SELECT COMMITTEE
OF THE
LEGISLATIVE COUNCIL
ON
TRAIN SERVICES

FINAL REPORT

SEPTEMBER 2010
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1. **Background**

1.1 **Initial Investigations**

1. On 11 March 2009, the Legislative Council appointed a seven-member Select Committee to inquire into the factors leading to and causes of failures in the provision of metropolitan and V/Line train services.

2. During the initial 12 month investigations, the Committee received evidence in the form of 73 written submissions and numerous witnesses in public hearings held over six days. The Committee subsequently tabled an interim report on 8 June 2010.

1.2 **Amended Terms of Reference**

3. On 5 May 2010, the Legislative Council amended the Committee’s terms of reference to inquire into the impact on train services as a result of the purchase, operation, implementation and oversight by Government of the ‘myki’ ticketing system in Victoria, including an examination of performance, costs and integration of the ‘myki’ ticketing system.

4. This second and final report deals with evidence received with respect to the myki ticketing system in line with the amended terms of reference. No additional evidence or findings relating to train service delivery failures, consistent with the first interim report, are highlighted in this final report.

1.3 **Further Evidence**

5. Following the tabling of its first interim report, the Committee wrote to relevant witnesses to advise of the amended terms of reference and invite their further input. No additional written submissions were received, other than the supplementary submission from the Department of Transport.

6. The Committee proceeded to take evidence from the Department of Transport, and the Transport Ticketing Authority at a public hearing on 22 July 2010. Further evidence was received from Keane Australia Micropayment Consortium (Kamco) at a hearing on 23 August 2010.

7. The Department of Transport has overall responsibility for the delivery and oversight of Victoria’s transport system including managing contracts of public
transport operators, long term planning of the public transport system and development of the myki ticketing system.

8. The Transport Ticketing Authority (TTA) was established in June 2003 with a dual role of overseeing Victoria’s current Metcard public transport ticketing system contract and to procure and manage the new myki ticketing system. As a body formed under the *State Owned Enterprises Act 1992*, TTA reports to the Minister for Public Transport on transport policy matters and to the Treasurer for matters pertaining to the *State Owned Enterprises Act*.

9. Keane Australia Micropayment Consortium (Kamco) is the company contracted to design, build and implement the myki ticketing system.

10. A full list of witnesses who have appeared before the Committee throughout the entire Inquiry is provided in Appendix A. Full transcripts of public hearings, answers to question taken on notice and copies of all written submission are located on the Committee’s website: [www.parliament.vic.gov.au/select-committees](http://www.parliament.vic.gov.au/select-committees)

1.4 Report Outline

11. The initial part of this report comments on the reasons for the introduction of a new ticketing system, the tender process, the costs of myki’s introduction and on-going operations, and commentary on the significant delays in the full implementation of myki. The remainder of this report will examine the extent to which the myki implementation has impacted upon train services.

2. The move to a new ticketing system

12. The outgoing Metcard ticketing system commenced full revenue service in May 1998 after the move to automated ticketing began in 1992. Tenders were called for the design, supply, installation and on-going maintenance of the system, with testing of prototypes commencing in December 1993. The development of this system involved contractual issues between the supplier, OneLink, and the Victorian Government in relation to cost over-runs and machine reliability issues.

13. The original contract for the Metcard system was for a period of nine years and was due to expire in March 2007. The contract has subsequently been extended to enable the staged introduction of the myki ticketing system.
14. Myki is the multimodal ticketing system developed to replace the OneLink Metcard system. Myki is more advanced than Metcard, being based on smart card technology which calculates the cheapest fare option for passengers. In comparison the Metcard system employs cardboard tickets with a metallic strip. Unlike the Metcard ticketing system which was implemented in the metropolitan area only, the myki system is designed to be introduced throughout Victoria.

15. The Department of Transport advised there are four main operational reasons for myki’s advantages over the Metcard system. They are:

- myki will provide an integrated ticketing system across Victoria and removes the need for Victorian public transport users to navigate three different ticketing systems; Metcard in Melbourne; V/Line tickets for regional trains and coaches; and paper tickets for regional buses.

- myki is fully electronic (containing no mechanical components), bringing with it all the benefits of a fully programmable ticketing system such as the ability to add discounts or incentives into the fare structure more easily over time.

- The number of passengers on the metropolitan train network has more than doubled since Metcard was installed and without a new ticketing system, significant investment in additional, yet outdated, Metcard equipment would have been required.

- myki is an open-architecture system, not proprietary. Open architecture is a common protocol which allows devices from different manufacturers to work together. This allows the flexibility of adding, upgrading and swapping components over time. Proprietary software does not give this flexibility.\(^1\)

16. The Transport Ticketing Authority sought to implement a new system that was both easy and convenient for passengers to use. It also sought to draw on proven technology tailored to the State’s specific requirements.\(^2\) Rather than being locked into a long term contract to one supplier with high costs, TTA sought to develop a system based on open architecture that would allow

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1 Department of Transport, *Supplementary Written Submission*, 5.
systems and equipment from a variety of manufacturers to interface with each other.

