Brief Personal Submission

To The

Parliamentary Enquiry into VicRoads’ Management of Country Roads

By

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INTRODUCTION
Since graduating as a Civil Engineer in 1978, I have worked continuously in both the public and private sectors and have been engaged as both an employee of Local Government and a consultant to Local Government until my retirement from professional work, almost two years ago.

I have extensive experience in both road and bridge design and construction and have developed a very good knowledge of road and bridge maintenance and a well developed knowledge of how good asset management, through effective expenditure at the right time, can lead to improved road safety outcomes at minimal cost.

My professional knowledge is underwritten by many years of driving and motorcycling experience on roads all over Australia and New Zealand and of course by local observations of what works and what quite obviously does not work with road management.

I now own and manage a beef farming enterprise near Casterton, so road travel is still a big part of my weekly tasks.

During the early 1990's, when VicRoads was recognised as an “Authority” on all matters relating to Roads and Bridges, I attended a VicRoads Seminar in the Latrobe Valley that had a theme of “A Stitch In Time”. The key message from VicRoads at that seminar, which was focussed on good road maintenance practices, was “Do It Once and Do it Right”. i.e. if you undertake and pothole repair or dig out a soft area and perform a patch, then do it properly so that you do not have to return to this same failure zone again. My observations of the condition of Arterial Roads in the South West of Victoria during the past 16 years suggests strongly that the VicRoads wisdom displayed at that seminar almost thirty years ago, has somehow been lost.

Context
The Arterial Roads in the South West of Victoria perform a vital freight movement function for both local and interstate industries. The Green Triangle Region is renowned for its world scale timber production, high quality agricultural and aquaculture production, as well as an ever increasing ecotourism and recreational fishing area.

The natural deep water Port of Portland is of critical significance for the export of harvested timber products, mineral sands, grain and aluminium and is likely to grow with new market opportunities. The Arterial Roads that feed the Port of Portland are a vital link and their condition is pivotal to the efficient movement of all freight, both to and from the Port and to the economic prosperity of Victoria.

Apart from the Arterial Roads that directly feed the Port of Portland, the interstate connection of the Princes Highway, is a vital freight corridor that connects the South East of
South Australia to the Ports of Portland and Geelong as well as the urban centres of along the route to Melbourne. The efficiency of road freight transport is related to the cost of moving freight and therefore is related to the competitiveness of our produce when exported overseas. The criticality of providing good quality transport routes which minimise damage and maintenance costs to haulage companies and contractors cannot be overstated.

The coincidence of thousands of heavy freight vehicles sharing the road network with buses, recreational tourist vehicles, cars and motorcycles, all in the presence of tree lined roads and native animals provides a very potent road safety threat, even when roads are in good condition, but when drivers are forced to weave across the road to avoid road failure zones, then the risks are elevated enormously.

Whilst I believe that drivers are currently doing their best to cope with current road failure throughout the South West Region and are awaiting our political leaders to fund much needed road rebuilding, I also believe that a catastrophe may be just around the corner and this is evidenced by the many truck crashes that are recorded in the region. One can only hope that a tourist coach does not get involved.

Local Observations

The following are my own observations of the Arterial Road Network and the way that it has been managed and maintained during recent years:

1. I worked for a number of years with a chap that was on a road construction gang that constructed much of the Portland Casterton Road, north of Heywood. He told me on a number of occasions that this road was built with a maximum pavement depth of around 200mm of natural gravels, possibly suitable for the low traffic volumes and lighter transports of that time, but in no way capable of carrying regular timber trucks that now use this route every day. Contemporary road design would demand a flexible pavement thickness of around 500mm to carry heavy loads over poor soils, so it is no wonder that roads like this one are constantly failing under the demands being placed on them.

2. Sections of almost every Arterial Road in the South West Region are displaying signs of distress as presented by longitudinal rutting and shoving of pavement material, depressions and sunken areas, broken seals over soft pavements, potholes and temporary patches. I have no doubt that inadequate pavement depth on many of these roads is the prime cause of the road failure that indicates that the roads, or sections of roads, have reached the end of their service life. It is likely that many of the key freight roads were originally constructed in the 1950’s to the 1970’s and with a design service life of around 30 years, it is reasonable to assume that these roads are now at the time when good asset management would see them upgraded to carry contemporary loads for the next 30 years.
3. Potholes, ruts and depressions are sometimes easy to see on an open road or freeway, however when a large hole is on a road through a forest and afternoon or morning shadows from the trees are cast over the road surface on a sunny day, the hazard can be almost impossible to detect until it is too late and hitting it with a vehicle is the only option. This applies even when speeds have been reduced substantially. I recently witnessed a motorcyclist crash on the Princes Highway as his bike hit one of these nasty big holes that was camouflaged by tree shadows in the late afternoon. It was a sickening sight to see how quickly this crash occurred. This poor guy did absolutely nothing wrong except maybe assuming that the road authority had done their job in providing him with a reasonable surface on which to travel. Many local drivers get to know where the road failures are located and will often avoid the problems, but for any motorist or motorcyclist that is unfamiliar with local conditions, it can spell disaster.

