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**Maximising the impact of games as effective participative tools:  
The RUFopoly resource kit**

**Preliminary Report from a Workshop held in the Barossa Valley**

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<b>Contents</b>	<b>page</b>
1. Introduction	2
2. Background	2
3. The Workshop	4
4. Feedback from the Participants: The ‘Original’ RUFopoly Game	8
5. Playing RUFopoly in the context of the Barossa Region	13
5.1 Scenario One	16
5.2 Scenario Two	17
5.3 Scenario Three	19
5.4 Scenario Four	20
5.5 Scenario Five	21
5.6 Scenario Six	22
6. Feedback from the Participants: Developing a Barossa-based version of RUFopoly	23
Acknowledgements	25
References	26

## **Figures**

1. Barossa Valley RDA	5
2. RDA Barossa Valley – Local Government Areas	6
3. RUFopoly/RUFkit – Each square represents a different planning issue	7
4. The RUFopoly Board	8

## **Tables**

1. The participants	5
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## **1. Introduction**

This Report details the outcomes of a workshop conducted in South Australia in November 2015 as part of the evaluation of the participatory-learning board game, RUFopoly. The Report's authors introduced the game to a range of potential users in South Australia in March 2015, at a session held at the University of South Australia, with guidance via Skype from one of the game's key instigators, Professor Alister Scott at Birmingham City University, England. Subsequently, favourable reception of the game led to various suggestions as to how its use might be more widely disseminated in the state and elsewhere in Australia. It was agreed that a 'real-world' context would best serve the purpose of using the playing of the game to illustrate how it might serve a practical purpose. Hence, it was agreed to accept an offer from Regional Development Australia (RDA) Barossa to use the game at a workshop to which various interested parties would be invited. The local context was the future preparation of a new strategic plan for the Barossa region, and thus the invitees were all key stakeholders in the strategic planning process. A broader regional context was the upcoming revision to the *30-Year Plan for Greater Adelaide* (of which the Barossa Region is part) (DPLGSA, 2010).

The workshop consisted of three parts:

- playing the original version of RUFopoly;
- playing a version with scenarios determined by the authors and relating broadly to significant, contemporary planning issues in the Barossa region;
- a discussion involving all participants in which views were elicited regarding the nature of the game and its general utility, and possibilities for using the game in practical terms for the local planning context.

## **2. Background**

Online planning games have become increasingly popular as a means of encouraging public participation in urban planning (Poplin, 2012). This has been linked closely to the development of public participatory Geographical Information Systems (PPGIS) (Brown, 2012). Whilst these games usually use computer technology to simulate reality and utilise various methods to attract participants, there are also earlier non-computer variants involving role-play to address a particular problem (Duke and Geurts, 2004). "Games allow stakeholders to take part in a participatory exercise, in a manner which is enjoyable and engaging, and which allows consideration of 'real' issues" (Glass et al., 2012: 3). The variant used in the RDA Barossa workshop described here was a particular non-computerised 'game' applied to a general rural-urban fringe planning context.

RUFopoly is a participatory-learning board game enabling players to undertake a journey through a fictitious rural-urban fringe landscape called RUFshire, answering questions and making decisions on development challenges and place-making; those answers then inform each player's vision for RUFshire. The encountered questions/scenarios are determined by the roll of a die and based on primary data collected originally for a project funded by the United Kingdom's Joint Research Councils (the Rural Economy and Land Use [RELU] program) about 'Managing environmental change at the rural-urban fringe' ([http://www.researchgate.net/figure/274507292\\_fig15\\_Rufopoly-learning-tool-board](http://www.researchgate.net/figure/274507292_fig15_Rufopoly-learning-tool-board)); see also [https://www.youtube.com/watch?v=HaWkN2\\_6WUA](https://www.youtube.com/watch?v=HaWkN2_6WUA); and <https://www.youtube.com/watch?v=8Vqg9iHhBfA>). The game is actively being developed into a planning tool called RUFkit (<http://www.rufkit.org>). For a detailed review see [http://neat.ecosystemsknowledge.net/pdfs/games\\_tool\\_review.pdf](http://neat.ecosystemsknowledge.net/pdfs/games_tool_review.pdf).

The game has been applied in various situations in the United Kingdom (UK), Sweden and the United States (Qviström, 2015; Scott et al., 2013; 2014; 2015; Shoemaker, 2014) and was introduced to potential users in South Australia in early 2015. Originating in the UK, it has been used especially in the early stages of projects and plans, such as the pioneering Greater Birmingham and Solihull Local Enterprise Partnership spatial plan. It has been used by government, European Union project groups, local authorities, business, community groups, universities and schools. It has exposed audiences to issues associated with the delivery and trade-offs associated with planning and environmental issues at the rural-urban fringe. However, further evaluation and testing of the game is required as part of explorations of the potential of RUFopoly/RUFkit to become a generic platform for interested parties to develop their own versions to meet particular needs. Its originators hope that such explorations will enable a gap to be filled in the effectiveness of participatory tools for improved decision making.

RUFopoly requires its players to consider the basis, context and impacts of their own decisions as applied to issues tackled during the game. The players discuss planning issues and negotiate solutions with other players. This involves considering different priorities and perspectives, for each of the challenges posed in the game. So there is opportunity for discussion and debate alongside individual reflection. A key point made by the game's originators is that RUFopoly provides a limited amount of information about the fictitious locality in which it is set (Scott et al., 2015), so that players must rely on their own knowledge and perspectives, which provides possibilities for clashes of values and priorities.

### 3. The Workshop

The workshop was held at Light Regional Council offices in Kapunda, a location chosen by RDA Barossa (Figures 1 and 2). It focused on playing RUFopoly and then reflecting on the game itself and the types of situations it highlights. The aim of the workshop was essentially two-fold:

- to test the game itself and assess its utility as a tool to be used in assisting planners (with the views of the workshop's participants reported to the game's originators in the UK)
- to assist RDA Barossa in evaluating the merits of the game as a tool to support future strategic planning for the Barossa region.

Primarily, the workshop represented a knowledge exchange exercise to add to knowledge gained worldwide from similar exercises employing RUFopoly and its variants. The participants were encouraged to express their opinions on the nature of the game format and potential for its enhancement into a more effective and multi-functional tool.