17. When questioned on the justification for investing in a new ticketing system to replace Metcard, particularly given the Metcard system was still working well, the Department of Transport advised the Metcard ticketing system had a limited life span. As a result an alternative ticketing system was required to be developed to ensure the operator’s ability to collect revenue was not compromised. The Department further advised that the new ticketing system should be capable of evolving and being upgraded to meet future requirements without having to replace the entire ticketing system.

Mr BETTS - We anticipate that from around 2013 it will be increasingly difficult to operate the Metcard system. It was purchased in the early to mid 1990s. If you can imagine operating today a computer in your office which was bought at that time, if you run into difficulties, it is very hard to source technical support and it is very hard to source spare parts. This is really an asset renewal project.  

18. The Committee received evidence that ticketing systems cannot be purchased ‘off the shelf’. While automated ticketing systems have common physical components, the software has to be tailored for each situation.

Mr BETTS - Really there is no such thing as an off-the-shelf system. Each of the systems you see up there pretty much was designed with the specific characteristics of their jurisdiction in mind. Clearly we do not completely redesign circuits and all of that kind of stuff; there is some standard technology which applies across these different systems. 

* * * * *

Mr CAROLAN - So in hardware terms, a lot of it is close to similar with a little bit of tailoring for the individual system. But in software systems, there is an awful lot of software work that has to go on to build the system for those local requirements based on what the fare system is, the types of customers, the number of concession rules et cetera.  

3. The Myki Tender Process

19. The number of automated ticketing system manufacturers and suppliers worldwide is limited with the Australian market dominated by two equipment suppliers. As such, most ticketing systems involve long-term contracts which make it difficult to change equipment or suppliers before the contract expires.

3 Mr Jim Betts, Secretary, Department of Transport, *Transcript of Evidence (SCTS)*, 22 July 2010, 192.

4 Mr Jim Betts, Secretary, Department of Transport, *Transcript of Evidence (SCTS)*, 22 July 2010, 197.

5 Mr Bernie Carolan, Chief Executive Officer, Transport Ticketing Authority, *Transcript of Evidence (SCTS)*, 22 July 2010, 197.
20. The TTA sought to implement a system that drew on proven technology without tying the state to a single technology supplier.

Mr BETTS - The benefits that passengers will get will be through the automation and the simplification of their access to those benefits.\(^6\)

21. Tenders for the new ticketing system were called for in July 2004 with a shortlist of four tenderers identified by December 2004. In March 2005, a final two tenderers were announced: Keane Australia Micropayment Consortium Pty Ltd (Kamco) and Mantra T.

22. In July 2005, the contact was awarded to Keane Australia Micropayment Consortium Pty Ltd (Kamco) for the development and implementation of the new ticketing system. The contract was worth $494 million and based on a delivery timeline of March 2007.

4. Implementation of myki

23. The implementation of the myki ticketing system has been faced with considerable problems and delays. The ticketing problems, combined with ongoing problems experienced with train cancellations and delays as earlier reported by the Committee, may have contributed to a poor public perception of public transport more generally.

4.1 Implementation delays

24. Myki has taken in excess of five years to develop and deliver which is significantly longer than initially agreed when Kamco signed the contract in March 2005.

25. As stated earlier, the original timeline anticipated the ticketing system would be rolled out across all forms of public transport in Melbourne by March 2007.\(^7\) However, as illustrated in the timeline below, the implementation of myki across the public transport network has been more than three years past the original deadline.

\(^6\) Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 201.

26. The Department of Transport advised that the development and delivery of automated ticketing systems in other jurisdictions usually takes five or more years. This is consistent with the evidence from Kamco highlighted below.

27. For example, Queensland’s ‘Go Card’ system took five years to deliver while the ‘Smartrider’ ticketing system in Perth was delivered in four years. Overseas examples include London’s ‘Oyster’ card (6 years), Paris’ ‘Navigo’ card (10 plus years), Hong Kong’s ‘Octopus’ card (3 years) and various ticketing systems in the United States which have taken five or more years to implement.

28. While there have been delays with the development and commissioning of myki, the Department of Transport contends the timeframe is still comparable most of the ticketing systems in other jurisdictions. However, most of these systems only apply in metropolitan areas while myki applies across the state. As such, myki is significantly larger than most of the other ticketing systems.

