

**ECONOMICS AND INDUSTRY  
STANDING COMMITTEE**

**INQUIRY INTO TECHNOLOGICAL AND SERVICE INNOVATION  
IN WESTERN AUSTRALIA**

**TRANSCRIPT OF EVIDENCE  
TAKEN AT PERTH  
FRIDAY, 12 FEBRUARY 2016**

**SESSION ONE**

**Members**

**Mr I.C. Blayney(Chair)  
Mr F.M. Logan (Deputy Chair)  
Mr P.C. Tinley  
Mr J. Norberger  
Mr T.K. Waldron**

---

<001> E/A[9:31:10 AM](#)

**Hearing commenced at 9.31 am**

**Dr DARREN GIBSON**

**Manager, Collaboration and Innovation, Edith Cowan University, examined:**

**The CHAIR:** On behalf of the Economics and Industry Standing Committee, I would like to thank you for your appearance before us here today. This hearing has been convened to enable the committee to gather evidence for its inquiry into technological and service innovation in Western Australia. You have been provided with a copy of the committee's terms of reference. At this stage I would like to introduce myself and the other members of the committee present today. I am the chair, Ian Blayney. With me is the deputy chair, Hon Fran Logan; Hon Terry Waldron; and Peter Tinley. The Economics and Industry Standing Committee is a committee of the Legislative Assembly of the Parliament of Western Australia. This hearing is a formal procedure of the Parliament and therefore commands the same respect as is given to proceedings in the house itself. Even though the committee is not asking witnesses to provide evidence on oath or affirmation, it is important that you understand that any deliberate misleading of the committee may be regarded as a contempt of the Parliament. This is a public hearing and Hansard is making a transcript of the proceedings for the public record. If you refer to any documents during your evidence, it would assist Hansard if you would provide the full title for the record.

Before we proceed to the inquiry-specific questions that we have for you today, I need to ask you the following: have you completed the "Details of Witness" form?

**Dr Gibson:** Yes, I have.

**The CHAIR:** Do you understand the notes at the bottom of the form about giving evidence to a parliamentary committee?

**Dr Gibson:** Yes.

**The CHAIR:** Did you receive and read the information for witnesses briefing sheet provided with the "Details of Witness" form?

**Dr Gibson:** Yes.

**The CHAIR:** Do you have any questions in relation to being a witness at today's hearing?

**Dr Gibson:** No.

**The CHAIR:** We obviously have some questions for you, but, before we get to them, would you like to make an opening statement?

**Dr Gibson:** Probably the main thing I have to say is that I think it is fantastic that the state government is actually looking at innovation, and it is very timely, especially with the federal announcement last December. I would say that the state is slightly ahead in releasing this in June or July; I think it is fantastic. I think it is great that you are getting input from all sectors, both business and academia, and I look forward to hearing the outcomes of the committee's review.

**Mr P.C. TINLEY:** Thank you for your time; I appreciate it. Edith Cowan is now a very well-established institution, and is an institution probably closer to industry than perhaps some of the other institutions are. In your submission you made commentary around the link between innovation and economic growth. The statement has almost become clichéd, because you read them everywhere. You are saying that we have an opportunity to drive technology and service innovation by embracing change and providing opportunities for entrepreneurship and collaboration.

The question is: what in your estimation is the key to unlocking this culture? Everybody keeps talking about this idea of culture. How do we, in a state like Western Australia, where 79 per cent of the population live in the city of Perth, unlock a culture of innovation?

**Dr Gibson:** I think it comes down to mainly communication. Some of the initiatives that have happened over the last couple of years have been a great step forward. We at the university are doing seriously different projects around trying to break down those barriers between industry and academia. I can give you a couple of examples from the university, but I would also like to acknowledge the Innovation Australia network series that colleagues in the stands are driving forward. That is another great initiative within the state, because a lot of the time business people engage with business people, or industries with industries, in different types of forums, so they will go to a conference and it will be all industry leaders at that conference, and very few academics, and vice versa, and academics will go to their professional conferences and speak about nanotechnology or such things, but it is all within their discipline, and very rarely will you have the two sectors interacting. The only time you would really see industry within an academic conference is normally the sales teams of, “Do you want this piece of technology for your industry?”, rather than, “How can we actually work together?” That is where the main driver is, I think. If we could get that correct in the state, we will break down a lot of the barriers—if we could get business and academics and students in the same room to talk and discuss the problems.

