**UNDERCOVER GRADUATES: CLIENT vs CONSULTANT**

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**ABSTRACT**

The last 100 years has seen changes to the way that fresh-faced young engineers entering the transport sector gradually transform into competent, professional engineers. For several decades the transport sector in New Zealand was dominated by the Ministry of Works. Being such a large organisation incorporating many different functions, graduates were able to gain a broad range of experience within the one organisation. Since the 80’s, increased privatisation and smaller, more specialised organisations has made it harder for graduates to obtain a broad understanding of the sector. One method gaining more traction is graduate secondments between organisations.

The New Zealand Transport Agency is a strong advocate of graduate secondments, and requires their graduates to spend time with consultants and sometimes contractors as part of their development. As a slight variation of this, in 2013 one Transport Agency graduate and one Opus graduate swapped places for 12 months. In other words, we each crossed enemy lines and went undercover.

This Technical Note will describe how working for another organisation is a great way of learning, forging valuable relationships and being exposed to a wider range of challenges. It also gives surrounding colleagues a better understanding of how the “other side” really operates. Doing a two-way exchange rather than a one-way secondment also removed the hurdles of imbalanced resourcing and costs that could turn some managers away from traditional one-way secondments.

This paper will also discuss the value of graduate secondments to the graduates and their respective organisations. It also discusses why graduate secondments are currently underutilised and possible ways of addressing the perceived difficulties involved. Secondments are more necessary in today’s market than they have been during the last 100 years, and are a valuable tool to give New Zealand’s transport sector the best footing heading into the next 100 years.

INTRODUCTION

Graduate secondments are gaining more attention as a method of developing new engineers. They are a means of rapidly enhancing a graduate’s capability by providing an opportunity that is unable to be provided by the graduate’s home organisation, enabling the graduate to learn a broader range of skills, develop key relationships, and get a more holistic understanding of the sector.

The New Zealand Transport Agency includes graduate secondments as an essential component of their Graduate Development Programme, and regularly sends graduates to consultants and contractors. In 2013, a graduate secondment with a difference occurred. In conjunction with a Transport Agency graduate being seconded to a consultant, Opus, an Opus graduate was also seconded back to the Transport Agency. The secondments were for the same duration, the graduates were at similar stages in their careers, and the secondees were in close contact with each other throughout. This arrangement meant the traditional benefits of a secondment were enhanced, and some of the difficulties associated with secondments were annulled.

This paper will briefly describe the history of graduate development programmes in New Zealand, summarising the changes to the sector which have led to the need for graduate secondments today. It will describe the secondment which the authors took part in, analysing the benefits and challenges experienced and draw conclusions about the value of graduate secondments in the New Zealand transport sector today.

It is important to note that while technical secondments for the purpose of achieving a specific task or project are very common, this paper is only referring to graduate secondments where the main purpose is to develop graduates.

**HISTORY OF GRADUATE PROGRAMMES**

As long as New Zealand has had transport engineers, there have been development programmes to grow new young engineers into competent professionals. Some of New Zealand’s earliest engineers went through extremely tough development programmes, with pioneers like Fritz Langbein (Ex-President of the New Zealand Institution of Engineers) learning his trade with the New Zealand Expeditionary Force as a tunneller in World War I (Aspden, 2012).

Things have come a long way since then. From its establishment in 1876 until its disestablishment in 1988 the Department of Public Works (DPW), and its successors dominated the transport, and wider heavy civil engineering sectors in New Zealand. Successors to the DPW with a transport focus included the Ministries of Works and Transport (MOW and MOT respectively), and the National Roads Board (NRB). The MOW had the dominant role in the investigation, design and construction of central government transport projects. Many of today’s transport engineers began their careers here.

Several practicing engineers were interviewed as part of this research to get their views on graduate development programmes and secondments. Tony Spowart, a Principal Safety Engineer with the Transport Agency, started at the MOW in 1959, and has a view that *“Training was broader in those days. In my first 5 years I worked on roading, water and wastewater projects. Although based in the design office, we were given extensive experience surveying and supervising work in the field*” (personal comment 2013). John Reynolds, a Principal Structures Engineer with the Transport Agency, began his career at the ministry in 1974 and noted that at that time “*The Ministry of Works was the place to be for young engineers. They had a reputation for having an excellent training programme*” (personal comment 2013). John spent his first year in the design office working on bridges, before being placed on site at the Twizel hydro schemes for 2 years. It is notable that both these engineers were rotated around different parts of the Ministry to obtain a broad range of experience.

