



SUBMISSION BY THE GARDA REPRESENTATIVE ASSOCIATION

TO THE

PUBLIC SECTOR PAY COMMISSION [PSPC]

MODULE ON THE VALUE OF PUBLIC SECTOR PENSIONS

6 March 2017

**SUBMISSION BY THE GARDA REPRESENTATIVE ASSOCIATION
TO:**

**Public Sector Pay Commission [PSPC] module on the value
of Public Sector Pensions**

“Heightened personal risk for 30 years and more; reduced lifespan resulting from occupational stress and rotated shift patterns; no occupational health programme; forced early retirement cutting the lifetime earning potential; limited employment mobility – just some of the core factors militating the value of a Garda pension and Garda pay.

“Who will want to be a Garda in the future?”

SUMMARY

The body of research into occupational stress, health and injury is growing exponentially; and litigation will soon follow as the direct causation of long-term health and welfare issues will recourse to the employer’s duty of care. This is blatantly not happening in An Garda Síochána where employees’ health and wellbeing is only paid lip service. Garda Management does not provide even a system for properly recording the number of assaults on its employees, nor the full impact of injuries at work. Risk assessment is minimal or absent – and there is no occupational health policy or programme. As a practical alternative, the State simply provides a Garda Compensation Scheme for those injuries on duty that may have long-term implications for quality of life - a once-off payment that arbitrarily evaluates any future consequences.

Shiftwork is detrimental to health; giving rise to increased risk to type II diabetes, cardiovascular disease and an elevated risk to breast, bowel and prostate cancer; all impact upon mortality. Health factors do not act in isolation; they interact with occupational stress and the long-term impairment of sleep found with all former shift workers. The chronic effects of fatigue manifest in increased dependence on alcohol, nicotine and other stimulants or depressants. Shiftwork is a core component of policing; but there is a cost to the individual and the organisation. As empirical evidence grows it will undoubtedly influence the legalistic framework that will be considered as part of organisational responsibility.

Importantly for this module of the PSPC; the government has exclusive access to the pension data for nearly 60 years’ of retired gardaí. This must be analysed and published to expose the true longevity for those gardaí who served the State. We have strong indication that a combination of occupational stress, heightened risk and shiftwork patterns have a detrimental effect on the life expectancy for police officers – and the quality of life in both the physical and psychological wellbeing is negatively impacted. Academic research increasingly supports this viewpoint. We do not believe that this is properly accounted for in any quantitative analysis of the monetary value of garda pensions.

The unique role and function of the Garda in Irish society provides a framework for understanding the role of pension entitlement to a group of workers who are effectively made redundant by governing legislation before the national retirement age; and the Garda pension provides a top-up to social welfare and the national state pension entitlements – unless further employment is secured.

INTRODUCTION

A pension is deferred payment for work already done – this is how all pensions are generated. When a Garda now leaves the Garda College for their station they are promised a career in policing that should last at least to age 55; from the start of their training this could be just 20 years if they join at the maximum age of 35 or it could be 37 years if they join at the minimum age of 18. Both are significantly different from those recruited before 1995 – who could join up until their 27th birthday and were forced to retire on their 57th birthday; this upper age limit has been extended to 60 for some 10 years. Those who joined at 20 could see 30 years' service and achieve their full Garda pension. Not so today.

Those joining at 35 years of age will only be able to reach 20 years pensionable service before they must be medically assessed by the Chief Medical Officer at 55 years of age – or at a later date up to age 60 according to the Public Service Superannuation [Miscellaneous Provisions] Act 2004. From then on it is uncertain to whether they will be able to serve until the mandatory retirement age of 60. Those who join at 18 will be required to serve 37 years to the minimum retirement age of 55 – seven years worth of insurance, tax, levies and pension contributions that will not count towards enhancing life after the job. They will pay an increased cost of additional pension contributions.

For those 80% of the Force who retire at Garda rank, the opportunity for the benefits of promotion are outside of their locus of control; this is a hierarchical organisation where only a proportion can progress – and there is limited mobility in a national police force; you can't simply ply your trade in the neighbouring constabulary; and policing skills and capabilities do not readily transfer as similar occupations do not exist. Both the statutory Conroy Commission and the Report of the Ryan Committee Inquiry have confirmed policing as a unique occupation. This unique role is evident when serving; but on retirement the community perception remains – and 'ex-Garda' is the defining characteristic of your very being in the community.

Police officers from around the world accept their lot in a variety of ways but much of this police culture has its similarities. They reluctantly endure the palpable dangers inherent in their work, and this acute awareness impinges upon their mental life until they get the magical '30 years' done. We have all seen the cop shows on television where colleagues try to afford extra protection to those in their final weeks of service – it's how police officers mitigate the perception of risk against the State providing a level of subsistence income after your service. These conditions have eroded; and we are yet to see the full ramifications.

The first tranche of post 1995 enrolments will begin to retire from 2025 onwards; the post 2004 entrants may begin to retire a year sooner in 2024 if they were recruited at the maximum age; the first retirees will only attain half-pension entitlement somewhat equivalent of income support. As the dates loom closer we envisage a growing disquiet as these members consider their future prospects and security.

OCCUPATIONAL HAZARDS

The rise of contract killings to xenophobia with drugs, paedophilia, human trafficking, internet crime, corporate crime, fraud, international criminal networks, it is readily apparent that the gardaí face an escalating challenge in the maintenance of law and order. This challenge is exacerbated by the decline in the relevance of the principle of 'policing by consent', as the shared set of values nurtured by communal forces continues to decline, necessitating the force to rely more on professionalism, adaptability and the commitment of its members.

In the face of significant societal, crime-type, legislative and organisational change, it is not surprising that the evidence should confirm that police work is highly stressful. Occupational psychologists concur that policing is 'emotionally dangerous' and a relatively 'high-risk' job.

Extensive longitudinal research serves to confirm that the pressures of law enforcement puts officers at real risk of high blood pressure, insomnia, dangerous levels of destructive stress hormones, heart problems, post traumatic stress disorder and suicide. The practical impact of the job's demands and responsibilities on stress levels in An Garda Síochána was confirmed at University College Cork [UCC], which found that 32% of gardaí are experiencing 'above-average' levels of stress, whilst one-fifth suffer from 'severe' levels of stress.

Gardaí remain liable to disciplinary action in their personal indebtedness. Our members' predicament is accentuated by the prohibition on their spare time activities to significantly hamper their scope to pursue additional income, sharply contrasting with the types of restrictions applied to other public servants and police forces across Europe; underlining the 'unique' status of the Garda.

