## HOUSING AFFORDABILITY IN ROMA; CAN PROGRESS BE MADE WITHIN THE REGULATORY AND POLICY FRAMEWORK?

Wayne Wilson<sup>1</sup>, Marita Basson<sup>2</sup>

Survey Manager, Downes Survey Group Pty Ltd<sup>1</sup> Lecturer in Urban Design and Planning, University of Southern Queensland<sup>2</sup>

**Abstract:** Housing affordability is a complex issue that relates supply and consumption costs of housing to the ability of the household to pay for housing costs. A regulation and policy framework sets the direction for attaining housing affordability. This paper contends that the direction created by current regulation and policy is inappropriate, and that it will not lead to meaningful progress in housing affordability in Roma, as well as in the wider context.

A detailed analysis of the relevant literature, regulation and policy governing housing provision in Roma has highlighted areas of conflict within the regulation and policy framework. Using Roma as a case study, the disparities in regulation and policy were examined in depth to gauge what impact the conflicting elements might have on housing affordability. Regulation and policy roadmaps were produced to enable the relationships within the framework to be visualised. The volume, complexity and lack of coordination between the various elements of regulation and policy were shown to detract from the execution of the framework.

The major conclusion resulting from this paper is that accurate and realistic predictions of housing demand and available supply are needed to ensure that the shortcomings of the regulation and policy framework do not impact negatively on the affordability of housing in Roma and other areas under the jurisdiction of this framework. The second conclusion is that Roma will require additional residential land to be developed at higher densities than currently exist, to maintain or improve current relative levels of housing affordability. The recommended higher densities are the result of the regulatory constraints, recent and impending changes in development of land prone to flooding and projected economic and population growth in Roma,

#### INTRODUCTION

Housing Affordability refers to the relationship between the supply costs of housing, the consumption price of housing, and the subsequent impact on the household's capacity to meet and maintain consumption costs (Department of Local Government and Planning 2011b). In a broad sense, this definition refers to the ability of a household to pay for their housing costs, such as mortgage costs, ancillary costs, service costs or rental costs. Housing affordability is a complex issue impacted by economic, environmental and social factors and is subject to numerous influences, including land supply provisions, labour force factors, general cost of living expenses and housing market conditions. As a consequence, it is difficult to measure the direct and indirect impacts of individual factors influencing affordability.

Recognition of the factors underlying housing affordability, and relevant actions to mitigate those factors, is more effective than focusing on discreet measures of housing affordability (Yates & Gabriel 2006). Therefore, this paper considers the regulatory and policy framework underpinning housing affordability in the township of Roma, not on the assumption that housing affordability issues are more or less acute in Roma, but as a recognition of fundamental principles.

In the Australian Housing and Urban Research Institute final report number 165 'The drivers of supply and demand in Australia's rural and regional centres', Beer et al. (2011) conclude that an individual approach tailored to market specific factors in rural and regional areas, is required to recognise, respond and develop effectively functioning housing markets. Understanding whether the national, state and regional focus of the regulatory and policy settings have achieved the stated goals at the local level is critical to gauging the success of regulators and policy makers intentions. The balance of supply and demand factors in the local context is the ultimate test of the effectiveness of the mechanisms, coordination and implementation of the regulatory and policy framework. This paper argues that the current policy and regulatory framework does not achieve the stated goals, partly due to contradictions between the different elements in the framework.

#### **BACKGROUND**

Roma is a town of 6,500 residents located in the Local Government area of Maranoa (Australian Bureau of Statistics 2007). The town is the principal residential and business centre for the Maranoa region and falls within the Surat Basin resource province, as shown in Figure 1.0. The Maranoa region has a diverse economic base; however it is the emergence of the Coal Seam Gas (CSG) industry that is the primary economic driver, complimenting Roma's history as the birthplace of the oil and gas industry in Australia (Visit Maranoa 2011).

There is no statutory regional planning document spanning the entire Surat Basin region under the *Sustainable Planning Act 2009*, however the *Maranoa-Balonne Regional Plan 2009* and the *South East Queensland Regional Plan 2009-2031* coordinate development activities in the western and eastern areas of the region respectively (Department of Local Government and Planning 2011b). As a consequence, the Surat Basin area has lacked consistent and coordinated responses to resource driven economic and population growth.

As a consequence of the changing economic landscape, the *Surat Basin Future Direction Statement* was released in February 2010 to maximise the benefits and mitigate the consequences associated with rapid growth. The *Future Direction Statement* recognised the critical need for strategies to respond to the anticipated growth, including headline initiatives the *Surat Basin Regional Planning Framework* and the *Resource Town Housing Affordability Strategy* (Department of Employment, Economic Development and Innovation 2010).

The Future Direction Statement has a coordinating role to play between regional planning mechanisms, local planning mechanisms, natural resources mechanisms and policy intentions. Coordination of the objectives and outcomes of the Maranoa-Balonne Regional Plan, Surat Basin Regional Planning Framework, Roma Town Planning Scheme 2006 and the Environmental Impact Statement assessment process will be critical in the management of growth related issues (Department of Employment, Economic Development and Innovation 2010).