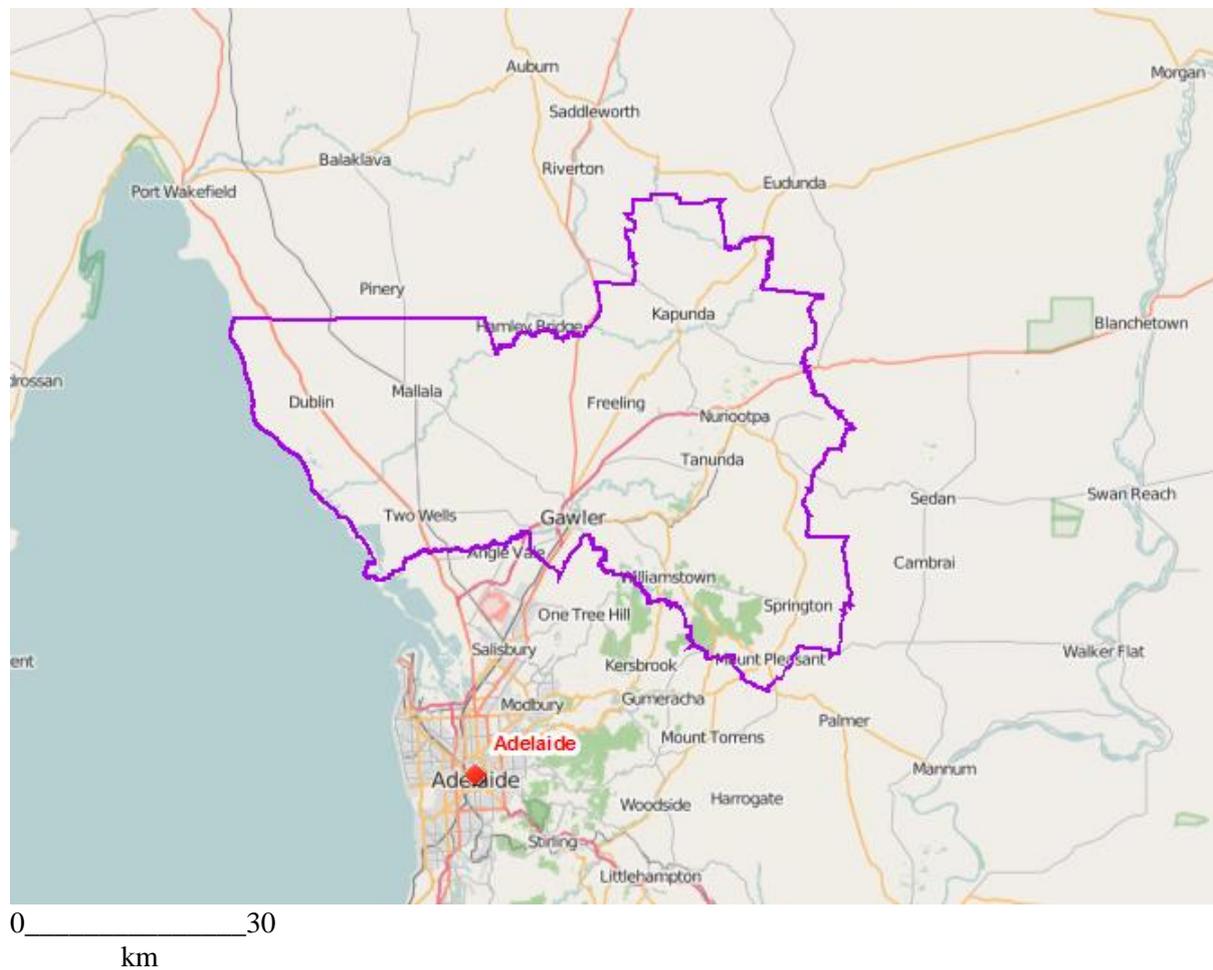
Participants were invited by RDA Barossa. They were all 'stakeholders' in the development of future planning for the Barossa region. Hence, invitations were extended to representatives from planning, regional development, industry, commerce, education and the general community. Amongst the invitees younger members of the community were specifically targeted so that future community leaders were an integral part of the exercise. This involved representatives from the Barossa Future Leaders Program (<http://www.barossa.org.au/regional-leadership/barossa-future-leaders-program/>), Barossa Young People in Agriculture (<http://www.barossa.org.au/regional-leadership/barossa-young-people-in-agriculture/>) and also members of the Young Ambassador program (<http://barossavintagefestival.com.au/young-ambassadors/>). In addition there were employees from local councils and the RDA, including planners (with Gawler Council and Light Regional Council). In total there were twenty participants in the workshop plus five facilitators (the Report's authors plus two assistants) (Table 1). Ethical approval to run the workshop was granted by the University of Adelaide Human Research Ethics Committee (Ethics Approval H-2015-268). Concluding discussions in the workshop were digitally recorded and the recording transcribed to enable further analysis. All participants signed a consent form, giving permission for the open discussion in the workshop to be audio recorded.

The workshop was conducted around five tables, each with a facilitator and four 'players' using the mid-2015 version of the RUFopoly board (representing a rural-urban fringe in the English Midlands; other boards not used in the workshop have been designed for an urban extension, mixed urban edge, rural uplands and the coast)

(<https://dl.dropboxusercontent.com/u/52854279/Appendix1%20Rufopoly%20Board.pdf>). The game

was played by participants shaking a pair of dice and proceeding around the RUFopoly board. Each numbered square on the board relates to a particular planning issue providing the basis for discussion (Figure 3). Participants were expected to contribute to that discussion from their own perspective, as a planner, business person, local resident etc. In general, the scenarios around the board relate to something happening in that vicinity, so players were encouraged to look closely at the square under consideration and neighbouring squares. The game has 28 squares on which the players can land, structured around four themes, which were identified in the UK as the keys to spatial planning in the rural-urban fringe. The themes are a) values and decision-making, b) making connections in the grey-green-blue planning infrastructure, c) spatial planning and ecosystem services, d) long-termism – temporal perspectives.

