



Institute of
Public Works
Engineering
Australia

'Attracting Young People' to Engineering

OUTCOMES Strategy Forum, Sydney

26 May 2005

At its meeting in March 2005, the IPWEA National Board adopted a draft Strategy & Action Plan for attracting young people to a career in public works. The first action associated with the strategy was to conduct a Forum involving young engineers to review the draft plan and prioritise actions.

The following report is a record of the Forum proceedings held at the Holiday Inn Hotel, Sydney Airport, on 26 May 2005.

For further information contact Ross Moody at rmoody@ipwea.org.au or visit www.ipwea.org.au/ayp



Attendance (left to right):

Chris Champion (National), Chris Watson (Nat. Foundation), Rod Fyfe (SA), Ross Moody (WA & Nat'l), Maurice Stabb (Vic), Peter Taylor (EA), Brad Harris (WA), Elspeth Moroni (Tas), Stephen Hegedus (Qld), Warren Roberts (Nat'l), Jade Everingham (Qld), Cathy Edwards-Davis (NSW), Kelly Loveridge (NSW), Antoniette Santacaterina (Vic), Dave Abbott (Nat'l & NSW)

Not in photo: *Facilitators Dianna Dawson and Fiona Waugh ([CREATE](#) Foundation), Scott Harris ([Beacon](#) Foundation), Matthew Fanning (NSW), Stephen Yam (NSW)*

Welcome (Warren Roberts, IPWEA National President)

- The IPWEA Attracting Young People (AYP) Strategy was developed in response to the low numbers of young people choosing careers in public works engineering within local government settings
- The low levels of youth attraction to this career is further compounded by an aging public works engineering workforce, making skills shortage a very real threat in the near future
- The problem of a reduced public works engineering workforce is not just an issue for the IPWEA and Local Government Associations, but also for the wider community who rely on this expertise to ensure public infrastructure is maintained and updated
- IPWEA has developed a draft AYP Strategy that considers the issue within the context of the 'strategic level - engineering as a career', 'industry level - local government/public works as a career' and 'local level - your organisation as an employer'
- The Forum was organised to provide representatives from each state, and in particular young engineers, an opportunity to review the strategy and prioritise the first set of actions to be undertaken

Identifying the Problem (all delegates)

Reasons for Low Youth Attraction	
• Competition for graduates is fierce	• Perception that people don't know what LG does – lack of marketing
• Councils become predatory toward each other – head hunt	• Lack of promotion of engineering in secondary schools
• Local Government remuneration lags behind the private market	• Generational issues – workplace culture set by baby boomers
• Rural areas finding it hard to retain young people & attract young professionals	• Good engineers move to management very quickly
• Less tertiary institutes offer courses in engineering	• Lack of understanding at the undergraduate level of public works engineering
• Enrolments in courses have fallen	• Image is stereotypical
• Not a sexy career choice to young people	• Not a career or employer of choice
• Competing against most other industries	• Appears bureaucratic
• Influencers in young people's lives don't see LG as good career direction	• Need a secondary school approach
• Global labour market is tempting graduates overseas	• Need junior permanent positions
• Only 3% of IPWEA members under 30	• Long term trends not considered
• Image and lack of profile of LG as an appealing employer	• Lack of ownership at the state level
• Limited recruitment and retention strategies	• Need to develop "how to model" for cadetships
• Lack of cadetships, mentor programs	• Costs excessive and inflexible course delivery
• Need to engage universities in course construction	• \$\$\$ - graduates get highly paid elsewhere
• Attracting young people isn't prioritised	• Opportunities to travel – disengages staff from employer
• Undersupply of graduates	• Lack of career opportunities / scope for growth
• Lack of public works/local government opportunities	• Performance of elected members regarding youth in LG
• Inflexibility – sector and executive management levels	• Lack of professional development (eg. not offering conference attendance)
• Rural attraction difficult	• Not starting early enough regarding science / maths education
• Consultancy employment more attractive than local government employment	• Lack of federal government leadership and state government agreement
• Engineering not valued / understood within the community	• Study and course work at university doesn't necessarily match the field
• Artificial thresholds – entry levels	• Misleading statistics
• Lack of introduction to engineering at school – not a subject at school	• Don't understand what engineering is – roles and functions of local government

