

Building the foundations

2013/2014 Annual evaluation report of the Stretton Centre

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July 2014

A report for The Stretton Centre funded by the Australian Government Suburban Jobs Program









Building the foundations

2013/2014 ANNUAL EVALUATION REPORT OF THE STRETTON CENTRE

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The Australian Workplace Innovation and Social Research Centre (WISeR) focuses on work and socio-economic change. WISeR is particularly interested in how organisational structure and practices, technology and economic systems, policy and institutions, environment and culture interact to influence the performance of workplaces and the wellbeing of individuals, households and communities.

WISeR also specialises in socio-economic impact assessment including the distributional impacts and human dimensions of change on different population groups and localities. Our research plays a key role in informing policy and strategy development at a national, local and international level.

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The Stretton Centre

The Stretton Centre is one of only three projects funded in Australia through the Australian Government's *Suburban Jobs Program*. The Stretton Centre involves a partnership between the City of Playford, Workplace Innovation and Social Research Centre (WISeR) at the University of Adelaide, and the Urban Renewal Authority (Renewal SA). Over \$11 million was awarded to the Stretton Centre under the program with other partners contributing a further \$4 million of cash and in-kind support. The Stretton Centre was formally launched 6 September 2012, with the contract finalised between the Commonwealth and City of Playford on 28 November 2012.

This report is the second of the annual monitoring and evaluation reports which is a core reporting requirement of the Stretton Centre project. The Australian Workplace Innovation and Social Research Centre (WISeR) at The University of Adelaide is responsible for the evaluation of the Stretton Centre over the period January 2013 to June 2020. The evaluation has adopted the monitoring and evaluation framework developed in consultation with the Suburban Jobs Program team and the two other projects funded under this initiative.

The vision

Integrated learning, employment and research centres like the Stretton Centre are at the cutting edge of effective place based planning and development internationally, drawing national and international attention to the innovative work they foster. Not only will the Stretton Centre demonstrate the benefits of well informed and collaborative approaches to local workforce, workplace and urban development, capturing the benefits of growth in the health and aged care and advanced manufacturing sectors, it will be a source of inspiration for policymakers, planners and practitioner seeking to successfully implement place based approaches to workforce and urban development.

Core objectives of the Stretton Centre are to:

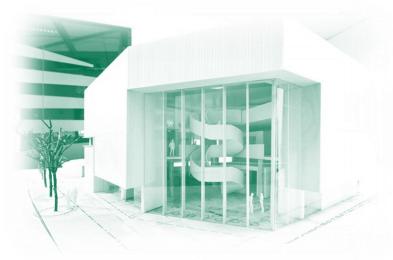
- Facilitate an environment for the creation of local jobs
- > Enable integrated policy and strategy development
- Undertake collaborative industry/workforce research and evaluation
- Enable transitions to local employment, including business development
- Develop sustainable industries in the area
- Support community learning
- Enable community building in support of industry and workforce development.

The Stretton Centre is a community-based, action learning hub where researchers, business people and local communities work side-by-side towards a shared goal of sustainable industry and workforce development in Adelaide's northern region. An unusual combination of functions social and economic research and industry development as well as community building and education - will be integrated and co-located within the Centre to enable new pathways to employment for local communities and to related policy and development. Digital communication technologies will support and connect the Centre's functions.

The real benefits to the community and to industry of the Centre's multidisciplinary approach will demonstrate the core mission of the Centre's namesake, Hugh Stretton, and will set the Stretton Centre apart from other centres for industry research and community development.

A welcoming, collaborative and inspirational place, the Stretton Centre will be firmly embedded in its

community, assisting it to meet the challenges of a rapidly changing economy and environment. The Centre will house a range of research, training, learning and industry development activities that broadly focus on the goal of improving community well-being and developing new industry and employment opportunities in Adelaide's outer northern suburbs.



1. Improving conditions for the creation of jobs in Major Capital city locations outside of CBDs that are subject to pressures as a result of current, or recent, rapid growth

	How project will deliver on this objective	How delivery will be measured	КРІ
Reducing investment risk through funded projects (re funding of	Communicating project information/ successes to State government to increase funding for similar projects.	Feedback from State Government on willingness to fund similar projects.	KPI: 1.1
similar projects)		Documentation on total costs and positive economic benefits of project.	
		Report on co-funded projects.	
Establishing project partnerships and examining the usefulness of project partnerships	Forming effective partnerships with project consortium, training organisations, and potential tenants of the Stretton Centre that contribute to the successful implementation of the project.	Annual qualitative assessments against agreed criteria (including how partnerships maximised project outcomes).	KPI: 1.2
	Implement agreed actions with project partners.		
Improving the amenity of project areas to make them suitable for business investment	Construction of an iconic and environmentally sustainably designed building/surrounding landscaping which is consistent with surrounding area and provides amenity for employees. Design of the Stretton Centre to ensure it is a catalyst for other development in the area.	Achieve the equivalent of a five star Greenstar certification using an appropriate rating and certification approach, as agreed with the department.	KPI: 1.3
Raising the profile of project areas so businesses are aware of opportunities to invest	Engaging with local businesses and stakeholders in building & service design. Promotion of project through various marketing tools - (website, articles in business publications, brochures, media releases). Working with stakeholders such as Renewal SA, local government and training providers to ensure awareness of potential business opportunities in the area.	Surveys of local businesses about awareness of centre/effectiveness of project promotion.	KPI: 1.4
Providing high quality office/training space/business support facilities that is	Engaging with local business/training organisations to ascertain requirements for new office spaces and ensuring requirements are incorporated into design.	Stretton Centre Functional Brief. Number of people trained at the Stretton Centre.	KPI: 1.5
adaptable for different industries and changing needs (including NBN capability)	Research activities to inform businesses to engage.	Surveys of trainees about adequacy of space.	

KPI: 1.1 STATE GOVERNMENT CO-FUNDING AVAILABLE TO SUPPORT STRETTON CENTRE ACTIVITIES

STATUS: IN PROGRESS

The South Australian Government has been engaged in a range of activities associated with the Stretton Centre from its announcement. It has made significant investment in projects aligned to the Stretton Centre including:

The SMART Workplaces online and demonstration project involves the development of a resource designed to support manufacturing businesses that are seeking to better understand and successfully implement high performance workplace systems. The project will also develop a SMART Workplace Change Management Demonstration Program to implement and track the experience of two committed manufacturing firms seeking to adopt high performance work systems. This is designed to provide guidance and inspiration to other manufacturers through relevant local case studies. In addition, evaluation of the program by the research team will assist in identifying key lessons for other businesses as well as informing policymakers on what forms of assistance might be helpful for industry. As well as providing a valuable tool, the project will raise awareness of HPW practices and encourage their wider uptake. This workplace focused strategy closely fits with, and compliments, broader State and Federal policy in respect of the future of manufacturing. Funding of \$200,000 has been provided by the Department of State Development to the project.