**Figure 1 Barossa Valley RDA**

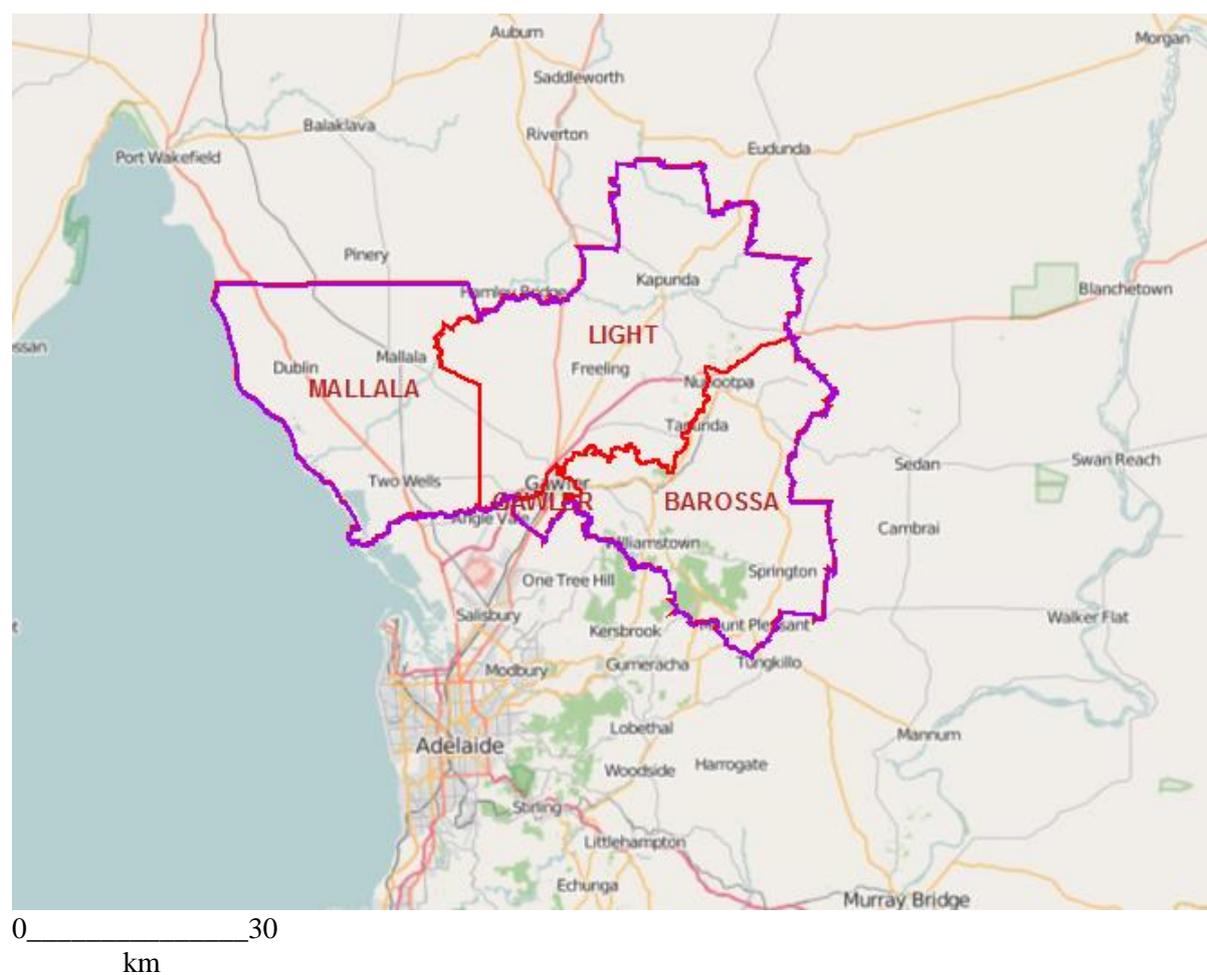


Source:  
<https://www.arcgis.com/home/webmap/viewer.html?webmap=f1e0ba16ca494bd189c33cb9a492e286>

**Table 1 The Participants**

Source	n	N
Community members		15
Barossa Future Leaders Program	3	
Barossa Youth in Agriculture	3	
Young Ambassadors	3	
Others	6	
Planners and Council Officials		5
Total		20

**Figure 2 RDA Barossa Valley – Local Government Areas**



Source:

<https://www.arcgis.com/home/webmap/viewer.html?webmap=f1e0ba16ca494bd189c33cb9a492e286>

At the outset, each player was given the opportunity to introduce themselves and to describe their role(s) in the community and region, including any formal representative role they held or particular interest they had, and to nominate the three goals they thought should feature in strategic planning for the region.

After discussing as a group, players provided their own answers to the questions they encountered on the board. The facilitators were not required to produce a consensus answer. The players were encouraged to justify their answers as fully as possible. For each question/scenario ten minutes was allowed for group discussion, followed by two minutes for writing down individual answers.

**Figure 3** RUFopoly/RUFkit – Each square represents a different planning issue



Source: <http://www.rufkit.org/>

The five tables each addressed four scenarios during the time allotted, which was felt sufficient to provide an introduction to the basic concept and to enable the players to start discussing planning issues. Each player was able to contribute to discussion from their particular perspective and to gain an understanding that the variety of perspectives present could contribute to differences of opinion around the table. Hence, it could be readily recognised that if agreements were to be reached



which appeared to contain areas of settlement, sparking discussion about the nature of Green Belts in England in contrast to Adelaide's Metropolitan Open Space System. For example, one community member asked, "What is the economic value of the Green Belt?" There was insufficient time available to provide much background on the four categories of scenarios, but their variety was apparent once the game got underway, with sufficient time allocated to enable four scenarios to be tackled on each table. A common view was that the categories could be differentiated in modified form by using colour-coded cards for the various scenarios, thereby obviating the need to print the scenarios around the edges of the board.

During the playing of the game general questions arose relating to the context in which the various issues raised by the scenarios were set. At a simple level this related to land uses portrayed on the board. "Does the land use in that square indicate very high quality agricultural land, as, if so, that would affect my views on whether new housing development should be allowed there?" (community member). However, broader contextual concerns related to the likely priorities of the local authorities. "Is there a pressing need to create new employment in this area, as, if so, then presumption in favour of development should be the prime concern relating to key redevelopment of this site" (council/RDA employee). The need to understand the economic 'drivers' of the region were raised by several participants. Other contextual concerns related to issues of scale and distance, e.g. "how far is that square from the nearest major municipal waste management facility?" (council/RDA employee). "Where is the nearest science/technology park?" (community member). Lack of knowledge regarding financial issues was also regarded as problematic, e.g. "how much money would the council have at its disposal to spend on that development?" (community member). This all contributed to a view expressed by some participants that the English setting was quite different to that of the local Barossa region. Yet others noted commonalities between issues raised on the board and those occurring in their region. They also observed that the game helped make it more apparent just what issues councils and planners have to deal with. Several community members linked this to a greater need for 'bottom-up' contributions to the planning process.