We have driven a couple of agendas already at the university, one being our Enterprise Tuesday program, which was aimed at looking at small businesses, entrepreneurs, government officials, both state and local, academics, and students, and bring them into the room to talk about the journey of actually establishing a business. We were bringing in leading academics and leading people from business. We have held that discussion. They were setting the scene with a 10 or 15-minute presentation, and most of the evening was around discussing and interacting with each other.

Following on from that, we are actually launching a product around Easter time called the Link. This is really to break down a lot of the barriers and actually put the language from the university into business terms. We are working with local government, and with a lot of the start-up and small business sectors, to actually turn the language that we use in academia into business terms. We might say one thing, and everyone within the university understands what that means, but business will go, “What does that actually mean?” There is no connection from a business point of view to drive the business forward. It is the same thing; it is just that the word is slightly different. The same outcomes can be achieved, and the Link project should drive it. Our aim is to break down these barriers. That will be another step forward—another piece in that jigsaw to break down that culture.

**Mr P.C. TINLEY:** That is another step forward. I have heard that a lot, and this is not a criticism whatsoever, but you talk about these forward steps and positive initiatives, and give examples, and it is really interesting, but it leads me always to this fundamental question, or sort of two levels of the same question. What describes success for both ECU and, if you would like to venture an opinion, the state of Western Australia? When are we an innovative economy and an innovative society, and what would be the characteristics of a successful culture?

**Dr Gibson:** I think to drive innovation from the university, there is obviously the research. If we have the link with industry, one of our KPIs would be student intake, and if we have that link to business and industry opportunities for students. As a hypothetical example, if we had a partnership with Google and we saw students flow from all different sectors within the university—all different disciplines—into Google, then our KPIs would be increased in the number of students who want to come to ECU, because they have that engagement with Google and they also want the job with Google in the end. I think that would be one of our drivers.

<002> P/A [9:39:49 AM](#)

[9.40 am]

I think for business, the driver for innovation really needs to be around profit. It needs to be able to show a return of investment from a business point of view. If they are putting in \$100 000, that could appoint another FTE for their business to keep their business going steadily forward, but \$100 000 into a research project could be that step change. That is where the universities could add value to a business, to really drive innovation and be that step change for business, thinking outside the square a little bit, rather than businesses, especially a lot of SMEs, being so focused on surviving, in my opinion, because they have to pay salaries and they have to pay increased costs all the time, so they do not often see the value of putting that \$100 000 into a research project. If we can break down some of those sorts of barriers, the innovative steps business could do from an SME point of view would be great.

If you take that back a step to the start-up community, it could be the difference of a one-person start-up to a company that is a 10 million or even a multimillion-dollar company like Canva now is. That was from a couple of years back when Canva was just a start-up, really. There are multiple examples of how we can actually see what the successes are, but to know what that success is is a million-dollar question. No-one knows what the next five years' or the next 10 years' jobs will be. I think there will be another great link into the universities if we did have a crystal ball and we could say that the job market in five to 10 years will need expertise in X and the universities can start building programs, in partnerships with industry, to say that we have actually got the educated personnel already within the local employment field or employment pool, rather than what was happening several years ago, even with the mining boom, where we have always had to bring in people from overseas—speaking from an overseas point of view—rather than actually building our own. If we could build our own capacity in different education areas, then we really will be a leading light in innovation and driving R&D forward in the world.

**Mr T.K. WALDRON:** I notice in your submission that you advocate the adoption of the UK catapult model. I see what it says here, but could you just tell us a little more about that and how you see that could be done here?

**Dr Gibson:** I do not know if you are aware of the CRC program. The catapult model is a similar sort of model. I think the CRC program here in Australia has been absolutely fantastic. I personally think it is one of the best ways of getting industry and academia working together. It would be a great program to continue. One of the other things that the catapult model does—I think an extension of catapult would be the opening up of infrastructure to work across different areas. That is one thing that we could probably do better here in Australia. The CRC program does it slightly, but within that one field. A mass spectrometer could be used in health, but it could also be used in agriculture, or in mining, potentially; I do not know. If we could use infrastructure in a slightly different way and have it used 24/7, that would be a great step forward. The review of the catapult model—I cannot remember the name of the person who did it—in the last year or so had as one of its recommendations that pushing forward of infrastructure sharing.

**Mr T.K. WALDRON:** Does that link into technology park-type set-ups?

**Dr Gibson:** Yes, exactly. I think if we could do that it would be a great mechanism here in Australia.

**Mr T.K. WALDRON:** You talked about collaboration, and it sounds like you guys are doing some good stuff between academia and industry, and this is something that comes up all the time, but what would you see as government's role? Should we be encouraging it, or should we be actually demanding it in how we structure?

