

**Investment Plan
For
NZ Sports Turf Industry Training Organisation
2011-2013**

Part 1 - Plan Context

Background Information

Sports are a vital feature of New Zealand life. In every community around the country, New Zealanders of all ages and levels participate in sports, and are healthier and happier as a result. Success in international sport furthers our sense of national pride and identity. Accessible, quality playing surfaces are the essential foundation enabling New Zealanders to safely and confidently develop skills and maximize their enjoyment and performance of sport, and to attract top level international sports events and sport tourism. On the other hand; many playing fields are substandard resulting in frequent closure of sports fields. This particularly affects children, who can have many of their sporting fixtures cancelled.

To this end New Zealand has developed a wide range of sporting venues and associated amenities. These have increasingly sophisticated natural and synthetic surfaces designed to meet the individual requirements of the sports code or codes for which the surface is used.

Ensuring that the New Zealand turf industry has a well educated highly skilled, adaptable and respected workforce capable of presented quality turf, for turf facilities, is central to the role of NZ Sports Turf ITO (NZSTITO). This is achieved through developing, maintaining and arranging delivery of qualifications and skill standards and providing industry leadership by identifying skills needs, developing strategic training plans and promoting training that is matched to the unique requirements of the industry. While the key focus of the ITO is upon sports turf, the ITOs' scope of training and activity encompasses all turf areas, including passive use amenity turf and synthetic turf surfaces.

The sports turf industry employs, 8 740 workers nationally and works with 3000 volunteers. The industry has nearly \$33 billion worth of assets and the total land area dedicated to sports turf activities is estimated at 122 328 ha nationally.

The mission of the NZSTITO is to develop the person and the person will grow the industry. It exists to provide relevant, effective and sustainable education and training opportunities for the sports turf industry.

Industry Strategic Training Plan

Needs analysis and research work conducted over the period of 2006 through 2010 has informed the basis of the industry strategy and focussed the NZSTITO to work with its industry, TEOs and Government to strengthen and improve its contribution to the development of a qualified and skilled workforce. The publication of the industry strategic training plan at the end of 2010 lays the foundation and context for the NZSTITO 2011 – 2013 investment plan. Please refer to Appendix 1 for the draft version (pre-design and layout). It articulates priority areas for skills and training activity as well as defining its labour, economic and industry characteristics, it also covers its current and future skill and training needs. Without such a body of work the industry and the ITO would not have a 'compass' with direction from which to perform its leadership role.

Key Issues

The industry strategic training plan project identified seven key industry issues/needs as a result of the 2006 research and feedback received from the 2009 Turf Conference survey and 2010 interviews with industry bodies and NSOs. They are;

1. More than half of the workforce remains unqualified and uptake of training is low in some industry sectors.

- Lack of investment in training by employers in some sectors is a barrier to the initial uptake of training, and impacts on the progression of trainees to higher levels of learning.
- Insufficient weighting placed on staff training as an attribute in (price driven) tender processes to select turf contractors acts as a disincentive to contractors engaging in staff training. This price driven approach, if continued is likely to exacerbate future skill shortages.
- There are opportunities for growth in training, particularly in sectors which have not engaged to any great degree previously (such as the school and the passive turf maintenance sectors) and to increase uptake in sectors which do participate.

The NZSTITO has already taken up the challenge to raise awareness and educate its industry about the 'value-add' and RoI (return on investment)¹ opportunities that are derived from supported training at conferences and through association newsletters. This work will continue with the objective to upskill the workforce and improve penetration. It is hoped that this will go some way towards addressing issues one and three.

NZSTITO research and PSG industry skills leadership work has confirmed the need to focus on 'upskilling' as well growing participation in training by increasing industry penetration.

2. There is a need for enhanced management capability and packages of training spanning a range of different levels.

- There is a need for enhanced management capability amongst turf technical and facilities management staff. Club and facility managers need to be capable of recognizing and adapting to changing customer expectations (such as a trend away from traditional club membership towards casual play and 'pay for play' participation), running facilities with a clear focus on financial sustainability.
- There is a demand for small and flexible packages of training (not necessary related to qualification achievement) to upskill the current workforce in developing technologies and industry related issues and to maintain professional standards.
- There is a need for mentoring support and development amongst turf technical and facilities management staff. Club and facility managers' need to have the confidence to be able to develop their roles of manager, trainer and assessor.