In 1988 the Ministry of Works was separated into several organisations. The consultancy and construction State Owned Enterprises were later privatised to eventually become (through a number of iterations and takeovers) Opus and Downer respectively. Predecessors of the Transport Agency were also formed at this time. A more competitive market was formed and the transport engineering sector saw the rise of more consultants and contractors. This triggered a change in the way graduates were trained, as these new organisations were often smaller and more specialised than the Ministry of Works.

Mike Darnell, Southern Region Road Asset Management Coordinator with Opus, began his career in 1994 with Opus Palmerston North Office. In his first 5 years he worked in the same role, and when he eventually shifted to the Hamilton office, he thought this shift was beneficial to his development.

The series of interviews conducted revealed a general consensus that the transport engineering sector today is made up of more, smaller, private companies, and separate public and private client organisations, as compared to the sector before 1988 where there were fewer consultants and contractors, with the Ministry of Works dominating. Graduates at the Ministry of Works were able to get a broad range of experience by being rotated around the different parts within the Ministry. For graduates to get that same breadth today would require working at different organisations. This is where secondments help.

**OUR SECONDMENT**

**The Facts**

For the duration of 2013 a Transport Agency graduate, Luke Reeves, was seconded to Opus as part of his development programme. Unusually, a reverse secondment was set up in conjunction with this, whereby an Opus graduate, Chris Morahan, was seconded to the Transport Agency for the same time period.

Although the Christchurch offices of these two organisations have shared many graduate secondments, this was the first time an exchange had been done, and it resulted in several key benefits over a conventional secondment. The swap was cost-neutral for both organisations, and did not create a shortage or excess of resource for either of the organisations involved. The graduates were able to swap workplaces and slot into each other’s roles, literally “sitting in each other’s seats”. They were also able to communicate the whole way through the secondment, smoothing the handover periods, sharing their experiences along the way, and generally strengthening relationships between the organisations.

**The Experience**

Both of the secondees were highly positive of their secondment experiences, and felt it was extremely valuable to their development.

Many of the benefits to the secondees are obvious: having their eyes opened to the way other types of organisation actually operate, building key relationships with people they are likely to be working with in future, experiencing a different work environment and different management styles, filling holes in their competencies thus enabling them to gain further evidence towards their CPEng assessment without needing to change jobs, and learning a whole new set of technical skills. The secondee to Opus learnt technical skills in the areas of road design and tendering for work. The secondee also dealt with client organisations including the Transport Agency and learnt how the private sector operates on a daily basis, which includes accounting for the time spent on projects. The secondee to the Transport Agency learnt how to navigate the Transport Agency’s funding structures, statutory environment and strategic context, as well as progressing his project management and transport planning skills.

Benefits to the organisations were also significant. The Transport Agency requires their graduates to do secondments to consultants, and often include contractors too, as they already know the benefits to their graduates and organisation. These include giving their graduates design experience and field work, and an understanding of how consultants and contractors operate. Consultants and contractors are less likely to second their graduates to a client organisation, but the benefits to these organisations are also significant. Many consultants and contractors rely heavily on the Transport Agency for work, and having a secondee within the Agency is a great way to increase their visibility and build relationships with a key client. It gives the secondee and their home organisation a deeper understanding of the client’s requirements, and how to meet those better in their future work.

Another benefit is the increased retention of graduates. The view of both of the secondees is that they are more likely to stay with their home organisations, now that they have been given the opportunity to temporarily go and work in a different environment. Many graduates are looking to get as broad a range of experience as they can in the early years of their careers and, if they cannot find this within one organisation, will switch jobs in order to get it. Secondments are a way employers can offer graduates time in a different organisation and role, while still retaining them as their own.

However there were also benefits which had not been expected. Both secondees commented on the way they had developed ethically and professionally. Being members of both the client and the consultant at the same time forced them to be more aware of confidentiality and impartiality. They both regularly heard or saw things that could not be shared with their home organisations, and had to practice integrity in these situations.

**HOW GRADUATE SECONDMENTS AFFECT YOU**

Graduate secondments are currently underutilised. It was commented above that in today’s transport sector graduates have to move between organisations if they are to get the same breadth of experience as they used to get in the Ministry of Works. There are considerable benefits for both the secondees and the organisations involved as previously stated. However the number of graduate secondments occurring is currently very low.

As of November 2013, the Transport Agency currently has 8 of their 24 graduates on secondment to either a consultant, contractor or project alliance nationwide. However anecdotally it seems that most consultants and contractors have a lower proportion of graduates than this (if any at all) on secondments.