**Dr Gibson:** Probably a bit of both, I would think. I think government at all three levels—local, state and federal—has a key part to play, really. I do not think it should be down to one level of that government system; all three have a critical role to play. I like the catapult model, where I think one-third of the core funding is from the UK government, similar to the CRC program, where the core part of the funding is from the federal government. That is where we could definitely put to the

state and federal governments that they have that involvement in any of these models. Local government is more the hands-on-deck. I think they could be working more one-on-one with whatever institutions. We work really closely with the City of Joondalup and the City of Wanneroo because we want to see those areas growing around the university. The City of Perth is not as important to us, but I think it is great for the state. I think state government could play a part there in trying to support the local governments to bring up their areas and to have different schemes. Long-term funding is a critical thing, probably mostly on the federal side and potentially even on the state side. In a lot of the programs that I have seen it is very short-term; it is two or three-year type funding. If we are really going to change the system, we have to look at 10 to 20-year type funding and say, “Right, we want to be known for agricultural research, or whatever, and we are going to put in 10 years or 20 years of core funding, not just to keep the lights on but to actually develop the system and bring in different technologies.” To really take that step forward, industry has to be involved there as well, but government, at whichever level you want to look at, has to at least have that core as the backbone of these schemes going forward.

**Mr F.M. LOGAN:** Thanks, Darren. You note in your submissions that quite often the communication between academia and industry and the co-relationship between the two is tenuous at best, and non-existent mostly. I note that one of the submissions and one of the groups that we heard from yesterday is from ECU and was not included in your submission, and that is iPREP, which is really in that space and doing what we thought as a committee is a great job. It is probably one of the first groups to be able to harness all five universities together to actually stay on the one page, which is a remarkable feat in itself—not the iPREP model itself, which is having PhDs at work in the private sector or outside academia for a six-week period, but the whole concept as it exists elsewhere in the world, particularly in Europe and the United States, where there is an interchange between academia and the world of work that does not affect tenure and does not affect the standing of the academic vis-a-vis the demand on them to produce published papers—it does not impact on them. Do have any comments about what Australia and Western Australia should do to overcome that rigid model, which basically stops academics moving into that workspace, and yet retain their status and also their tenure?

<003> S/A [9:49:23 AM](#)

[9.50 am]

**Dr Gibson:** First touching base on iPREP, I am glad Dr Ayers actually put in a submission just for iPREP, because I think iPREP standing alone is a better submission than an iPREP model within an ECU paper, because it is a statewide initiative. I know ECU is one of the lead agents for iPREP, but I think iPREP as a model should be statewide. It is a great initiative. I applaud our graduate school for really taking that on, and also the partners across the state for embracing that model. I fully support your comments about secondments, or whatever terminology you want to use, and that interchange between academic into industry and industry into academia. If you can break that down, that would be great, and I would applaud that. My own personal background is mainly from industry coming into academia. I would like to go back into industry, but it is a question of how you do that model.

I believe one of the biggest changes will probably have to come from the federal government, and that would be around the grants funding schemes, where they are always looking at track record. Track record is probably even more important than the research question. We should break that down and take that out of the equation. A lot of the models in the UK and America look at impact and how the impact of the research is then translated into the community and into business, depending exactly on what the research question is. I know that Australia is starting to look at impact, and how I have done it in the past is to look at trial models around impact. I believe that for the MRC in the UK, 20 to 25 per cent of the weight of the grant application is around impact. Most grants are probably all within a 10 to 15 per cent bracket, so if you then put an impact in there, that will really split out and open the pack. That would be one mechanism to try to do that.

If we take the track record away, universities themselves must be aware that it is not all about the publications, but the standard. I have three nature papers compared with three general chemistry papers, but I have actually have two reports for Rio Tinto that are equally important as a nature paper. It is that balance. The university sector needs to be aware of the track record or the promotion scheme—that it is not about how many dollars you have brought into the university via category 1-type grants and how many top-class general articles you have published in the past 10 years to get to that next level of academic promotion. If the university contains that as one model, I fully support that. I would not want that model to ever really disappear, because I think that some institutions—UWA is probably the prime example of leading some blue sky-type research. I do not think we do as much blue sky research at a place like ECU, but we do a lot more applied research. That should be equally important and on the same level as the blue sky research.