A Garda is restricted from the development of a business interest or restricted if a business is carried on by a spouse at any premises within their area of jurisdiction, or by any member of the family at the premises at which the officer resides. This is a significant constraint and another consequential feature of the Garda's 'unique' status. No other public servant is subject to such a constraint upon either the individual or the wider family to reduce personal debt. Gardaí cannot even drive a taxi or minicab to supplement their income.

The Minister for Justice and Equality has recently confirmed that 631 gardaí were injured on duty in 2015. This is massively underreported. Official figures show that 5,417 gardaí were injured on duty since 2006 and there were five on-duty fatalities. But official figures are not collated through an occupational health or injury scheme, but through criminal prosecutions or when the member has to take three or more day's sickness absence as a result of their injuries. Many more injuries are sustained and not reported; such is the culture within the job that members are routinely expected to accept injury and assault as part of the job. This is unacceptable.

In Britain; more than one million days of work have been lost by police forces in England and Wales due to mental health-related illness in the past three years; with some 65% of officers reporting that they have attended work while feeling that they shouldn't have because of their mental wellbeing. More than a quarter attributed sick leave to stress, depression or anxiety. This Police Federation survey illustrated that 80% of respondents experienced feelings of mental health issues; and of those 92% indicated their psychological difficulties had been cause or made worse by work.

Flint House, a police treatment centre, announced on 9 February 2017 that it could no longer offer psychological support for officers “for the foreseeable future” because their current waiting list was “too long”.

A study [Taylor et al 1998, p6] sampled 1,069 members of Garda rank and found that 20% of the sample reported ‘severe’ levels of stress experience, manifested in sleep disturbance and forms of general illness. Many organisational factors may also generate or compound sleep disturbance, the most obvious being rotated shift work. The lack of up-to-date data is indicative of Management fear of full results.

No one should expect to be assaulted or injured as a regular part of their job; yet for members it has remained an unacceptable occupational hazard. Our workplace is every single part of the State – including territorial waters and airspace – where every conceivable danger is possible from high speed to armed robbery, from hypodermic needles through to dangerous animals. We provide a catchall service that is the last line of defence between our people and mortal danger.

We look for protection; legal, physical and psychological but more often than not, our only protection is the uniform we wear and the implied moral authority of the people. When gardai say goodbye to their families and leave for work, no one is sure what lies ahead. All other citizens can go about their business as they so please; but if an off-duty Garda encounters any form of criminal behaviour, as an office holder, they are required to put themselves on-duty and contain the situation. No other profession is held to this; a Garda is always vigilant to this as long as they remain in the jurisdiction.

While it might seem reasonable to assume that policing is inherently stressful because of this exposure to dangerous or unsavoury situations there is growing empirical evidence that suggests organisational issues may be more stressful than operational issues – issues that are interlinked; role ambiguity and conflict. Notwithstanding oversight of management, the judiciary, ombudsman, policing authority and the media; the number of traumatic events that emergency services personnel may experience in a week could possibly exceed that experienced by a member of the general population in a lifetime.

Numerous studies in the USA have shown that police officers had increased rates for heart disease, cancers and had a high rate of suicide. Collins and Gibbs [2003] confirmed that organisational culture and workload were key issues in police stress, and indicated a possible increased susceptibility in female officers. Police officers and paramedics are four times more likely to suffer from stress, depression and anxiety compared to the general population.

Common psychological problems experienced by police officers may not be caused by one single traumatic incident, but the cumulative weight of dealing with many incidents over the course of a career.

In November 2016 the Police Dependents’ Trust in the UK produced a series of findings for police on-duty injury. The report examined the experiences of 460 former police officers that retired or left the service in the past five years – the majority had reached their retirement age or 30 years’ service. One fifth reported that their decision was related to an injury on duty – 47% of these said it was work-related psychological or mental health issue. Those who left or retired because of an injury on duty were more likely to report their primary source of income was a police pension; and were less likely to say that they were living comfortably on their

current income. Only 40% of those who retired at a normal pensionable age were living comfortably; 66% said they worried about having enough money to pay for unexpected expenses.

RISKS

An Garda Síochána produced an Occupational Injury Report in 2014 that stated; “As part of their normal work, gardaí inevitably face significant and serious dangers and sometimes unrealistic public expectations. The nature of policing is that it is not always possible to completely control all risks. The special nature of operational policing may require that certain risks are taken to secure appropriate benefits to the public and the wider society, such as saving life, preventing serious crime and apprehending those responsible for serious crime. However, there is still a requirement for those risks to be minimised as far as is reasonably practicable in the context of operational policing.”

The overall injury rate per 1,000 employees of An Garda Síochána was 39.7 compared with the national injury rate of 3.4 [Health and Safety Authority]. Even without an occupational health or injury scheme to properly report such figures, gardaí are 12 times more likely to be injured from assault, road traffic collisions or slips, trips and falls than other workers. And this is an underestimate. In 2014, from an exposed workforce of some 14,000 only six members reported a psychological shock or trauma while 16 reported a needle stick or stab wound. This does not correlate with the findings of UK studies; but is consistent with the lack of organisational awareness and attention to the mental health and wellbeing of gardaí. To give this some context – a University of Surrey report of November 2016 found that psychological injuries or mental health issues were a factor in over half of the injuries reported.

CONCLUDING REMARKS

In summary, there is no official Occupational Health Programme in An Garda Síochána; and there is little or no collation of data relating to illness and injuries – and as compensation arbitrary sums are dispensed through the Garda Compensation Scheme for the more serious physical injuries that are regarded as being an occupational hazard. This is simply not good enough and is awaiting serious legal challenge for the lack of either effective Occupational Health or Occupational Injuries policies and procedures.

The nearest comparable public sector employees exposed to risk of assault or trauma are prison officers, firefighters and paramedics. It is argued that firefighters arrive to dangerous workplaces in crews and risk management is provided by a chief fire officer; paramedics are not in confrontational situations as much as members of An Garda Síochána; prison officers are deployed mostly within prisons that are to a greater or lesser degree ‘controlled environments’.

Gardaí often work alone and unsupervised in every conceivable environment. There are fewer gardaí to complete more tasks: our numbers have been reduced by one in six and our responsibilities increased. We have become the first call and final refuge for our citizens with nowhere else to turn. We have been required to revolutionise our roster and increase productivity without compensation. Our members are subjected to increasingly violent assault with reduced protection [many are patrolling alone or without accessible backup].

Our conditions of service have been denigrated, particularly the reform of our sickness regulations, is seen to be unfair and discriminatory to a profession where sickness, injury and psychological challenges are occupational hazards.