The NZSTITO is responding to this by collaborating with Unitec and the NZ Sports Turf Institute to offer a new qualification; NC in Sports Turf Level 5. The development has been supported by Sector Leadership Funding and seeks to assess the needs of the trainee and its organisation through an individualised needs assessment process. The outcomes inform the learning pathway and content to complete the 70 credit qualification. A fundamental component of this project is the 'buy-in' and support of the manager to develop management capability.

The NZSTITO is aware that this identified need spans the primary sector and has potential to be expanded at a 'pan-sector' level between the Primary Sector Group of ITOs (PSG) and

¹ Acknowledgement of work from Brinkerhoff and research case studies conducted by the Ag ITO

the ITP sector. The NZSTITO has entered into dialogue with the PSG to discuss ways in which this provision may be adapted.

The NZSTITO throughout this next investment period will scope the potential development of introducing (Supplementary Credit Programmes) to its qualifications to support the need for industry to achieve smaller packages of learning.

3. There is a need for increased acceptance of the importance of ongoing training and to link this with professional standards and career pathways.

- While sports turf qualifications have been available for some years at levels 3 to 6 of the NZ Qualifications Framework, historical uptake of training beyond level 4 has been minimal.
- Lack of connection between qualification achievement (particularly at higher qualification levels) and career advancement and remuneration is seen to be a disincentive to engaging in training.
- There is a need to raise professional standards of employees at organisation level if the sports turf industry image and performance is to be improved. Top class playing facilities require top class staff. This requires establishment of *professional standards* and *qualification pathways* that are clearly linked with career pathways and supported by employers and National Sports Organisations.
- In terms of developing a skilled workforce, increasing the *supply* of training in isolation of other shifts in industry, is not likely to rectify the problem. In order to realise opportunities for growth in training these industry issues need to be addressed, associated with clear demonstration of value add for participation in training (for both trainees and employers).

4. Low salaries and wages drive skill shortages and leakage of skilled people from the industry. There is a need to enhance industry image to attract high calibre recruits, and meet replacement demand driven by an aging workforce.

- There is difficulty in attracting and retaining high calibre recruits – a higher proportion of staff enter the industry with no formal school qualifications than the workforce as a whole. There is a need to raise the profile and image of the sports turf industry and improve the calibre of recruits entering the industry.
- The sports turf industry median personal income is below that for the New Zealand workforce. Qualified workers are leaving the workforce to overseas for better pay. Low salaries and wages have been identified as a barrier to attracting recruitment of high calibre recruits and to participation in training.
- Many turf based sports facilities lack resources or management capability, arising from too many facilities serving too few members. A catch 22 situation exists where sporting venues cannot raise salaries because of low revenues due to inadequate memberships. In turn they are reluctant to raise membership fees because members are likely to go elsewhere. Unless the turf based sports facilities change their business model to meet the changing needs of their customers and adapt their practices, there is a risk of ongoing challenges with insufficient resources and management capability.
- The turf industry workforce is aging with a much higher proportion of staff over 60 years of age than the workforce as a whole. Although recent economic reports from BERL; show that the number of people over 60 in the workforce is increasing as people are remaining in the workforce.² Generally, succession planning is a weakness in the industry.
- The workforce is drawn from a narrow demographic (predominantly European and male). In view of changing population patterns, unless the industry draws from a

² Dr Ganesh Nana, presentation to the ITF Labour Market and Skills Forum, September 2010; www.itf.org.nz

wider cross section of the workforce, there is a risk of ongoing skills and labour shortages.

5. There are challenges in maintaining a critical mass of training provision across a small highly specialised and widely dispersed industry.