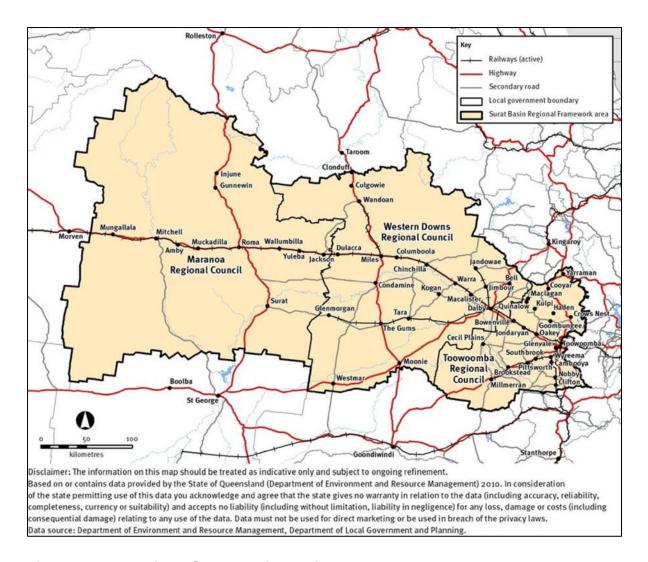


Figure 1.0 Map of the Surat Basin Region

Source: Surat Basin Resource Town Housing Affordability Strategy (p. 3)

#### **PROJECT AIMS**

This project aims to establish whether the imposition of regulation restrictions, and policy and strategy initiatives have created an environment conducive to improving housing affordability in a regional Queensland town that is influenced by the mining and resource sector.

#### **METHODOLOGY**

To achieve progress in housing affordability in Roma, the drivers and constraints of supply and demand (refer Figure 2.0) should be understood; and housing and economic market conditions within regulation and policy settings should be optimised to respond effectively to those drivers and constraints. Therefore, the methodology

for this project comprised a two-phase approach. Firstly, the investigation of the supply and demand restrictions in the housing market in Roma, as well as in the wider context. Secondly, a consideration of the regulation and policy settings underpinning affordability, taking a holistic approach to the entire framework rather than concentrating on one or more specific elements.

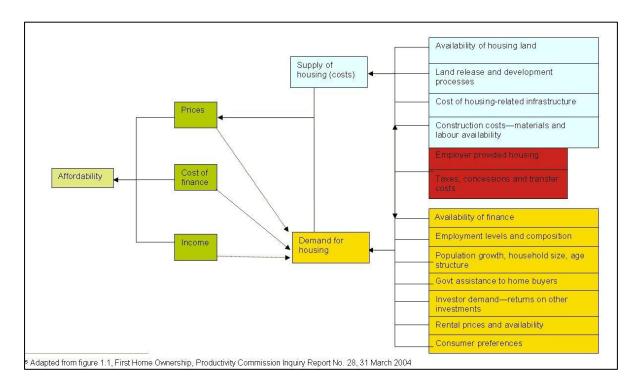


Figure 2.0 Elements Contributing to Housing Affordability

Source: Surat Basin Resource Town Housing Affordability Strategy (p. 8)

#### **Developable Land Supply Constraints**

The Maranoa-Balonne Regional Plan (p. 25) requires a minimum of 15 years stock of developable land. Key policy initiatives, including the *Surat Basin Regional Planning Framework* (Department of Local Government and Planning 2011a, pp. 48-49), categorically state that there is adequate land available for future development in the Surat Basin. Using current planning scheme maps and regulatory constraints, the extent of developable land in Roma was established (refer Figures 3.0 and 3.1). The Urban Development Area site is shown for reference to gauge the scale and location of the development.

Excluding the proposed 350 dwellings in the Urban Development Area site, there are six greenfield allotments, with a combined total area of 125 300 square meters, that are currently available for residential development. This translates to a nominal yield of 101 residential allotments using typical current densities in Roma. To improve this limited number of developable allotments, and therefore the availability and/or diversity in housing stock, will require either a relaxation of Good Quality Agricultural Land constraints and rezoning of Rural or Rural Residential land, or increased densities within the area suitable for development within the urban footprint.