Assisting growth — Assistive technologies mapping and opportunities project (ATMOP) is investigating the potential for accelerated transition of businesses and workers from declining manufacturing industries into new and growing industries — industrial transformation and diversification, in association with the South Australian Government Department of State Development¹ and Fraunhofer Gesellschaft. ATMOP is a practical economic development project centred on diversifying our economic base by identifying and capturing high value targets in high growth AT. It is a critical element in the urgently needed response to the demise of the automotive sector by transitioning certain manufacturing businesses and workers into 'Assistive Technologies' (AT) — products and services used in the care and support for aged and disabled people. The project is based on a structured on-going industry engagement program including workshops, to examine opportunities for SA firms to benefit from opportunities in this sector, including understanding international trends and future technologies. It will include consideration of an Assistive Technologies Industry Innovation Centre (ATIIC) as an enabler for the industrial transition of northern Adelaide. Funding of \$110,000 has been provided by the Department of State Development.

In May 2014, the South Australian Government committed \$2 million cash in total over 4 years and 3.0 FTE inkind staff commitment over 7 years to the value of \$980,000 for the South Australian node of the Innovative Manufacturing CRC. The work is to be overseen by the Stretton Centre in partnership with WISeR. In SA, the CRC focus will be on applying the program and research focus areas to major value chains (resources, defence, clean tech and medical and assistive devices, including for aged and disability), and new materials science to create new products and applications (titanium), additive and subtractive manufacturing applications, and non-destructive testing, together with workplace leadership/innovation and 'factories of the future'. The work will dovetail with the state's Manufacturing Works strategy, utilize existing infrastructure such as the Stretton and Polaris Centres and Tonsley Park, and leverage partnerships with 'best of breed' organisations internationally, such as Fraunhofer Gesellschaft.

FOR MORE DETAILS SEE:

- Appendix A: SMART workplaces update
- Appendix B: ATMOP update

¹ Formerly Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) and the Department of Further Education, Employment, Skills and Training (DFEEST).

KPI: 1.2 REGIONAL PARTNERSHIPS STRENGTHENED

STATUS: IN PROGRESS

A Stakeholder and Community Engagement Plan was developed for the project. This plan provides a framework and rationale for engaging with Stretton Centre stakeholders. It has been designed to evolve as the project progresses, and is underpinned by a commitment that stakeholders will help shape the interaction. The Stretton Centre engagement objectives are to:

- Connect stakeholders to Stretton
- **Communicate** activities and outcomes
- **Collaborate** in the development of Stretton
- Capture imagination, commitment and thinking

Activities with regional partners include:



- Provided assistance to the City of Playford and City of Salisbury with the preparation of a submission to
 Minister Macfarlane's inquiry into the automotive industry and subsequently refine proposals contained
 in the submission as projects of regional significance.
- Support and engagement with the Playford Local Advisory Group which has been focused on building
 collaborative effort in Playford to better access data; develop collaboration and co-design skills and
 knowledge; and build community leadership capacity. This work included presentations at the *Connect Effect 2014 Series* providing data and information to around 100 organisations; and support and advice for
 the development of a local data observatory to better respond to the changing socio-economic climate in
 Adelaide's north.
- Development of an Aboriginal workforce strategy in consultation with the City of Playford (including Marni Waiendi), the South Australian Government Department of State Development and Local Government Association, and Aboriginal Recruitment Training (ART) and Employment. This work recognises the vital role played by local government in driving local outcomes for the Indigenous communities they represent. The Strategic Framework for Regional Aboriginal Workforce Development is designed to assist local government Councils to increase and enhance opportunities for Aboriginal employment in their region.
- An overview of Renewal SA's Works Program implemented as part of Playford Alive, a large Scale urban
 renewal project representing a partnership between Renewal SA, the City of Playford, the Department for
 Communities and Social Inclusion (DCSI), Housing SA and the community. The *Building Jobs* report found
 the program generated new jobs and formal qualifications along with a range of subjective outcomes that
 encourage longer term employment and other social benefits.
- Various presentations to the City of Playford including the Council and the Council's City Assets and Services Committee, and the staff Roadshows in October 2013 and June 2014.
- Various meetings and presentations to State and Local Government Departments.
- Present workshops Charles Landry Building understanding it's potential as a driver of innovation
- A joint project between the Cities of Playford and Salisbury, Department of State Development, University of Adelaide and University of South Australia, called 'Northern Adelaide Manufacturing Project'. In late October 2013, a project officer was appointed for 12 months to work across the Stretton and Polaris Centres. The role liaises directly with the manufacturing sector employers to identify short and medium term industry and workforce development opportunities in the context of likely demand for goods and services in other sectors. As at June 2014, face-to-face contact including site visits have occurred with 116 businesses. Of these, sixteen have been connected with funding partner programs and 28 Manufacturing Workshops/Events (Manufacturing Works etc.) have been promoted to a database of 200+ businesses
- Via the Services Plan, co-invested in Carey Training's Live Employment and Training Project, and EQUAL International's Youth on the Move and Northern Health Pathways Programs.

FOR MORE DETAILS SEE:

Moretti, C., Barbaro, B., & Spoehr, J. (final draft). *Aboriginal Workforce Development Strategy in Northern Adelaide*. Adelaide: Australian Workplace Innovation and Social Research Centre (WISER).

Perrett, R., & Spoehr, J. (2014). *Building jobs: Renewal SA's Works Program at Playford Alive.* Adelaide: Australian Workplace Innovation and Social Research Centre (WISeR).

Spoehr, J., & Worrall, L. (2014). *Strength in Diversity: Diversification, innovation and jobs*. Commonwealth Review of SA Economy and impact of GMH closure. Adelaide: Australian Workplace Innovation and Social Research Centre (WISER), City of Playford, City of Salisbury.

KPI: 1.3 CONSTRUCTION OF THE STRETTON CENTRE ACHIEVES THE EQUIVALENT OF A FIVE STAR GREENSTAR CERTIFICATION

STATUS: IN PROGRESS

In agreement with the Department, the Stretton Centre will achieve the equivalent of a five star Greenstar certification using an appropriate rating and certification approach.

The Stretton Centre is not eligible for the GreenStar Office Design and As Built v3 rating tool, as it does not meet the Green Building Council (GBC) criteria for an office building. Office requires in the first instance that that the building comprise no less than 80% of the gross floor area as Class 5 offices. Stretton only has 60%. One of the challenges for a mixed use building like Stretton is finding a rating model that is flexible enough to appreciate the uniqueness of the integrated design and functionality of the building.

A workshop, held in November 2013 with the project's design team and the GBC, attempted to identify some opportunities in the rating tool to accommodate the mixed use nature of the building. The GBC requirements proved inflexible, so Stretton's ESD consultant (BESTEC), began the process of developing a revised tool.

BESTEC tested the eligibility of the Stretton Centre against the recently released Green Star Public Buildings Tool. While the project complied with the eligibility criteria, BESTEC undertook a direct comparison between the two tools (office and public) to understand the differences between them and the cost implications likely to be incurred. This study highlighted that the Public Buildings tool incorporated a mix of credits drawn from the Office, Education and Healthcare tools. As a result, some of these credits are not applicable to the nature of the Stretton Centre and consequently would have imposed an additional cost in the order of \$155,000 to achieve compliance. The budget constraints on the project made this approach unacceptable as it would divert funds towards ESD compliance with criteria not applicable to the project, rather than delivery of core functionality upon which the Stretton Centre's future success is dependent.

It was therefore proposed to utilise the Green Star Office tool as the framework for measuring the delivery of ESD outcomes and to self assess this compliance in the same manner as if the project were to be submitted to the GBCA for assessment. In this way the delivery of an equivalent 5 star rating could be demonstrated.