- Many turf technology and skill requirements are unique to the sector, and not readily transferable to or from other industries. For instance, while productivity (eg pasture and crop production) is typically a key output in primary industries, playing surface quality and capacity are key outputs for the sports turf industry. Management practices reflect these outputs. This impact's on the ability of the ITO and providers to attract and retain staff with appropriate specialised skills.
- The small market size and specialised nature of the industry creates challenges concerning the financial viability and sustainability of the training organisations and provision. This particularly of concern for higher levels of training.
- While there is scope for additional training, care needs to be taken that introducing additional training providers does not negatively impact on the viability of existing training organisations, or reduce the quality of provision through lack of access to appropriately skilled staff.
- The most effective means of providing high quality, sustainable training is likely to be through a small number of specialised providers, with a national focus, rather than numerous regional training organisations.
- In order to achieve this, training organisations need to act collaboratively, and adopt mechanisms of delivery that transcend geographical barriers (including electronic delivery), and make training accessible to all sectors of the market. Collaboration is equally important at ITO level, where NZSTITO is seeking to build and strengthen links with other ITOs, including the Primary Sector Group of ITOs.

6. There is a need to ensure effective communication and cooperation between the ITO, industry, and international turf sector organisations.

- The ITO understands this need and is already working together with turf industry groups to enhance linkages between groups, exchange information and develop a cohesive, whole of industry approach to addressing industry issues.
- The ITO needs to establish and maintain links with other education and research organisations in New Zealand and overseas to encourage research and innovation, and take maximum advantage of new technologies.
- Industry needs to work together to exchange information that will promote and support technical and business innovation.

7. There is a need to develop mechanisms to support trainees with low levels of literacy and numeracy and ensure that these people are able to successfully engage in training.

- 40% of the New Zealand workforce has literacy levels below the minimum level required for optimal everyday life and work demands (Adult Literacy and Life Skills (ALL) Survey: Education, Work and Literacy, Ministry of Education, August 2008). If New Zealand is to build a high-skill, high-wage economy, it needs a population with high literacy and numeric skills. The ITO needs to work with employers and providers to ensure that training delivery is embedded and pitched at an appropriate literacy level to improve and increase the literacy level making up the turf industry workforce.
- The ITO needs to support professional development for providers so that they have the tools to better identify trainees with literacy needs and to embed literacy into the delivery in a relevant way.

Future Outlook

Summary of Future Skill Needs

The industry strategic training plan project considers the key issues occurring in the turf industry and their likely impact on future skill needs. Note that while these issues have been distinguished for the sake of clarity, in practice a number are inter-related. They are;

1. Financial sustainability is a key challenge. This may result in increased rationalisation, amalgamations, and fewer facilities.

Skills impact;

- Facility amalgamations may lead to more multi sport venues, and more turf managers serving multiple facilities. There is a recent trend to a merging of roles between golf Club Managers and Turf Managers (Golf Course Superintendents). Turf managers will require the skills to manage a range of sports turf surfaces and functions.
- Enhanced leadership, management and communication skills will be required for both facility and course managers, along with more effective communication between staff at facility and course management levels. Qualified staff with business and technical training will be a key need.

2. Usage demand for sports facilities will increase, along with the need to maintain or improve sports surface quality.

Skills impact;

- Sports turf facilities will need to increasingly adopt construction and management technologies capable of sustaining increased usage while maintaining quality. This will require dissemination of information on new technologies, and management strategies to maintain these technologies.
- Usage demand may drive increased utilisation of synthetic turf surfaces, and adoption of new synthetic technologies. This in turn will drive a demand for training in the management of synthetics. There is a need to develop training specific to synthetic turf surfaces.
- Usage demand for green open spaces that are currently under-utilised will increase. With SPARC driving more school, sport, territorial authority co-operation to offer sports opportunities, there will be a push to use more school grounds for sports where green space is limited. There is a need for collaboration and co-operation amongst organisations involved in sports.

3. Pressure on budgets is likely to increase, at least in the short to medium term.

Turf managers are facing increased pressure on budgets as a result of the recession, increasing resource costs and reducing facility membership income. Council sectors face demand from rate payers for high levels of service, while minimizing expenditure.