The Benchmarking Body [2008] failed to address the unique and evolving status of Garda rank, and gardaí have been historically excluded from pay negotiations of the broader public service pay review system. There is also no definitive clarity in the current status of the rights of gardaí for industrial relations following the decision of the Council of Europe.

The European Code of Police Ethics [2001], subsequently adopted by the Council of Europe, also states “staff shall have the right to... be provided with special health and security measures, taking into account the particular character of police work.”

We have repeatedly proposed the solution is a separation of the gardaí through the establishment of an independent pay review body specifically for gardaí. This would appropriately reflect the unique and separate status for those workers who are tasked with State security, personal protection and community commitment.

Numerous agencies have outlined the need for clearly stated and verifiable data on the nature of policing in Ireland. The Garda Representative Association [GRA] has long contended that an optimum numbers survey should be researched and compiled by an independent authority utilising the latest academic theory and methodology. A consultative document should be produced, distributed, discussed and implemented within the lifetime of the next Dáil. A defined policing function and policing plan will determine the numbers of workers required to satisfy the requirements of the public against attainable productivity levels and contingencies for each Garda. The situation is currently untenable. The policing plans are not covered and the policing service has become inconsistent. The first question that needs to be answered is: how many gardaí are needed to fulfil the role and function of An Garda Síochána? Additionally the Association has requested an audit of wellbeing/welfare to provide the necessary psychosocial risk assessment to accompany the physical risks; the reception from Management has been, at best, less than ethusastic.

There is no doubt that our members are more vulnerable to becoming victims of crime too. In the search for a quantifiable solution to such a question, the individual level of risk to which each member is to be exposed will have to be quantified. Until now, it appears that the authorities are prepared to accept that being assaulted or subjected to intimidation is to be regarded as an occupational hazard. This is no longer accepted in the ways of the past. A modern police officer has every right to the benefit of State protections; and as an employer the State has a duty of care for each employee.

The derived level of personal risk that each Garda is assigned must be reflected in remuneration to compensate for any heightened or uncertain risk; public opinion now appears to reflect this. Few employments require the wearing of an anti-stab or an anti-ballistics vest as basic, standard personal safety equipment alongside asp batons and incapacitant sprays.

As civilianisation is becoming more prevalent throughout An Garda Síochána there is a diminishing capacity to gainfully deploy senior members in non-confrontational environments. Current government policy wants all sworn personnel on frontline operational duties. We are cognisant of equality issues; but is it really fair to expect gardaí in their late

fifties, possibly grandfathers or grandmothers, to be wrestling with drunken youths in all-too-common public order situations? Without risk assessment?

ENDS

APPENDICES

1. Quantitative Analysis of Garda Pension Research Data by Frank O'Reilly, IPC Consulting
2. Shiftwork briefing [academic review] provided by Professor Andrew Coogan, NUIM

Garda Pensions Research Data

**Supporting the GRA Submission
to the PSPC**

**The Garda Representative
Association**



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1 Pension Value : Summary of Research

1.1 The Value of Garda Pensions has Declined

The real value of Garda pensions has been in decline since 1995. Scheme changes introduced have restricted benefits.

The key restrictions introduced were as follows: -

- Prior to 1995, Garda pensions were based on final salary with 50% pension and lump sum of 1.5 times salary available after 50 years of age, provided one had 30 years' service.
- For post-1995 entrants, the Garda pension is now deemed to include a social welfare element (€12,434 / Year). This portion of the Garda pension is removed should the retired Garda take up further employment.
- For post-2004 entrants, the minimum retirement age increased from 50 to 55 years of age.
- In 2013 a new career average pension scheme was introduced. This effectively replaced a defined benefit scheme with a defined contribution one.¹
- Pension levies have also reduced the value of pensions in retirement.
- The new career average notional funds are inflated with reference to CPI (consumer price index) each year. This is 1.5% to 2% below the long-term growth rate required to deliver targeted benefits. The new scheme value is hence falling further and further behind each year. (see 1.6 below).

1.2 Why the Value of Garda Rank Pensions tend to be Overstated

Valuations of Garda pensions tend to neglect the following factors which have the effect of reducing the value of the Garda pension: -

- Garda who attested post 2004 must retire at age 55 unless the Commissioner evaluates them as being fully capable of continuing to serve. This assessment will occur on an annual basis.
A garda retiring at 55 must survive on a Garda pension until retirement age or achieve alternative employment. Alternative employment is considered difficult to procure at this age.
- There is a cost attached to being forced to retire early. A Garda forced to retire at 55, 56, 57, 58, 59 or 60 must often survive on a pension until state retirement age which is currently 66 and is soon to be 67 and then 68. Being too old to start a new career and often still needing to fund mortgage and family education, the requirement to retire at these early ages is a cost to the Garda.
The retiring Garda is deprived of the opportunity to earn a full income up to old age pension age which is currently 66. This is an opportunity cost to the retiring Garda. Benchmarking 2007 recognised this fact.
The GRA contend that this opportunity cost should be deducted from the Garda Pensions for valuation purposes. In chapter 4 we show the impact of this deduction.

¹ Even though no actual pension fund is maintained, the rules applied to the career average scheme relate closely to the defined benefit approach.

- A Garda attested post-1995 pays full rate PRSI and receives a pension that includes a €12,434 social welfare payment. This payment is typically included in valuations of Garda pensions. However, if the Garda takes up alternative employment, this element of the Garda pension will be withdrawn. It is not guaranteed. **Hence it is not a pension.**
- An unemployed person who pays class A PRSI will receive jobseekers benefit and subsequently jobseekers allowance up to normal old age pension age which is currently 66. For a single person, these payments are €193 / week. This equates to €10,071 / year (€193 x 52.18).
The GRA contend that this figure should be deducted from Garda Pensions for valuation purposes. In chapter 4 we show the impact of this deduction.
- A person who has paid full PRSI during their working life receives a state contributory old age pension from age 66 onwards. For a single person, this amounts to €238.30 per week or €12,434 per year (€238.30 x 52.18).
The GRA contend that the value of Garda pensions is overstated by €12,434 per year from age 66 onwards. In chapter 4 we show the impact of this deduction.
- A post-1995 Garda in retirement will lose the social welfare element of his pension if he/she takes up a job in retirement. This is a significant disincentive, particularly to part-time working in retirement.
- In the private sector, the state pension is considered to be quite separate from a funded pension. For defined contribution pensions, which make up the majority of private sector pensions, a pension annuity will be stated net of the state pension.
- Garda must continue making pension and lump sum contributions after reaching 30 years' service. Gardaí receive no benefit for these extra contributions.

