part of the concession agreement, State Wide Roads was also given permission to adjust tolls in line with movements in the Consumer Price Index (CPI), providing an essential inflation protection for the long-term revenue stream.

The tolling on the M4 Motorway commenced in 1992 with the initial toll set at A$1.50 for cars and A$4 for trucks. Average daily traffic volume at the time was 50,000. By the end of the concession, the toll had increased to A$2.75 for cars and A$6.60 for trucks and average daily traffic volume had increased to 112,000.

The M4 also had an element of political controversy. In 1997, local residents exerted their political strength upon the government and earned a 'Cashback Scheme,' or subsidy, for some residents utilizing the toll road.

Ownership History

As an investment, the M4 Motorway underwent three distinct phases over the concession period each associated with distinct operating risks:

- ❖ development and growth
- ❖ mature growth
- ❖ maturity

During these phases, the ownership of the M4 also changed hands several times from the original owner State Wide Roads, to Macquarie Infrastructure Group (MIG), to a short-lived public listing, and, ultimately, to Transurban. Each of the owners of the concession assumed a different level of risk and achieved overall returns that were in line with their respective risk profiles.

◆ Development And Growth

During the construction and ramp up period, State Wide Roads took on more risk with expectations to earn a commensurately higher return. Exact returns to investors in State Wide Roads have not been publicly released. Between 1996 and 1998, the M4 was expanded from four to six lanes and was also upgraded. In 1997, electronic tolling devices were introduced, but were not fully adopted and integrated until 2003.

◆ Mature Growth

By December 2000, growth opportunities for the road had been largely realized. At that time, MIG announced that it would acquire a 50.6 per cent controlling interest in State Wide Roads. MIG, a publicly listed company, published data at the time of purchase stating return expectations of 16 per cent (pre-tax IRR) and an annual cash return of 12 per cent per annum for the first five years.

The M4 was a strategic acquisition for MIG which held a portfolio of toll road interests with various maturities across Australia, the UK, and Germany. It was clear that MIG viewed M4 as a mature and stabilizing asset within its broader portfolio.

◆ Mature

In March 2006, MIG announced plans to divest three of its more mature toll road assets including the M4. For the combined portfolio, of which the M4 was the oldest asset, MIG recorded a 30 per cent IRR and 5x multiple in realized value and dividend capital invested. To divest these roads, MIG created Sydney Roads Group (SRG). MIG shareholders received an in specie distribution of SRG stock that listed in July 2006.

SRG's life as a stand alone company was short-lived. In December 2006, Transurban Group made a takeover bid for SRG, valuing the equity of the company at a 17 per cent premium to SRG's listing price. For Transurban, the M4 would become part of a broader portfolio. The acquisition made sense in terms of the synergies that M4 offered. There was also an element of free optionality, dependant upon what the government decided to do at the end of the concession.

End Of The Concession

As the M4 concession agreement came to its conclusion, the government had several options:

- ❖ negotiate an extension of the existing concession
- ❖ seek proposals for a new concession
- ❖ continue tolling under a State management
- ❖ end the concession and the toll

The government's decision to end the concession and the toll was not surprising. Public opinion polls at the time showed 71 per cent support for the decision and the next election cycle was only one year away. However, there was some disagreement from the media, economists and the business community which noted that the removal of the toll also removed a useful tool for traffic congestion management in Sydney. Data on the impact of the removal of the toll on traffic volumes has yet to emerge, but initial estimates suggested a traffic increase of about 27 per cent or 6.5 minutes extra on the prior 26-minute morning commute.

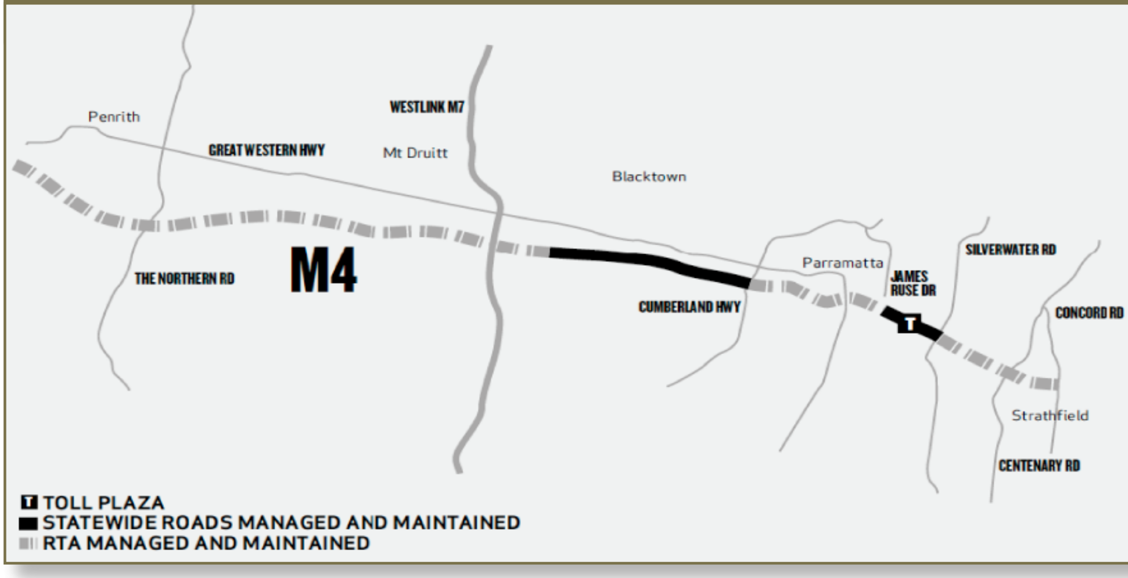
Observations

◆ The role concessions can play in supporting a government's budgetary needs

The establishment of the concession provided obvious benefits to the government, both at its inception and throughout the next 20 years. Signing the agreement reinvigorated a stalled but much needed public asset. The initial cost of the final section of the road and the upgrade amounted to A$246 million (US$220 million) in 1992.

Throughout the life of the project, the motorway remained a public asset. The contract for the concession placed detailed service requirements on the operator such as management of litter, breakdowns, toll collection centre service levels, and the overall quality of the road surface. As such, the public recognized that this was not a privatization of a public asset.

Exhibit 1: **M4 Motorway Locations**



◆ **The efficiencies offered by concession agreements and similar structures to investors and users**

The M4 met all the key characteristics of core infrastructure: an essential asset with high barriers to entry, stable, predictable cash flows over a long operating life and inflation-linked revenue with low demand elasticity.

While the toll road was not without its political controversy, the overall user experience was positive. The concession was able to be structured to meet the government's goal for a relatively short 20-year life and was able to demonstrate to the public a clear justification for the toll in terms of a significant reduction in travel time and consistency in road quality.

◆ **The ability of infrastructure assets to meet a range of investors' risk appetites**

The changes in ownership interests over the concession life of the M4 illustrate the ability of such assets to provide attractive investment returns to a range of investors with different risk appetites. From the growth to maturity phases, each of the various investors matched different levels of risk and achieved overall returns in line with those expectations.

Ultimately, the M4 became a landmark deal for the State of NSW. While small by itself, it became the template with a number of new user-pays transport infrastructure projects in the State such as the M2, M5, M7, the Cross City Tunnel, the Lane Cove Tunnel, the Sydney Harbour Tunnel, and the Eastern Distributor.

Infrastructure is a new asset class that has accelerated its development over the past decade. As such, many of the existing projects and concessions are still relatively new. The completion of the M4 concession serves as a useful model for understanding the full lifecycle of PPP infrastructure projects. ■