29. In August 2008, myki system testing commenced on Melbourne train and tram networks. The ticketing system was only activated on the train network due to reliability problems with its operation on buses and trams.8

30. From December 2008 to May 2009, myki became operational in numerous bus routes in regional Victoria including in Geelong, Ballarat, Bendigo, Seymour, Warragul and Latrobe Valley

31. In December 2009, myki became operational on all metropolitan train services.

32. In February 2010, in response to the myki implementation problems, the Government replaced the then TTA Chief Executive, Mr Garry Thwaites, with Mr Bernie Carolan who was the Chief Executive of Metlink at the time.

33. The day the Committee was scheduled to receive evidence from the Department and TTA, the Minister for Transport announced that myki would finally become operational on metropolitan trams and buses on 25 July 2010.

34. As at September 2010, the Government had not announced when myki would be introduced onto the V/Line network. The Committee understands

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8 Clay Lucas, ‘Myki users hit hard on card lapses’ The Age 05.01.2010
that the introduction of myki on V/Line services required some software solutions to be approved and deployed.\textsuperscript{9}

35. Following the activation of myki on trams and buses, the Government announced that the Metcard system would continue to operate in tandem with myki until at least Easter 2011.\textsuperscript{10} This would allow the public to gradually transfer to the new system as confident in it increases.

36. Although the original commencement date for the operation of myki was not met, the Committee notes that there have been no direct penalties applied to Kamco by the TTA.\textsuperscript{11} However, payments under the contract have not been made due to the failure of Kamco to meet project milestones.

37. The Department of Transport and Transport Ticketing Authority, in their evidence to the Committee, did not provide any detailed explanation as to the reasons for the long delays in myki’s implementation other than to suggest Kamco had committed to unrealistic timelines when it won the myki contract in 2005.

\begin{quote}
Mr BETTS - The second thing I would say is that the myki system has attracted a lot of criticism because of the time lines associated with its implementation. It is certainly true that we have failed to meet some of the very ambitious time lines to which our supplier, Kamco, committed in the early stages of the procurement of the project.\textsuperscript{12}
\end{quote}

38. Kamco also attributed the delays with the commissioning and operation of the myki system to an overly simplistic schedule, and that given the scope of the project five years was a more realistic timeframe.

\begin{quote}
Mr PURDY - I think at the outset the program both the TTA and Kamco were overly optimistic to think they could meet the schedule. When this contract was signed in 2005 the quickest smartcard implementation done anywhere in the world was five years. In my personal view this program is running the course it was set to run, in a time line that is probably a more sensible time line of five years.\textsuperscript{13}
\end{quote}

\textsuperscript{9} Mr Amir Durrani, Executive Vice President, Keane Asia-Pacific, Transcript of Evidence (SCTS), 23 August 2010, 224.
\textsuperscript{10} www.mobile.premier.vic.gov.au/component/content/article/11280.html accessed 07.09.2010 at 11.00 a.m.; Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 209.
\textsuperscript{11} Mr Greg Purdy, Chief Executive Officer and Vice President, Keane Australia Micropayment Consortium, Transcript of Evidence (SCTS), 23 August 2010, 224.
\textsuperscript{12} Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 192.
\textsuperscript{13} Mr Greg Purdy, Chief Executive Officer and Vice President, Keane Australia Micropayment Consortium, Transcript of Evidence (SCTS), 23 August 2010, 226.
39. Kamco further advised that software issues were responsible for the problems with myki on trams and buses. The myki software is large and complex, and will require continual updates to ensure its optimal operation.

Mr PURDY - What you saw occur through June then into July was a standard maintenance release of software. In June we piloted one organisation, finalised it, debugged it and then in July there was the version we sanctioned to go live upon as it was stable and met the requirements that were required.

Moving forward, like every software program it will have a release cycle where maintenance releases will be programmed over time to increase the system maturity and availability. That will be an ongoing thing that will be part of the normal program, and then we will move into the operations phase.  

FINDING 1

The implementation of the myki ticketing system has taken more than three years longer than initially anticipated by the Government and the contractor, Kamco.

FINDING 2

The Government and Kamco now concede that this initial timeline was unrealistic for a major project such as myki and that a five year implementation period is more consistent with the delivery of automated ticketing systems world wide.

4.2 Public acceptance of myki

40. Public transport users have been slow to embrace the new myki ticketing system instead preferring to continue using Metcards during the gradual roll-out of myki. While the Government will not set a date for the final cut off of Metcard, suggestions are that it is expected to be by April 2011.

41. In his evidence to the Committee in March 2010, the Minister for Public Transport commented on customer satisfaction levels with myki and associated delays in its roll-out:

Mr PAKULA —It is not operating perfectly, we recognise that. There are issues with data flow, there are issues with customer satisfaction. One of the reasons that we are not moving to full rollout yet is because one of the things that we want to do is ensure that those customer satisfaction measures are operating very well before we extend Myki to trams and buses.