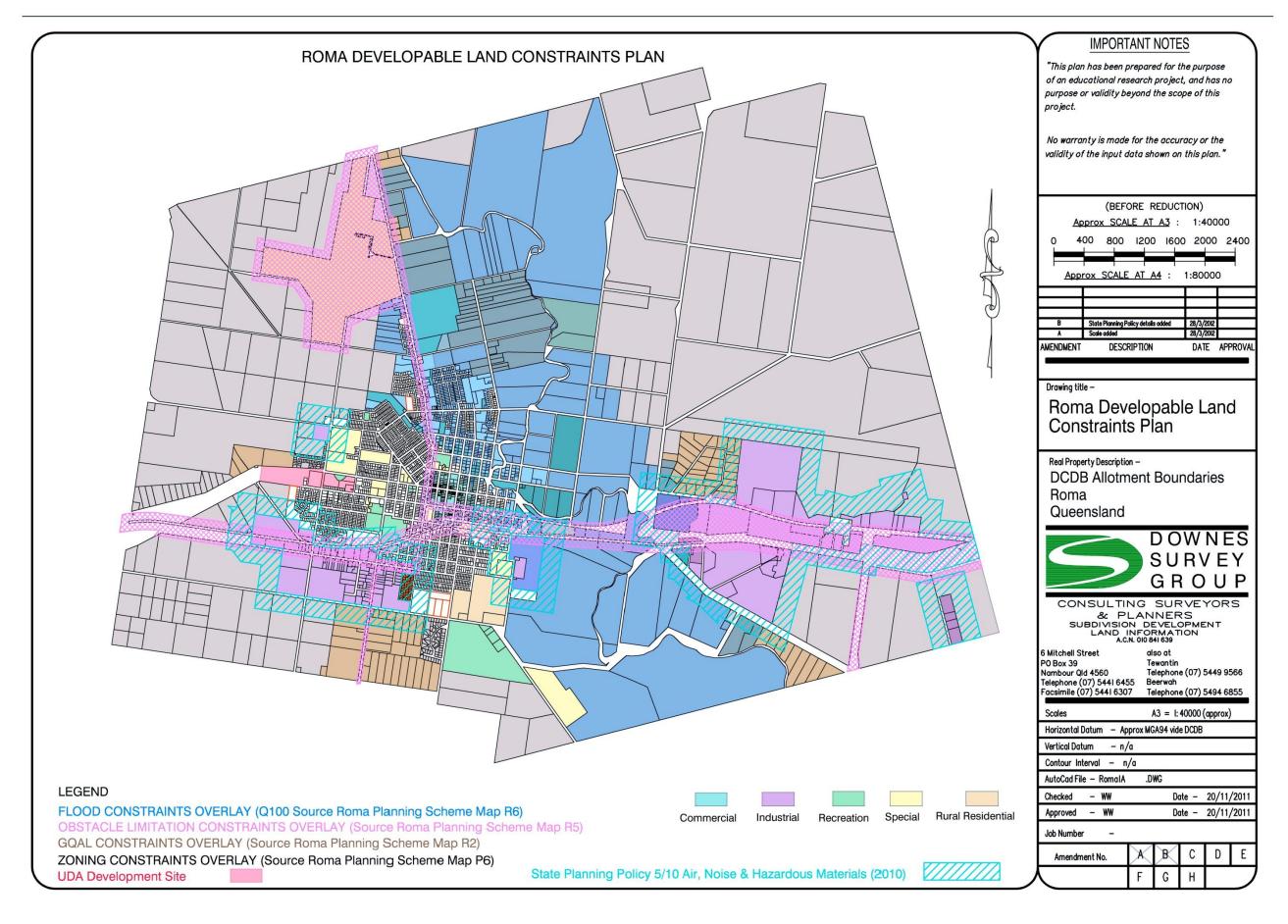


Figure 3.0 Roma Town Extents Developable Land Constraints Plan

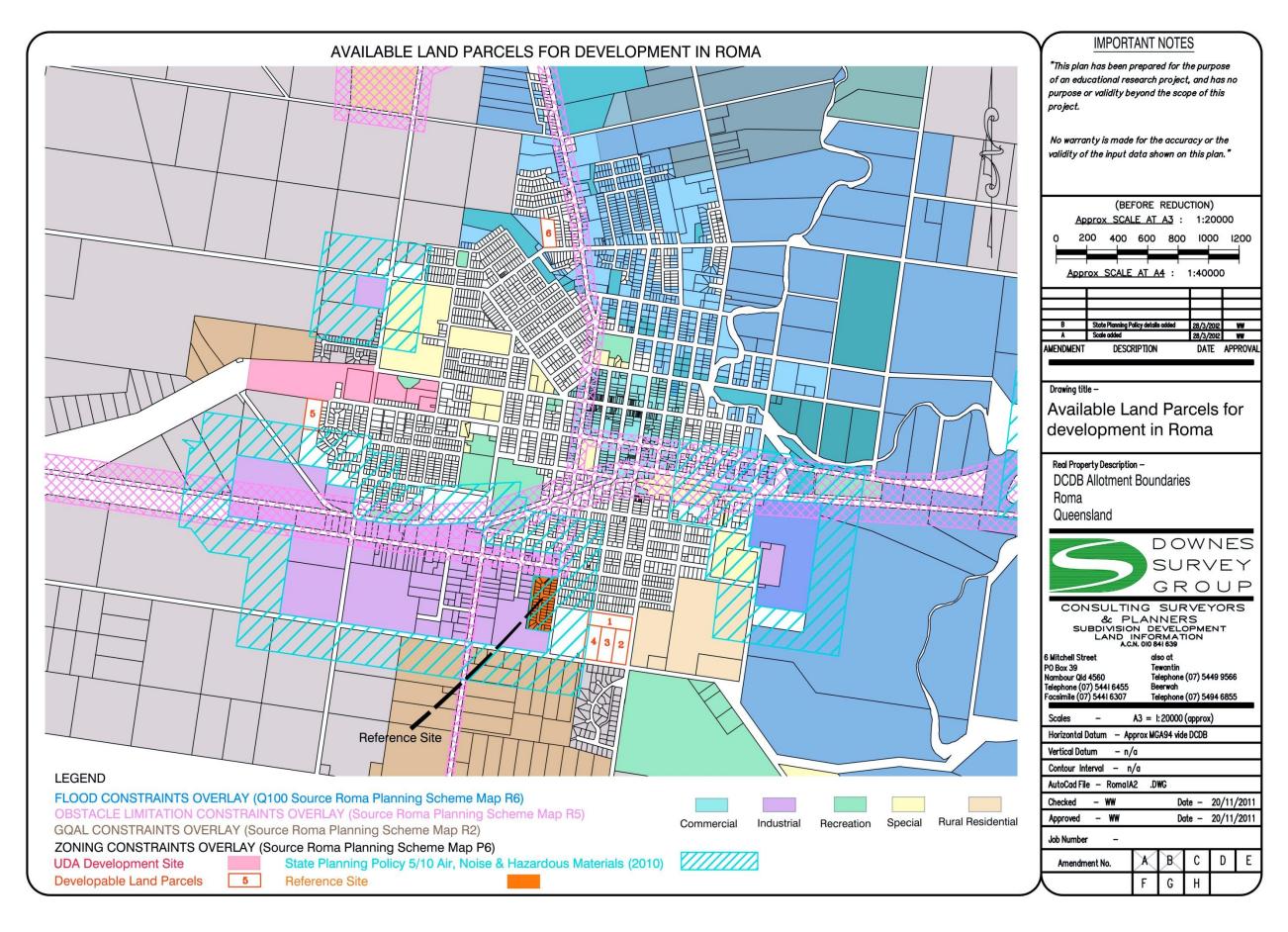


Figure 3.1 Development and Reference Site Plan

## **Developable Land Demand Constraints**

The discrepancies in population growth rate forecasts in the Maranoa region are significant. Historically, Roma has experienced an annual residential growth rate of 0.5 percent, and much of the regulation and policy framework relies on the historical perspective to predict future growth, as noted in Table 4.0 (Maranoa Regional Council 2011).

**Table 4.0 Population Growth Rate Forecasts** 

Source	Growth Rate Forecast
	(Estimated Resident Population or
	Full-Time Equivalent)
Surat Basin Regional Planning	0.5 percent ERP
Framework (Department of Local	
Government and Planning 2011a, p.	
29)	
Maranoa-Balonne Regional Plan 2009	0.4 percent FTE
(p. 34)	
Maranoa Economic Snapshot 2011	0.5 percent ERP
(Maranoa Regional Council 2011)	
Surat Basin Property Report 2010	Low 0.6 percent ERP (Maranoa)
(Queensland Treasury 2011c)	Low 0.9 percent ERP (Roma)
	Medium 1.1 percent ERP (Maranoa)
	Medium 1.5 percent ERP (Roma)
	High 1.4 percent ERP (Maranoa)
	High 1.7 percent ERP (Roma)