How the alternative rating will be independently reviewed:

The proposed assessment framework has been developed on the basis that all the credits claimed would be verified by assessment of the same reports and documentation that would have been submitted to the GBCA if the project had been eligible for submission in the first place.

All documentation supporting the credits claimed would be compiled by the respective designers and submitted to Graham Dyus (BESTEC) for review and verification of compliance with the criteria as set out in the Green Star technical manual.

Had the project been eligible, this process of checking the compiled reports from the designers would have been carried out by Graham Dyus prior to submission to the GBCA, to minimise the time and cost associated with the Round 1 and Round 2 submission process to the GBCA.

The score achieved would be explained in a brief Assessor's Report. The completed assessment with all supporting documentation would be made available in electronic PDF format to the Federal Government.

This process divorces the assessment of ESD from the design role and hence does not allow for conflict of interest.

Marketing the sustainable features of the building:

A multi-layer strategy will be implemented to market the sustainable features and integrity of the building. This will include but is not limited to:

- A specific page on the City of Playford and Stretton Centre websites that provide a narrative on the sustainable features and the benefits to the environment and people using the Centre.
- Using information systems within the building itself to highlight energy consumption and savings and sustainable design features
- General Stretton Centre marketing collateral will promote the sustainable design features of the building
- Pitching the Stretton ESD narrative to targeted media publications, especially during specific environment events such as Earth Hour or World Water Day. Highlight ESD features within the building more prominently during these same weeks.

The Stretton Centre's ESD initiatives are estimated to total 63 points, which achieves the equivalent of a five star GreenStar certification.

THE ESD INITIATIVES TO BE INCLUDED IN THE STRETTON CENTRE ARE LISTED IN APPENDIX C.

PROGRESS OF THE BUILD CAN BE VIEWED:

http://c337ba591423b8aac742-

e5e2abcbf1ec66bd50b106b0cf70129c.r44.cf2.rackcdn.com//LatestPhoto/LatestPhoto.jpg

KPI: 1.4 THE ACTIVITY AND FUNCTION OF THE STRETTON CENTRE PROMOTED THROUGH MULTIPLE METHODS

STATUS: IN PROGRESS

The City of Playford and WISeR are promoting the Stretton Centre through their websites developed to promote the Program, building and the research and innovation program.

A basic project fact sheet on the Stretton Centre was developed in November for distribution at the Playford Alive Community Fun Day. This information has been further developed and updated on the Council website as the project has progressed. WISER has also produced research and innovation project overviews as a promotional mechanism for the work undertaken to date.

Two CGI images of the building (external view and ground floor hub view) were developed by Hassell, which has been a key image, used for promoting the building aspect of the project. Two 1:50 scale 3d models were created by the University of Adelaide's School of Architecture (one on display in Playford, the other in the CBD at WISeR). This has been an invaluable engagement tool for immersing stakeholders in the various spaces in the building and providing something tangible to consider in terms of how the space will look and function.



The appointment of the builder and impending start of construction, attracted media attention in local and state media, including television coverage.

During 2013/14 the majority of promotion occurred through direct engagement with stakeholders via briefings, meetings and the presentations outlined and referred to throughout this report. This has been an important strategy in the stakeholder engagement plan as a way of capturing the imagination of people who will work with or in the Stretton Centre.

The Northern Adelaide Manufacturing Development Officer (also see KPI: 1.2) has hosted an event at the Polaris Centre on support programs for manufacturers - that event was attended by 35 local manufacturers. In addition the officer has hosted three visits for small groups of manufacturers to the University of South Australia which has resulted in four site visits being made by university staff to the manufacturing businesses.

FOR MORE DETAILS SEE

http://www.playford.sa.gov.au/strettoncentre

http://www.adelaide.edu.au/wiser/stretton/

KPI: 1.5 DEVELOPMENT OF A FUNCTIONAL BRIEF SO USER AND TENANT REQUIREMENTS ARE INTEGRATED INTO THE DESIGN

STATUS: COMPLETE

Urban and Regional Planning Solutions (URPS) was engaged by the City of Playford in 2013 to undertake community engagement about the design of the Stretton Centre with a focus on:

- Communicating what the Stretton Centre is, its location, form (multi-storey) and what its facilities and
 uses will be; and
- Gathering community feedback to influence the look, feel and functionality of the Stretton Centre and its relationship with the adjacent Town Park in the context of known parameters (i.e. the building location, floor area, multi-storey building form, core facilities and uses). It was also an aim to integrate Stretton Centre community engagement activities as much as possible with the program of community engagement being undertaken by Renewal SA (with assistance from URPS) for the Playford Alive Town Park. Public consultation for both the Stretton Centre and Town Park projects occurred between 6 April and 3 May 2013. This included a public display on the site on Saturday 6 April, an online survey and distribution of flyers. Thirty-one people completed a survey relating to the Stretton Centre and others provided feedback at the event.

Village Well were engaged to develop a Functional Brief for the Stretton Centre in 2013. The Village Well workshops helped to articulate the objectives of and activities for the Stretton Centre. Workshops were held in Shedley Theatre (Playford Civic Centre) on 30 April and 1 May 2013 and included members of the Project Control Group and Project Design Group. This was followed by a final workshop on 12 June 2013 (Playford Operations Centre) to review the draft Functional Brief before it was finalised at the end of the month.

- The Brief provides a summary of the Stretton Centre's main functions and was developed to inform the architectural design of the Centre and the ongoing planning for the services, programs and management of the Centre. The scope of uses and functional areas described in the Brief is a 'first cut' and is the outcome of a series of stakeholder workshops and discussions. Other investigations, including the analysis of successful case studies of similar centres and services have also informed this Brief.
- The Brief outlines the project stakeholders' vision for the Stretton Centre and its context, including key user groups. It describes the main users, activities and services (the Core and supporting functions) that will occur in the Centre and it proposes specific functional areas to accommodate these functions and the relationships between them.
- The Brief also provides guiding principles for future design and services planning and prioritisation. It is envisaged that the functions outlined in this Brief will be further analysed and refined by the Project Partners and the design team as part of the design process.

2. Creating enduring benefits for the distribution and diversity of employment in areas

	How project will deliver on this objective	How delivery will be measured	KPI
Conducting research into future industry opportunities to build	Research into industry demand and development opportunities in area (health and ageing, horticulture etc).	Completed research reports. Employer survey.	KPI: 2.1 KPI: 2.2
sustainable industries in area.	Monitoring of business conditions in the area.		KPI: 2.3
	Possible exploration and testing of local resilience building by WISeR research officer.		
	Undertake surveys to obtain micro-level forecasts of employer demand in the area.		
Providing industry	Delivering business support activities.	Reporting of Stretton Fellows	KPI: 2.4
support to build sustainable industries in	Engaging Stretton Fellows to act as strategic brokers in the areas of industry	research findings and engagement with stakeholders.	KPI: 2.5
area with increased employment capacity.	development, workforce development,	Industry and Services Plan.	KPI: 1.1
. ,	urban development and sustainability. Meetings with govt departments	High performance workplace	
	(DMITRE) and local industries to ascertain needs in area.	report.	
	Completion of an Industry and Services Work-force Plan.		
	Research reports identifying best practice to guide policy and industry decision making.		
Connecting the	Provide direct jobs during construction	Surveys of participants about training/work-shops (including	KPI: 1.2
community with diverse future employment opportunities in area.	and external works/land-scaping. Provide direct jobs in the Stretton Centre. Working with stakeholders such as Renewal SA, local government, and	number of people who received training).	KPI: 2.6 KPI: 2.7
		Number of direct and indirect	KPI: 2.8
	training providers to obtain local industry	number of jobs created by project (methodology/data	KPI: 3.2
	requirements and future employment demand possibilities.	utilised and how data assisted in maximising employment outcomes, how data was collected and what the data enabled Grantee to achieve).	KPI: 4.1
		Employment diversity changes in area (data source: ABS Census).	
		Employment self sufficiency/self containment changes in area (data source: ABS Census).	