14 Mr Greg Purdy, Chief Executive Officer and Vice President, Keane Australia Micropayment Consortium, Transcript of Evidence (SCTS), 23 August 2010, 223.

15 Minister for Public Transport, Transcript of Evidence (SCTS), 2 March 2010, 282.
42. In July 2010, the Minister for Public Transport advised Parliament that prior to being used on buses and trams, there were 430,000 cards issued, with some 30,000 daily usages which accounted for 5 to 6 per cent of trips.\textsuperscript{16}

43. It has been suggested that by mid-August 2010, just over half of the free myki cards issued were being used, and that only 10 per cent of public transport users had switched to myki.\textsuperscript{17} While they did not confirm exact figures, representatives from Kamco confirmed that current myki usage was in the vicinity of 10 per cent.\textsuperscript{18} Despite this low usage, Kamco advised the Committee that the system could cope with 100 per cent usage.\textsuperscript{19}

44. The Department of Transport was unable to confirm if myki use equated to 10 per cent of trips on public transport as suggested by Kamco. However, on 15 September 2010, the Minister for Public Transport advised the Parliament that the number of myki cards being validated each day had increased from 30,000 to 70,000 since July 2010 when myki became operational on trams and buses. By comparison, data provided to the Committee by the Department of Transport indicates that while there are still approximately 850,000 Metcard validations each day, there has been steady growth in the use of myki cards, with a corresponding decrease in the use of Metcards over the past two months.

45. Problems reported in relation to both the operation and roll out of the new system include: card users being overcharged;\textsuperscript{20} and cards being recalled because they were either not activated correctly or contained the wrong details/information.\textsuperscript{21}

46. Following the roll out of the myki ticketing system on Melbourne trains in December 2009, further problems were reported with the system including:

\textsuperscript{18} Mr Greg Purdy, Chief Executive Officer and Vice President, Keane Australia Micropayment Consortium, \textit{Transcript of Evidence (SCTS)}, 23 August 2010, 227.
\textsuperscript{19} Mr Greg Purdy, Chief Executive Officer and Vice President, Keane Australia Micropayment Consortium, \textit{Transcript of Evidence (SCTS)}, 23 August 2010, 227.
\textsuperscript{20} Clay Lucas, ‘Kosky “missing over myki”’ \textit{The Age} 07.01.2010
\textsuperscript{21} Ashley Gardiner, ‘The myki mess, times 30,000’ \textit{The Herald-Sun} 09.01.2010
• ticket inspectors had not been provided with enough card scanners to enable them to detect fare evaders;\textsuperscript{22}

• commuters reported losing credit from their myki accounts;\textsuperscript{23} and

• three commuters were reportedly credited with more than $167,000 each to their myki.\textsuperscript{24}

47. It was suggested to the Committee that when automated ticketing systems are introduced it can take several years before they enjoy high levels of public confidence and support.

Mr BETTS - With each of these projects I suspect that if you went to look at the media coverage whilst they were being implemented, you would find a lot of angst and a lot of criticism. Ticketing systems are intrinsically difficult projects to deliver.\textsuperscript{25}

48. The introduction of Metcard supports this suggestion. Although the Metcard system enjoyed a high level of public support and reliability in 2010,\textsuperscript{26} problems were experienced when it was introduced in 1996.

Problems were experienced in the introduction of the new system including delays in implementation and in the functionality of the equipment across the various modes of transport. Overall, the Metcard system had not been accepted by the community and patronage fell.\textsuperscript{27}

49. The Tourism and Transport Forum (TTF) suggested that smartcard ticketing systems are generally prone to early implementation problems, and accordingly take some time before all the benefits are realised.\textsuperscript{28} For example, although London’s Oyster Card is now regarded as a best practice smartcard system, its implementation was not without controversy or criticism.

While the Oyster card is one of the world’s most renowned smartcard ticketing systems, its implementation has been fraught with technical problems and ongoing costs that have posed serious challenges to TfL and TranSys- the consortium responsible for establishing and operating the Oyster System.\textsuperscript{29}

\textsuperscript{22} Matt Johnson & Ashley Gardiner ‘Train ticket inspectors will be unable to detect fare evaders as myki rolls out’ Herald-Sun 04.01.2010.
\textsuperscript{23} Ashley Gardiner ‘Faulty Myki card gobbed up credit, says Melbourne’s unluckiest commuter’ The Herald-Sun 15.01.2010.
\textsuperscript{24} Catherine Best ‘Myki commuters hit the jackpot’ The Age 02.02.2010.
\textsuperscript{25} Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 194.
\textsuperscript{26} Department of Transport (Victoria) Track Record 43 (Apr to June 2010) 33.
50. As a means of building public confidence in the new ticketing system, the Department advised it always proposed the operation of the Metcard and myki ticketing systems would overlap.