Forum Outcomes Sought	
• Be clear of issues	• Identify long and short term strategies
• Find funding opportunities	• Exchange programs internationally
• Gain a collective stakeholder agreement	• Develop clear and achievable actions
• Prioritise the action plan	• Set responsibilities and actions
• Revised, owned and relevant strategy plan	• Develop strategies for more undergrad vacation employment / work experience
• Develop practical and achievable plan	• Have a set cadetship template for the industry
• Responsible plan of action	• Strategy to communicate problem to LG
• Strong timeline – bring in graduates next year	• State level action with national support
• Develop a feasible, workable strategy to be actioned quickly and effectively	• Commitment from LGA's to own the problem and prioritise youth attraction
• See how we can work positively together – focusing on opportunities	• Results and timelines
• Develop a good plan and how to work together	• Examine the need for soft skill training of senior engineers
• Get message into universities and promote with longer term view to promotion within secondary schools	• Develop strategies that are feasible and achievable

Identifying the Target Audience (Fiona Waugh, CREATE)

CREATE Foundation

- CREATE: a national not-for-profit organisation concerned with improving life opportunities of Australian children & young people in out-of-home care
- CREATE runs programs that aim to connect and empower young people in care, and engages in research to effect positive change within the out-of-home care sector
- Fiona is the Business Development Manager for CREATE, and is currently sourcing opportunities to develop partnerships with the corporate sector for the delivery of workplace learning programs for young people in care – engineering may be an ideal industry area to target
- www.create.org.au

Four Generations in Workplaces Today

1. Veterans / Builders
2. Baby Boomers
3. Generation X
4. Generation Y

Generation X Characteristics

- The post-baby boom generation (1961 – 1979)
- The 'latch-key kids generation' who often had parent/s working outside the home – requiring them to be self-sufficient and independent
- Parents of this generation divorced in record numbers
- This generation witnessed the effects of recession and corporate restructuring on their parents
- The result is a generation considered to be fiercely independent, sceptical, reduced sense of workplace loyalty and distrustful of authority
- This generation is well educated, technologically-savvy and entrepreneurial in nature
- This generation take employability seriously but are generally more loyal to a type of work rather than a specific company – thus more likely to move between companies and make career switches
- Job security comes not through employers but through the possession of portable / transferable skills

Generation Y Characteristics

- Born between 1980 – 1995
- Also known as the 'betwixter' (between childhood and adulthood) and 'millennial' generations

- More numerous than Generation X (at a rate of approx. 2:1), and look likely to overtake the Baby Boomer Generation in population size
- This generation was the product of a society shifting away from 'latch-key living' to a more structured and scheduled life of play groups, team sports and after-school care
- This generation was brought up with an emphasis on self-esteem building and personal autonomy
- Most well educated generation of the four generations
- As a result of these societal influences this generation tends to be more optimistic and idealist than Generation X'ers
- Generation Y considered to have more in common with WWII generation than any other; sharing traits such as youthful optimism, conservative values, social / civic engagement and a belief that hard work pays off
- This generation is technologically competent, grown up using the internet, communication technology & interactive multimedia for education & fun
- This generation are considered to be
 - flexible multi-skilled risk takers
 - more global in outlook than past generations
 - have a greater respect for authority & learning from wisdom of elders

Attracting and Retaining Generation X and Y

- Create high impact messages – Generation X and Y are use to being marketed to
- Require vivid and compelling media and communication – use of the internet and online tools important
- A plethora of career choices available to these generations – often it is difficult for them to decide which pathway to take
- Tertiary education has been expensive for these generations
- Salary is not the sole motivating factor for young people assessing potential careers / workplaces. Attracting and retaining these generations are also influenced by a range of other factors:
 - **Challenging work** – upbringing and education has made them resistant to the notion of menial work
 - **Job flexibility** – consider telecommuting, flexible work hours, virtual work, casual work environment
 - **Personalised career path development** – to reflect personal career goals
 - **Career advancement** – opportunities for promotion early in the career are important, lateral movement to other departments, opportunities to work in other locations

- **Professional development** - high priority on learning and education, mentoring opportunities valued
- **Collegiate environment** - supportive team environments valued
- **Good work-life balance** – however the lines between work and personal life are blurry, so young people expect personally rewarding experiences in the workplace (travel, friendships, workplace self-development) – ‘work to live, not live to work’
- **Access to cutting-edge technology** – new and emerging technology valued and utilised by these generations
- **Respect and rewards** - want management that respects and rewards individual and collective performance, rewards don't need to be monetary or formal (eg. time-off, recognition in newsletters / company intranet, representing the industry / organisation)
- Offering work experience opportunities / part-time work provide young people with a chance to assess the organisation / industry before committing to it – it also gives the organisation an opportunity for an extended interview with potential employees
- Money, lifestyle issues and challenging / interesting work are all part of the Generation X and Y recruitment and retention strategy