Skills impact;

- Sports turf facility and asset managers will face increased pressure to demonstrate efficient and economic management appropriate for their club or facility. This may include an increased demand to record usage levels and monitor turf performance against objectively defined turf performance standards. This in turn will need to inform asset management strategies and resource allocation to maximize efficiency.

- This will drive a need for higher level training in asset management strategies, financial management and analysis, methods of measuring and monitoring turf performance, predictive modelling, and contract establishment and management.
- Turf managers will require training to optimize efficiency in use of inputs such as fertiliser, energy, topdressing materials, water and agrichemicals.
- Turf managers will require well developed communication skills to communicate at multiple levels (for instance with councils, and at club level), to articulate the need for resources, and influence decisions.

4. Environmental pressures will increase.

Many facilities have poor practices for the storage and handling of agrichemicals and discharge of wastes. Through environment related legislation such as the Resource Management Act 1991 and Hazardous Substances and New Organisms Act 1996, increasing responsibility is being placed upon land-users to be environmentally responsible and accountable for their actions. This, together with changing weather patterns which may be associated with climate change, the loss to the industry of some commonly used pesticides due to adverse environmental affects, and rising cost of fuel and fertilisers will impact on the cost efficiency of, and access to sports facilities, and turf management requirements.

Skills impact;

- Staff at sports turf facilities need to be aware of environmental legislation, regional council resource management plans and city/district council plans, and their impact on sports turf facility management. This is required at both facility and course (turf) management levels.
- The industry will need to be kept informed of changes in availability of agrichemicals and/or any changes in how retained products can be used. Loss of products may require development of alternative pest and disease management strategies, with obvious flow on effects for training.
- Turf managers will require knowledge of the emissions trading scheme and its impacts on the sports turf industry.
- Turf managers, particularly in golf course and council, will need to be able to develop and implement strategies to maintain and increase biodiversity and protect and enhance the environment.
- Turf managers will need to be aware of the potential impacts of climate change including;
 - Development of risk management strategies to deal with increased frequency of extreme weather events (flooding, drought).
 - Incidence of new pests and diseases occurring in response to climate change along with appropriate pest management strategies.
 - Greater need for skills in the management of warm season grasses.
- Turf managers will require training in techniques for managing turf areas under low water input regimes and enhanced skills in water budgeting and monitoring of water use.
- Turf managers will require training that will support improved environmental sustainability of turf facilities, including developing sustainability strategies, conducting environmental audits and development and implementation of environment management systems and plans (including water and nutrient management plans). This is required alongside training in communicating with users concerning the impact of strategies on playing surface standards.

Key Initiatives and/or changes

Primary Sector Liaison

The Primary Sector Group (PSG) of ITOs are working together as an ITO cluster. This includes Agriculture ITO, Horticulture ITO, FITEC (forestry, and wood processing), NZITO (dairy and meat processing), Seaford ITO, Sports Turf and Equine. The PSG is responsible for industry training for a significant part of the New Zealand economy, amounting to some 20% of GDP and around 65% of export receipts.

The objectives of the PSG are to explore opportunities for joint labour/skills needs analyses, to influence primary sector education and training policy, achieve operational economies of scale, and combine generic training plans and activities. Short term projects include:

- (i) Workforce analysis across the primary sector to project labour and skill requirements and determine effective training delivery.
- (ii) Harmonisation of common/generic qualifications across the primary sector.
- (iii) Benchmarking to determine best practice.

There has been a particular demand for a joint primary sector training approach for Maori landowners and corporate Iwi groups.

The PSG operates as a virtual group using contractors and members own resources. Since its inception some \$280,000 of TEC funding has been allocated for PSG activities. The PSG CEOs operate as a steering group and meet every six weeks or so. Activities are funded on a project by project basis based on consensus decision making. Any new and/or significant proposals are subject to individual ITO Board approval. Some projects may not include all PSG ITOs.

