









G-Tags will influence the perpetrators knowing the chances of getting caught have escalated and may dissuade many 'would-be's.'

In Australia, 49 vehicles a week are stolen and processed for scrap metal - one in four cars stolen are never recovered -the \$103 million estimated value of the vehicles never recovered.

There are estimated to be 5 million vehicles on Victorian roads that do not have immobilising technology. (*Source -National Motor Vehicle Theft Reduction Council.*). Most commercial fleets, including government vehicles, do.

In Victoria, 14366, vehicle thefts were reported according to VicPol statistics - in 2014. In 2015 that number increased to 17090, an increase of 19%. The National average of vehicles not recovered is 31% (This figure could be substantially higher when including vehicles recovered damaged beyond repair - burnt out etc.) so extrapolating those figures to Victoria, in excess of 5000 vehicles disappear every year, or nearly 100 every week.

What the statistics do not show is the hardship caused, and the danger posed to the community

## 2. Community safety -

**The G-Tag has the potential of improving community safety dramatically with the additional benefit of making the workplace safer for Police with the bonus of recovering millions currently lost by the Government through unpaid fines and fees.**

- a. **Victims of Domestic violence**-. They can be better protected by tagging perpetrators vehicles in the G-Tag system to warn Police of the perpetrator heading toward the victim. The use of postcodes to quarantine victims will enable Police to intervene when postcode boundaries are crossed by perpetrators breaching Family Violence Orders— alerting Police to reduce the risk to the victim.
- b. **Missing Persons**-. G-Tags can locate vehicles of missing persons before self-harm. Suicidal victims are generally

located after their demise when the family have contacted Police over concerns. Police driving around searching every nook and cranny has historically been demonstrated as ineffective and an utter waste of time.

G-Tags will save lives with the chance of getting professional help to a desperate person.

*For a variety of reasons, people disappear in their cars, from murder victims to abductions to the mentally ill. To be able to locate their car using G-Tag will lead to interventions that will save lives.*

- c. **Rural application**- The application in rural and remote Victoria is very sound; consider locating a tractor on a large remote property or a driver overdue to destinations, particularly in times of natural disaster. This will also reduce the number of unnecessary searches.

*The applications of G-Tag technology can be extended to include watercraft and recreational vehicles.*

- d. **Technology instead of manpower**- . The thousands of man-hours expended by emergency services, particularly Police, can be dramatically reduced in multiple circumstances by the G-Tag technology.

*Policing will become more efficient and effective, reducing pressure on Police resources.*

### **3. Criminal activity -**

Vehicles are involved in the majority of specific crimes and or more generally, in criminal activity. To have the ability to disrupt this activity with a G-Tag will positively impact crime reduction. Making the vehicle potentially a liability in criminal endeavours will have a dramatic and positive effect.

An analogy of the thief raiding a property will have the reduced capacity to remove goods and access the location if the car becomes a liability to the endeavour. You can not carry much on a pushbike.

- a) **Terrorism Investigations** would have the advantage of monitoring vehicles with G-Tag's without intrusion to better understand the risks posed by suspects.

*The use of vehicles as a weapon in Terrorism is commonplace elsewhere in the world. It is likely to re-appear in Australia when travel restrictions are lifted.*

- b) **Criminal Behaviour** -There is a current spate of home invasions where perpetrators physically confront victims in their homes by forced entry to gain access to keys to steal high-end motor vehicles.

*This type of activity (home invasions) is on the rise; there is a substantial risk of serious harm if not a victim's death. The ability to track these vehicles by G-Tag and immobilise them making the theft of a car pointless.*

- c) **Illicit Drugs** - must be transported in vehicles at some stage. Access to G-Tag technology will provide invaluable assistance in managing the importation and trafficking of drugs.
- d) **Hoon drivers** -can be monitored and removed from our roads. Known hoons' vehicles can be tagged in the G-Tag system.

An alarm indicating when tagged vehicles are identified by the system to be congregating can give Police the opportunity to intervene before the dangers escalate.

- e) **Police Pursuits** - This technology virtually eliminates the need for pursuits with the ability to disable vehicles; however, good tracking will mean Police can back off and just watch and monitor the vehicle much more efficiently than a Helicopter.