4. Failure zones in relatively new sections of road (eg passing lanes near Heathmere < 10 years old) indicate that construction project management and quality control is inadequate and/or construction contract management is poorly conducted. I have seen this type of problem on many new sections of road across the State, so something common is occurring. Newly designed and built roads should last at least 30 years before re-work is required! There needs to be a much greater emphasis on project and contract management to ensure that construction contractors do their job properly and guarantee their work for a reasonable time.

5. The most common problem that I observe is the rapid failure of repairs that are undertaken, indicating that the repairs are not being done properly (Remember - Do It Once, Do It Right!).

I see potholes and soft areas that just have a few shovelfuls of coldmix asphalt thrown into them without first cleaning out loose pavement and compacting new filling material into them. These poor repairs often only last until the first truck comes along.

I see isolated digout type repairs undertaken to remove poor or failed pavement and replace it with new pavement, but often these will only last weeks or months because either (a) a deep subgrade issue has not been addressed; or (b) new pavement has not been thoroughly compacted. Often the finished surface is not matched nicely to the surrounding seal, so that vehicles feel a thump when passing over the patch. In some cases the patches end up almost as rough as the road was prior to the work being undertaken.

6. Many kilometres of the Portland Casterton Road was resurfaced (slurry seal) and/or reconstructed using pavement stabilisation techniques within the past 12 months. It
is saddening to see that (a) many areas where the slurry seal was used to cover wheel ruts and depressions are again displaying failure zones reflecting through the new surface. Deeper pavement or subgrade problems were not addressed by the “bandaid” that was applied to give the road a facelift, so now more repairs are required. A terrible waste of resources.

7. On sections of reconstructed (cement stabilised) road pavement on the same road, a bituminous primerseal was applied using a very small (7mm) aggregate rather than a 10mm aggregate. Invariably, the first hot weather after this treatment sees the bitumen bleeding (since it has not yet evaporated all of its volatiles) and sticking to tyres because the tyres should be travelling on the stones, not the black sticky stuff. The end result is many sections of ripped up seal, rough surface and potholing where water penetrates the seal and general ruination of otherwise reasonable work. Better seal design and use of larger stones for the initial seal should prevent most of this problem. Again Contract Management and Contract Supervision improvements should see an end to this type of problem.

8. I see what appears to be a botched reconstruction project in Heywood at present, with evidence to suggest that the contractor has little idea of what they are doing. I see culverts being placed after road construction has been undertaken, poor quality pavement material being placed and not thoroughly compacted, re-work and seemingly little daily progress on a job that should have been finished long ago. Need I say again that Contract Management and Contract Supervision should be improved?

9. I see vital freight transport and tourist Arterial Roads through forest areas with trees within clear zones, too close to the road to see wildlife and too close to the road to offer some forgiveness to drivers that might: take evasive action to avoid another vehicle or animal; or otherwise lose control of their vehicle.

The End Result
Despite all of the work that occurs every day, rough, dangerous road conditions prevail throughout the South West Region and there is no apparent progress towards a longer term solution.

The wastage of public monies on maintenance re-work and road construction on the arterial road network must be astronomical!

What is required?
To address the failure of roads throughout the South West Region, a massive injection of funds is required to rebuild and strengthen the roads which are no longer “Fit for Purpose” because they have now passed their “Use By” dates. This required injection of funds should be seen as an investment into the future of this region, rather than an impost of cost. Such
an investment will see an improvement in industry productivity and a massive improvement in road safety to go with it. Failure to invest in good quality roads to serve our next generation will represent an abject failure of Government and Road Manager responsibilities as custodians of these public assets.

The continuous “temporary” repair of failure zones is likely to result from maintenance contract terms. An effective maintenance contract should provide incentives for maintenance contractors to “Do It Once and Do it Right”. A longer term view towards progressive road improvement should predominate all maintenance activities. I am not aware of how the existing maintenance contracts are written, but if contractors are paid each time they repair a pothole or other failure, then each pothole will become a “cashcow” and there will be absolutely no incentive for a contractor to permanently fix that problem.

There seems to be a reluctance to hold contractors to account for their failures during construction works. Construction project contracts should include clauses to ensure good quality work that conforms to all required standards. This must then be followed up with sound, forceful contract management that will hold contractors to account for the quality of their work, even if they have to return 10 years down the track to fix it up. Contract money retention for longer periods may also be used effectively, although getting it right for a start is always the better approach.

I long to see a return of VicRoads as a recognised authority of all things relating to roads and bridges.

I see too much handing over of responsibilities to consultants and contractors and believe that we have seen sufficient evidence that the VicRoads organisation has lost control over its asset management function in Country Victoria, likely brought about by inadequate Government budget allocation to perform their required role.

I understand that the demands for infrastructure development in metropolitan Melbourne are massive due to the population growth; however no Government/s can turn their back on an economic powerhouse such as the South West Region of Victoria for very long before the people and the huge wealth of industry will speak.

I urge VicRoads and the Victorian Government to again adopt the mantra of “Do It Once and Do it Right” and do everything possible with contract management and project management to ensure that this mantra becomes a focal point in all future construction and maintenance works.

As a tax payer and a rate payer, I expect my contribution to public funds to be spent wisely. Nothing more and nothing less.