During the plan period the PSG will progress current projects and further considering opportunities for closer collaboration and economies of scale, particularly any combined back office functions where individual industry training requirements can be appropriately retained. Any such discussion will require full stakeholder involvement. In addition the PSG will continue to investigate improvements to the vocational education and training infrastructure which would assist skill development in the primary sector.

The PSG Group of ITOs is seeking Sector Leadership funding of \$300,000 for 2011 to continue rationalisation of unit standards and qualifications across the primary industry to benchmark against other ITO clusters and to support the TES 2010 – 2015 priorities. This funding combined with individual ITO contributions will be used to scope potential qualification development in the areas of, On-job assessor mentoring development, Maori Asset Management, Environmental and Water Management, Meat and Seafood Processing, Organic Production Systems, Irrigation Systems, and ETS Management. Refer to separate application in appendix 2.

Tertiary Education Strategy Priorities

The NZSTITO plans to continue to strengthen and improve its work to achieve outcomes that will contribute to the Tertiary Education Strategy Priorities.

More under 25 year olds achieving qualifications at Level 4 and above

The sports turf industry workforce is made up of 13% under 25 year olds according to the 2006 Sports Turf Industry Survey.³ The industry has an acute aging workforce population that draws from a narrow demographic, but is not too dissimilar to overall workforce trends. The NZSTITO has recognised this issue and needs to continue to work with its industry regarding intervention strategies to encourage participation from a wider demographic. Succession planning is a key topic in the range of conversations that the ITO has with industry employers. National Sector Organisations across the industry have also recognised this issue and have strategies in place to encourage more under 25 year olds into the industry.

There are 20% 16 – 21 year olds from 2009 participating in a Modern Apprenticeship. There are 25% of 'under' 25 year olds from 2009 participating in NZSTITO training. Over 85% of those are enrolled in qualifications at Level 4 and above. The industry wide recognised qualification has its origins from Trade Certificate days and its current equivalent sits at Level 4 on the NZQF. This has ensured high participation in training at Level 4. The opportunity for the NZSTITO in this next investment period is to strengthen its established trainee management and support systems and services to enable improved qualification achievement. This will be achieved by a range of support interventions. Such as; providing clear information at 'sign up', early identification of needs (literacy or other) or lack of progress, improvements made to individual training plans, support intervention and regular contact (eg: through optimized SMS communication). The NZSTITO recognises that it will require a 'whole of industry' approach as the parties to the training agreement understand their role and support the learning.

More Maori students enjoying success at higher levels

Maori participation in the sports turf industry is important. 2009 analysis demonstrates that 9% of trainees have identified as Maori, compared to 8% of Maori employees according to the 2006 Sports Turf Industry Survey. As stated above the industry has the challenge to accept that the population base is changing and they need to embrace a wider demographic for the future.

67% of Maori trainees are enrolled in qualifications at Level 4 and above. The opportunity and challenge for the NZSTITO in this next investment period is to establish key relationships through collaborative initiatives (eg: PSG activity) to attract a higher percentage of Maori learners into the industry and to make sure that arrangements for training are suited to the needs of those learners to ensure they enjoy success of learning at a higher level.

The identification of role models that work in the industry to raise awareness and create the pathway for encouraging Maori into the industry is one way to raise participation. Engagement with Iwi can be fraught as the identified needs of that community are not necessarily going to encompass the sports turf industry. A recent example of this is an opportunity that is under discussion with the PSG Group of ITOs. Engagement with a range of Iwi groups and TPK regarding education and training needs suggest that the industries that will benefit are going to be seafood, agriculture, forestry and horticulture.

³ Haydu, J, Way, B, Hodges A; *New Zealand Sports Turf Industry Survey & Future Skills Analysis Project 2006*. University of Florida and NZ Sports Turf ITO.

More Pasifika students achieving at higher levels

Pasifika participation in the sports turf industry is important. 2009 analysis demonstrates that 2% of trainees have identified as Pasifika, compared to 3% of Pasifika employees according to the 2006 Sports Turf Industry Survey. As stated above the industry has the challenge to accept that the population base is changing and they need to embrace a wider demographic for the future.