*The ability to disable a vehicle would save lives and make cars an undesirable asset for the criminally disposed.*

- f) **Emergency vehicles** - can easily and reliably be located and managed when civil emergencies occur. E.g. incident managers could recognise the precise locations of fire appliances during bushfire outbreaks.

A capability to direct them to where they are most needed - or away from impending danger would be a magnificent tool.

- g) **Aerial surveillance** - Currently undertaken by the Police Airwing, there are limitations with availability and response times, and aerial surveillance is very expensive.

*The G-Tag will not replace the need for Aerial Surveillance as a Policing tool, but the G-Tag will greatly enhance the effectiveness of the Air Wing, reducing operating costs.*

- h) **Legal implications** - The data recorded in the G-Tag system has evidentiary value, as does E-Tags and Security Cameras. The potential for the improved data available from G-Tags will provide data of strong evidentiary value for Prosecution and Defence in equal benefit, further improving our judicial system.

- i) **Revenue streams**  
The advantage of this system is it would allow the Government to use this mechanism to charge registrations on a user-pay basis, the most equitable mechanism. Implementing this proposal would eliminate the need to enforce recalcitrant individuals by placing the vehicle in 'limp home mode until the financial liabilities are met. This capacity could also be extended to other civil liabilities related to traffic.

## 4. The G-Tag technology

The G-Tag's technology is currently available that can be hard-wired into the vehicle's electronics, about the size of a cigarette packet and fitted where they cannot be easily removed or interfered with. This technology adds a new layer where the vehicle's electronics can be activated remotely to put the vehicle into a limp home mode (reducing

its top speed to 80KPH) before engaging the engine immobiliser to halt the vehicle. The sequence depends on operational priorities. Suppose the immobilisation is required because of fine non-payment. In that case, these systems can be adjusted so that the vehicle targeted can be immobilised when its speed drops below 10kph or is stationary.

The only limitations will be that certain older vehicles do not have the limp home mode and would be stopped at a safe place or immobilised stationary unless involved in some significant unlawful activity.

The G-Tags would need to be fitted to all new vehicles, including heavy vehicles pre-delivery. The technology exists in most new cars less than ten years old and would require the assistance of manufacturers; all other vehicles could be retrofitted to vehicles as part of the roadworthy process. That Victorian Fleet can be retrofitted out by new Car Dealerships and Licensed Roadworthy Testers. A moratorium would be required to set a reasonable time that all vehicles must comply, like other safety initiatives, including seat belt introduction.

Re-establishing the vehicle's functionality when recovered is a technical issue that has not proven insurmountable. If it can be switched off, it can be switched back on; it is just a matter of protocols.

## **5. The Fiscal impact.**

On the latest fiscal data released in relation to the recovery of fines by Victoria makes the equation for the financial viability of the G-Tag very compelling for any Government. Perversely the electorate could well strongly support this move. The majority of those booked and have paid their fines would favour all perpetrators pay, not just them.

Recently announced, the Government was forced to write off \$740 Million in unpaid fines that had exceeded the five-year recovery deadline over the past two years. It would be not unreasonable to conclude there are literally Billions of dollars in unpaid fines in the five-year queue, distorting the fiscal position of the state.

Conservatively you could add an estimated 15% to that figure for administration and other legal costs expended in attempts at recovery.

The fines written off is revenue that has been counted but never received, and given it is five years since they were issued, the administrative cost may well be far too conservative.

That is an eye-watering figure of over \$850 Million or just under one Billion Dollars for two years.

The quarterly rate of unpaid fines jumped by about 50% between 2018 and 2020 or 25% year on year so that we can anticipate that sort of exponential growth going forward.

To look at this horrendous revenue loss going forward, you can look at it from the quarterly figure's perspective. Quoted as currently running at \$68-76 Million per quarter. Averaging that figure at \$70 Million, you can add another \$280 Million for the 2020 figure, or a quarter of a Billion for the year 2021 not included in the above figures.

It appears from press reports that the Government does not have a plan to reduce this compliance issue, but it will somehow improve when they get their computer fixed. All that will achieve is the write-downs over shorter time frames will have markedly lower headline figures, but the real figures do not alter but continue to grow by 25% per annum.

We could do a lot with that money to make Victoria a safer, healthier, and better-educated place or reduce taxes and Government fees.