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<http://www.recruitersworld.com/Articles/RW/Special/GenXY.asp>
- United Way of America, ‘Building Relationships with Generations X & Y’,
<http://national.unitedway.org/research/generationsXY.cfm>

Education and Career Decision Process

- Students aspire to professional careers
- Students seek fulfilment in the careers they choose
- Students exhibit a high degree of flexibility with regards career choices
- Students often clearer about wanting to go to University or TAFE, than about what to study there
- Students commence career planning during the junior secondary school year levels – much earlier than in previous years

Career Decision Influences

- **Parents** - considered by students and careers teachers to be the biggest influence on career aspirations, keen to see their children enter professional careers / attend university, can hold themselves up as counter models
- **Students** – consider themselves to be self-determining
- **Careers teachers** – degree of influence varies, but they are a primary source of career / post-secondary education information, information-centred vs. student-centred career advice approaches
- **Gender** – females less likely to choose science-oriented careers
- **Teachers** – identify aptitudes and ability which can influence subject and career choice
- **Academic achievement** – level of academic achievement set the parameters for the kinds of careers students can reasonably aspire to, however articulated pathways and knowledge of ‘back door entry’ into courses is making academic achievement a lesser influence
- **Work experience** – work experience can have both a positive and negative influence on career decisions
- **Career Expos** – career information nights at schools, universities, TAFEs
- **Vocational Education and Training (VET) participation** – enormous numbers of young people around Australia are undertaking VET Certificates as a senior secondary subject
- **Society / Culture** – external influences such as entertainment media

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http://www.findarticles.com/p/articles/mi_ga3765/is_200411/ai_n9468960
- Perkins, D and Peterson, C. (2005) ‘Supporting young people’s career choices: the role of parents’, *Brotherhood of St Lawrence*
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Engineers Australia Update (Peter Taylor)

- Refer to accompanying PowerPoint presentation
http://www.ipwea.org.au/ayp/EA_AYP_Forum_26may05.pdf
- www.ieaust.org.au

Beacon Foundation Update (Scott Harris)

- The Beacon Foundation is a national not-for-profit organisation, that seeks to influence the attitudes and culture of Australians so that each young person develops an independent will to achieve personal success for themselves and their community.
- Beacon Foundation initiates innovative projects that demonstrate solutions to youth unemployment & encourage self-help at the local level.
- One project is 'No Dole', where Year 10 students in individual schools sign a charter which commits them to participating in education or employment (earning or learning) in the following year.
- As part of this program, the wider community contributes to the pledge through participation in work placements, adopt-a-class, career workshops, industry visits & mock interview days. Students, parents and teachers who have been involved with the No Dole program report greater understanding and confidence about career decisions following Year 10.
- The project originated in Brooks High School (Launceston) in 1995, in an attempt to reduce the numbers of young people exiting school at the end of year 10 with the express goal of going on the dole. In 2005, over 70 schools around Australia have committed to the No Dole program.
- Scott showed a DVD produced by Year 10 students at Maroochydore High School, which provides an overview of the No Dole program.
- www.beaconfoundation.net

AYP Strategy and Action Plan – Identifying and Prioritising New Actions (All delegates)

- Prior to the forum, delegates were asked to rank actions and identify any new actions in each of the three strategy levels – a document with ranked and newly identified actions was distributed to all participants for review.
- Delegates were then asked to review the new strategy actions identified by participants prior to the forum.
- Through a show of hands, delegates ranked each new action as being of either highest priority (1), medium priority (2) or low priority (3).

- Newly ranked actions (*italics*) were added to the already ranked actions in order of importance – the full listing can be found in **APPENDIX B**
- The Forum then discussed and agreed on a final **IPWEA AYP Strategy** – see **APPENDIX A**

Where to from Here? (Ross Moody)

- Key objectives of the forum were achieved – the draft plan was put before young engineers, strategy actions were prioritised, and the day provided the first opportunity for the issue to be discussed and debated.
- IPWEA will prepare a proposal to seek funding to resource a National AYP Committee, Project Officer and elements of the strategy roll-out.
- The National Committee will be vital to the strategy; it is important that this Committee is a network that works together & doesn't duplicate effort.
- Emphasis must be on targeting secondary students and leveraging off existing initiatives and activities in this regard.
- Need to examine all available funding opportunities to resource the Committee and AYP Strategy.