Mr BETTS - But there was never a great policy imperative or any other reason to switch Metcard off early, other than financial cost, because we always wanted to use Metcard as the safety net or fallback — call it what you will — so that passengers did not feel that they were being prematurely compelled to take up a new system which they did not fully understand.30

51. The Committee notes that that the phased roll-out of myki has enabled the system to be tested in real operations and progressively build public support in the new ticketing system. Problems following the introduction of myki on train services received significant media coverage. When myki was introduced on tram and bus services, there has not been the same volume of negative of media reports. However, this must be considered in the context of the existing very low patronage of myki.

52. It is worth noting that ticketing is often the reason for community complaints over public transport. The Public Transport Ombudsman’s 2009 Annual Report highlights a common complaint received by its Office relates to ticketing, including faulty tickets and machines, refunds, replacements, information and conditions.31

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<th>FINDING 3</th>
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<td>The problems and delays associated with the myki ticketing project may have impacted on the level of public acceptance and uptake of the new ticketing system to date.</td>
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4.3. Cost of myki project

53. In addition to its implementation delays, the cost of the myki ticketing project has been the subject of considerable public interest and debate in recent years as the overall implementation costs have escalated from the Government’s original estimates.

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30 Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 210.
54. In March 2005, Kamco signed a contract for the development and operation of the myki ticketing system with an initial budget of $494 million (excluding operating costs and contingencies). Of this amount, $300 million related to running costs and $194 million was to deliver the new ticketing system.

55. Further to the $494 million outlined in the original contract, it was estimated that approximately $50 to $55 million per year was required to operate the myki system during the ten year contract. With on-going operating costs totalling up to $550 million, in addition to the initial $494 million start-up costs, the total cost for the implementation and ongoing operation of myki was estimated to be just under $1 billion.

56. In May 2008, the Government allocated an additional $352 million towards the myki project. The additional expenditure was required to pay for modifications to the design of the ticketing system, equipment purchases as a result of additional trams and buses, together with $79 million to continue operating the existing Metcard ticketing system due to major delays with the myki implementation.

57. In his evidence to the Committee, Mr Bernie Carolan, Chief Executive Officer of the Transport Ticketing Authority outlined the basis for the additional funding:

Mr CAROLAN - The process that was done in 2008 talked about the fact that the additional 350 — 352 if you want to be precise — included allowances for additional equipment and changes to the base contract. That is the main reason that the 2008 formulation went through for budget approval at the time. A proportion of those allowances have now been activated and a proportion of them have not been. This contract were specified back in 2004, as we all know. It is completely the case that the public transport system has moved on since 2004. I am sure you will not be surprised to know that at whatever pace the public transport system has moved since 2004, technology has moved a whole lot faster.

There have been a series of variations. Some of the major variations relate to, as Jim has talked about, the additional equipment that has been needed on stations — additional trams and additional buses. That variation alone means in excess of $10 million has been committed out of the available fund. There have been major changes with the hand-held devices that will be used not only by authorised officers but also by V/Line conductors. The coach drivers who drive on the regional V/Line coaches will use a variant of the hand-held device, and also retail agents will use a similar device — obviously in a cradle. That variation has been quite major: around about $7 million.

In regard to the communications technology that is used between trams and buses to communicate with the central system there has also been quite a major variation and not one that was expected back in 2004, because I do not
think many of us knew what 3G technology was in 2004. That variation is about $4 million. They are some of the bigger variations that have already culminated, and I am sure there will be others through the life of the contract.32

58. The above expenditure outlay, including ongoing costs for the next ten years, brings the overall cost of the myki ticketing system to $1.35 billion. The Department of Transport, in its supplementary submission to the myki part of the Committee’s Inquiry, wished to place on record that this figure is not a cost of the implementation to date:

The myki project is regularly portrayed as “costing $1.35 billion”. This portrayal sometimes suggests that $1.35 billion is the cumulative spend on myki to date, which is inaccurate. The figure of $1.35 billion includes the cost of building and then operating the new system until 2017, and costs associated with Metcard and running the TTA.33

59. During its public hearing evidence, the TTA and Department provided a breakdown of the $1.35 billion:

Mr CAROLAN - There is around about $375 million that is related to the capital delivery of the project, including the civil works that we talked about before, and also including allowances for some of those contingencies and variations that we have also touched on. There is about $550 million for what we would call the operational period of myki, which is not all direct money that would go to Kamco. It also includes other aspects of an operational system. There is about $200 million for Metcard, as again we have talked about several times, and lastly there is a bit over $220 million for the TTA. I hope that adds up to close enough to $1.35 billion.

............