KPI: 2.1 DEVELOPMENT AND IMPLEMENTATION OF A LONGITUDINAL SURVEY OF LOCAL BUSINESS CONDITIONS

STATUS: IN PROGRESS

The Workforce Futures Survey (WFS) provides industry, government and NGOs with a regular snapshot of the changing demand for skills, workplace innovation and employment and investment intentions of workplaces in Playford and Salisbury in South Australia. It is the first longitudinal survey of its kind to be undertaken in South Australia and is designed to inform workplace and workforce development decision making. The survey explores:

- Business confidence in investment, recruitment, profits, sales and growth.
- Factors related to high performance workplaces that impact on business and organisational performance and productivity.
- Current and future employment demand (vacancies and recruitment) and issues with supply (hard to fill vacancies), with a focus on local employment.
- Existing skills gaps within organisations and potential future skills requirements.
- Extent and nature of workforce training and development.

The first WFS, administered in November 2013, provides a baseline, having been conducted prior to the announcement of the 2017 closure of GM Holden. Respondents from 451 establishments (with over 12,500 employees participated in the survey) - a response rate of 12.5%. The second WFS was administered in May 2014 with a total of 455 employers, of which 338 (74%) were continuing participants from the previous round.

FOR MORE DETAILS SEE:

Ranasinghe, R., Hordacre, A.-L., & Spoehr, J. (2014). *Workforce Futures: Employer Survey - Playford and Salisbury*. Adelaide: Australian Workplace Innovation and Social Research Centre (WISER).

Ranasinghe, R., Hordacre, A.-L., & Spoehr, J. (final draft). *Workforce Futures Index: Playford and Salisbury.*Adelaide: Australian Workplace Innovation and Social Research Centre (WISeR).

Ranasinghe, R., Hordacre, A.-L., & Spoehr, J. (draft). *Workforce Future Wave II: Employer Survey - Playford and Salisbury.* Adelaide: Australian Workplace Innovation and Social Research Centre (WISER).

KPI: 2.2 A PROGRAM OF RESEARCH WORK UNDERWAY EXPLORING HEALTH AND AGEING

STATUS: IN PROGRESS

The Stretton Centre is seeking transformative change in the social and economic strength of communities living in and near the City of Playford. To do this, it is important that a range of factors driving change – locally, nationally and on a global scale – are understood, along with the challenges and opportunities embedded in each.

The *Playford Prospects: Challenges and Opportunities* report is designed to stimulate and inform strategic thinking, planning and decision making in collaboration with stakeholders. It provides a preliminary overview of the landscape in which the Centre is operating as a foundation for discussion of short and medium term priorities. The report provides an overview of the policy context in which the Stretton Centre is situated. The policy directions discussed reflect the need to respond to major drivers of change, particularly those affecting our environment, our economy, and our population, and the over-arching need to develop sustainability. Key drivers of change – population ageing, climate change and technological change – are explored first from a futurist perspective and then in the light of existing trends. Some industry and workforce development opportunities linked to major changes taking place are identified and discussed.

Given the considerable movement of labour and employment within and around regions, the City of Playford and Adelaide - North labour markets and policies are inextricably linked to those of the surrounding areas. Understanding regional labour market dynamics, including the incidence and outcomes of shocks is critical in

10 WISER (2014)

policy formulation. *Ageing and Jobs in Adelaide - North* explores ageing of the regional population and ageing of the workforce in Adelaide – North in order to plan for the replacement of an ageing workforce and to understand the potential demand for goods and services for an ageing population.

The City of Playford is seeking to develop a Health Learning and Innovation Precinct using greenfield space around the Lyell McEwin Hospital. The *Northern Adelaide Health Precinct Development Project* has been designed to provide research assistance in scoping the opportunity, defining the concept and engaging key partners. It is intended that the Precinct will cluster research, teaching, learning, training and employment opportunities into a single Hub that will focus on services in health (acute care, primary care and mental health), aged care and disability care. The project involves three stages:

- 1. To inform the Precinct design, a background paper will be prepared to document the policy and service context in which the Precinct will operate analysing policy and service directions over the next decade in the aged care and ageing, disability and mental health sectors. In particular, this will include a focus on the consumer directed care trend and its implications for service design and workforce development.
- 2. In order to better understand the supply of services, and to analyse this against key demand factors such as demographic trends, existing services in the region will be identified and profiled according to key features in order to develop a regional perspective.
- 3. A detailed consultation process will be undertaken with the services identified during Stage 2 and with other key stakeholders. The consultation process will be designed to quantify the role which each organisation can and would like to play in the Precinct and to encourage engagement from them.

FOR MORE DETAILS SEE:

Barnett, K., & Spoehr, J. (2013). *Playford Prospects. Challenges and opportunities*. Adelaide: Australian Workplace Innovation and Social Research Centre (WISeR), The University of Adelaide.

Ranasinghe, R., Hordacre, A., & Spoehr, J. (2014). *Ageing and Jobs in Adelaide - North*. Adelaide: Australian Workplace Innovation and Social Research Centre (WISeR), The University of Adelaide.

KPI: 2.3 A PROGRAM OF RESEARCH WORK UNDERWAY EXPLORING HORTICULTURE

STATUS: IN PROGRESS

The Virginia horticultural area is one of Australia's premier horticultural districts, with annual farm gate production of \$250 million, and significant potential for growth. WISeR is working with Seed Consulting to support the development of a Horticultural Industry Development and Innovation Plan (HIDIP) which will include an evaluation of the feasibility of establishing a Virginia and Northern Adelaide Plains (VNAP) Horticultural Innovation and Development Centre (HIDC) to support the development and operation of a horticultural and related industries cluster.

A business case for the development of the Centre will be prepared for consideration of stakeholders and potential funding bodies at the local, state and national level.

The proposed Centre would address in a timely and practical fashion the potential for industry growth and associated employment generation in the Virginia horticultural area particularly, as well as the impediments and challenges that will need to be addressed to maximise the region's economic potential. Whilst the focus here is on horticulture, this is a component (albeit a significant one) of developing northern Adelaide as an increasingly important and expanding region in food production, processing and distribution, including potentially, production of elements of the technology, plant and equipment required along the horticulture value chain.

All elements of the proposal are consistent with the directions enunciated by the Wakefield Group (which includes the City of Playford, City of Salisbury, City of Gawler, Mallalla Council, Barrossa Council and Light Council) which regards establishment of the Centre as a vehicle for collaboration and accelerated business improvement for the horticultural producers of northern Adelaide. Further, the Wakefield Group sees this as the vehicle by which the most positive impact could be achieved, in the most cost efficient manner and in the

short time left available by the impending withdrawal of GMH and its negative knock-on effects to component suppliers and other industries. The Wakefield group considers a realistic target would be a doubling of production output to \$500 million over the next five years, and employment growth to 2000.