Other positive observations included recognition that the game enabled discussion of the issues, which was extremely important for community members, with listening to various points of view being actively encouraged. One of the community members commented, "Everyone considered the options available and discussed alternatives ... and this extended beyond the individual views held."

One view presented by a community member referred to the need for a longer amount of time to be allocated to playing the basic game. This sentiment was echoed by others who argued that the time allocated in the workshop only permitted four scenarios to be tackled. A longer session would have illustrated the full range of issues covered by the board. However, this view also included reference to

the need for more background context to be provided so that “tighter answers” could be developed. However, a counter view was presented by another community member who argued that without detailed context there was more opportunity for the players to use their imaginations and to consider a range of possible scenarios, sparking more discussion and debate involving original thinking, which she referred to as “thinking outside the box”.

It was acknowledged that RUFopoly had great potential as an ‘ice-breaker’ at the start of a planning or policy workshop. For example, use of the game at the start of the recent spatial planning process for Roseworthy could have been invaluable. It can enable participants to gain an appreciation of the views and participants of the other players. If a strategic planning workshop extended for a day or two days then an introductory two-hour game of RUFopoly followed by a feedback discussion would be ideal. However, one council/RDA employee argued that the terminology employed would be very important, as calling RUFopoly a ‘game’ might set the wrong tone, suggesting ‘scenario setting’ as a better term, and allaying this to clearly identified aims and outputs to ensure appropriate participation. It was agreed that four players per table from a mix of backgrounds plus a facilitator was ideal.

One view of the original game is that it works best if the players are detached from the details of the board, which should not be a faithful copy of stakeholders’ local Australian landscape, though this view could also be interpreted as extending to avoidance of any board depicting Australian landscapes. It was generally felt that the key attraction of the game was its ability to help players to distil their thinking by drawing out conversations about key planning issues. These issues needed to have some local relevance but this was not necessarily to be achieved by giving the board a more specific local flavour. Indeed, part of the final discussion at the workshop centred on the various merits of a generic board versus one that was more specific to the local area.

One of the chief benefits of starting the workshop by using the original UK-based RUFopoly board was that it helped to remove emotion from the discussion of the issues being considered. It helped to demonstrate that different views could be expressed and listened to without entrenched positions being prevalent. This presented greater opportunity for arguments to be made, which could be absorbed by others at the table and then debated. When proposed courses of action were formulated these could then be compared and negotiation could ensue in a spirit of compromise. One of the council/RDA employees referred to the board game as a “good lesson in Play 101”, with an ability to bring together people across the community, including key stakeholders, environmental managers, planners and local officials. It was noted how the game could act as the starting point for participants to express different points of view about planning issues, which therefore acted as an ‘ice breaker’ prior to dealing with concrete problems affecting their home region. It could also serve as an awareness raising mechanism for the strategic planning process in the region, enabling people to

realise the need for a vision for long-term planning goals. Several players added the view that it had helped them gain a better understanding of problems faced by planners, and especially how planners had to deal with a need for compromise, trade-offs, recognition that particular decisions could mean there were both ‘winners’ and ‘losers’, and that the concept of ‘the greater good’ needed to be at the forefront of decision making. The roles of planners as both regulators and facilitators were felt to be emphasised through the game.

I did enjoy being part of this but for me it was to highlight what planners have to deal with rather than how can this help us build regional plans. If you can explain how this can help us build a better community plan, then I am all ears! (community member).

The basic game helped to distil thinking and draw out discussions on competing issues. It represented a good process as an ‘ice breaker’ for consultation purposes for new developments. It was closely related to the experiences of some of the participants and it was acknowledged that it could be relatively easily converted into a local version that used Australian terminology. The interactive nature of the game was regarded as enjoyable, though the English terminology presented some difficulties (e.g. using unfamiliar terms such as ‘fly-tipping’ rather than ‘illegal dumping’) and hence several participants stressed the need for more context to be provided as well as more time to play the game than was permitted during the workshop. Some participants also made the point that by playing the game first for an area with which they were unfamiliar helped put them in the right frame of mind to then examine locally relevant scenarios and to understand the complexities of planning issues. It was agreed that greater locally relevant planning terminology would improve ease of use of the game.

One of the council/RDA employees noted that the basic board game illustrated the tensions between strategic planning aimed at delivering employment and economic development (in part by fostering population growth) and endeavouring to preserve regional identity and heritage. Hence the game provided the players with a better appreciation of the dilemmas faced by their local council and planners, in part by exposing issues relating to the balance between maintaining private rights and interests versus broader societal benefits.

Planning is often only regarded by the public as something that deals with site-specific problems, but this tool presents an opportunity to engage with planning in terms of broader visions and debate of major issues to provide input into the creation of long-term futures. It presented an opportunity for key stakeholders to engage in the same ‘planning language’ before actual planning consultation commences. The tool provides a way to help develop plan-making as a ‘ground-up’ exercise placing the local community at the core of land use discussions. It also helped illustrate the need for balance in planning, with planners needing to be open-minded, to listen to diverse views, be willing to compromise, and to negotiate.

For the future, one suggestion from a community member was that new local councillors (or possibly all councillors) should play the game to help acquaint them with the types of planning issues that can occur. It would help teach them that balance is required when making planning decisions, with different perceptions and emotions to be considered when approaching issues. It was also felt that the game could also be marketed to the broader community as 'Planning 101'. This would help people gain a general sense of the complexity and the conflicting rights and demands involved in planning issues. It would help to show them that planners often need to be innovators, and they have to deal with trade-offs between the present and the future across a wide range of social, environmental and economic issues. The educational potential of the game was also noted, with the suggestion that it should feature in the tertiary curriculum for planning students, thereby building upon existing tools developed by the Planning Institute of Australia (Baird and Papageorgiou, 2015).

Another positive response to the game came from a council/RDA employee who argued that it demonstrated the importance of public participation in strategic planning so that the community 'owned' the strategic plan. Recent planning for Two Wells was referred to as a successful example of this participatory process. Reference was made to the current process of planning reform within South Australia and the need for public participation in any new planning system eventuating. The potential contribution of RUFopoly to this lay in its role in awareness raising, acting as an ice breaker and helping to create community 'ownership' of strategic planning through ongoing public discussion and greater recognition of the nature of the process. An additional comment was that the game could help players gain greater understanding of the planning codes and the nature of planning regulations. This could help contribute to the development of a stronger Strategic Plan.