**Mr P.C. TINLEY:** More important.

**Dr Gibson:** Potentially even more important. If we do not have the blue sky, will we ever see that new market appear? That may be another question for another committee, I do not know. That is one thing, but if we could at least put them on the same level, it would be a great starting point. But the universities have to [inaudible] along that journey. In my opinion, if the federal government changes policy or the guidelines around ERC grants, it might look fine on paper, but we need to have the right people on board in that review process to make sure that it is still fine and it is not just a paper exercise. Likewise, universities have to bring that in house to make sure that happens. If that does happen, the culture will change dramatically and we could potentially see these secondments for a year, for example. With the research and business program, as I think it is still called, from AusIndustry, the federal government put 50 per cent in business and 50 per cent to essentially buy an academic out for a period at a time. Those sorts of programs are really good, but just now that will affect their track record and their tenure. But if we could break that down from the examples just given, we should be able to take leaps forward. I think it is good if you can encourage it in some way and if both state and federal can push those agendas, and if it comes from the government then the universities will change and they will open up the doors.

**Mr P.C. TINLEY:** Thank you very much.

**Mr T.K. WALDRON:** You have identified five barriers. It is always good to know what the barriers are. How do you see getting over those barriers, and what role does the state government play in getting around those barriers to make sure that collaboration is happening?

**Dr Gibson:** I have touched on some of them, such as culture and the language. Proximity is a factor. Obviously we have great mining resources here, with lots of the big mining companies. As a state, we have five key research themes from the chief scientists, and they are all quite broad. It would be great to focus on a few and really be world-leading in certain areas. If we could do that, and if we could bring in the key business players from around the world —

**Mr T.K. WALDRON:** Should that come from the industry and academia, or if state government identifies an area, should it push that?

**Dr Gibson:** It probably should be a discussion between academia and government. Clinical trials are a good example. We do not excel in clinical trials in medical research in this state; it is mainly Melbourne or Sydney.

**Mr T.K. WALDRON:** We are getting better, since we put the money in.

**Dr Gibson:** We are getting better, but if that is an area in which we really want to grow, we must have the correct academic environment around that so that that grows. The transnational network is a great example of how we are trying to do that in health. If that is one area we want to be known for in the world, we have to grow that —

**Mr T.K. WALDRON:** And have a real focus.

**Dr Gibson:** Yes; I think focus is the key. At universities it is probably equally bad and we do not focus. We try to look after every single area rather than focusing on some streamlined areas.

**Mr T.K. WALDRON:** You said you have government talking with academia. Are there forums now that make that happen?

**Dr Gibson:** We do have some good communication sessions with the chief scientist and the key stakeholders within different departments; that does happen.

**Mr T.K. WALDRON:** But does government need to be driving that more as well to make sure that is happening?

**Dr Gibson:** I think that would be great. If government is the driver, the universities will listen to government. If that is where the power is and where the policies are put in place, the universities will adhere to that, because, if they do not, they are going against the system, and that probably would not look good because they might not be funded and will be associated with going against that system. If we have that pulling power, we can maybe bring in some of the larger companies. Looking at some of the larger companies, and having that close proximity, even though with technology now it does not matter where you are in the world in theory, it is much easier to work with someone if there is face-to-face contact and you can go down the corridor or across the road and actually work with them. It goes back to that secondment-type model. Somebody could work in the lab, and that could be seen to be seconding. At Siemens, they could deploy five people in the university, who could still be Siemens employees but who work with the infrastructure within the university and understand that environment well. That would break down some of the culture barriers, and proximity would be ensured as well. People would also start understanding the different languages. For example, at Siemens, people will start talking over a cup of coffee or at the water fountain, so some of the language barriers will break down there as well. The legal drive to change some of the grant mechanisms and guidelines would be a great step forward to breaking down some of the barriers. For me, proximity and communication are the big drivers. I was in Germany last year and saw that Volkswagen liked being right next to the universities because it has that direct link-in and it can go over and ask different questions, rather than having to fly to a university somewhere. It is a challenge for Australia, being so far away from central Europe and North America, but I think government can play a key part in that, especially if we do have that focus.

<004> O/A [9:58:59 AM](#)

[10.00 am]

**The CHAIR:** Can you tell us a bit more about the Security Research Institute at ECU? We understand it has a particular focus on cyber security. To what extent does it collaborate with industry in Western Australia?

**Dr Gibson:** The institute is led by Professor Craig Valli. I have known Craig now for the last four years, approximately, and ever since I have known Craig he has always worked with government and industry to ensure that industry has more secure systems. In 2014, they had a CRC application. We got through to the final stage in that—that was obviously in partnership with a range of businesses and academic institutions—but unfortunately that failed at the last hurdle. But I suppose the upside of it was that the Australian Cyber Security Research Institute was formed, which is an incorporated body. I cannot remember what type of legal entity it is, but it is an incorporated body led by David Irvine, who is the chair of the institute.