1.3 Average Value of Garda Pensions : Benchmarking Report 2007

The Benchmarking Body commissioned Life Strategies Ltd (now called Milliman) to value public sector pensions in mid-2007. The concluded that ..

Employer Effective Contribution Rate for Gardaí	
Pre-2004 Gardaí	Post 2004 Gardaí ²
28.7%	32.9%

The Benchmarking Body concluded that..

"In the light of the outcome of the study, and having regard to the actuarial advice received, the Body decided that the higher cost of public service pensions should be assessed as 12% of salary for the grades covered by the benchmarking process."

See chapter 2 for further detail.

² "The post 2004 position for members of the Garda Síochána shows a higher cost because the age at entry is higher for those who entered in this period". Source : Benchmarking Report 7.18 (V).

1.4 Average Value of Garda Pensions : C&AG 2009

In 2009 the C&AG produced a special report on public sector pensions. They valued the pensions of all Garda members with pre-1995, post-1995 and post-2004 pension terms as follows: -

Value of Garda Pensions		
	Gross Pension Cost as a Percentage of Pensionable Remuneration	Net Pension Cost as a Percentage of Pensionable Remuneration
Garda Average	27.9%	15.9%

Their Net cost estimate took account of staff contributions, including PRD. See chapter 3 for further detail.

1.5 C&AG Valuation of Post 2004 Pension

The C&AG also calculated the contribution rates for male Gardaí joining from 1st April 2004.

Contribution Rates as a Percentage of Pensionable Remuneration Garda Joined Post 1 st April 2004			
Total Cost	PRD	Employee Contribution	Net Cost
29.6%	8.5%	5.1%	16%

The Garda contribution of 5.1% is stated as the total Garda contributions over the working life of the Garda as a percentage of total pensionable remuneration. See chapter 3 for further detail.

1.6 GRA Actuarial Valuation of pre-2013 Garda Pensions

In chapter 4 we show how the Benchmarking Body and the C&AG valuations have tended to overstate the valuation of Garda pensions. We show how Gardaí who pay full rate PRSI are effectively funding the equivalent of the state contributory pension through their Class A PRSI contributions. We show how Gardaí retiring before 66 would, in the absence of a pension, be entitled to jobseekers benefit through their PRSI contributions and subsequently to jobseekers' allowance.

Garda pension contributions are in reality, only funding the balance of Garda pensions.

In section 4.4 we show that Garda pensions (retiring at 55) with the social welfare element deducted, cost 35% less than normally quoted. Applying this correction to the C&AG 2009 valuation, we reduce the total cost of Garda pensions to 19.2% (29.6% x 65%) of pensionable remuneration. When Garda PRD and employee contributions³ are deducted, **the net cost to the exchequer is 5.6% of pensionable salary. This is a relatively low rate of employer contribution**

³ As calculated by the C&AG in 2009.

even in comparison with scheme contributions made by private sector employers.

In section 2.3 we quote the **Benchmarking Report** where it **recognises the opportunity cost associated with mandatory early retirement** and notes the argument for taking the associated loss of earnings into account.

Taking this into account would further significantly reduce the valuation of Garda pensions.

The Benchmarking Body calculated the loss of earnings associated with early retirement as equivalent to 5.7% of annual earnings for pre-2004 Gardaí and 10.6% of annual earnings for post-2004 Gardaí.

1.7 Garda Life Expectancy in Retirement is Below Average

All valuations tend to assume that Garda life expectancy is similar to that of the general population. Garda experience is that retired Gardaí do not, on average achieve normal life expectancy. Our submission refers to the factors impacting on life expectancy.

If we were to apply a percentage reduction in Garda life expectancy, the adjusted exchequer contribution rates calculated in 1.6 above would further reduce.

1.8 Garda post-2012 Career Average Pension

Gardaí who attested post-2012 join the new career average pension scheme.

One of the key assumptions in pension calculations is the rate of real salary increase. This is the rate by which salaries grow faster than inflation.

The following table reveals that actuaries in their pension funding calculations, generally provide for a real rate of salary increase of 1.5% to 2%. The real rate of salary increase is the extent to which salaries grow faster than the rate of price inflation.

Summary of Real Salary Rate of Increase Data				
	C&AG 2009	Benchmarking Report 2007	Commission on Public Sector Pensions 2000	IPSAS International Public Sector Accounting Standard 25
Inflation	1.65%	2.25%		
General Salary Increase	3.40%	4.25%		
General Salary Inflation in Excess of Price Inflation	1.75%	2.00%	1.5%	1.75%

Source : C&AG Pensions Report 2009.

The Career Average Pension Scheme is based on growing the fund (the referral amounts) by the consumer price index only. This is contrary to normal actuarial practice and will lead to the fund not meeting final salary expectations at retirement (for both pension and lump sum).

The UK Career Average Police Pension Scheme

The UK government has its own actuarial department called the Government Actuary's Department. They regularly carry out an actuarial valuation of state pension schemes. In December 2014, they reported on their March 2014 valuation of the police pension schemes. Their report included details of a police career average scheme introduced in 2015. The notional fund accumulated from annual contributions is inflated at **CPI + 1.25%** each year⁴.

While this growth rate is insufficient in our opinion to adequately fund the police pensions, it does reveal that the UK government realises the need to grow pension funds by more than CPI each year.

The Irish career average scheme is significantly underfunding future Garda pensions.

Career Average Garda Pension Scheme & Promotion

For the approximately 20% of Gardaí who are promoted up the ranks, the career average pension scheme will deliver a pension that does not relate to the higher salaries associated with higher ranks. In many cases, senior rank retirees will receive pensions close to those of Garda rank retirees.

While the career average pension scheme tries to deliver a pension which somewhat relates to final salary for Garda rank retirees, there is no attempt to do so for those who are promoted. This is particularly so for those who will be promoted after many years of service at Garda rank.

This deficiency in the design of the career average scheme will take many years to manifest itself.

Registration with the Pensions Authority

The Garda Síochána Superannuation scheme is registered with the Irish Pensions Authority (registration number PB43833). This places certain requirements on the trustees to comply with Pension Authority requirements including reporting requirements.

The new Career Average Scheme is **not registered** with the Pensions Authority. The Pension Authority appear to have no role in overseeing the adequacy of career average scheme notional funding provisions.

⁴ Police Pension Schemes (England & Wales), Actuarial Valuation as on 31 March 2012, Government Actuary's Department, Page 28.

2 Benchmarking '07 Valuation of Pension

2.1 Executive Summary : Value of Public Sector Pensions

The following is a direct quote from the Executive Summary of the "Report of the Public Service Benchmarking Body" dated "21st December 2007"

"The Body reached the following main conclusions:

- the pensions of the public service groups covered by the benchmarking exercise are significantly more valuable than those of private sector groups;
- having regard to actuarial advice received the Body decided that the superior value of public service pensions should be quantified as 12% of salary and that a discount of this amount should be applied in comparing remuneration levels in the public service and the private sector".