Due to the recent nature and relevance of the property report, an annual growth rate prediction of 1.6 percent ERP has been adopted in Roma, which is more than 200 percent greater than the estimations by the regional plan in 2009, planning framework and other key strategic documents. The higher predicted growth rate is endorsed by the level of economic investment and activity in the region, downstream

investment in the liquefied natural gas industry in Gladstone, historical precedents from other resource-based regions, and the volume and intention of policy initiatives.

A projected annual growth rate of 1.6 percent in Roma translates to an additional 2,422 new residents to be accommodated in the next 15 years (Queensland Treasury 2011c, pp. 28-30). Assuming the current average household size in the Maranoa Region of 2.5 people per dwelling, this translates to 619 dwellings required to achieve the desired regional outcome, accounting for the completion of the Bowen Street UDA development.

The Office of Economic and Statistical Research states that 92.4 percent of dwellings in the Maranoa region are separate houses, indicating a distinct lack of housing product options and diversity (Queensland Treasury 2011b, p. 9). Allowing for the 7.6 percent of dwellings that are not separate houses, with an assumption of three semi-detached or apartment dwelling units per allotment, the number of lots required to achieve the desired regional outcome is as follows:-

Number of Lots = (619 dwellings\*100%) - (619 dwellings\*7.6%/3) = 588 Lots.