**Mr F.M. LOGAN:** The former head of ASIO.

**Dr Gibson:** Yes; that is correct. The main partner is Cisco, and ECU, with ANU and Deakin, I believe, are the two other academic partners just now. But the main driver is to work with business—that is the main focus—to ensure that business practices are more secure, because obviously cyber security is, and probably will be, one of the biggest hurdles for most businesses

going forward, because people will be able to infect any part of the business. That is the case especially now that we have here in Western Australia the automated trucks, and if people hack into or break into that system, the disasters could be unbelievable, and the automated trains, and when they are a kilometre long—I do not recall the length of them—and they go off the rails and people just slowly increase the speed, all of a sudden they could come right through Perth. That is going to be a huge, huge area, I believe, going forward, and ECU is primed to be a key part of that. Craig loves working with industry. He does a lot of consultations with different industry partners acknowledged under that research, but looking at their systems. There is a new program that they have just started within the universities, in partnership with the City of Joondalup and City of Wanneroo, called Cyber Check.Me. They are doing a one-hour, free drop-in clinic. I think they are going to some of the shopping malls and things like that, and people can bring in their technology. It could be, sort of, the single parent at home with their phone or their laptop, and Craig's team will have a look at it and say that you need to get your antivirus upgraded or you need to do this. It is also a great opportunity for start-ups and SMEs [inaudible]—"If you take that away just now and sort that out, you are going to be in a better position than you were in yesterday, but also this is really what you need to do." I think that is what Craig really likes doing. I do not know if any of you have been to ECU?

**Mr F.M. LOGAN:** Yes.

**Dr Gibson:** If you have been to Craig's research institute, he does a trial. I think he has a little toy thing set up—I do not know if it is agriculture or something—and they play a game. It is the red team versus the blue team, I believe, and one keeps on breaking in and they change the controls on the plant and things like that, and the other team is trying to defend that. It is a great example. If you ever want to come up and see it, please contact me and we can make an appointment.

**Mr T.K. WALDRON:** It sounds like fun!

**Dr Gibson:** I think it really puts the message home that cyber security is not just about taking bank details and taking \$1 million out of a big business; it can be part of anything. It can be just someone having fun by increasing the temperature of your plant, and that has catastrophic effects.

**Mr P.C. TINLEY:** That's fun!

**Dr Gibson:** And that has significant effects. Craig's team always wants to work with business, and he has worked with a lot of businesses that we cannot name because of, obviously, this being a public record, so I would not want to name any of the organisations he has worked with, but he has worked with them to ensure that they have got better systems in place. So, for me, that is one key area for ECU in that sort of business-academia nexus that I think we are all talking about.

**The CHAIR:** Is that program very much focused on the commercial world?

**Dr Gibson:** Which one?

**The CHAIR:** The cyber security.

**Dr Gibson:** But also pushing the academic records. They are all academics. There will be PhD students, who have to answer research questions.

**The CHAIR:** But it does not have a role in national security, is what I am saying.

**Dr Gibson:** There have been talks; I do not know how far they have developed, so I cannot comment on this one. I know they do work with some departments within the federal government, but I do not know which ones exactly they work with.

**Mr F.M. LOGAN:** In your submission, you refer to the easy access into intellectual property policy. Can you explain a little more about that?

**Dr Gibson:** Yes; sure. This is a new initiative—the initiative of Easy Access IP is not new, but it is new for ECU. We were made first aware of it by the University of New South Wales; I think they



were the key drivers in Australia for Easy Access IP. They came over a year possibly a year to a year and a half ago to present the Easy Access IP framework to us. We thought this is a great mechanism because universities have got a lot of IP that we actually do not do much with. So we thought this was a great mechanism of putting that IP out there free of charge for businesses to actually do something with and potentially make it into a commercial product if they can. We have a whole raft of IP that we are trying to put on. I think we have got six or eight different IP already on Easy Access IP. This is one area that we are trying to push forward, unless we want to commercialise it ourselves, which I do not think as a university we are one of the leading examples in the world on that. I think we have a very low amount of commercialisation sort of ability at this stage, probably because we look at more the applied side of research. There are other universities in the state—Curtin is probably a great example of spinning out companies et cetera—and at this stage it is not a pathway that the university wants to go down. So working with industry through the Easy Access IP is one mechanism that we are trying to look towards. With the New South Wales stats that they gave us, it looks like a great way of building up that relationship with industry and then industry coming back on board to further develop that and ask further research questions, which then maybe opens up the ARC linkage-type grants, and that is where these sort of benefits will flow back to the university, hopefully.

