



MAIN ROADS WA (MRWA) is tasked with building WA's major government road infrastructure projects, providing infrastructure and operations improvements, and maintaining the state's major government roads, bridges, verges and reserves. This involves using technology to optimise the real-time management of the network and provide traveler information. The Information Management Branch (IMB) is responsible for the provision of all corporate ICT services and manages 2,300 users, 3 metropolitan data centres (with high speed interconnections including GovNext), 21 metro and regional offices, 50 depot locations throughout regional WA, and an extensive Traffic Control Network.

VISION

The government-led (Office of Digital Government) mandate to move to a consumption model for ICT services "GovNext"), along with the emergence of public cloud as a mainstream operating model, presented the prospect of great change and opportunity in the ways IMB would procure, consume and deliver technology.

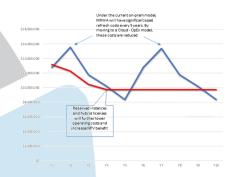
IMB faced several significant challenges including; high capital cost to replace imminently obsolescent infrastructure, shifting technology market forces, and GovNext policy mandates. Strategic adoption of cloud and related services was critical to addressing these and consolidating IMB's role as a partner and enabler to the agency and transport portfolio.

MRWA engaged estrat to develop a business plan and roadmap to move to a cloud computing operating model. The scope of the project was to review the current infrastructure and applications across the corporate and OT environments, assess

suitability of cloud options, and provide a plan of transitional work to migrate into appropriate cloud environments over the next five years.

A detailed strategy was needed to:

- Set out an achievable roadmap for the transition and eventual transformation of candidate infrastructure and applications
- Provide supporting rationale and justification for the chosen pathways
- Specify strategic benefits, implications and risks
- Consider portfolio initiatives and joint venture opportunities
- Provide a five-year financial business case
- Articulate a program of work to guide the transformation













TRACTION



The Main Roads Cloud Business Plan (CBP) was completed by estrat and provided specific guidance on the take up of cloud services as part of the overall strategy to streamline and modernise MRWA's IT and Digital capability.

The CBP provided a roadmap guiding the journey from the establishment of underlying network and security services through to the migration of applications into public cloud and GovNext destinations. This would see a fundamental change in the way in which MRWA procures and delivers IT services.

Rather than owning and operating complex infrastructure the Agency would consume services from selected partners.

The program would pivot MRWA's funding processes to a consumption (OPEX) model in contrast to the pre-existing CAPEX method.

An increased focus would be required on service catalogue management, cross-platform operations, cloud concepts, and security. Roles would evolve as the model matures and staff develop new skills in cloud infrastructure management and integration.



Addresses the compounding / colliding issues of aging 'big tin', lack of capacity, and GovNext constraints



Reduces large capital outlay for core infrastructure replacemen over next two years



Balances risk by retaining critical applications on local private cloud infrastructure while exploiting cheaper pricing in public cloud for less critical applications



Aligns with State Government "Digital WA" policy directions



Positions MRWA with latest technology, services and



Scalability and agility to support accelerating requirements for vast amounts of storage, compute and network resources driven by usecases such as video, smart freeways, autonomous vehicles, IOT, data warehousing and analytics





Transformational program redoubling IMB's focus on business partnership and strategic value



Provides pathway for full public cloud adoption in the future



Creates opportunity for the development of innovative solutions and products across the Transport portfolio

RESULTS

A strong business case existed for the proposed cloud transition program when compared with a traditional approach. A forecast saving of 50% over five years was estimated after transition costs.

A multi-cloud environment would prevail for the foreseeable future such that MRWA could leverage the key strengths of the various vendors' offerings. There would be a sustained period of transition during which on-premise, GovNext and public cloud platforms would coexist.

Care was taken to pragmatically determine the optimal location for applications, recognising the requirements for user experience, latency, performance, cost optimisation, ease of support and security. This would see a heavy take up of public cloud, SaaS and GovNext services.

Specific deliverables included:

- Risk assessment
- Business case
- Cash flow projection
- Solution design (public cloud, GovNext, network, disaster recovery, data protection)
- Workload placement analysis
- Operating model design
- Program of work

A vision for strategic cloud adoption and future mode of operation