Therefore, allowing for the completion of the UDA, the developable land shortfall is:-

Developable Land Shortfall = (588 allotments – 101 available allotments) \* 1,240 square metres/allotment = 60.39 Hectares. Consequently, the shortfall in available residential land to achieve the regional plan policy outcome at this point in time and using existing residential densities is 60.39 hectares of developable land.

#### Regulation, Policy and Strategy Framework

A detailed assessment of the existing framework was required to ascertain whether favourable market conditions in Roma can be optimised within the regulation and policy settings. The voluminous framework for housing affordability necessitated the development of roadmaps to visualise the key relationships within the regulatory and policy framework. These roadmaps show the complexity of the system underpinning housing affordability.

### **Regulation Framework**

There are three systems of regulation, assessment and approval for the provision of land in Queensland. The first system involves the planning and development system under the *Sustainable Planning Act 2009*, the second system the assessment of social impacts stemming from Environmental Impact Statements (EIS), and the third system the Urban Land Development Authority (ULDA). Of particular relevance to the housing market in Roma, is the EIS approval for the Gladstone Liquefied Natural Gas project, and the Bowen Street Urban Development Area site in Roma, which was declared on July 30, 2010 (Urban Land Development Authority 2011).

To assist with interpretation and visualisation of the regulatory framework, a 'Regulation Framework Roadmap' has been provided in Figure 5.0.

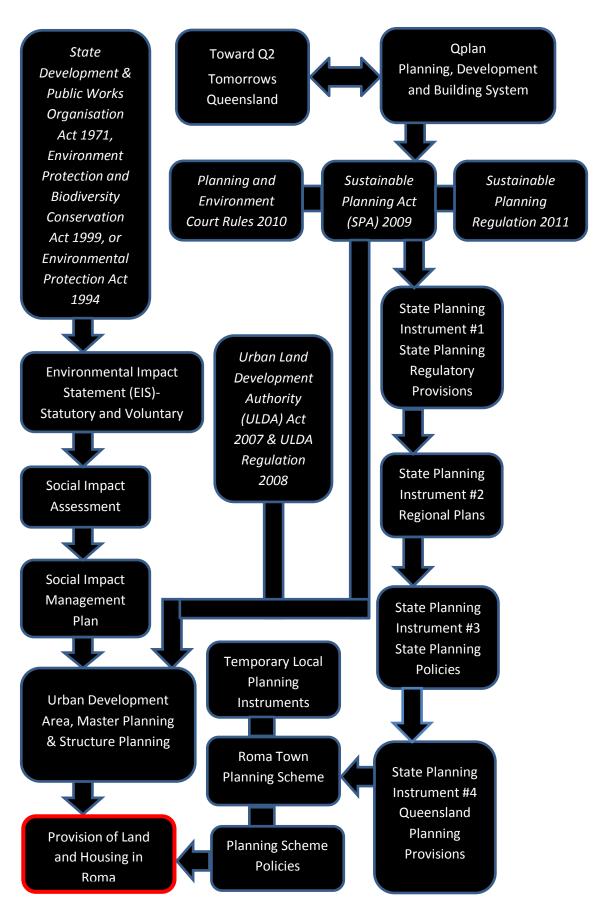


Figure 5.0 Regulation Framework Roadmap

## **Policy and Strategy Framework**

Federal Government policy framework provides overarching policy agendas, initiatives and funding to improve the general wellbeing of residents, and to encourage sustainable levels of population growth and infrastructure appropriate for the level of localised economic activity. The federal policy intention is for a market led approach to growth (Department of Sustainability, Environment, Water, Population and Communities 2011).

State Government policy has a regional and state-wide focus on managing cumulative growth impacts and strategies. The state advocates the use of partnerships, integration, resilience, adaptability and responsiveness to ensure policy remains relevant.

Additionally, the framework must allow for the coordination between regional planning, local planning and natural resources mechanisms (Department of Employment, Economic Development and Innovation 2010).

Local Government policy generally seeks to create opportunities to attract residents to the region based on employment and lifestyle factors (Local Government Planning Alliance 2009).

To assist with interpretation and visualisation of the respective policy frameworks, *Policy Framework Roadmaps* have been provided in Figure 6.0, Figure 7.0 and Figure 8.0.