At the very least, the G-Tag would recover 80% of the outstanding fines without counting in fees such as registration etc.', with the only limiting factor will be technology implementation.

## **6. Debt recovery**

A G-Tag fitted to a vehicle registered to a person who has failed to comply with penalty requirements can be in the first instance after proper notice, and a grace period, their vehicle can be put into the limp home mode, and if the driver takes no action, the vehicle can be shut down until the owner has arranged with the authority to either contest or enter a payment arrangement to satisfy demands.

Once the authority notifies the G-Tag ops, the vehicle can be immediately reactivated.

Apart from being dramatically cheaper than normal debt recovery, the advantage of this approach is that while the debt is attached to the vehicle, the debt cannot be avoided. The vehicle cannot be sold.

A proviso to allow for a vehicle sale subject to the debt being satisfied could assist hardship cases who do not seek help from the authority. A vehicle traded must have clearance, or otherwise, the debt transfers to the purchaser- the adjustment to satisfy the debt can be part of the transfer process. Adjusting the vehicle's sale price is a commercial matter between the seller and the buyer, who will no doubt adjust the transaction to cover the debt by the seller.

Either way, the Government recovers debts they would otherwise forfeit.

## **7. How will the G-Tag be operated?**

There will be a requirement for substantial IT support for the system. Whether existing IT facilities could cope or a standalone integrated system is required is a matter for the detailed feasibility planning.

The need for a 24/7 control facility with substantial administration support is essential and a key to the initiative.

The control centre does not have to be in the CBD, only in reasonable proximity and integrated with police communications for operational purposes.

The primary staff who would operate the system could only be sworn Police with substantial operational experience as they would have the ability to make spontaneous operational decisions faced with an ongoing incident.

The need to have Police with the *'finger on the button'*, so to speak is, essential as many operational scenarios require instant and correct judgement calls, a skill not possessed in any other professional skill set.

## 8. The cost of a G-Tag System

The CAA resources do not permit a proper scoping of the exercise; however, based on experience, we believe the cost estimates would not be unreasonable.

At least in part, the cost of installing the devices in the Victorian fleet should be covered by users. We estimate this cost at circa \$300. Welfare recipients should have their vehicles fitted out at no or nominal cost to encourage compliance as they are the ones most adversely impacted by losing or having a vehicle damaged without the ability to replace or repair it.

We estimate that the Government of welfare recipients would be circa \$1 Million a one-off cost.

There would also be cost recovery calculated from Transurban as the G-Tag can replace the E-Tag with the benefit that all vehicles will ultimately be covered. Reducing non-compliance and administration cost by the G-Tag intervention strategy.

The major cost will be to establish and operate the G-Tag Authority estimated after establishment, recurrent \$20m P/A.

The issue of access to computer capacity and whether a standalone system is required would be identified in the scoping process.

The other advantage of the G-Tag is the recovery of fees for the registration of vehicles. An unregistered vehicle that continues to be used, as with fines, can be shut down, making it is a valueless asset for the owner that cannot be sold or used.

This will also add further Millions to the income stream, and as that amount does not currently form part of budget revenue estimates, this would be additional income.

## 9. Operations of the G-Tag

The set up for the G-Tag management system is not going to be cheap and recurring costs not unsubstantial. Still, they will be well offset by improved revenue streams from non-compliance and reduced crime, personal injury, loss of life and more effective Policing. In real terms,

we guesstimate that the bottom line to the Government Budget would be in the order of \$200-\$300 Million per annum and untold administrative cost savings.

## 10. Technology

Anybody who owns a smartphone or has a Satellite navigation device, is acutely aware of the power and application of technology.

Currently advertised on the internet for \$35 is a tracking device attached to a vehicle and linked to a smartphone. The technology exists and is small and relatively cheap.

Many businesses with fleets install tracking devices, as does the Government. The difference with a G-Tag is the vehicle can be tracked for other purposes. The G-Tag would not replace the current fleet or privately installed GPS systems but add another layer with additional purposes to what a Fleet manager may require.

With the increasing sophistication of motor vehicles and their reliance on computers to manage their engines, the opportunity exists to intervene in a vehicle's performance. A large part (and increasing) of the Victorian Fleet are vehicles with an inbuilt "Limp Home Mode" in their computer systems designed to protect the engine from further damage should a fault be detected. Many also have internet connectivity.