Perhaps it would also help the committee if I finished off that last question by also reporting what we have spent to date, which is $472 million on myki and related activities, including our own costs. On top of that, as I said before, we have $40 million or $50 million a year for Metcard that we have been managing as well, but the amount to date on myki, TTA and everything to do with the project in that sense is $472 million.34

60. Although there have been delays with the implementation of myki and extra investment has been required, the Committee received evidence that the abandonment of the system was never considered a sensible option because it would have left the state without an operating ticketing system.

Mr CAROLAN - The system that we are now trying to implement is very far advanced, and abandoning the project now would inevitably lead to

32 Mr Bernie Carolan, Chief Executive Officer, Transport Ticketing Authority, Transcript of Evidence (SCTS), 22 July 2010, 206.
33 Department of Transport, Supplementary Written Submission, 6.
34 Mr Bernie Carolan, Chief Executive Officer, Transport Ticketing Authority, Transcript of Evidence (SCTS), 22 July 2010, 218.
considerable further delays and considerably additional money over and above what the budget envelope we are working within is, and the Sydney example is relevant to that — we are way further advanced than Sydney was when Sydney decided to stop their project and re-tender.

We talked before about 20,000 devices; virtually all of those devices are installed except for the ones that cannot be installed until the Metcard system is completely decommissioned. So abandoning this project now would be quite a heroic thing to decide to do, and while in some sense it has been analysed and assessed, it has not been front of our mind over recent months, that is for sure.\(^\text{35}\)

61. The potential impact upon train services of the myki implementation costs, in particular the impact of additional funds allocated to myki, are discussed below.

**FINDING 4**

As a result of problems and delays in the implementation of the myki ticketing system, together with some changes to the scope of the project, the cost of the myki project has increased by $352 million. This additional budget allocation does not include any costs associated with the on-going operation of myki over the next ten years.

**FINDING 5**

It is estimated that on-going myki costs will exceed $500 million over the term of the ten year contract. The overall cost of the myki ticketing project will be approximately $1.35 billion.

5. **Impact of myki on Train Services**

62. The Committee’s amended terms of reference required an assessment as to the impact of the myki ticketing system implementation on train services. In considering this matter, the Committee acknowledges that there are differing interpretations as to the extent to which a ticketing system can have an impact upon train service delivery.

63. The Committee’s first interim report discussed in detail the various factors leading to failures in train service delivery. These failures largely focussed on

\(^\text{35}\) Mr Bernie Carolan, Chief Executive Officer, Transport Ticketing Authority, *Transcript of Evidence (SCTS)*, 22 July 2010, 203.
delays and cancellations. On this basis, the Committee has received no evidence that the problems with the implementation of myki ticketing have directly resulted in train delays and cancellations. Similarly, there is no evidence at this stage to suggest the new ticketing system, once fully operational and patronised, will lead to improved train reliability and punctuality.

64. The Committee was asked to look at the impact of myki more broadly on train service delivery and public transport generally. If one argues that a ticketing system is not relevant to train services, the same argument could be made for public safety on trains. However, the Committee believes all these issues are of vital importance when it comes to delivering a reliable train system with high levels of customer satisfaction.

65. The Department of Transport suggested that the introduction of myki would not significantly impact on the operation of train services in Victoria.

Mr BETTS - We do not envisage that the implementation of myki will have a material impact on the operation of train services. Myki is about providing a new way for people who use public transport to pay for it. We believe that it is a more convenient way than the systems which have existed in the past. To the extent that there are any impacts on the operation of the train system, we expect those to be very marginal indeed.36

66. In September 2009, the Committee invited the then Chief Executive Officer of the TTA to give evidence during the Inquiry. This was prior to the amended reference dealing with myki. At that stage, the TTA declined the invitation noting it was not responsible for managing or overseeing any public transport services and was not clear on how the Committee’s investigations at that point related to the TTA’s functions. The Authority stressed there is no suggestion that failures in the provision of train services are linked to any aspect of the ticketing systems for those services.37

67. In its June 2010 interim report, the Committee found that Melbourne’s train network has experienced significant, sustained patronage growth over the past ten years which was not matched with an appropriate increase in services and infrastructure investment during this period. This has caused constraints on network capacity and adversely affected service reliability.

36 Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 192.
37 Letter from Mr Gary Thwaites, Chief Executive Officer, Transport Ticketing Authority to Select Committee, 7 September 2009.
This lack of investment must be taken into consideration when examining the myki implementation costs.

68. In the public hearing with the Department of Transport, the Committee explored whether the increase in funding for myki had been at the opportunity cost of other projects.

Mr O'DONOHUE - Mr Betts, can I go to your opening remarks that myki will not have a material impact on train services. That would be true, in my opinion, if there was not a scarcity of resources, but for every allocation of funds capital to one project it means another project does not get funded, and this contract with Kamco came after the government's policy announcement of 20 per cent of trips by 2020, and to achieve that obviously requires significant capital investment in trains and all the rest of it. What choices were before the department in 2005 when it decided to sign the contract with Kamco to spend half a billion dollars to build this technology? What were the alternatives for that investment? Were there alternatives presented to buy new trains, extend existing tracks, upgrade, attend to maintenance or signalling?