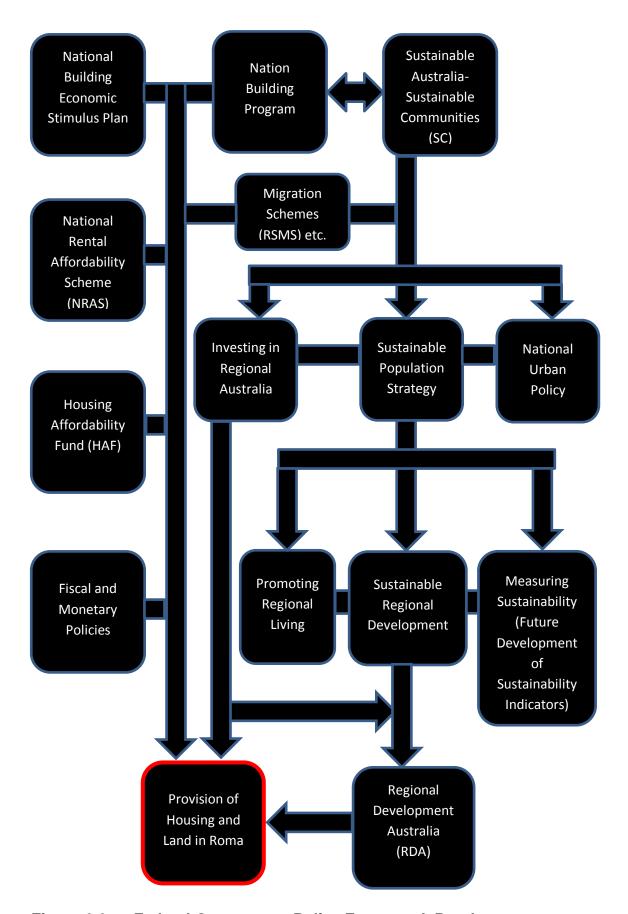


Figure 6.0 Federal Government Policy Framework Roadmap

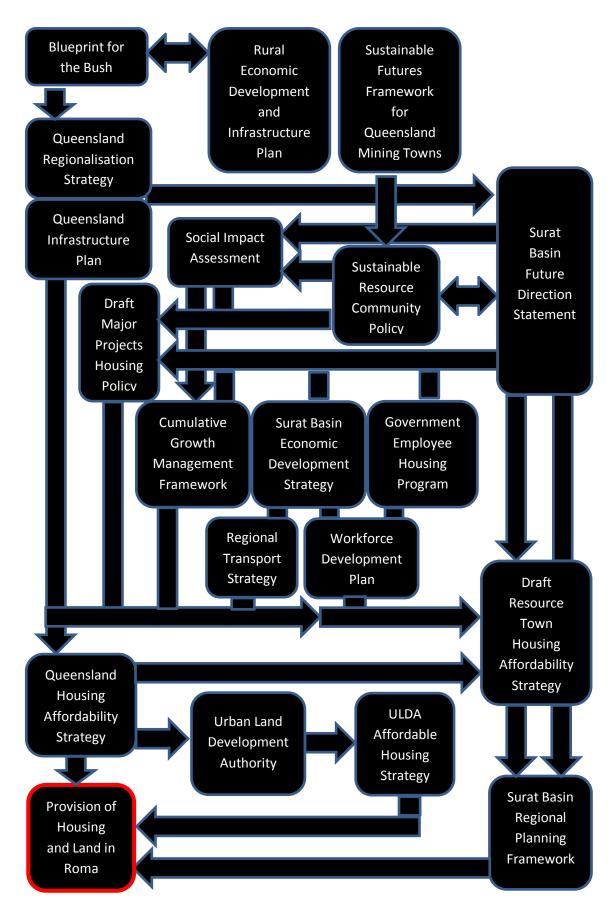


Figure 7.0 State Government Policy Framework Roadmap

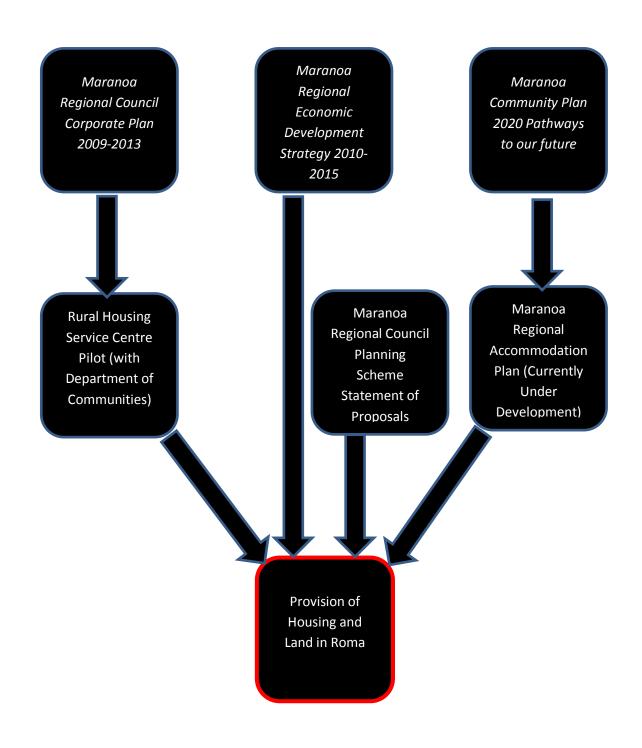


Figure 8.0 Local Government Policy Framework Roadmap

#### MAJOR FINDINGS

## **Density and Diversity**

Developable land in Roma is limited, residential development is not permitted to impinge on Good Quality Agricultural Land, and the population is predicted to increase; making the need for higher residential densities and greater housing diversity in Roma a reality. Traditional residential allotment sizes cannot be maintained to achieve the greater residential densities required (*Roma Town Council Planning Scheme 2006*). The *Bowen Street Roma Urban Development Area Development Scheme 2011states an* allotment size of 200-650 square metres within the UDA area (Urban Land Development Authority 2011), a significant divergence between the current local scheme and the UDA.