KPI: 2.4 DEVELOPMENT AND ACCEPTANCE OF AN INDUSTRY AND SERVICES PLAN

STATUS: COMPLETE

This 2013-2015 Services Plan for the Stretton Centre details a range of initiatives that respond to key objectives of the Suburban Jobs Program including increasing the employment generation potential of the area; removing barriers to participation in employment and training; reducing travel to work times for residents; building and sustaining successful collaborations and fostering the uptake of the NBN in the workplace. The Plan is designed to be developmental, building on current knowledge and experience of successful practice and lessons that have been learnt in the region and testing out new ideas and solutions that are informed by the Stretton Centre research and evaluation program. Target areas include health and aged care, manufacturing and horticulture workforce and industry development.

FOR MORE DETAILS SEE: The Stretton Centre Industry and Workforce Services plan 2013-2015: Sustainable Jobs, Sustainable Cities, originally submitted May 2013 with an update submitted March 2014.

KPI: 2.5 STRETTON FELLOWS ENGAGED WITH THE ACTIVITIES OF THE STRETTON CENTRE

The Stretton Fellows program implemented in early 2013, links the Stretton Centre to key thought leaders with expertise in areas of industry development, workforce development, urban development and sustainability. Stretton Fellows will act as strategic advisers to the Stretton Centre, providing feedback on research findings and presenting at Stretton Centre public forums to raise awareness and help stimulate discussion. Stretton Fellows will also act as strategic brokers, helping to engage a wide range of stakeholders in the work of the Stretton Centre. Six Fellows have engaged with the process to date, these are listed in Table 1.

TABLE 1: STRETTON FELLOWS

Stretton Fellows	
Professor Göran Roos	Innovation Management, Strategy, Industry & Innovation Policy, Intellectual Capital Management Chair, Advanced Manufacturing Council Former Adelaide Thinker in Residence
Professor John Quiggin	Decision theory, environmental economics, production economics, and the theory of economic growth Australian Laureate Fellow in Economics at the University of Queensland
Professor Roy Green	Industry & Innovation Policy Dean, University of Technology Sydney Business School
Professor Rhonda Sharp	Gender, Work and Public Policy Member of the Order of Australia (AM) for her services and research to economics and women
Dr Zoz Brooks	Digital manufacturing technologies, rapid prototyping and digital fabrication Co-host of the Discovery Channel's "Prototype This!" series
Tim Horton	Architecture, urban design and civic space, innovation President of the SA Branch of the Australian Institute of Architects Former SA Integrated Design Commissioner

Tim Horton, former SA Integrated Design Commissioner and Current Stretton Fellow, was engaged to provide independent input and advice into the selection of the architect and during the Village Well workshops. He was also on the selection panel to appoint the builder. Tim's design approach has also been beneficial for the project in considering its business plan (which includes a governance and management model) and

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communications and engagement strategies. Tim's insight into design and innovation has added much value to project development throughout the year.

KPI: 2.6 PROVISION OF DIRECT JOBS DURING CONSTRUCTION AND EXTERNAL WORKS/ LANDSCAPING

STATUS: IN PROGRESS

Estimates of employment figures

- 1. Employment figures directly related to Stretton Centre project during:
 - a. The design and planning stage 55 people have worked in the design and planning stage in some capacity including consultancy, WISeR and Playford Staff.
 - b. (Projected numbers) during construction phase Projected at 200 people working on the construction in some capacity, between the builder and 30 sub-contractors.
 - i. In May 2014, an average of 2-3 people were on site at a time for the car park and related works.
 - ii. In June 2014, 23 employees worked on the project site.
- 2. Latest projection for actual future jobs in the Centre (operational staff, tenants etc)
 - a. 52 workstations are planned for library staff, co-working space and research and innovation Centre so this is the estimated number expected to work in the building in full-time/part-time/casual capacities.

KPI: 2.7 EXPAND LOCAL EMPLOYMENT OPPORTUNITIES

STATUS: IN PROGRESS

A number of training, workforce development, engagement and local employment projects were supported by the Stretton Centre through its Services Plan including:

- → The Youth on the Move project
- → The Northern Health Pathways project
- → Northern Communities of Hope Live Training Site project
- → Shared Drive/Hackerspace project

THESE ARE ALL DISCUSSED IN GREATER DETAIL ELSEWHERE (SEE KPI: 1.2, KPI: 3.2, AND KPI: 4.1)

KPI: 2.8 DEVELOP A LOCAL POPULATION PROFILE

STATUS: IN PROGRESS

The City of Playford: Socio-demographic, employment and education profile was prepared by WISeR as a baseline study of the City of Playford population, with much of the data drawn from the recently released 2011 Census (ABS). The profile has articulated key areas of population growth, disadvantage and opportunity providing comparisons to the Greater Adelaide and South Australian populations. The Playford profile provides a detailed analysis of:

- Resident population
- Indigenous and cultural and linguistically diverse populations
- Population movement and growth
- Socio-economic disadvantage
- Education and qualifications
- House and vehicle ownership
- Health, disability and premature death rates
- Labour force participation
- Industry, occupation and income
- Local employment
- Employment self-sufficiency and self-containment

FOR MORE DETAILS SEE:

Hordacre, A.-L., Spoehr, J., Crossman, S., & Barbaro, B. (2013). *City of Playford. Socio-demographic, employment and education profile*. Adelaide: Australian Workplace Innovation and Social Research Centre (WISER).

Hordacre, A.-L., Spoehr, J., Crossman, S., & Barbaro, B. (2013). Playford Facts.

- ✓ Education
- ✓ Employment
- ✓ Families and Communities
- ✓ Health
- ✓ Income
- ✓ Population

3. Demonstrating innovative ways in which the digital economy can be used

	How project will deliver on this objective	How delivery will be measured	KPI
Demonstrating innovative ways in which NBN or digital technology can be utilised in the workplace.	Establish and administer innovative training facilities and library facilities in Stretton Centre (inc possible 3D printing facility). Ensure building is NBN capable.	Report on the intention of tenants to use high speed broadband (before occupancy) as part of their business and what activities they expect to complete using the connection. Report on number of businesses connected to NBN (after occupancy) and how this is allowing them to more effectively provide existing services. Details of any new services enabled by the NBN.	KPI: 3.1
Raising the profile of digital technology and how it can be used by communicating with external stakeholders about innovative technological elements of the projects.	Conduct communication activities with business organisations, state government etc (e.g. forums, workshops, meetings). Use and demonstration of 3D printing capabilities.	Report of forums, workshops etc. Report of use and demonstration of 3D printing.	KPI: 3.2

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KPI: 3.1 USE OF HIGH SPEED BROADBAND

STATUS: IN PROGRESS

Each floor of the Stretton Centre will have its own connection to the NBN.

The Stretton Library Service has embarked on a process of reimagining the service, particularly in terms of broadening the definition of literacy to include various forms of digital literacy. This process is informing the expansion of the library's programing to make use of the NBN connection to delivery creative and entrepreneurial learning opportunities for the community, including the use of 3D printers.