Another council/RDA employee referred to the planning system as 'robust', laid out in clear 'black and white' terms. He noted that problems arose when people tried to go outside these black and white limits and questioned why the system was designed as it was. He felt that by introducing RUFopoly to key stakeholders and the wider community this nature of the system could be more readily understood, as part of an exercise in increasing engagement. He felt that the game "could help take the community on a journey" that would show them that implacable public opposition to a particular planning proposal was rarely helpful to planners and public officials without presenting "the community good" backed up by clearly expressed values. He expressed the desire to see a "solutions-based approach" to planning issues, reinforced through use of RUFopoly.

One novel suggestion was that council meetings should regularly play RUFopoly with the public in attendance so that both councillors and community members alike would have to engage with key planning issues but in a non-specific context, and this would help encourage appreciation of different

views and the need to move away from entrenched positions. Tackling one scenario each meeting was suggested as a possibility.

## **5. Playing RUFopoly in the context of the Barossa Region**

RDA Barossa had previously worked with Adelaide Thinker in Residence, Laura Lee (2011), on integrated design strategies, a user-centric approach to planning and development. She stressed the essential need for citizen participation in the development of planning and the understanding of alternative pathways. It is with this desire to enhance citizen engagement and participation in planning that the workshop trialled RUFopoly. The intention was to give the invitees chance to explore some of the issues, challenges and trade-offs in making land-use planning decisions at a regional level, given the varying views that different members of the community possess.

Planning issues have been hotly debated in recent years in the Barossa region. In particular, RDA Barossa is charged statutorily with contributing to long-term planning for the region, specifically through capturing and presenting regional priorities in a ‘regional roadmap’. These priorities will form future thinking alongside the updated *30-Year Plan for Greater Adelaide*, of which Barossa is part. Particular questions posed by the RDA include, “How do we engage the next generation of leaders in rational and informed debate about spatial planning for the future?” and “What engagement mechanisms are available for switching on some new thinking about how land-use planning plays out?”

Prior to the workshop participants had been asked to imagine that a new Regional Strategic Plan was being developed by State and Local Government, which relates directly to circumstances involving the *30-Year Plan*. They were asked to think about their current understanding of the development and planning issues facing the Barossa region (Mallala, Light, Barossa and Gawler Council areas), and then to nominate three goals (targets or trends), — a ‘social’ goal, an ‘economic’ goal and an ‘environmental’ goal that they felt should be included in that Regional Strategic Plan.

Having played RUFopoly using a generic board, a break was taken and then each table was presented with two of the six scenarios specially tailored to the Barossa region. Each participant had a copy of the Scenarios under consideration, with one of the participants asked to read out the first scenario for that table, which was then discussed. As with the round using the original RUFopoly board, players were asked to share their thinking and views in response to the scenario. After discussing the scenario as a group, each player recorded their own response. The tables were not required to produce a consensus answer, but each individual’s responses had to be justified as fully as possible. For each

scenario ten minutes were allocated to group discussion, with a further two minutes for individual participants to write down their responses.

After addressing the two scenarios discussed at their table, the facilitators asked the participants to assess if they would modify their vision for the region in any way based on how they and others at the table had responded to the scenarios. They were specifically asked if there were any trade-offs from their original position that they would be willing to make. Ten minutes were allowed for discussion at this stage.

To conclude the workshop all participants came together as a single group to report on the responses to the six scenarios in turn. Hence the two tables who had considered scenario 1 gave their responses, and then the two who had dealt with scenario 2 and so on. Each pair of tables was asked to identify if they had anything different to the comments from the other table in the pair. The process was repeated for the remaining tables, so each table was able to lead the response and provide further comments on a response. The participants were specifically asked about their response to the scenarios and what issues had been raised regarding the particular scenario.

Finally, the participants were asked for their views on the workshop, and in particular if they could identify ways in which they had found it useful and/or interesting. They were asked to reflect on the initial playing of RUFopoly using the RUFopoly board, and on the ensuing discussion around their table, especially in terms of its effects on their own initial views and position. For the focus on questions relating to the Barossa, if their own vision for the region had been challenged they were asked to consider whether this was likely to make them change their views or vision. They were asked to consider whether there were any particular trade-offs they might be willing to accept in order to accommodate different perspectives encountered during the workshop.

Before concluding the workshop the participants were asked to reflect on the utility of RUFopoly as a tool for engaging the community in land-use planning issues. Specifically they were challenged to address the merits of this approach for community engagement in strategic planning. They were also asked to make suggestions for improving the game and to consider whether they had any thoughts about the potential for developing a particular Barossa version of the game. If so, would they support the local RDA to progress this initiative and, if an initiative was taken, would they be willing to participate in future development? These questions were to be considered in the coming weeks rather than at the end of the workshop, and participants were asked to contact the RDA or the researchers to provide any feedback.

The scenarios supplied for this second phase of the workshop broadly reflected topical strategic planning issues affecting Barossa region. In particular, they provided an opportunity for two contrasting views of the region's future to be discussed. On the one hand there has been a desire to see an expansion of population, which could occur through strategies aimed at encouraging new forms of economic development, such as a broadening of the food processing base, more tourism opportunities and additional light manufacturing. This could be combined with zoning relaxations to permit more residential development and creation of industrial estates. On the other hand, there has also been a more protectionist view that seeks to maintain the region's heritage, and to focus on the wine and food sector, but essentially through largely farm-based manufacture and with strict control on loss of farmland to housing and industry. Reconciling or balancing these two different views will be one of the major challenges for the region. The challenge can be seen already in the recent Character Preservation legislation that limits development outside the existing township boundaries in the Barossa and Eden Valleys, whilst agriculture and tourism uses take priority outside the townships. Meanwhile, a strong growth scenario is envisaged for Gawler, Roseworthy and Two Wells, partly to house the workforce for the expanding horticultural industry to the south. This will be accompanied by further retail developments and growth of small and medium-sized enterprises.

The different views lie at the heart of how the RDA's 'Roadmap' for the region will be interpreted and implemented (RDA Barossa, 2014) and in particular its interpretation of a commonly used term: sustainable economic development. This Roadmap has to address a multi-faceted policy context formed from the Council of Australian Governments' Regional Australia Standing Council framework for regional development; federal government priorities as articulated in the Australian government's budget statements; the South Australian Strategic Plan, the South Australian government's strategic priorities (in particular Premium Food and Wine from a Clean Environment); South Australia's ten point plan for the economy; Skills for Jobs – skills training and development – and the South Australian Planning Framework; the strategic priorities of The Barossa Council, The Town of Gawler, Light Regional Council and the District Council of Mallala; and industry strategic plans. The RDA's role is to identify regional collective priorities and to stimulate economic growth opportunities; to connect industry participants with capital and resources; and to identify barriers to growth and find ways to reduce them.