Forum Close (Warren Roberts)

- The Forum facilitated valuable discussion and decision-making.
- The Forum provided a great insight into the problems and issues driving the need for the AYP Strategy and the target groups that this strategy needs to be marketed towards.
- Delegates isolated the key AYP Strategy objectives and actions and the prioritisation session clearly showed a level of passion about the issue.
- The challenge of the National AYP Strategy Committee will be to action those strategy actions prioritised during the forum.
- Contributions to the forum acknowledged
 - Peter Taylor about the high level issues driving the need for greater numbers of engineers in Australia,
 - Scott Harris about the positive work being undertaken by Beacon Foundation to influence the education and employment aspirations of young Australians,
 - Fiona Waugh and Dianna Dawson for their facilitation of the day and information about the characteristics of, and career influences on, Generation X/Y.

APPENDIX A: AYP Strategy and Action Plan – Prioritising the Top Actions at Each Strategic Level (All delegates)

The ranked actions in each strategy level were presented to delegates, and delegates were asked to discuss and rank the top actions and delineate between actions that could be identified as a given or administrative action.

Delegates identified the following actions as **given or administrative actions**:

- Establish a National AYP Strategy Committee (State Committees to follow)
- Employ a Project Officer
- Develop an AYP Strategy Budget
- Develop a database of all stakeholders and contact details

Guiding principles for the National Committee were identified by the delegates as follows:

- Ensure young people are involved at all levels of the project to attract young people to engineering
- The needs of rural communities are to be considered at all levels of work done

Delegates prioritised the following actions as those considered most important to the strategy roll-out:

Strategic Level <i>Engineering as a Career</i>	Industry Level <i>Local Government/Public Works as a Career</i>	Local Level <i>Your Organisation as an Employer</i>
<ul style="list-style-type: none"> • Work with EA / APESMA / ACEA and other engineering alliance partners to develop a strategy to promote opportunities for young people to commence studies in engineering and join the public works engineering workforce • Develop a national “how to” model for cadetships, mentoring, work experience in local government and public works • Develop career web pages aimed at university and secondary school students on the IPWEA website (link to/from university websites) • Include young engineers, as a vital source of current target market knowledge, throughout the strategy development and implementation • Develop / utilise existing marketing material which promotes studies/careers in public works engineering • Ensure that rural / regional concerns underpin all activities 	<ul style="list-style-type: none"> • Work with ALGA / LGMA and others to develop: <ul style="list-style-type: none"> ➢ A recruitment strategy to attract young people to a career in local government (incl. a comprehensive list of benefits that working in LG provides) ➢ A retention strategy aimed at retaining people in local government careers ➢ A strategy to change the culture of local government to better reflect the workplace needs/wants of Generation X and Y • Actively participate in state / regional careers expos • Seek long-term engagement with universities and seek opportunities to present the benefits of working within local government to undergraduate engineering students • Develop state-based AYP strategy committees comprised of a majority of young engineers • Develop and run ‘Managing Generation X and Y’ training courses for local government managers • Provide meaningful work experience opportunities for university and secondary students (including rural exchange / council exchange programs) • Ensure that rural / regional concerns underpin all activities 	<ul style="list-style-type: none"> • Provide paid work experience to undergraduate engineers (NB. utilise “how to” model material) • Offer engineering cadetships (NB. utilise “how to” model material) • Develop public works engineering information for secondary students and ensure that information is tailored to the target age groups (NB. consider when it is appropriate to introduce local government employment information?) • Market to secondary students through local initiatives – eg. Beacon Foundation schools, Adopt-a-School, Career Events • Provide work experience opportunities to secondary students (NB. utilise “how to” model material) • Provide career and professional development support to young engineers (eg. mentoring, training) • Identify the monetary & non-monetary rewards of public works employment as part of the overall AYP strategy • Promote the Adelaide conference to young engineers through communication with relevant local government managers (NB. this action needs to be undertaken ASAP)

APPENDIX B: Full listing of actions that were workshopped and prioritised

Strategic Level – Goal: “Engineering as a Career”