They valued the generality of public sector pensions as being 12% more valuable than those in the private sector.

"In the light of the outcome of the study, and having regard to the actuarial advice received, the Body decided that the higher cost of public service pensions should be assessed as 12% of salary for the grades covered by the benchmarking process."

2.2 Benchmarking Body Commissioned Actuarial Study

The Benchmarking Body decided to conduct a formal study of the value of public sector pensions. After a competitive tendering process, they commissioned Life Strategies Limited to carry out this study. Their report is contained in appendix 8 of the 2007 Benchmarking report and is dated June 2007. They reported on "the respective values of Public Service and Private Sector pension benefits."

In section 2.2.5 of their report they focused on Gardaí and noted as follows: -

"An explicit pension contribution of 1.75% applied to members of the Garda Síochána appointed prior to 6th April 1995. Salary scales were updated accordingly in 1995. These new scales were equivalent to the corresponding salary scales appropriate to pre-April 1995 members minus 1.75% plus 1/19th of the resulting sum.

Members of the Garda Síochána may retire on or after age 50 (55 for gardaí appointed on or after 1st April 2004) if they have 30 years' service. Service in excess of 20 years is doubled, thus maximum pension is payable after 30 years' service.

The maximum retirement age is 60 for all ranks except in the case of the Commissioner where it is 65. Pensionable allowances for the Gardaí include rent allowance and unsocial hours' allowance."

Life Strategies Ltd took an average across the Garda ranks and detailed their assumptions about salary levels, ages, treatment of special benefits etc as follows (4.3.4 on page 214): -

"4.3.4 Garda

Age at entry = 21 (pre-2004 cohort); 23 (post 2004 cohort)

Age at retirement = 56 (pre-2004 cohort); 56 (post 2004 cohort)

Salary plus pensionable allowances at entry = €40,000

Salary plus pensionable allowances at retirement (2007 value) = €65,000
 Notional Added Years = 0

The above assumptions are based on data that was provided by the Benchmarking Body to Life Strategies, with the following exceptions:

- The average retirement age for the post 2004 cohort is not yet known so we have assumed the same age as the pre-2004 cohort (since this is greater than the post 2004 minimum of 55).
- The starting salary is taken as the entry salary for the Garda rank plus average allowances.
- The retirement salary is taken as the maximum salary for each rank weighted by the number retiring at that rank plus average allowances.

Note that the data provided for currently serving Gardaí only contains Gardaí who joined prior to June 2002. Therefore, the age at entry used for the pre-2004 cohort (21) is the median entry age for Gardaí joining before 2002. The age at entry used for the post 2004 cohort (23) is the median entry age for Gardaí joining in 2000 – 2002. This reflects a slight increase in the entry age of Gardaí from 20 pre-1990 to 23 in 2002.”

2.3 Value of Garda Pensions

On pages 2016 and 218, Life St stated that: -

“The figure that we are presenting is **the value of the pension to the employee, as represented by the notional employer contribution**. The employer effective contribution rate is the proportion of salary that the employer would have to contribute for each year of service in order to provide the benefit accrued at retirement.

This value to the employee is the pre-tax value. It will be the same for private sector and Public Service employees.”

On page 2018 the concluded as follows: -

5.4 Garda

	Pre 2004 cohort	Post 2004 cohort
Age at entry	21	23
Retirement Age	56	56
Salary plus allowances at entry	€40,000	€40,000
Salary plus allowances at retirement	€65,000	€65,000
Actual years service	35	33
Credited years service	30	30
Pension	€21,579	€21,579
Lump Sum	€97,500	€97,500
Cost as % of earnings p.a.	33.8%	38.0%
Employer effective contribution rate p.a.	28.7%	32.9%

“**The employer effective contribution rate for Gardaí is therefore 28.7% for the pre-2004 cohort and 32.9% for the post 2004 cohort.** The increase in cost for post 2004 Gardaí reflects the increase in entry age, which reduces actual service but without any reduction in pension entitlement since actual service still exceeds 30 years. If the age at entry post 2004 had remained at 21, then the effective contribution rate would have been 30.0%. The remaining increase is due to the later expected retirement year and the increased expected life expectancy for those retiring in that year.

Note that the increase in the minimum retirement age from 50 to 55 has not affected the post 2004 cost. This is because the average retirement age for the pre-2004 cohort is greater than 55 anyway.²⁶

The main reason why the cost of pension benefits for Gardaí is higher than for other Public Service employees examined is that Gardaí receive full pension after 30 years' service. This is as a result of the public policy decision to maintain a younger workforce suited to the rigours of policing. The quid pro quo for the additional pension benefits is that Gardaí are required to retire at a younger age than other Public Servants and therefore can suffer a loss of earnings.

If this **loss of earnings** were to be quantified it could be taken as representing the excess of earnings prior to retirement over the pension received. The loss of earnings depends on the "normal retirement age" for that cohort. We have taken this to be 60 for the pre-2004 cohort and 65 for the post 2004 cohort. This gives the following calculations for loss of earnings:

Pre-2004: $(60-57) \times (65,000 - 21,579) = 130,263$

Post 2004: $(65-60) \times (65,000 - 21,579) = 217,105$

These are equivalent to contribution rates of 5.7% and 10.6% of earnings respectively. If full allowance were made for this factor the contribution rate would reduce accordingly. However, account should be taken of the fact that the employees are free to earn income from other employments after they are required to retire from the Public Service."

3 C&AG 2009 Valuation of Garda Pension

3.1 C&AG Valuation of Garda Pensions 2009

The Department of Finance C&AG produced a special report on Public Sector Pensions in August 2009.

On page 28, they reported as follows: -

“Annual Pension Cost of Public Servants

The annual pension cost represents the notional contribution which would be required to fund the full pension cost of one year's additional service by all currently serving staff in the public service. The estimate aggregates members with pre-1995, post 1995 and post 2004 pension terms.

Figure 2.9 shows the gross estimate and the net estimate for each sector after taking account of staff contributions, including PRD.