The scenarios therefore deal with issues relating to how to accommodate population growth, how to accommodate the expansion of agri-business development, how to best utilise new irrigation opportunities, where to route a proposed new by-pass, managing the interface between farmland and a major new edge-of-town residential area, and how best to manage proposals for new on-farm tourist development.

## 5.1 Scenario One

Population projections suggest an increase of 25,000 people across the region by 2030. Before a new Regional Strategic Plan is prepared, a Discussion Paper is presenting a number of alternative development scenarios for consideration by the community, including:

- a) A major new town based around an existing small settlement or a suitable 'greenfield' site, and adjacent to a railway line capable of being incorporated into the metropolitan rail system
- b) Traditional township expansion shared on a pro-rata basis amongst all of the major towns in the region
- c) Compact township development, including pockets of medium density development, but only in those towns where job creation is anticipated, and with a substantial investment in site selection and urban design
- d) A number of new Rural Living Zones identified on the basis of minimizing environmental and agricultural impacts, bushfire hazard and municipal infrastructure and servicing costs
- e) Development of dwellings on vacant rural allotments

The Discussion Paper asks you to nominate the % share of new population you think should be allocated to each of (a) – (e) in the final strategy. Which mix of these scenarios do you prefer and why? Suggest modifications or further qualifications if necessary. Which would you reject and why?

As requested, participants awarded percentages to the various possibilities attached to each question, reflecting their preferred 'futures'. For example, the compact township development (option c) was favoured by one participant (community member) at 65%, but with the next best preference (option a - township expansion) at 25% and the next, dwellings on vacant rural allotments (option e), at 10%, with two of the other choices ruled out entirely. The general logic used regarding options (b) and (c) was that they both represented 'orderly development'. Option (a) was largely rejected because it was felt to be unnecessary or would not add any significant additional benefit. However, it was also noted that it offered the possibility of incorporating best practice design and that it might be best to accommodate the majority of the 25,000 additional people in one settlement. However, this would significantly alter the character of that particular locale so that sharing between major settlements (b) and a number of compact township developments (c) might be preferable.

One community member observed that option (d) might be viewed more favourably depending on the type of agriculture involved and the potential to favour family farming. In contrast, another community member favoured both (a) and (c) at 30% each providing that (a) definitely involved

development around an existing small settlement. This player awarded percentages to all five options, with options (d) and (e) being the least preferred.

The rationale of another player (a community member) was that better economic benefit would be obtained by building around existing infrastructure. Opposition to development on a new site might be high unless developers were able to promise the specifications as part of 'best practice'. This player also favoured (a) and (c), arguing that the existing town and compact development could go "hand-in-hand". The discussion noted the difference between options involving significant expansion of settlement footprint versus an opportunity for densification, i.e. favouring compact development comprising significant infill of an existing settlement. The choice between these two options was felt to depend on the specific context and the overriding aims for the region.

Option (e) presents an opportunity to further develop small-scale agriculture in the region, perhaps through quite intensive production given the limit of one dwelling per 10 ha block. It was felt that if this could favour family farming it might be beneficial to the wider community. It also represented a means of developing rural living to accommodate the proposed population influx, and could be allied to the notion of new Rural Living Zones (d). One modification to this and the other options might be to introduce some light industry so that the Strategy is not just focused on the location of the population but also on the need to create local employment.

## 5.2 Scenario Two

An agri-food business has developed on a local farm where it has been processing its own primary produce and that of neighbouring farms for several years. The award-winning business is very successful with export contracts and an expanding workforce. However, it has outgrown the owner's traditional farm shed where it was given planning approval as 'farm scale value-adding' development a decade ago. The owners are now proposing to build a modern, purpose-built factory several times larger than the current building on the existing site, which is a flat portion of the farm on the main road into the region's most significant heritage and tourism town. As a member of the Council's Development Assessment Panel, do you:

- a) Support the proposal because of the jobs it will create and because it is the prerogative of the owner to develop where they wish;
- b) Seek to persuade the owner to shift the planned expansion to a new, fully-serviced Industry zone 10 kms away, to avoid infrastructure, traffic and aesthetic impacts likely to accompany further development of the original site;
- c) Propose an alternative site on the other side of the farm, which is out of sight.

Players raised questions relating to the cost-benefits associated with (b) and the aesthetic and environmental consequences of (c). They discussed both the long-term and short-term consequences associated with each option, whilst also identifying specific 'value-adding' developments with which they were familiar in the region. This illustrates one of the key differences between playing the game without knowing the territory covered by the board and tackling the exercise when the players are intimately familiar with the regional terrain.

When discussing option (b), a community member referred to the need to minimise the financial implications for the owner, recognising the potential for various financial impacts, including the capital cost of the land on the industrial estate, cost of potential alternatives, and cost of higher rates, though these could be offset by higher capital growth in the industrial area and possibly increased saleability of products. Cash-flow was identified as a potential issue during a period of rapid growth. Another player (from the community) argued in favour of (b) provided that the farm and current infrastructure could be maintained as a "shop front" to preserve the "farm feel." Players argued that some form of financial incentive could possibly be offered to encourage a move to the fully-serviced industry zone. The development of the zone would help to maintain the visual aesthetic and landscape heritage of the rest of the region. It would also help to concentrate infrastructure where it could be of maximum effect. The farm business would be maintained as a saleable asset whilst developing the processing side of the business. However, the local authority may have to provide some assistance to enable a new factory to be built at the industrial zone.

Other aspects discussed included the cost of labour on the industrial estate as opposed to the farm, the attraction of the industrial estate because of the accompanying infrastructure, and the potential gain to the farmer of being able to sell the processing side of the business if it was located primarily on the industrial estate, but whilst still retaining the farm. Processing may be more economic in an industrial site, and separating processing from a farm-located sales outlet could help benefit any tourism and heritage aspects of the farm. A community member suggested that the removal of any unsightly processing plant from the farm might even enable higher prices to be charged to tourists visiting the farm.