A FabLab at the Stretton Centre: A Discussion, was produced for Stretton by one of FabLab Adelaide's founders. It provides practical insight into how to manage a 'maker space' and how such a program could work in Stretton. It has direct correlation with the path the library service is taking.

Stretton Fellow Zoz Brooks provided an overview of what a program of engagement could look like in this 'maker space' area in the lead up to the opening of the centre.

KPI: 3.2 Delivery of 3D printing program

STATUS: COMPLETE

Shared Drive/ Hackerspace is an initiative to encourage City of Playford residents to engage with their community, and play a role in its future technological, economic and social development. The project provided participants with skills and insight into the digital economy; affirmed the value of their ideas and creativity and promoted opportunities existing in the digital environment. Hackerspace Playford wrapped up its library workshops at the end of March 2014. However, it continues to work in partnership with the Carclew Youth Arts in providing 3D printing workshops, and the Barossa Council for the Barossa Tourism Conference; with the latter providing further employment for 3D printing facilitators and the promotion of City of Playford facilities and programs. Findings from the project include:

- > Delivery of 3D printing and digital programming proved most successful when
 - o combined with arts, robotics or gaming activities;
 - were conducted in environments that were open, youth-friendly, and already well frequented;
 - were conducted by facilitators who were skilled educators and able to solve technical glitches
- The development of partnerships is the central strength to the Stretton Centre alliance. The relationship with Fab Lab Adelaide, Hackerspace Adelaide and Mark Oliphant College has been beneficial in exchanging knowledge, shared resources and referrals.
- Female participation be targeted (around 25% of Hackerspace participants were female)
- Most participants were at senior primary to junior secondary level, which led to beneficial partnerships with Children's University and Carclew Youth Arts.
 - However, attendance by this demographic may have resulted in fewer adolescent or adult participants.

Creating Employment Opportunities: The City of Playford now owns a mobile 3D Printer and has access to trained facilitators. Encouraging the development of future trainers, particularly secondary students, would be an effective way to grow the project and create supportive part time employment opportunities for young people. More generally, there is scope for participants in schemes such as Hackerspace to engage with, and perform tasks set by, companies in the region working in 3D technology.

Engaging with school-age students: There is real scope to work with other schools in the Playford Region. Schools are working to implement Digital Literacy, a requirement mandated in the Australian Curriculum; there is opportunity to connect directly with schools, as well as with agencies such as NASSSA, to support this work. Children's University, an initiative currently based at Mark Oliphant College, is seeking to extend its operations, and this provides scope for further partnerships.

Capitalising on the 'Maker Movement' as a new opportunity for promoting the digital economy in Playford: DIY technology and events such as 'Maker Faires' are now seen as essential activities that promote community

engagement with technology, as well as a culture of entrepreneurship and aspiration. It is recommended that facilitators of future events consider the option of organising regular community-based 'Maker Faires' or similar activities that encourage widespread participation in high-tech and low-tech 'making'.

4. Reducing travel times between work and services/homes

	How project will deliver on this objective	How delivery will be measured	KPI
Providing high quality employment facilities in outer urban areas for residents of these areas so travel times are reduced.	Research Centre (SRC) will inform the future development of effective workforce development programs in the area. Offices and training facilities provided in Stretton Centre to work towards enabling local employment for residents.	Journey to work metrics (ABS census).	KPI: 1.2 KPI: 4.1
Establishing employment facilities located close to other services/urban transit centres in outer urban areas.	Ensuring building design incorporates good urban design principles. Centre built close to Munno Para Railway Station.	Develop a data profile for residents about transport usage.	KPI: 4.2

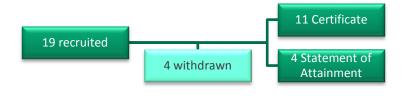
KPI: 4.1 ENGAGEMENT IN WORKFORCE DEVELOPMENT PROGRAMS

STATUS: COMPLETE

The Northern Communities of Hope Live Training Site project provided an outdoor classroom for 24 local participants to develop new skills within the construction industry and deliver live works on site via a new outdoor facility at the Northern Communities of Hope. This project was a partnership between Carey Training, Northern Communities of Hope, Renewal SA and the City of Playford. The project delivered a new pergola, wheelchair ramp and paving for the Northern Communities of Hope during the training.

Thirty students were recruited to participate in this program - with five signed up for both Certificates (see Figure 1 and Figure 2). Eleven *Certificate II in Construction* were achieved and six *Certificate II in Civil Construction* were achieved (noting 4 persons received Certificates in both courses). Eight participants achieved qualifications in conducting basic scaffolding operations, sixteen achieved their Whitecard and ten attained WorkZone Traffic Management qualifications. Carey Training reported issues with the recruitment process (which was conducted by City of Playford staff). There was some confusion about the communication of start dates and reminders for students, resulting in a higher than expected rate of withdrawals.

FIGURE 1: CERTIFICATE II IN CONSTRUCTION



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FIGURE 2: CERTIFICATE II IN CIVIL CONSTRUCTION



The Youth on the Move (YOTM) initiative was designed to engage participants in a 12 month meaningful training initiative aimed at assisting young people realising and developing their full potential, and to encourage their active community engagement through sport. The program will provide pre-vocational and life skills training which will involve collaborative relationships with key local sporting & community clubs. Participants will become recognised YOTM First Response Cadets, receiving nationally recognised training in Emergency Response Co-ordination, Senior First Aid, Taping and Strapping (Massage skills) and Community services units of competency training.

A cohort of 15 young people disengaged from school, training and employment received a package of accredited and non-accredited training in 2013. Participants have had a range of outcomes including:

- → 5 employment outcomes;
- → 10 qualification/skill cluster outcomes;
- → 5 commenced volunteering on a pathway to employment;
- → 4 have returned to school to complete SACE; and
- → 3 have commenced further VET training.

The following community and government networks have provided support

- Central District Football Club
- Northern Futures Career Workforce Development Centre
- Playford Alive
- Office of Recreation & Sport
- Job Services Australia
- Community Service Providers
- community clubs including Parafield Gardens Community Club, Davoren Park Youth & Community Centre, Gawler Station Gym, Northern Sound System, Salisbury Twelve25.

Recruitment strategies to the YOTM project were re-evaluated prior during Term 1 of 2013 due to lower than expected participant numbers; and strategies to better reflect and respond to the needs of young people and their pathway goals were implemented which saw target numbers achieved.

The Northern Health Pathways program delivers funded nationally recognised and accredited training in community services qualifications at Certificate III level to residents of Adelaide's Playford and wider-northern suburbs; embedded in the program is further, non-accredited training in life skills, personal goal-setting, and career support. The project aimed to provide add-on training opportunities in life skills, personal goal-setting, and career support for 45 residents of Playford and surrounding suburbs, associated with *Skills for All* Training, including 30 places in Cert III Aged Care & Cert III Home & Community Care and 15 places in Cert III Disability. The program was completed in 2013.

The target of 30 employment outcomes was achieved across aged care community and residential facilities and schools and residential. The inclusion of Certificate III in Disability saw the development of new regional partnerships with employers and work placement hosts and attracted a new cohort of participants.

The Northern Health Pathways program was awarded Best Training Program in the 2013 Playford Alive Local Heroes Awards. One participants was awarded Best Training to Employment Outcome and also received the Minister's Scholarship to fund further training and support her career development.