Figure 2.9 Annual Pension Cost of Public Servants^a

Sector	Gross Pension Cost as a	Net Pension Cost as a
	Percentage of Pensionable Remuneration	Percentage of Pensionable Remuneration
	%	%
Civil Service	22.3	13.0
Health	16.1	4.3
Gardai	27.9	15.9
Prison Officers	29.6	19.8
Defence Forces	28.2	19.5
Teachers ^b	22.4	9.6
VECs and ITs	19.9	7.2
Universities	19.3	7.8
State Sponsored Bodies	21.2	10.4
Constitutional, Ministerial and Judicial Office-Holders	70.0	61.1
Weighted Average Cost	20.1	8.6

On page 29, the C&AG state that “The gross pension cost of one years’ service for a public servant can be funded from two Sources: -

- the employee meets a proportion of the cost through contributions and pension related deductions
- the State meets the balance.

Figure 2.9 also shows the net cost to the State after taking account of employee contributions and PRD in each category.

3.2 C&AG Valuation of Post 2004 Pension

The C&AG also calculated the new entrant contribution rates for male staff joining from 1st April 2004.

Contribution Rates as a Percentage of Pensionable Remuneration Garda Joined Post 1 st April 2004			
Total Cost	PRD	Employee Contribution	Net Cost
29.6%	8.5%	5.1%	16%

The Garda contribution of 5.1% is the total Garda contributions over the working life of the Garda as a percentage of total pensionable remuneration.

C&AG assumed the following in this calculation: -

- Age at entry 23
- Retirement age 55
- Pensionable remuneration at entry €45,000
This is average remuneration for new entrants including allowances.
- Pensionable remuneration at retirement €68,000
Expected remuneration on retirement including allowances.
- Added years 0

The Pension Related Deduction (PRD) is a deduction on all income and is treated as a pension deduction. The C&AG calculations used the initial PRD rates i.e.

- 3% of first €15,000
- 6% of next €5,000
- 10% of amount above €20,000.

4 Actuarial Valuation of Garda Pensions

4.1 Assumptions

In our calculations, we have assumed the following: -

- Pension Annuity Rate = 2%
- Escalation / Inflation Rate = 1.5%
- Typical Final Pensionable Pay = €60,000 / Year at Garda rank.
- The vast majority of Gardaí at Garda rank retire on full pension.

We have requested guidance from the PSPC regarding the appropriate pension annuity and escalation rates.

In the meantime, we have taken our assumptions on pension annuity and inflation rates from those quoted by The Pensions Authority as the basis for their on-line pension calculator in early February 2017.

Pension annuity and inflation rates are key variables. Changes in these rates dramatically affect actuarial calculations. Some commercial annuity rates quoted in February 2017 were extremely low. Arguably, the state can take a more internal view, substituting for long term borrowing for example.

Our conclusions are in any case, proportion based and are hence less affected by the specific annuity and inflation rates selected.

4.2 Gardaí pay full PRSI

Gardaí who joined post-1995 pay full rate class A PRSI throughout their working life.

For all employees in the private sector, paying class A PRSI entitles citizens to jobseekers benefit if unemployed (at €193 / week single person + dependents allowances) and a contributory old age pension of €238.30 / week.

The annual value of these benefits are as follows: -

- Jobseekers Benefit/Allowance = €193 x 52.18 = €10,071 / year.
- Contributory Old Age Pension = €238.30 x 52.18 = €12,434 / year.

These payments are funded by PRSI contributions.

Private sector employments sometimes also operate a separate pension scheme.

In most cases, these are defined benefit schemes which on maturity fund an additional pension to top up the contributory old age pension.

GRA contend that on retirement before age 66, PRSI effectively funds a payment of €193 / week and then €238.30 per week from age 66 to death. Garda pension contributions are only required to fund the balance of the Garda "pension".

Pre-1995 Gardaí

Because Gardaí who joined pre-1995 pay lower-rate PRSI, their salary scale is reduced to leave their salary net of PRSI the same as for Gardaí who pay full-rate PRSI. The salary scale for Gardaí who joined post-1995 was increased to leave their salary net of PRSI the same as for pre-1995 Gardaí.

This arguably implies that pre-1995 Gardaí effectively pay full rate PRSI. We hence contend that our argument in relation to the valuation of post-1995 Garda pensions also applies to this group.

4.3 Post-1995 Gardaí retiring on Full Pension at Age 50

Based on the assumptions in 4.1 above, a typical post-1995 Garda with 30 years' service will retire on a full pension of €30,000 per year, rising each year in line with pay increases⁵.

We calculate the Present Value of this pension net of PRSI related benefits as follows.

Calculation of Value of Garda Pension Net of PRSI Benefits Post-95 Garda Retiring at Age 50		
	Amount	Present Value €000's
Total Garda Lump Sum & Pension	€30,000 / Year	1,201
Less :		
Jobseekers Benefit	€193 / Week	158
Contributory Old Age Pension	€238.30 / Week	253
Total PRSI Related Deductions		411
Net Garda Pension		790

Deducting these PRSI benefits reduces the present value of the Garda pension by 34%. The net Garda pension is on average under €20,000 per year (at today's money values i.e. €30,000 x 66%).

The above calculation ignores the fact that a Garda who must retire at age 60 at the latest, will then find it very difficult, if not impossible to find alternative employment. The retired Garda is arguably at the loss of the opportunity to earn a full salary for the years from age 60 to the old age pension age of 66. This is an opportunity cost that the Garda incurs. In the table below we deduct this opportunity cost to calculate the net value of a typical Garda pension.

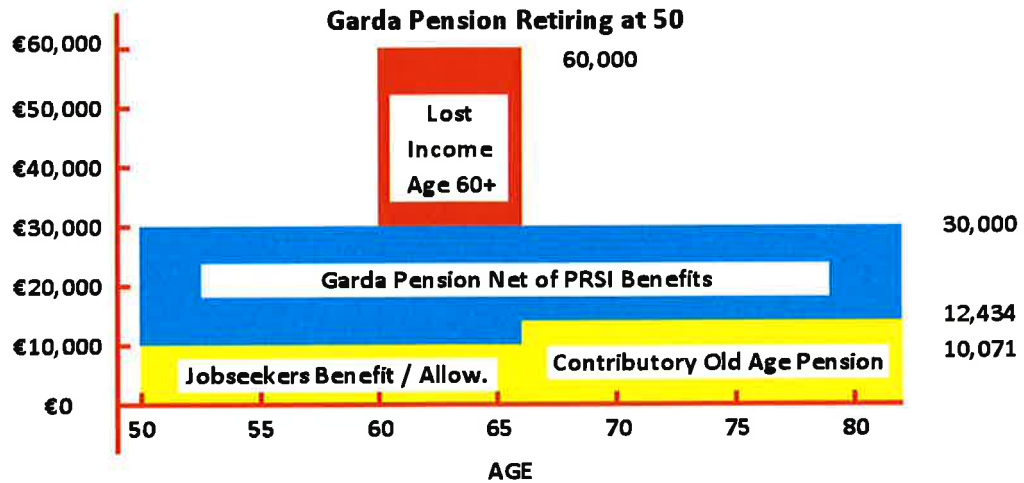
Calculation of Value of Garda Pension Net of PRSI Benefits & Earning Opportunity Costs of Lost Income Age 60 to 66 Post-95 Garda Retiring at Age 50		
	Amount	Present Value €000's
Total Garda Lump Sum & Pension	€30,000 / Year	1,201
Less :		
Jobseekers Benefit	€193 / Week	158
Contributory Old Age Pension	€238.30 / Week	253
Opportunity Cost of Lost Income from age 60 to 66	€30,000 / Year	470
Total Deductions		881
Net Garda Pension		320

This correction reduces the real value of the Garda pension by 73%. The net present value of €320k equates to a pension of approximately €8,000 per year from age 50 (i.e. €30,000 x 27%).