69. In response, the Department of Transport refuted suggestions that train services had been affected by the purchase of the myki ticketing system. The Department noted that funds were not diverted from other transport projects, such as purchasing new trains, extending existing tracks, and upgrading signalling, in order to build the myki system.

Mr BETTS - All of those things you have just described have been funded as well. The choice was, do we want a ticketing system or not because by 2013 the current ticketing system is going to fall over. The current ticketing system collects between $500 million and $600 million a year, so a failure to have an operating ticketing system in Melbourne would be a very expensive failure, so this was an asset renewal project that had to happen. The question was then how do we secure best value for money for that process, and a full competitive tender was undertaken, so it was not a choice of do we buy trains or do we invest in ticketing, because we had no choice but to invest in ticketing. But you would also note that investment in public transport, and particularly in rail in this state, is pretty much at record levels and will continue to be at record levels for at least the next four or five years with projects like the $4.3 billion regional rail link project, the South Morang rail extension, the Sunbury electrification project, the 38 new trains, of which 8 are now in service as of July 2010, new trams on order, growth area station et cetera, et cetera. On the face of it, you would not say that the decision — the correct decision — to replace the ticketing system has come at the cost of other investment in public transport.

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38 Mr O'Donohue, Transcript of Evidence (SCTS), 22 July 2010, 201.
39 Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 192; Mr Amir Durrani, Executive Vice President, Keane Asia-Pacific, Transcript of Evidence (SCTS), 23 August 2010, 231.
40 Mr Jim Betts, Secretary, Department of Transport, Transcript of Evidence (SCTS), 22 July 2010, 202.
70. The Committee notes the above statement by Mr Betts, but believes the delays and increased costs could have equated to an opportunity cost to Victoria in other areas.

71. Despite the significant problems with introducing the new ticketing system, the Committee notes the advantages a successful smartcard system can bring about including more fare options which may lead to more passengers using cheaper off-peak services and therefore reduce demand for peak-hour services.\(^{41}\)

72. In contrast, a poor ticketing system is seen to be systematic of a poorly run public transport network. The Public Transport Users Association (PTUA) observe that apart from limited running times and poor service frequencies, the ticketing system is the most obviously dysfunctional aspect of Melbourne’s public transport.\(^{42}\) The Association believes the dysfunctional ticketing system ‘not only starves the operators if revenue, but also makes the system less attractive to passengers.’\(^{43}\)

73. In January 2010, following the introduction of myki on train services, the PTUA alleged there were a range of problems with myki that either potentially or actually impacted on train services. These problems included a lack of machines at some stations, the barrier gates were responding very slowly at city stations, scanner response time was unpredictable and some suburban stations did not have a sufficient number of scanners to cope with peak hour crowds exiting in large numbers and in quick succession.\(^{44}\)

74. It has been proposed that myki will make it easier for people to use public transport, because they will not have to worry about what ticket they need to purchase or what zone they are travelling to/from.

Mr MOORE - The introduction of myki here in Victoria, for example, is a very positive thing. It will happen automatically for people; they will not have to think about ticketing. Information will follow as part of that. That is all a positive process that we think should be encouraged.\(^{45}\)

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\(^{43}\) Ibid, 12.


\(^{45}\) Mr Peter Moore, Executive Director, UITP (International Association of Public Transport) *Transcript of Evidence* (SCTS), 5 October 2009, 151.
75. In a media release dated 23 October 2009, the PTUA noted a number of advantages from the myki system, such as better access to the cheapest fare option. Under the Metcard system certain tickets were only available from staffed stations. When operational, myki will also eliminate the need to purchase a separate V/Line ticket, which potentially makes travel on these services easier and more appealing for passengers. Additionally, the move to plastic smartcards could mean tickets are more reliable and last longer.

76. The Committee received evidence that myki will provide better data on a day-to-day basis with respect to passenger movements, to enable more efficient timetabling of train services and co-ordination with other forms of public transport.

Mr BARKER - One thing that will help immeasurably with that is myki when it starts, because you will have exact information on a day-to-day basis about where people get on and where they get off, what modes they use, and so you will be able to tell, within a very small radius, where somebody starts their journey and where they finish it and then where they go to the gym after work or where they go for a swim if they are using public transport. This will be an invaluable resource in terms of planning, not only for your infrastructure but for your rolling stock and also planning for housing development and residential and commercial developments as well, because you will have a much better idea of people’s public transport usage and their travel patterns.  