KPI: 4.2 DEVELOPMENT OF A JOURNEY TO WORK PROFILE

STATUS: NOT COMMENCED

A Journey to Work profile focusing on Census 2011 data is planned. This work has not commenced at this time.

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Appendix A.SMART workplaces progress

WISER are collaborating with DMITRE and the Stretton Centre on a research program on High Performance Workplace Systems (HPWS). This work will provide employers with practical support and identify HR practices that can enhance strategic performance measures.

SMART Workplaces Online (SWO) is a resource designed to support manufacturing businesses that are seeking to better understand and successfully implement High Performance Workplace Systems. The project will provide a 'portfolio of tools' to be used by manufacturing companies in South Australia to help them self-assess 'where they are at' in terms of a variety of HPWS performance objectives.

Completed to date:

- Review of relevant academic and practitioner literature completed
- Self-assessment tool developed (and validated)
- Self-assessment tool piloted
- Changes made to tool and performance measures added
- ➤ Web designer/programmer appointed, site created and server checks completed
- Web skin templates selected and uploaded
- All web page content completed and uploaded to (non-public) host site
- Graphic designer briefed on the site and survey results presentation
- Use of graphics and sliders in survey design researched
- Detailed interviews undertaken at three case study companies two written up
- Short company interviews conducted and filmed (professional film company)
- Content of three short films edited two films completed
- Photographic biographies undertaken at three companies (professional photographer)
- Photographs for web site selected and added
- Developed online resource centre correct links added
- Existing networks page in development
- Contact us and distribution list added
- News and events page added
- Identified potential collaborative mentoring partner
- Mock disclaimer developed (terms and conditions of use)
- Method for detailed survey analysis developed (PLS-SEM)
- Fast Facts summary sheet developed

To be completed:

- Finalise the web design, use of pictures and complete all forms and functionality
- Design front cover for the pdf diagnostics report
- > Finalise format and presentation of the pdf diagnostics report
- One of the three case studies still needs writing up
- One film to be completed
- ➤ Shorts film clips to be selected and edited decide where to locate them
- Film Introduction boards to be designed and added
- Complete HR practice recommendations (to go with survey results)
- Awaiting ideas from Graphic Designer re. overall site presentation
- Awaiting ideas from Graphic Designer re. survey results presentation
- Disclaimer (terms and conditions of use) to be completed
- Pilot the web page (business and networks) and arrange a launch

SMART Workplaces Demonstration Program involves the development and administration of a baseline monitoring survey within two participating companies to identify wider performance objectives and the use of HR practices. This will form the basis of a detailed HPWS Change Management Program within the workplace. The surveys will be re-administered 12 months later to identify performance improvements and contribute to detailed Case Studies that document the journey of the organisations towards High Performance Work Systems.

Completed to date

- Review of employee survey questions undertaken
- Review of performance and productivity indicators undertaken
- Themes for analysis identified and some questions developed
- Short-list of change management consultants generated
- Large change management consultants approached and proposals received
- Directory of local and national consultants being compiled (thematically)

To be completed

- Complete the design of the full surveys (employer, employee, CFO)
- ➤ Identify participating companies and run the surveys use the launch of Smart Workplaces Online (SWO) to identify participating companies
- > Continue discussions and appoint a change management consultant

Appendix B. ATMOP update

RATIONALE

WISER is leading a project on opportunities for industry diversification into the high growth 'new manufacturing' value chain of Assistive Technologies (AT) for the aged and disabled. The project will identify credible high value product/ market opportunities for SA manufacturers, helping the state to retain complex manufacturing capabilities that would otherwise be lost completely through the demise of Australia's automotive industry.

The Assistive Technologies Mapping and Opportunities Project (ATMOP) involves a collaboration between the Department of State Development (DSD), the Australian Workplace Innovation and Social Research Centre (WISeR) at the University of Adelaide, the Stretton Centre, and Fraunhofer Gesellschaft, Europe's largest application-oriented technology and business extension organisation, and strategic adviser to the project. Formative work commenced in July 2013, with the formal project commencing in January 2014 and due to conclude in December 2014.

The purpose of the Project is to investigate the potential to develop AT opportunities as a part-response to the urgent need to diversify South Australia's manufacturing base, particularly in light of the collapse of Australia's automotive manufacturing sector. Opportunities for accelerated transition of manufacturing businesses and workers into new and growing product and service categories in the area of AT is the central focus of the project.

Changes in technology and international supply chains, together with innovative business organisation, have opened up new opportunities for internationally competitive manufacturing by SMEs away from scale- and cost-based activities - 'new manufacturing'.

Assistive technologies (AT) are devices that enable individuals to perform tasks they would otherwise not be able to because of age or disability, or technologies that increase the ease and safety with which tasks can be performed. AT of medium to high complexity (as distinct from the 'simple AT' product/market segments) align with these 'new manufacturing' opportunities.

Population ageing and rising disability rates will underpin high demand for AT, in Australia and internationally. In 2009, two million Australians used aids and equipment because of various disabling conditions. By 2050 the number of Australians aged 65-85 years will have doubled, whilst the number over 85 years will have quadrupled. Ageing alone will have doubled the cost of healthcare.

Similar trends are evident across much of Europe, Asia and the US. Often, these countries not only emphasise the role of AT in improving an individual's quality of life and the productivity of service provision, but also focus on leveraging this demand to help open up opportunities for advanced manufacturing and domestic industry development. To date, in Australia, there has been less focus on AT as an opportunity for growing local industries and innovation along these complex value chains.

Capabilities from the automotive sector can be applied to AT, including high process engineering skills, materials science and technology expertise, computer controlled processes, etc. There is also opportunity to use public procurement and the purchasing power of private institutions to help stimulate local innovation, particularly where high customisation, rapidity to market or high through life support for AT is needed.

PROJECT DESCRIPTION/ELEMENTS

The project is an industry development initiative, focusing squarely on identifying (during 2014), and then capturing, practical high value and actionable targets and opportunities in the high growth AT value chain.

The project involves undertaking research and consultation designed to identify credible high value industry development opportunities through the development of a Demand/Supply/Capability matrix. Over 2014 the project will identify substantive growth opportunities matched to existing or potential new capacities and capabilities of South Australia manufacturers. This involves pinpointing where individual companies need to acquire new capabilities or improve processes to capture opportunities in the AT value chain.

The project involves the following core elements²:

- The development of a Demand/Supply/Capability matrix designed to target and inform credible industry development and investment attraction propositions and opportunities.
- Identification of targets for a 5-year industry development and an investment attraction strategy for the industry.
- A structured on-going industry engagement program including workshops to examine opportunities for South Australian firms to benefit from opportunities in this industry sector, including understanding international trends and future technologies.
 - This will involve the following activities: Demand mapping and future technology fore-sighting to provide the initial suite of opportunities;
 - Results of surveys into local industry capability and opportunities for investment attraction;
 - Results of surveys of end users and care providing organisations, as well as public procurement entities;
 - Providing a Demand/Supply/Capability matrix to define a hierarchy of high value industry and economic development opportunities along the value chain for AT;
 - Tailored policy proposals targeted to highest value economic development opportunities.