It is a matter of connecting the dots. If we can identify a vehicle using GPS locating technology by a G-Tag. In that case, we only need to develop a mechanism to access the vehicle's computer via the G-Tag to activate the "Limp Home Mode" or the vehicles' "Immobilisation" function.

The power supply for the G-Tag is secured for the life of the vehicle. The simplest method to communicate with the vehicle electronics is by a SIM card in the device using the mobile network to communicate with the car's computer.

## 11. The Issue of Privacy

In the 1980s, a very vocal minority saw themselves as the keepers of our privacy objecting to the installation of CCTV cameras for a Commonwealth Heads of Government Meeting (CHOGM) held in

Melbourne. They vocalised on the prying eyes. The abuse that would occur should the cameras not be removed immediately the conference was finished- "It's a Police State" was the group's mantra.

Their plaintive cries are now fairly humorous when we look around at the number of cameras that watch us daily. Still, there is no community concern as it has been demonstrated that they serve the greater good, and law-abiding citizens do not care if they are watched. Indeed, governments actively encourage wider use of CCTV in public places, and the take-up of private CCTV systems - including those monitoring public spaces - is impressive.

This initiative has a distinct advantage over CCTV cameras. The Cameras have a deterrent effect and assist with identifying perpetrators, but they cannot stop or prevent the continuation of a crime - the G-Tag can.

For anybody worried about the movement of their vehicle being monitored should realise there are over 5 million vehicles in Victoria, so nobody would have the time, the resources or the interest to monitor every vehicle - it will be enough just monitoring vehicle that are of particular interest- law-abiding citizens hide in the crowd.

## **12. Impact on Judicial processes.**

The implementation of this system will provide the Judiciary with an alternative in the sentencing of offenders, particularly for the less serious traffic infringements and in some cases of criminal activity. Currently, lives are ruined financially and otherwise by fines and driving restrictions that cause offenders to lose employment and the capacity to pay fines.

The G-Tag technology would be able to disable a car during ongoing specific periods. A court may rule that a defendant may lose the use of their vehicle at particular times, for example, 7 pm to 6 am for specified days over a specified period to allow for work, educational or other hardship issues. The enforcement is achieved by immobilising the vehicle for that period.

Unindented double jeopardy can ruin many young people's lives. Correcting bad behaviour by bad outcomes destroys the chance of future compliance. It can lead to desperation, particularly for young

people steering them towards crime and into drugs to escape what they see as a hopeless situation from which they see no escape.

The G-Tag system can be used to manage the use of a vehicle to certain roads and or times to allow Offenders to continue in employment, therefore, enabling them to pay the fines but still having their social mobility curtailed to serve as a punishment.

The increase in penalty recovery would justify offenders retaining employment and avoid forcing people onto welfare and damaging the States productivity.

### **13. System Security**

There will need to be legislation that includes safeguards for privacy and safeguards against tampering with the system, either the physical equipment or any signal emitted.

## **Conclusion**

The G-Tag is a sound and important proposal, but there is a myriad of far more radical ideas that once seemed farfetched that are now accepted as the mainstream norm, world wide web, television and the telephone!

Anybody who has a mobile phone, shops at a supermarket or a volume traders store, has interaction with any political organisation, uses the internet, uses a financial institution, has an interaction with Health or Education systems and takes out Insurance is part of the workforce, or reliant on welfare has more detail of their lives recorded, trolled through and assessed than we care to think about. Still, it is a price we are prepared to pay for convenience and quality of life.

We now accept security cameras as a way of life and the dreaded speed cameras as an acceptable inconvenience that serves the greater good.

It will take leadership and innovative thought to implement this proposal; however, the advantages to the community make it a worthwhile project.

Our Prime Minister calls for Innovation - this is an innovation that will save lives.

## Recommendation

That Government enters into dialogue with the CAA to establish the best way to scope this project.

The CAA would need to engage professionals to put together a well-detailed working brief for scoping work. This would include the physical aspects of the initiative and have detailed financial, Law enforcement and community impact for Government consideration.

A one-year time frame would be the base estimate for substantial analysis and a report on cost and implementation strategies development.

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(For and on behalf of the CAA Inc.)

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