The **Benchmarking Report (2007)** discusses this opportunity cost and notes the argument for taking this loss of earnings into account (see section 2.3 above).

⁵ For simplicity of calculation, we have assumed wages will rise in the future in line with CPI.

The following graph illustrates the pension elements identified above.



4.4 Post-2004 Gardaí retiring on Full Pension at Age 55

Based on the assumptions in 4.1 above, a typical post-2004 Garda with 30 years' service will retire at age 55 on a full pension of €30,000 per year, rising each year in line with pay increases⁶.

We calculate the Present Value of this pension net of PRSI related benefits as follows.

Calculation of Value of Garda Pension Net of PRSI Benefits Post-2004 Garda Retiring at Age 55		
	Amount	Present Value €000's
Total Garda Lump Sum & Pension	€30,000 / Year	1,072
Less :		
Jobseekers Benefit	€193 / Week	111
Contributory Old Age Pension	€238.30 / Week	260
Total PRSI Related Deductions		371
Net Garda Pension		701

Deducting these PRSI benefits reduces the present value of the Garda pension by 35%. The net Garda pension is on approximately €19,600 per year (at today's money values i.e. €30,000 x 65%).

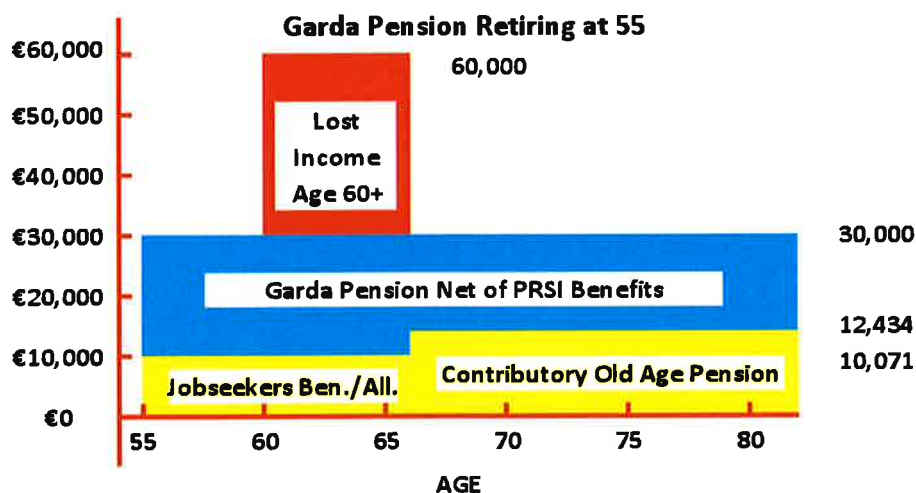
The above calculation ignores the fact that a Garda who must retire at age 60 at the latest, will then find it very difficult, if not impossible to find alternative employment. The retired Garda is arguably at the loss of the opportunity to earn a full salary for the years from age 60 to the old age pension age of 66. This is an opportunity cost that the Garda incurs. In the table below we deduct this opportunity cost to calculate the net value of a typical post-2004 Garda pension.

⁶ For simplicity of calculation, we have assumed wages will rise in the future in line with CPI.

Calculation of Value of Garda Pension Net of PRSI Benefits & Earning Opportunity Costs of Lost Income from Age 60 to 66 Post-95 Garda Retiring at Age 55		
	Amount	Present Value €000's
Total Garda Lump Sum & Pension	€30,000 / Year	1,072
Less :		
Jobseekers Benefit	€193 / Week	111
Contributory Old Age Pension	€238.30 / Week	260
Opportunity Cost of Lost Income from Age 60 to 66	€30,000 / Year	331
Total Deductions		702
Net Garda Pension		370

This correction reduces the real value of the Garda pension by 66%. The net present value of €370k equates to a pension of approximately €10,400 per year from age 55.

The following graph illustrates the pension elements identified above.



4.5 Garda retiring on Full Pension at Age 60

This example focuses on a Garda who works on to age 60 and then retires with 30 years' service on a full pension of €30,000 per year, rising each year in line with pay increases⁷.

We calculate the Present Value of this pension net of PRSI related benefits as follows.

Calculation of Value of Garda Pension Net of PRSI Benefits Garda Retiring at Age 60		
	Amount	Present Value €000's
Total Garda Lump Sum & Pension	€30,000 / Year	941
Less :		

⁷ For simplicity of calculation, we have assumed wages will rise in the future in line with CPI.

Jobseekers Benefit	€193 / Week	64
Contributory Old Age Pension	€238.30 / Week	267
Total PRSI Related Deductions		331
Net Garda Pension		610

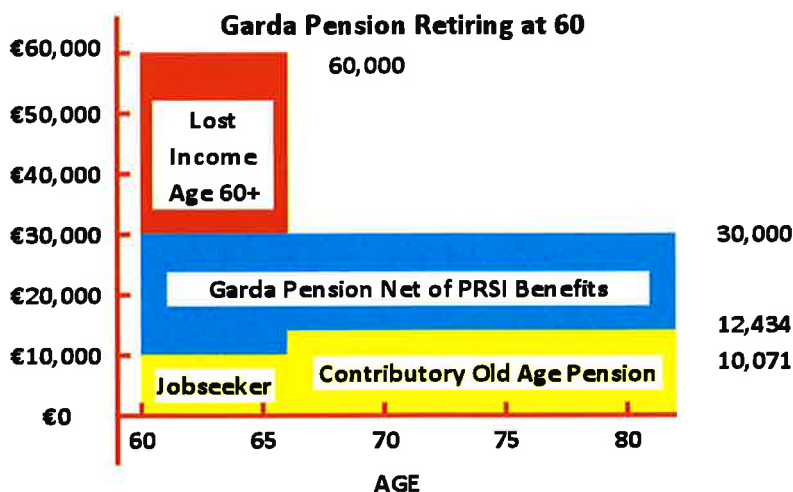
Deducting these PRSI benefits reduces the present value of the Garda pension by 35%. The net Garda pension is approximately €19,400 per year (at today's money values).