Actions	Score
Prior to establishing the AYP Committee hold a Forum (26 May) involving young engineers to review the Draft Strategic and Action Plan	1.1
Work with EA and APESMA to develop a national strategy to promote opportunities for young people to commence studies in engineering and join the public works engineering workforce.	1.1
<p style="text-align: center;">Establish university networks (state and national levels)</p> <p><i>Establish networks and linkages with secondary schools (at the local level) and Universities at a State level for interaction between engineering professionals and students and under-graduates.</i></p>	1.2
<p>Develop a national “how to” model for:</p> <ul style="list-style-type: none"> ▪ Cadetships ▪ Mentoring ▪ Work Experience <p>For local government and public works</p>	1.3
<p>Establish and Resource a National IPWEA AYP Project Committee (NAYPC) with a representative from each State plus 2 young reps <30 years of age National to appoint Chair. National Reps to chair State AYPC's (SAYPC)</p> <p><i>Formalise the methodology to promote the actions and outcomes of the AYP strategy and committee. Also promote the key members of the committee.</i></p>	1.4
<p style="text-align: center;">Career web pages (two separate target audiences: university and secondary students)</p> <p><i>Establish a web page across IPWEA/EA/APESMA web sites that are hyperlinked. The web page would feature regularly maintained career information and contact information for further information. The web page could have two parts targeted separately at tertiary and secondary school students with each section further divided.</i></p>	1.4
NAYPC to Develop/Review Strategic Plan	1.4
Work with young engineers/engineering staff to ensure activities are relevant and effective	1.4
Research initiatives already in place within the industry (and the Divisions)	1.4
Develop a Stakeholder list with key people and contact details in other organizations	1.4
Prepare a budget and business plan for the NAYPC which can also be used for funding submissions.	1.5
Seek Funding from the Federal Government or Foundations for p/t Project Officer and supporting the operations of the AYP National Committee	1.7
<p style="text-align: center;">Research the youth target group/s to ensure alignment to strategy</p> <p><i>Research what are the key motivators of YP to ensure that any actions are relevant and appropriate for the purpose. The communication and involvement of YP is critical to the success of the strategy.</i></p>	1.7
<p>Establish contacts in alliance organizations,</p> <ul style="list-style-type: none"> ▪ assess programs, ▪ share information, ▪ explore opportunities to work together 	1.7
Subject to external funding develop a ‘Public Works Engineering as a Career’ DVD - (QLD to take lead role)	1.7
<p style="text-align: center;">Establish career counsellor networks (state and national levels)</p> <p><i>Establish relationship with secondary school careers counsellors network (at local and State level) to provide regular careers information for supply to students and under-graduates.</i></p>	1.8
Research projects/programs already developed in other industries or by peak professional bodies	1.8
<p>Develop a section on the new IPWEA website that will be:</p> <ul style="list-style-type: none"> ▪ An education tool for students 	1.8

<ul style="list-style-type: none"> ▪ a marketing tool for the AYP projects/programs ▪ a notice board for current and new initiatives 	
Develop programs aimed at retaining young people already in the industry	1.8
Resource the NAYPC with a part time project officer	1.9
Develop a program for working with primary and secondary schools that can be used by the Divisions, regional groups or individual Councils and encourage senior engineers/IPWEA members to engage directly with local school students with the tools provided.	1.9
Get involved in the education curriculum – leveraging off the work done by EA	2
Develop a strategy to share information on initiatives “as they happen”	2
Dedicate the Sunday Forum in Adelaide to the development of further strategies for AYP	2
Establish a regular feature in the national Journal PWE to: <ul style="list-style-type: none"> ▪ Advise of the work of the AYPCs ▪ Promote strategies ▪ Share innovative ideas/experiences 	2.1
<p style="text-align: center;">Secondary student engineering competitions (regional, state and national levels)</p> <p><i>Develop a program of regional, State and National engineering competitions for secondary students to tackle an everyday local government engineering challenge.</i></p>	2.3
Consider a “YoungMates” discussion forum (similar to AskYourMates, AssetMates)	2.5

Industry Level – Goal: “Local Government / Public Works as a Career”