The relative density scenario calculations for the calculated shortfall of 619 dwellings required to achieve the desired regional outcome are shown in Table 9.0 below, comparing the ULDA development rates proposed in *Residential 30* guideline.

Developable Land Shortfall = 619 dwellings/dwelling rate per hectare – 12.53 ha current available land.

Table 9.0 Developable land shortfall using proposed ULDA dwelling densities

Dwellings per Hectare	Developable Land Shortfall
30	8.1 Hectares
25	12.2 Hectares
20	18.4 Hectares
15	28.7 Hectares

Developable land in Roma is a finite resource under the current regulatory framework. If there is reluctance to change the regulatory framework, then the ULDA development model is endorsed regardless of whether that model is accepted by the community or not. By declaring the UDA in Roma, the *Urban Land Development Authority* is recognising the impending changes to the supply and demand dynamic, and acting to improve housing diversity and affordability. However, the density model chosen should be not only tailored to the changing needs of the community but also

tailored to the existing housing market in Roma, which may include a reduction in the number of dwellings per hectare to say 20 dwellings per hectare.

### **Additional Supply and Demand Constraints**

Roma has been subjected to significant flooding events in March 2010, January 2011, April 2011 and a record flood most recently in February 2012 (Department of Community Safety 2012). As a consequence, a *Bungil Creek Flood Study & Mitigation Project* commenced in April 2011 to determine mitigation strategies, with concept design options due at the end of March 2012 (Maranoa Regional Council 2012). Unless, or until, successful mitigation strategies can be implemented, development in the significant portion of the town impacted by flooding should be restricted or prohibited, further limiting the viability of infill development options in flood-prone areas of town.

In addition to an increase in the Estimated Resident Population and flooding constraints, the *Surat Basin Population Report 2010* (Queensland Treasury 2011c, p. 7) predicts the non-resident workforce in the Maranoa region will increase from 860 in 2011 to 1,590 in 2012. This prediction translates to an estimated increase of 730 workers within one calendar year. Typically, in areas with high levels of non-resident workers and a shortage of short-term accommodation options, employers are forced to rent or buy existing dwellings to house their non-resident workforce. Should this prediction be realised, more demand will be placed on housing and motel accommodation within Roma, thereby negatively impacting housing affordability.

Additionally, the *Surat Basin Regional Planning Framework* states that the \$11 million dollar upgrade of the Roma Airport will allow larger passenger numbers to pass through Roma, with connecting flights to Brisbane, Charleville, St George and more remote resource regions located in the Cooper and Eromanga Basins (Department of Local Government and Planning 2011a).

#### **Regulation and Policy Conflict**

There are numerous inconsistencies and points of conflict within the regulation and policy framework which undermine the desired outcomes. There is a distinct lack of consistency in the development of regulatory restrictions in Roma. The *Maranoa-Balonne Regional Plan 2009* was released in September 2009 as a statutory

planning document, to "... provide a framework for the management and development of the region for more than 20 years" (pp. Release Notes). However, 14 months after gazettal of the Regional Plan, a draft version of the Surat Basin Regional Planning Framework was released, and subsequently adopted in 2011, advocating flexibility in approach and responsiveness for the region due to not being constrained to regional planning boundaries. The framework provides significant areas of overlap with the Maranoa-Balonne Regional Plan 2009 and the South East Queensland Regional Plan 2009-2031, and provides recognition that current regional planning mechanisms are not sufficient to accommodate growth across the region.

Additionally, there is a considerable divergence in the policy directions and motivations between the various levels of governance. The *Sustainable Australia-Sustainable Communities 2011* initiative provides clear direction from the Federal Government to encourage regional centres to sustainably accommodate growth. Should the community show the capacity and should population growth be economically viable, state and local regulation and policy is encouraged to adapt to the national direction (Department of Sustainability, Environment, Water, Population and Communities 2011c). As discussed in this paper, this has not, to date, been the case in Roma.

#### **MAJOR CONCLUSIONS**

As a consequence of restrictions imposed by regulatory and environmental constraints, there is a significant shortage of developable land in Roma, which will negatively impact on housing affordability. Therefore, the regulation and policy framework underpinning housing affordability in Roma fails the most basic fundamental principle of balancing supply and demand constraints in the housing market. Additionally, the current regulation and policy initiatives lack the responsiveness and adaptability to proactively address housing affordability fundamentals in their current form.