### 5.3 Scenario Three

Planning to expand irrigated farm production in the district based on recycled water from the major metropolitan wastewater treatment plant 40 km away is well advanced. A potential production area has been identified and a trunk pipeline route nominated. To enable planning for the distribution pipeline network, the developer has asked the Council to introduce planning controls to limit non-farm development in areas serviced by the distribution pipeline network. The pipeline investor claims this is necessary to avoid potential for future land use conflict, which would make land less attractive to new agri-food investors. However, several landholders (farmers) have objected to the proposed changes to the Development Plan, claiming that their “development rights” would be compromised by preventing them from selling vacant allotments (“to the highest bidder”) to fund their own expansion plans or their retirement. Do you:

- a) Support the pipeline investor and why;
- b) Support the landholders and why;
- c) Have another suggestion.

One council/RDA employee argued that supporting the pipeline developer did not necessarily conflict with support for landholders, as character preservation rules would usually over-ride building proposals. Concerns were raised about the permitted uses for the wastewater, with the suggestion that only agriculture/ horticulture should have rights of use. This could be achieved by creating a ‘Rural Zone’ where certain land uses would be prohibited and agricultural use given preference.

Nevertheless the expense of establishing the pipeline should mean that full use should be made of the water (through both in-ground and above-ground irrigation) via intensive agriculture/ horticulture.

Another player suggested that neither (a) nor (b) was appropriate before a full review of policy was performed. A council/RDA staff member proposed that a rural land authority needed to be established along the lines of urban land management commissions so that appropriate land could be purchased or leased to enable the creation of a ‘food park’, in which farmers would lease land from the authority.

This would help farmers looking to sell their land and also new entrants to farming seeking a holding.

## 5.4 Scenario Four

The Council has released plans for a by-pass road around a major regional town. A by-pass will take noisy and dangerous heavy vehicle traffic out of the main street and make regional freight movement more efficient. However, the preferred route bi-sects an iconic vineyard landscape on the edge of town that has been nominated as a national heritage item. The alternative routes would be more expensive and difficult to acquire because they traverse a more fragmented landscape where farms and vineyards are interspersed with rural lifestyle development and small quasi-rural enterprises, such as plant nurseries and earth-moving businesses. A majority of the ten landholders affected by the preferred route, and the regional tourism association, object to the proposal on the basis that the landscape in question is central to the regional tourism economy and has enabled the landholders to diversify their businesses at a time when the wine industry has been struggling. However, a majority of respondents to a poll run by the local newspaper support the preferred route on account of its lower cost to the community and lower disruption. Do you:

- a) Support the preferred route on the basis of cost and the majority view of ratepayers;
- b) Ask the Council to reconsider the other routes, including other means for funding the land acquisition required for the by-pass;
- c) Have another suggestion.

The potential for community conflict over this issue was illustrated by the differing views expressed around the two tables that considered this scenario. One of the community members from a farming background argued strongly against building a road that would go through an iconic vineyard. She made the point that once the character of that vineyard had been changed by the road there was no way of reversing the situation. She also felt that before such a decision could be taken the local community would need to be provided with more information, especially about the potential alternatives available. The discussion considered the likely impacts upon businesses in the major regional town if the flow of traffic through the town was significantly reduced. Option (a) was seen by some as essentially a short-term measure whilst option (c) was regarded as likely to be very costly but possibly a longer-term and generally a more widely acceptable solution.

Option (b) was also seen as ultimately offering a long-term solution. This option would involve taking time to consider alternative routes, but this might provide more long-term protection for the landscape. However, the additional costs involved could ultimately be reflected in increases to household rates. Option (b) was championed by those who felt that preserving the iconic landscape and heritage was of paramount concern. They took the view that the wider community interest would

be best served by protecting the landscape and that the demands of a small number of landowners should not outweigh this interest. They acknowledged, though, that a cost-benefit analysis was needed, with economics of the wine industry playing a part in this and hence in the decision taken. A key issue here is how to determine the ‘greater good’ within the various options addressed. It was acknowledged that the engineering solution (c) was essentially a compromise between (a) and (b), but despite its potential cost and its impact on the rates, this might be acceptable to the broad community.

### 5.5 Scenario Five

A major residential rezoning is proposed adjoining the region’s largest town. The rezoning will shift the boundary of the town into an actively farmed rural landscape where dust, chemical sprays and noise are a normal part of farm operations several times each year. The Council has engaged you as a consultant to develop a strategy for managing the interface between these two land uses. The project brief requires you to specify who is responsible for providing the buffer and how it is designed and maintained so that residential amenity inside the boundary is protected, and farming activities outside the boundary can be conducted without loss of production potential or fear of complaint from neighbours.

It was generally agreed that the developer should be responsible for providing the buffer, creating a belt that could partially hide the residential development from farmland whilst at the same time restricting the amount of noise and dust encountered by the new residents. A community member argued that it might be possible to promote more organic farming, which would reduce the use of chemical sprays on the farmland. The open-space requirements accompanying a new development could be incorporated into the creation of the buffer. However, some compensation may be required for the farmer if the buffer had an impact on ‘normal’ farming activities. The buffer zone could have the advantage of demarcating a clear boundary to the built-up area. There might also be an opportunity for providing more education to the residents via signage boards about the nature of farming and what residents living close to farms should expect from the farms by way of noise and odours.

The size and nature of the buffer zone were also debated, with several players remarking on the need to artificially create some relief, e.g. small ‘hills’, in the zone to shield the actively farmed landscape from the town. Different plantings in the buffer zone could be advised by local native plant specialists. The width of the buffer would partly be determined by its effectiveness in minimising noise, odours and dust from farm operations. Hence the buffer zone should have an amenity value,

providing some green open space with gains for biodiversity, recreation and possibly also transport if a new transport corridor was needed.

One suggestion from a council/RDA staff member was for the buffer zone to form part of the requisite open space requirement in the new development. They also suggested that consideration could be given to the nature of the farming activities adjacent to the buffer zone, encouraging organic farming to minimise use of chemical sprays and artificial fertilisers. Compensation to farmers to reduce such potentially noxious activity might also have to be considered. Another suggestion from a community member was for blocks of land alongside the buffer zone to be designated for agricultural use, possibly to encourage hobby farming as a transition between the town and fully commercial farming activity. This suggestion deemed hobby farmers as likely to be more tolerant of adjacent commercial agricultural activity than residents of the town.

## 5.6 Scenario Six

An innovative farmer has lodged an application with the Council for farm-stay accommodation on her 50 hectare property. The farm comprises five ten hectare allotments (5 x 10ha) in a picturesque valley that is part of the Council's Special Landscape Protection Zone. The development application proposes to construct a fully self-contained dwelling on each of the four vacant allotments on the farm. The application argues that farm-based tourism is an important diversification opportunity for the farming sector and that four additional dwellings will not significantly diminish landscape quality and tourist appeal in the valley. Overall, there are 25 farms in the valley, all between 50-100 hectares in area and with between four and eight vacant allotments each. Should the Council's Development Assessment Panel approve the application? What are the key considerations for the Panel? Does the application raise any questions about the current policy which allows construction of a dwelling on vacant allotments > 10 hectares in the Rural Zone?