**Mr F.M. LOGAN:** Has the university ever thought about working in conjunction with hackathons and groups like Unearthed, which bring people together looking for problem-solving, but at the same time if you have IP there, it is like a marketplace where people who are interested in that space may go, “This is just what I was looking for”?

**Dr Gibson:** There are certain groups, probably within our computer science, that are the main area that have taken part in a lot of the hackathons—the ones right across the state. We have not run one ourselves, I do not believe, but, yes, that could be another mechanism of saying, “We have got our IP and let’s trial it and see what happens.” Whereas the role I have within the university is sort of—I am very fortunate that I have great support from our deputy vice-chancellor to try these different initiatives, so I think probably working with our new dean of science, which looks after computer science, it might be a mechanism that we might explore going forward.

**The CHAIR:** You are headquartered in Joondalup, aren’t you?

**Dr Gibson:** Yes.

**The CHAIR:** That is a very new part of Perth, and you have probably become almost the most important institution there, I would have thought. It is a new area, which means new businesses, and probably a younger cohort, I suppose, in the population. Do you think that the collaboration between yourselves and businesses around Joondalup is different from what it would be for older universities in older parts?

<005> H/A [10:09:20 AM](#)

[10.10 am]

**Dr Gibson:** I will take the first part first. Our partnership with the City of Joondalup is fantastic on multiple levels. The project, the link, that we are driving is to drive the local, I suppose, start-up and SME market within Joondalup. As the main headquarters for ECU—obviously, we have Mt Lawley and then the Bunbury campuses—so we would take any knowledge that we develop in Joondalup to these other centres as well. We have our business and innovation centre called ECUBIC—Edith Cowan University Business and Innovation Centre—which houses 40 start-ups—small businesses there. That is run in partnership with Business Station at this moment in time. With that partnership and also the 6027 initiative at the racecourse, there is our Joondalup learning precinct along with the police academy. We are trying to build up that whole area of education expertise, but link in with the small business area.

One of the main drivers from the city side is obviously to build up more of a diverse portfolio rather than essentially retail at this moment in time, which is probably what Joondalup is best known for. Working in partnership with the university, if both of us could do that together, one, we could have placements for our students much easier, and the area itself could be known better for different types of business. One of the best examples at this moment in time would be the educational technology sector, where [inaudible] is based, which has approximately 50 people in it. It is a Joondalup company. It is about how to grow together. ECU is probably the largest employer up in the Joondalup area. It is probably the cornerstone now of the whole growth area there. With education being the backbone of ECU, we would like to see that education or technology sector really grow. A lot of small businesses are starting to pop up, and we want to see more businesses that are more than just a lifestyle business; we want to see businesses that actually have growth to be coming into the Joondalup area, because the population has grown up in the Joondalup-Wanneroo area, and a lot of migrants coming over are based up there, and we want to provide, in partnership with the City of Joondalup, the infrastructure that is there to really drive that forward.

The second question is that it may be easier for UWA with Perth or Subiaco, possibly because UWA and Subiaco probably already have their vision to go forward, and we are still probably learning and developing. We have been there 25 years this year. Joondalup itself has grown and developed over time. Wanneroo is growing and developing. I would say that we are probably still finding key pillars around the environment, and with both the cities of Joondalup and Wanneroo being supportive. Obviously there is the GP super clinic in Wanneroo, that we were big drivers for, and a lot of government funding for that initiative. We want to see these areas grow as well. If we could grow the businesses within those areas, it is better for the university, so we have that student engagement, research engagement, and we could actually give back to the community as well and seeing if people want to come to the university rather than heading down the freeway to UWA.

**The CHAIR:** Thanks for that. Thank you for your evidence before the committee here today. A transcript of this hearing will be forwarded to you for correction of minor errors. Any such corrections must be made and the transcript returned within 10 days from the date of the letter attached to the transcript. If the transcript is not returned within this period, it will be deemed to be correct. New material cannot be added via these corrections and the sense of your evidence cannot be altered. Should you wish to provide additional information or elaborate on particular points, please include a supplementary submission for the committee's consideration when you return your corrected transcript of evidence. Thank you very much for your time.

**Hearing concluded at 10.14 am**