77. In July 2010, the TTF, who previously appeared before the Committee, published a position paper titled Smartcard Ticketing on Public Transport. In this paper the TTF suggested that smartcard based ticketing systems can eliminate the need for commuters to que for tickets, and reduce boarding times on trams and buses. Following the introduction of the Oyster Card on buses in London, boarding rates have increased from 10 to 40 passengers per minute, which has reduced total trip times. Additionally, as smartcard generally involve cashless transactions, the TTF suggest that the safety of commuters and public transport employees in enhanced because they are carrying and handling less cash.

78. At the time of writing, the Committee notes that there are no public reports relating to the performance of the myki ticketing system. The Committee received evidence suggesting that such information will only become

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46 Mr Rowan Barker, Manager, Media and Communications, Tourism and Transport Forum Transcript of Evidence (SCTS), 22 September 2009, 83.
available once the system is running fully and the Metcard system is completely phased out.\footnote{49}

FINDING 6

The significant delays and costs associated with the implementation of the myki ticketing system could have equated to an opportunity cost to Victoria in other areas.

FINDING 7

Once fully operational and patronised by commuters, myki should provide greater flexibility in fare and travel options which may, in turn, lead to more efficient passenger movements and reduced train congestion.

FINDING 8

The real impact of myki’s performance on train services will not be evident until such time as the Metcard system is discontinued and all commuters are required to use myki, particularly during peak hour periods.

\footnote{49} Mr Jim Betts, Secretary, Department of Transport, \textit{Transcript of Evidence (SCTS)}, 22 July 2010, 209.
Appendix A: Schedule of Public Hearings

Tuesday 21 July 2009

Department of Transport
- Mr Jim Betts, Secretary
- Mr Hector McKenzie, Director of Public Transport
- Mr Tom Sargant, Deputy Director of Public Transport, Safety and Asset Management

Connex Melbourne / Veolia
- Mr Jonathan Metcalfe, Executive Chairman, Connex Melbourne Pty Ltd
- Mr Bruce Hughes, Deputy Chairman, Connex Melbourne Pty Ltd
- Mr Norm Grady, Chief Executive Officer, Mainco Melbourne Pty Ltd
- Ms Catherine Baxter, General Manager, United Group Melbourne Transport Ltd

Tuesday 22 September 2009

Australasian Centre for the Governance and Management of Urban Transport
- Dr John Stone

Tourism and Transport Forum
- Mr Kary Petersen, Manager, Transport
- Mr Rowan Barker, Manager, Media and Communications

Mr Edward Dotson

Eastern Transport Coalition
- Cr Samantha Dunn

Dr Paul Mees, Senior Lecturer in Transport Planning, RMIT

Monday 5 October 2009

Institute of Transport Studies, Monash University
- Prof Graham Currie, Chair in Public Transport

UITP (International Association of Public Transport)
- Mr Peter Moore, Executive Director

Upgrade Upfield Corridor Committee
- Mr Denis Watson

Public Transport Users Association
- Mr Daniel Bowen, President
- Dr Tony Morton, Secretary

Metropolitan Transport Forum
- Ms Suzie Strain, Executive Officer
- Cr. Martin Zakharov, Secretary, MTF and Councillor, City of Maribyrnong
- Mr Paul Hamilton, Manager Transport, City of Casey
Tuesday 6 October 2009

Public Transport Safety Victoria
- Mr Alan Osborne, Director
- Mr Chris McKeown, General Manager Safety Systems

Metlink
- Mr Bernie Carolan, Chief Executive Officer

Siemens
- Mr Paul Bennet, Director, Siemens Rail Services
- Mr Brian Luber, Executive Manager Sales

V/Line
- Mr Rob Barnett, Chief Executive Officer
- Ms Ursula McGinnes, General Manager Stakeholder Relations
- Mr Greg Wilson, Manager, Network Services and Performance

Wednesday 9 December 2009

Mr Ian McCallum, Chief Investigator, Transport and Marine Safety Investigations

Tuesday 2 March 2010

Metro Trains Melbourne
- Mr Andrew Lezala, Chief Executive Officer
- Mr Bob Lindsell, Chief Operating Officer
- Mr Ys Au, General Manager, Asset Management and Engineering
- Mr Robert Tatton-Jones, Operations

Department of Transport
- Hon. Martin Pakula, Minister for Public Transport
- Mr Jim Betts, Secretary
- Mr Hector McKenzie, Director of Public Transport
- Mr Tom Sargant, Deputy Director of Public Transport, Safety and Asset Management

Thursday 22 July 2010

Department of Transport
- Mr Jim Betts, Secretary

Transport Ticketing Authority
- Mr Bernie Carolan, Chief Executive Officer

Monday 23 August 2010

Keane Australia Micropayment Consortium
- Mr Greg Purdy, Chief Executive Officer & Vice President, Keane Australia Micropayment Consortium Pty Ltd
- Mr Amir Durrani, Executive Vice President, Keane Asia Pacific