Actions	Score
Work with ALGA and LGMA to develop a strategy aimed at attracting young people to a career in local government (and how to retain them) <i>(This strategy should be combined with the following by promoting LG as an employer of choice)</i>	1.3
<p style="text-align: center;">Professional bodies to participate in state / regional careers expos</p> <p><i>State bodies to actively participate in major State and regional careers expos/festivals for senior secondary school students (Year 11/12). Development of career show bags with relevant brochures and a CD/DVD that they can view featuring activities and a narrative by young local government engineers.</i></p>	1.3
Work with ALGA and LGMA to develop a strategy to change the culture of councils aimed at obtaining a commitment to: <ul style="list-style-type: none"> ▪ cadetships (incl engineering) ▪ work experience ▪ Employment of graduates <p><i>*This needs to be a consistent approach amongst all Councils</i></p>	1.4
Work with ALGA and LGMA to develop a strategy aimed at improving the image and profile of local government in the community and as a good employment opportunity/career for their children	1.5
Work with young engineers/engineering staff to ensure activities are relevant and effective	1.5
<p style="text-align: center;">University engagement – students, faculty and management</p> <p><i>Actively seek long term engagement with universities through the creation of Memorandums of Understanding, strategic alliances and assistance to final year students with subject project work, normally through short term work placement.</i></p> <p><i>Workshop with recent graduates and under-graduates to discuss issues relating to pursuing a career in engineering</i></p> <p><i>Presented to final year undergraduates, promoting the career development opportunities in Local Government. Present at community events promoting Local Government as an employer of choice, at a local level.</i></p>	1.6
Each State IPWEA Division to establish a SAYPC with at least 2 young <30 representatives	1.7
<p style="text-align: center;">Train local government managers to lead/manage Generation X/Y and develop marketing skills to promote industry in local region</p> <p><i>Develop and provide a short training course for middle and senior managers in local government engineering covering two keys areas. The first relates to leading and managing Generation X and Y staff. The second relates to effective marketing strategies to promote local engineering achievement at the local level to promote a positive image of engineering in our local communities to WOW residents and particularly our target</i></p>	1.7

<i>audience of secondary and tertiary student residents.</i>	
IPWEA State bodies to act as the broker with: <ul style="list-style-type: none"> ▪ TAFE ▪ Universities ▪ For providers of work experience, cadetships and graduate placements for Councils	1.7
Develop a Stakeholder list with key people and contact details in other organisations	1.7
Consider innovative terms of employment for persons employed in local government to make the industry attractive to new and existing employees	1.7
Provide meaningful work experience opportunities to secondary students <i>Secondary schools in the list of agencies that IPWEA State bodies should act as broker with, particularly to pursue the work experience program for secondary school students. Note that this would demand that local government engineers MUST ensure that the work experience students are given meaningful tasks and are assigned to a department representative who will make their time at Council exciting and leave a positive image of local government engineering and what it has to offer as a career. This should also include the engagement with local secondary school career counsellors.</i>	1.7
Local government engineers to guest lecture at Universities <i>Encourage local government engineers to do guest lectures at universities, to increase contact with student engineers and to pass on information about local government engineering</i>	1.8
Develop career paths for new employees <i>*promote personal & professional development</i>	1.8
Encourage senior engineers/IPWEA members to engage directly with local school students with the tools provided	1.9
Provide tours of local government engineering projects to secondary and university students <i>At state and possible local level – arrange tour of local government engineering projects for high school/uni students. One of the strong selling points of local government is the ability to see your projects within a short time span and the benefits to the local community.</i>	1.9
Mentoring <i>IPWEA Mentor network IPWEA member sponsoring of university students by members attending IPWEA events</i>	1.9
Encourage IPWEA members through E News and the Journal to use the: <ul style="list-style-type: none"> ▪ programs developed, ▪ their influence of position and ▪ contacts in council to “do their bit”	2
Encourage older engineering employees to be retained in the workforce longer for specific roles in mentoring, education and training.	2.1
Offer prizes to students (award ceremony at a members function) <i>eg Uni of Tasmania prize for essay and good marks in public works related subjects. Should invite the winner to meet members at a function or get them into seeing some workplaces and projects</i>	2.1

Local Level – Goal: “Your Organisation as an Employer”

Actions	Score
Offer paid vacation experience to engineering undergraduates	1
Apply packages developed for: <ul style="list-style-type: none"> • Cadetships • Mentoring 	1.2
Talk to the local schools and offer to present to final year students about what a public works engineer does	1.3