The above calculation ignores the fact that a Garda who must retire at age 60 at the latest, will then find it very difficult, if not impossible to find alternative employment. The retired Garda is arguably at the loss of the opportunity to earn a full salary for the years from age 60 to the old age pension age of 66. This is an opportunity cost that the Garda incurs. In the table below we deduct this opportunity cost to calculate the net value of this Garda pension.

Calculation of Value of Garda Pension Net of PRSI Benefits & Earning Opportunity Costs age 60 to 66 Garda Retiring at Age 60		
	Amount	Present Value €000's
Total Garda Lump Sum & Pension	€30,000 / Year	941
Less :		
Jobseekers Benefit	€193 / Week	64
Contributory Old Age Pension	€238.30 / Week	267
Opportunity Cost of Lost Income from Age 60 to 66	€30,000 / Year	189
Total Deductions		520
Net Garda Pension		421

This correction reduces the real value of the Garda pension by 55%. The net present value of €421k equates to a pension of approximately €13,500 per year from age 60 (i.e. €30,000 x 45%).

The following graph illustrates the pension elements identified above.



end

APPENDIX 2

Shift Work and Disease

Shift work, involving night work, has been associated with an increase in risk for a number of common chronic diseases. By and large, there appears to be a dose-response relationship; that is, the more years worked on shift, the greater the risk.

A recent review of thirty four studies reports that shift work is associated with a 23% increase in risk for cardiovascular disease, with the increase in risk rising to 41% in night workers (Vyas et al, *British Medical Journal*, 2012).

For Type II Diabetes, a recent review of twelve studies indicates that shift work was associated with an increase of 37% in men, and of 9% in women. Risk for all workers on rotating shift schedules was elevated by 42%, indicating more risk associated with rotating versus other types of shift schedules (Gan et al, *Occupational and Environmental Medicine*, 2015).

The International Agency for Cancer Research, a World Health Organisation body, classified shift work involving circadian disruption as a type IIa (probable) carcinogen in 2007. A recent review of sixteen studies indicates that night work is associated with increased risk of breast cancer of 9% in those working more than 20 years on patterns involving night work, and that the death rate from breast cancer in the same cohort was 9% higher than day workers (Lin et al, *Sleep Medicine*, 2015). These findings should be considered in the light of the common nature of breast cancer; the overall life-time risk is estimated at 12% (National Cancer Institute, USA), and as such a modest increase in relative risk will result in significant number of new cases.

A review of eight studies has indicated an increased risk of prostate cancer in shift workers of 24% (Rao et al, *OncoTargets and Therapeutics*, 2015).

A recent review of fifteen studies examining the link between shift work and women's reproductive health indicated that shift work is associated with a 15% risk of abnormal menstrual cycles and a 41% increase in risk for miscarriage (Stocker et al, *Obstetrics and Gynaecology*, 2014).

A recent study of 277,168 workers indicates that shift work is associated with an increase in depressive symptoms and neuroticism (Wyse et al, *Annals of Medicine*, 2017).

Approximately 30% of shift workers suffer from Shift Work Sleep Disorder, a recognised sleep disorder characterised by insomnia and/or excessive day time sleepiness that co-occurs with shift work (DiMilla et al, *Public Library of Science*, 2013).

Shift Work and Longevity

There is some evidence that shift work is associated with shortened life expectancy. In a study of 75,000 American nurses, shift work was associated with an 11% increase in all-cause mortality for those working more than 15 years on rotating shifts (Gu et al, American Journal of Preventative Medicine, 2015). A 25% increase in all-cause mortality is reported by Lin et al (Sleep Medicine, 2015).

In studies of Police, officers in Buffalo, New York, were reported to have a 21 year decrease in life expectancy compared to the general population (Violanti et al, International Journal of Emergency Mental Health, 2013). This appears to be a very striking findings, but may be influenced by cultural factors and the exact statistical treatment of the data.

Shift Work and Quality of Life

In police, shift work involving night work has been associated with greater occupational stress (Ma et al, Safety Health and Work, 2015).

Night work was also associated with greater risk of work-place injury (Violanti et al, American Journal of Industrial Medicine, 2012).

In police, shift work is associated with increased rates of sick leave; night shifts are associated with twice as many sick leave days as the day shift (Fekedulegn et al, Chronobiology International, 2013).

In general, numerous studies indicate that night shift work is associated with decreases in quality of life and life satisfaction (Kim et al, Health and Quality of Life Outcomes, 2016). Shift work is also associated with large increases of risk of motor vehicle accident following night shifts, and this is believed to be a major contributor to enhanced stress and decreased quality of life for shift workers (Lee et al, Proceedings of the National Academy of Science, 2016).

Sleep Disorders in Police Officers

For emergency service personnel, sleep disturbance appears to be a major contributor to high levels of stress (Wolkow et al, International Journal of Occupational Medicine and Environmental Health, 2015). A number of studies have indicated that there is a high prevalence of sleep disorders in police officers. Night shift work in police officers is associated with significantly poorer sleep quality (65% of officers on the night shift report poor quality sleep; Fekedulegn et al, Journal of Occupational and Environmental Medicine, 2016).

In Taiwan, police officers with poorer sleep were at higher risk of obesity and metabolic syndrome (Chang et al, International Journal of Occupational Medicine and Environmental Health, 2015).

In a large study of ~5,000 police officers in the USA, 40% of all police officers screened were positive for at least one sleep disorder, with obstructive sleep apnea being the most common (32%). Police officers positive for a sleep disorder were more likely to have physical and psychological health problems (eg. diabetes, cardiovascular disease, depression). Further, officers with at least one sleep disorder were more likely to encounter professional problems, such as making serious administrative errors, committing serious safety violations and displaying uncontrolled anger (Rajartnam et al, Journal of the American Medical Association, 2011).

Shift Work after Retirement

There are studies that the effects of shift work persist after retirement. A study of 26,000 Chinese factory workers demonstrated that poorer sleep persists for years after retirement in those who previously worked shifts (Guo et al, Public Library of Science, 2013).

A study of 3,200 retired workers in France demonstrated that a previous history of shift work was associated with impaired cognition. The magnitude of this effects was similar to that expected from an additional 6.5 years of age). This effect gradually reversed over time post-retirement (Marquie et al, Occupational and Environmental Medicine, 2014).