69% of Pasifika trainees are enrolled in qualifications at Level 4 and above. The opportunity and challenge for the NZSTITO in this next investment period is to establish key relationships through collaborative initiatives (eg: PSG activity) to attract a higher percentage of Pasifika learners into the industry and to make sure that arrangements for training are suited to the needs of those learners to ensure they enjoy success of learning at a higher level.

The identification of role models that work in the industry to raise awareness and create the pathway for encouraging Pasifika into the industry is one way to raise participation. Once again this can be challenging and complex as the families have a strong influence in directing and determining a career path for their children. If sports turf is not seen as an option then the challenge for the ITO and the industry is to find ways to raise the profile of career options that exist in the industry.

Increasing school to tertiary education transition

The school to tertiary education transition is important to support young people to consider tertiary education opportunities from school. The sports turf industry has the challenge to accept that the high level of the industries aging workforce has to change over the next decade. The importance of succession planning and improving the profile and perception of the industry is the key to attracting young people to consider learning and career opportunities in sports turf.

25% of 'under 25 year olds' participated in sports turf training in 2009, of which 20% are Modern Apprentices and fit the 16 – 21 year old criteria. The ITO recognises the need to collaborate and work with its industry national sector organisations and other ITOs such as the PSG Group to participate in initiatives that will increase the level of young people making the transition from school to work in this industry.

The Gateway programme has been effective in introducing sports turf career options to students while they are still at school. A number of new people entering into the industry have been a direct result of the Gateway programme.

The Sports Turf ITO would like to work alongside any opportunities that exist by participating in the new Trade Academy programme that FITEC, Agriculture and Horticulture ITOs have been approved to rollout from the MoE.

Also potential exists for a shared promotion and careers function within the PSG where schools careers advisers and school students are able to be introduced to the range of primary industry options to encourage them to undertake training during their transition from school to work. It is hoped that by applying a broader more flexible and efficient approach the schools and the students will not be bombarded with seven individual approaches from seven different ITOs, rather just deal with one key contact on behalf of the seven organisations. This would need to align with recommendations that come out of current Industry Skills Leadership project work from the PSG.

Improving ELN skills from level 1 – 3

Improving the standard of literacy in society across New Zealand is an important Government goal. To achieve this strategic goal will require a whole of industry approach across the network of tertiary provision. The ITO supports initiatives in place to improve the levels of literacy and is committed to doing its part towards this.

The ITO offers qualifications from Levels 3 and up; partly because of its apprenticeship training heritage that sits at Level 4 (Trade Certificate level) and as such there have been no developed Level 1 and 2 qualifications. The ITO recognises the need to work with partner ITOs such as the PSG to offer primary Level 1 and 2 qualifications. Providing ELN is a key component of such offerings. Providing the broad offering of Level 1 and 2 qualifications works, the progressive pathway from 1 to 3 should lead to improved ELN skills. The ITO has gone beyond Level 3 to also embed ELN into its Level 4 qualification. It is hoped that the literacy levels of industry trainees will continue to improve as the pathway towards the ITOs higher level qualifications will continue to develop this progression.

The NZSTITO is committed to contributing to the TES priority to embed literacy and numeracy in its qualifications. By embedding literacy and numeracy it is expected that improvements will occur in a range of areas including; improved trainee completion rates, greater progression of trainees to higher-level learning. The ITO recognises the need during this next investment period to further strengthen its leadership position by working with industry to raise awareness of the significance of improving literacy in the workplace and to take every reasonable opportunity to develop trainees' literacy levels.

The ITO's overall philosophy will be to work closely with its off-job providers and industry assessors to deliver 'slices' of embedded literacy using a blended delivery approach applied to the various on-job and off-job training and assessment environments.

In a practical sense, these 'slices' of embedded training activities are anticipated to take a variety of forms including, but not limited to: review and development of written learning materials, development of electronic resources (eg: e-learning), tutor led in-class embedded delivery, pre-assessment and post-assessment of trainees, turf manager/workplace assessor led on-job embedded delivery.