PREVIOUS ACTIVITIES

STAGE 1

- ✓ Publication of Assisting Transition: Assistive technologies opportunities and industrial transformation in South Australia. The report covers key information on trends driving growth in demand for AT, its characteristics as a value chain suitable for targeting for industry diversification, procurement practices and attitudes of care agencies, and the preparedness of automotive supply companies to enter AT.
- ✓ Information Workshop (3 April) attracting 50 participants, including 25 companies and Prof Frank Wagner, Fraunhofer. Also included presentations from successful AT companies and end-user organisations. The agenda, speaker profiles and PowerPoint presentations from the workshop, and other associated materials, are available.
- ✓ Live web page with materials, reports and outcomes of Information Workshop, at http://www.adelaide.edu.au/wiser/research/innovation/. Will provide feedback portal for companies and other stakeholders and updates on the project.
- ✓ Commenced initial demand mapping and future technology fore sighting to yield proximate leads on opportunities (including international perspectives from Fraunhofer).
- ✓ Commenced dialogue with South Australian companies, comprising existing AT and medical technology companies, and companies from outside with synergies (e.g., tier two and three automotive suppliers), as well as industry associations and importers of AT.
- ✓ Commenced dialogue with key researchers and end-user and care provider organisations.

CURRENT ACTIVITIES (TIME OF WRITING)

STAGE 2

- ✓ Develop the demand mapping and technology fore sighting beyond general opportunities to:
 - Provide estimates of demand (current size, rate of growth, expected size) for key goods and services in Australia and internationally over coming decade.
 - Pinpoint credible opportunities (intermediate) to provide a preliminary schedule of product/market segment opportunities.

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² Described in detail in Assisting Transition: Assistive technologies opportunities and industrial transformation in South Australia.

- ✓ Simultaneously assess the group of South Australian companies against characteristics of internationally competitive firms in these value chains, and their potential to capture opportunities in AT.
- ✓ Convene an Industry Reference Group of key stakeholders (industry, care providers and endusers, researchers, industry associations, others) to provide guidance and assess abovementioned research outputs on an iterative model.
- ✓ Present intermediate results at the second Industry Workshop.

FUTURE ACTIVITIES

STAGE 3

- ✓ Use outputs from Stages 1-2 to provide the Demand/Supply/Capability matrix which will pinpoint credible industry development and investment attraction targets.
- ✓ Provide advice (report) to government, industry and industry associations, as well as universities and researchers on targeting of well-defined policy proposals (existing and new) to ensure capture of highest value economic development opportunities through a 5-year strategy (the Assistive Technologies Industry Development program) and a possible Assistive Technologies Innovation Industry Centre.

FOR MORE DETAILS SEE:

http://www.adelaide.edu.au/wiser/research/innovation/ http://www.adelaide.edu.au/wiser/research/innovation/assistivetech/

- Eyre, J., Spoehr, J., & Barnett, K. (2013). *The significance of assistive technologies in aged care: Summary report*. Adelaide: Australian Workplace Innovation and Social Research Centre (WISeR).
- Sandercock, P (2013). Assistive Technologies: Case studies into South Australian automotive supplier readiness.

 Adelaide: Australian Workplace Innovation and Social Research Centre (WISER).
- Spoehr, J., Worrall, L., Sandercock, P., Eyre, J., & Molloy, S. (2014). *Assisting Transition: Assistive technologies opportunities and industrial transformation in South Australia*. Adelaide: Australian Workplace Innovation and Social Research Centre (WISER).
- Spoehr, J., Worrall (2014), Assistive Technologies Mapping and Opportunities Project Two Page Flyer

Various (2014), All session PowerPoint presentations (individual and collected in a single PDF)

Appendix C. ESD Initiatives

ESD Initiatives

Management

Comprehensive commissioning, and quality monitoring for building services (Building Management System, Mechanical, Electrical and Hydraulic)

Environmental management procedures to ensure construction activities are not detrimental to the surrounding environment

Waste management procedures to ensure construction waste is collected, sorted and either re-used or recycled to minimise waste sent to landfill

Provision of an electronic Building Management System (BMS) to monitor and report on energy and water consumption and control systems for minimum energy consumption

Provision of Building User's Guides, non-technical documents providing an overview of the basic functions of the buildings, building services and ESD philosophies to enable staff to use building facilities at their full potential and Facilities Managers to maintain the building sustainably.

Indoor Environment Quality

Mechanical Services systems arranged to promote high levels of fresh air and high indoor air quality comprising high efficiency filters, economy cycle fresh air 'free cooling' and modulation of outside air via CO2 sensors

Building design aimed to increase the extent of natural daylight and external views through window orientation, fixed solar shading and passive solar design

Low Volatile Organic Compound emission rates for paints, adhesives, sealants, carpets and furnishings

Air conditioning and ventilation air distribution systems designed to ensure outdoor pollutants are filtered and to ensure internal pollutants are exhausted effectively and efficiently

Acoustic design of the building services and building form to ensure the development will deliver internal and external noise levels within the requirements of relevant Australian Standards

High efficiency lighting systems with high frequency electronic ballasts

High efficiency lighting systems designed to achieve light levels specific to each functional area at low energy consumption

Energy

Sound building orientation and form incorporating solar passive design and external solar shading whilst maximising availability of natural light. Atrium facade orientation has been arranged to reduce solar heat gains.

High performance solar control double glazing.

Inclusion of precast concrete finishes internally to provide thermal mass for temperature stability

Natural daylighting to Atrium

Lift motors utilising VVVF drive and magnetic gearless motor for maximum energy efficiency

Economy cycle systems are incorporated into air handling units that are not 100% fresh air

Reduced lighting zones (<100 m2) and significantly high quantities of zones operated via movement (PIR) sensors

High efficiency fluorescent and LED lighting systems with electronic ballasts and occupancy sensor lighting control systems.

External lighting systems utilise high efficacy light fittings which are equipped with photo-electric cells which enables the lights to be automatically switched off when there is sufficient daylight available

Electrical sub-metering of all major plant and equipment items and areas to enable energy usage to be accurately recorded and, therefore, controlled in a more optimal manner

Transport

Cyclist facilities comprising bicycle storage, showers and lockers to encourage staff to cycle to work

Close proximity of public transport facilities with the building to encourage people to use public transport

Water

Provision of water minimisation initiatives including low flow (WELS) rated water use fixtures and fittings, taps, showers, urinals and water closets

Inclusion of indigenous plant species to minimise water usage and support native fauna

Capturing site harvested stormwater from the roof for return to the City of Playford's aquifer recharge system.

Provision of dual reticulation system to utilise City of Playford's recycled water for toilet flushing and irrigation.

Provision of water tanker connection to capture triennial fire test water for re-use off site or for irrigation on site.

Water sub-metering and connection to the BMS for monitoring purposes, meters serving major water consumption components including amenity areas and irrigation

ESD Initiatives

Materials

Provision of dedicated storage areas to facilitate recycling of waste products

Use of Eco-friendly materials and finishes in flooring, ceilings and loose furniture

Use of recycled steel and steel manufactured in low energy furnace processes

Use of local materials to minimise transportation costs

Use of recycled timber and timber sourced from sustainably managed forests.

Land Use & Ecology

Project design and construction methodologies adopted to ensure existing natural flora and fauna species are not disturbed as a result of the development

Emissions

Use of refrigerants with zero Ozone Depletion Potential (ODP).

Use of thermal insulation products comprising zero ODP in composition and in manufacture

External lighting designed to prevent light pollution/dispersion into night sky and neighbouring properties