As part of this research a poll was conducted through the IPENZ weekly newsletter *(Engineering Direct, Issue 515)*. This poll asked “Do you think your organisation gains, or would gain, value from sending graduates on secondments to other organisations?” 84 members responded, with the results shown in **Figure 1** below.

Figure 1: IPENZ Members Poll Results (29/10/2013)

The results show that 97% of respondents thought their organisations would benefit from sending graduates on secondments, yet only 44% of respondents’ organisations (of those applicable) actually did send their graduates on secondments.

**Risks of Secondments**

Organisations have reasons for not engaging in secondments. Interviews of practising engineers revealed several potential risks that managers may be put off by some of the following;

**Resourcing** can be tricky with one-way secondments, as one organisation loses a person and another organisation gains a person. A two-way secondment annuls this problem. Advanced planning of a secondment can help with this. There was suggestion that basing the secondment timeframe around the start and end dates of a key project make it easier for managers to organise and manage, as well as being beneficial for secondees.

There is a period of **low productivity** when the secondee arrives at their new organisation, while they are learning new skills, new projects, new procedures and new people. This occurs with any new employee and is unavoidable, but the impact of it is reduced in a longer secondment. For this reason graduate secondments shorter than 12 months are not recommended.

The **duration** of a secondment is a key component in its success. To get value out of a secondment, a duration of 12-18 months is recommended. This allows plenty of time for graduates to become familiar with the office, staff and day-to-day working environment. Shorter secondments are common when they are based around a specific project or task, but for graduate secondments these are not recommended. Secondments of only few weeks give the secondee time to do little more than find the photocopier and learn how to use the coffee machine. Longer secondments give the secondee time to become more deeply involved in projects and assume more responsibility. Comments from the interviews conducted indicated that secondments can be too long as well, as they increase the risk of secondees losing touch with their home organisation, and either wanting to stay on at the host organisation if they are enjoying it, or feeling trapped and wanting to leave if they are not enjoying it. For this reason graduate secondments longer than 18 months are not recommended.

Occasionally secondees have been known to enjoy their host organisation so much that following the secondment they **leave their home organisation** and permanently join their host organisation. The home organisation then loses their investment of time and money into hiring, developing and nurturing the graduate. The Transport Agency has had secondees do this and has developed ways of reducing this risk. Having a clearly defined duration and end date means the secondees have an expectation of returning to their home organisations. Ensuring secondees know that they still have a job when they return, and that the new skills they’ve learnt on secondment will be utilised helps motivate them to return. Actively maintaining regular contact with the secondee is perhaps the most important factor, and is recommended by The UK’s Institute of Employment Studies, 2004. Encouraging them to return for team meetings, social events, training courses, and continuing mentoring programmes are essential to making the secondee feel they are still a part of their home organisation.

Graduate secondments involving clients may create a **perception of an unfair market**, where the client is becoming too close with certain consultants or contractors. Client organisations should therefore be careful to ensure secondments are made equally available to competitors. The Transport Agency have successfully spread secondments around a wide range of organisations, completing secondments in recent years around the country with Opus, Aurecon, MWH, Beca, Fulton Hogan, InRoads, Downer, Higgins, and various alliances. Reducing this perception of an unfair market also relies on the secondees knowing the ethical situation they are inhabiting, and to ensure they are acting professionally at all times.

The challenges described above can all be managed to acceptable levels of risk. The benefits described earlier are orders of magnitude greater than the challenges, and managers considering secondments for their graduates should not let these put them off.

**CONCLUSION**

Graduate secondments can be of substantial benefit to graduates, and client, consultant and contractor organisations. While the Ministry of Works was operating, graduates could gain breadth of experience relatively easily internally. In today’s increasingly privatised and specialised market, gaining the same breadth of experience requires multiple organisations. Graduate secondments between clients, consultants and contractors are becoming more important in the transport sector, but are currently underutilised.

Benefits are numerous and include intensive development of the graduate, building of key relationships, and closer ties between the organisations involved.

Challenges involve resourcing, loss of productivity, retention of secondee at completion of secondment, and avoiding the perception of becoming too close with other organisations. There are various ways of dealing with these challenges. Two-way secondments are one method of avoiding some of the imbalances of a one-way secondment.

Overall the benefits of graduate secondments far outweigh the challenges inherent in them. If more organisations looked to secondments to fill the gaps in their graduate development programmes, the benefits to graduates, and the organisations involved would be well worth the challenge. We could then look forward to a future of better relationships between clients, consultants and contractors, and more competent, well-rounded engineers. Graduate secondments are a vital component to a successful future for transport in New Zealand.

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