Provide mentoring to young engineering staff members	1.3
Provide career advancement opportunities	1.3
Offer work experience to secondary school students	1.4
Work with young engineers/engineering staff to ensure activities are relevant and effective	1.4
<p align="center">Improve work culture and non-financial rewards to retain employees (LGP Emerging Leaders Program)</p> <p><i>The environment of the workplace is continually changing. Organisations and their managers must respond proactively to attract and retain engineering graduates. No longer is recruitment about what a potential employee can bring to the job and the organisation with the vacancy. It is a 'seller's market' and potential employees will look at what employers can offer across a wide range of areas.</i></p> <p><i>Examples of the sort of things graduates will be looking for from a potential employer include:</i></p> <ul style="list-style-type: none"> • <i>Access to ongoing structured training for personal and professional development</i> • <i>A supportive workplace environment and culture</i> • <i>A worker/family friendly environment</i> • <i>A career path</i> • <i>A variety of work that will challenge and stimulate</i> • <i>An organisation that is loyal to its staff</i> <p><i>The LGPro Emerging Leaders Program is an excellent example of what can be provided to the Sector to support the ongoing development and retention of staff. This also demands the ongoing training of existing managers about the changing face of the workplace and the development of effective response strategies.</i></p>	1.4
Develop a network of local contacts	1.5
Encourage experienced engineers to take a young staff member to IPWEA general meetings, State and National conferences	1.5
<p align="center">Provide employment to late-stage undergraduates</p> <p><i>Industry / Local Level Goal: Local councils to offer permanent junior engineer positions to students in the later stages of engineering degrees (part time and/or adaptable to allow class attendance)</i> <i>(This may fall within strategies for cadetships / work experience etc)</i></p>	1.5
<p align="center">Career development, work/life balance, training and development</p> <ul style="list-style-type: none"> • <i>Demonstrate potential career paths through the organisation</i> • <i>Ensure that young engineers, particularly in short-term holiday work, are given clear work programs with objectives and expected outputs (rather than just observation)</i> • <i>Promote local government as career/family/lifestyle balance friendly (flexible hours)</i> • <i>Provide on-going study assistance (for Masters, short courses, etc.)</i> • <i>Advertise junior engineering positions on University student job noticeboards</i> 	1.5
<p align="center">Support secondary students to select engineering through career advisory activities</p> <ul style="list-style-type: none"> • <i>Participation in annual major careers fairs in the metropolitan and regional areas – high contact opportunity with senior secondary students</i> • <i>Presentations at career counsellor workshops and seminars – frequent contact with teaching staff who are the reference point for every senior secondary student and the creation of an ongoing network with these teachers</i> • <i>Conducting an annual seminar/workshop for secondary school careers counsellors</i> • <i>Provision of information kits, CDs and DVDs to schools as reference material for teachers and students alike</i> 	1.5
Encourage senior engineers/IPWEA members to engage directly with local school students with the tools provided	1.7
<p align="center">University engagement – students, faculty and management</p> <p><i>Seek long term engagement with various universities through the creation of Memorandums of Understanding, strategic alliances and assistance to final year students with subject project work, normally through short term work placement.</i></p>	1.8
<p align="center">Encourage young engineers to become IPWEA members</p> <p><i>Utilising existing members to sit along side new young people in their organisation, or others they know in other organisations to encourage them to become members and be involved and supported through existing programs and members. i.e. calling members to be proactive in finding new members and getting them involved</i></p>	1.8

<p style="text-align: center;">IPWEA to drive youth attraction strategies</p> <p><i>Priorities based on what likelihood can be achieved and will result in action. If left to individual Councils, may not happen. So most issues, particularly relating to discussion with schools will need to be driven at State level (IPWEA) as whilst some Councils may undertake, they will be a minority.</i></p>	1.9
<p>Encourage older engineering employees to be retained in the workforce longer for specific roles in mentoring, education and training.</p>	2
<p>Establish (regional) RAYPC with at least 2 young <30 representatives to liaise with local Councils</p>	2.2
<p style="text-align: center;">Alliances with international public works organisations</p> <p><i>Pursue strategic alliances with overseas municipal/public works engineering agencies (eg APWA) to place graduates for short terms if they chose to travel overseas immediately after graduating</i></p>	2.3
<p>Encourage Councils to provide awards for ALL schools in the district aimed at raising the profile of local government as a career opportunity. In return request to run an annual program with schools – primary year 7 and secondary year 9.</p>	2.3