One of the council/RDA employees suggested that an amalgamation of titles was preferable, so that any dwellings constructed could be concentrated on just one ten-hectare allotment rather than spread across five allotments. This would help to reduce costs for the local authority and might reduce the problem of 'snowballing' whereby other farmers might seek to pursue similar development plans. Discussions raised issues about the legal situation related to change of use of the new dwellings, occupancy restrictions and future sales of the allotments. In particular, the potential conflicts caused by moves from a tourist use to a permanent residence were raised, reflecting likely classification problems for planners. It was felt that the clustering solution would appeal to the local council provided that the overall rural and farming character of the area was maintained. Furthermore, approval of the general thrust of the application was felt to increase the likelihood of retaining inter-

generational transfer of the farm property. However, there was discussion of just what form the clustering might take, with a courtyard-type development suggested as one possibility. A key consideration was felt to be preserving the character of the area, and preventing substantial development of new dwellings on all 25 farms in the valley.

## **6. Feedback from the Participants: Developing a Barossa-based Version of RUFopoly**

Several participants felt that if the game was to be used in a formal manner for strategic planning for their region then a purpose-designed board was required rather than the original English design. This would help ensure that the board and the scenarios could be directly relevant to the subject area under review. Hence the term ‘Australianised’ was introduced to the discussion, symbolising the need for a purpose-designed board with terminology aligned with State legislation. Some argued that additional information needs to be provided about the scale of the map on the board and the meaning of the various acronyms, perhaps with conversions into Australian equivalents.

One participant described the original board as “diverse and well-constructed”, remarking that the scenarios covered an excellent range of planning issues. The four-fold classification of the scenarios was noted by some as an attractive feature. However, several remarked that it was difficult for Australians to appreciate the intricacy of the land-use mosaic in England, reflecting the density of settlement and the highly fragmented landscapes and terrain. Some felt there might be similarities with rural-urban fringes around Sydney or Melbourne, but the sprawling nature of Australian metropoli gave rise to somewhat different planning problems and hence the need for a purpose-designed board to meet local needs. At the same time two other observations were made. First, the original board illustrated generic issues that could be readily appreciated from various perspectives and backgrounds. Second, a minority view was that the Barossa Region did not fit well in terms of the notion of ‘rural-urban fringe’. It was primarily a working and quite intensively farmed rural landscape with a few urban pressures, in contrast to the area represented in the original RUFopoly board. This was one of the reasons why it was necessary to develop specific scenarios for the Region, with the six tackled during the workshop representing an excellent introduction.

One strand of discussion focused on the possibility of developing a local version of the game. This raised a series of questions to which definite answers were not provided: what scenarios? What map/board? How specific should the scenarios be? Should the basic game be retained but using Australianised language and a ‘tweaking’ of the scenarios? What would be the specific purpose of using the game? Producing a local version would address one of the basic game’s weaknesses, namely that it is too abstracted from reality to inform a particular local context. Lessons could be learned from the development of RUFopoly in Nebraska where ‘Plainsopoly’ uses ‘The State of Plains’, which “is

depicted on the board by an amalgamation of aerial images including the edge of a large city, several small towns, both irrigated and dryland farming areas, the foothills of a larger mountain range, sensitive sandhills habitat, a winding river, and a recognized federal Indian reservation” ([http://lawprofessors.typepad.com/land\\_use/2014/11/state-of-plains-by-jessica-a-shoemaker.html](http://lawprofessors.typepad.com/land_use/2014/11/state-of-plains-by-jessica-a-shoemaker.html)).

Scenarios utilised include ones on urban growth; rural depopulation; infrastructure needs; drought and other climate issues; tourism; new energy siting, including fracking, renewables, and transmission line expansion; invasive species control; water quality and quantity; and jurisdictional conflicts.

In addressing the issue of the purpose of a locally tailored game, the general view was there was a virtue in local planners being introduced to the game, possibly alongside key community leaders so that a future strategic plan could have better informed community input. However, it wasn't clear whether this should be in the form of using the game as a consultation tool or as the preliminary to discussions about strategic planning. One suggestion was that RUFopoly could be used to help build specific aspects of a plan.

There was widespread agreement that a new board could be developed using Australian terminology and focus, but with a need for further discussion as to what form the board should take. For example, if one was to be developed for the Barossa region should it focus on Barossa, Light, Gawler or Mallala, or should it simply be a broader composite Australian peri-urban aerial photo?

My only additional comment would be that if you were playing this game in 'real life' (i.e. to discuss the pros and cons of a building on a piece of land in South Australia) you would need more information on the current land use (i.e. productivity, soil type, topography, native species, run-off) and more information on the type of business (chemical usage, size, ethics i.e. what is their environmental stewardship mandate). I know that it is only to start discussions. But in our group we found it hard to provide a definitive recommendation without further information” (community member).

In discussing how the Region might usually utilise RUFopoly in the future, there was reference to the need to consider what format might work with the wider community. It was noted that a Review of the Strategic Plan would be released soon and that this was being produced with relatively little public consultation, in contrast to the Strategic Plan itself. So could RUFopoly be used to build on the Review and to help express community views?

Overall, the general view seemed to be that a generalised model was preferable, but with some local dimensions introduced, using local planning terminology. This could still have a broad rural-urban focus, but perhaps with a more recognisably Australian composite landscape represented. It was widely acknowledged by the participants that there were several potential benefits to be derived from playing the game, including for community groups carrying out neighbourhood plans; local

authorities consulting over local plans; the RDA preparing strategic plans; and students understanding the nature of the rural-urban fringe as part of the school curriculum or as part of a planning degree.

In concluding the Workshop it was agreed that RDA Barossa would digest the knowledge gained about RUFopoly and would consider how the game or a variant might be developed in early 2016 to utilise it for one or more of the various possible applications that had been discussed. In particular, the RDA would consider the extent to which the tool can assist in developing statutory plans whilst improving ownership by the public, possibly via contributing to a new form of community governance. In addition, other RDA groups in South Australia had expressed interest in playing the game, so there would be some discussion with these groups and possibly with the national reference group for Regional Australia.

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