Whilst the ULDA has a significant role in addressing the fundamentals underpinning housing affordability, as well as directly delivering affordable housing products and developments, the mandate of the ULDA is also proof of the recognition by the state government of an over-constrained regulatory system. The ULDA has been introduced to negate many of the existing development controls, to ensure expedient

delivery and diversity of housing products, and introduce the market to alternative design principles. Accordingly, the ULDA can have a positive impact on housing affordability in Roma, particularly where the development model can be embraced and replicated. The ULDA development will not resolve housing affordability issues in isolation to other measures.

Progress in housing affordability can be made within the regulatory framework in Roma, but that progress will be limited until significant impediments to the supply and demand dynamic can be resolved.

#### RECOMMENDATIONS

Ultimately, the major recommendation of this project is that the policy and regulatory framework should allow the principles of supply and demand in the housing market to be balanced to achieve meaningful progress in housing affordability. This will require the provision of additional developable land within the urban precinct, to be established at a higher density than currently exists in the Roma housing market. In conjunction, the accurate and realistic predictions of housing demand must be incorporated into the regulatory and policy framework to ensure that the supply of land remains sufficient. As a minimum, an additional 60.39 hectares of suitably zoned and serviced land should be added to the urban precinct to achieve the Maranoa-Balonne Regional Plan policy outcome of 15 years of developable land, allowing potentially higher levels of dwelling density as a buffer towards current and future demand.

Discrepancies between policy and regulations documents should be addressed. Performance indicators are required in planning and policy documents to ensure that the initiatives achieve the desired outcome, and that they retain the ability to respond to dynamic supply and demand constraints. All regulation and policy initiatives, including the ULDA development model, must consider localism and the scale of the supply and demand dynamics, rather than enforcing a 'one model fits all' approach (Beer et al. 2011, pp.16-17).

The provision of developable land overlay maps or databases would allow regulators, policy makers, the development industry and the community to visualise regulation and policy restrictions in Roma, as well as in the wider context. The

inclusion of overlay mapping in the regulation and policy documents is therefore a viable regulation enhancement.

Along with the provision of additional land, there are numerous enhancements to the regulatory system that have been adopted in high growth local government areas of Queensland, but have not yet been adopted in the Maranoa region, such as the *Next Generation Planning* (Council of Mayors 2011), the *Target 5 Days* initiative and the *Housing Affordability Programme electronic Development Assessment* (HAF-eDA) and *Smart eDA* system (Local Government Association of Queensland 2010a).

In terms of policy enhancements, the majority of policy documents seek community and stakeholder input into the development of policy responses, but it is likely that few members of the community understand the process due to the volume and complexity of the material. The inclusion of roadmaps in the policy documents is therefore a viable policy enhancement initiative.

Policy initiatives that create peaks and troughs in demand should be discouraged, particularly where such initiatives have an expiry date. Encouraging sustainability in the housing market is better suited to long term policies that maintain a steady rate of growth

## **List of References**

- Australian Bureau of Statistics 2007, 2006 Census QuickStats: Roma, Australian Bureau of Statistics, Canberra, Viewed 28 May 2011,
  - <http://www.censusdata.abs.gov.au/ABSNavigation/prenav/LocationSearch?location</p>
    LastSearchTerm=roma&locationSearchTerm=roma&newarea=SSC37335&submitbut
    ton=View+QuickStats+%3E&mapdisplay=on&collection=Census&period=2006&are
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    &producttype=QuickStats&topic=&navmapdisplayed=true&javascript=true&breadcr
    umb=PL&topholder=0&leftholder=0&currentaction=104&action=401&textversion=f
    alse&subaction=1>.
- Beer, A., Tually, S., Rowley, S., Haslam McKenzie, F., Schlapp, J., Birdsall Jones, C., Corunna, V. 2011, *The drivers of supply and demand in Australia's rural and regional centres*, AHURI Final Report No. 165, Australian Housing and Urban Research Institute, Melbourne, Victoria, Viewed 17 April 2011, <a href="http://www.ahuri.edu.au/">http://www.ahuri.edu.au/</a>.
- Council of Mayors 2011, *Next Generation Planning*, State of Queensland (Department of Local Government and Planning), Brisbane, Queensland, Viewed 01 April 2011, <a href="http://www.dlgp.qld.gov.au/growth/ngp">http://www.dlgp.qld.gov.au/growth/ngp</a>.
- Department of Community Safety 2012, *News Archive, News Released in 2011*, The State of Queensland (Department of Community Safety), Brisbane, Queensland, Viewed 18 March 2012, <a href="http://www.emergency.qld.gov.au/news/archive.asp">http://www.emergency.qld.gov.au/news/archive.asp</a>.
- Department of Employment, Economic Development and Innovation 2010, *Surat Basin Future Direction Statement*, The State of Queensland (Department of Employment, Economic Development and Innovation), Brisbane, Queensland, Viewed 04 June 2011, <a href="http://www.regions.qld.gov.au/dsdweb/v4/apps/web/content.cfm?id=15175">http://www.regions.qld.gov.au/dsdweb/v4/apps/web/content.cfm?id=15175</a>.
- Department of Local Government and Planning 2011a, *Surat Basin Regional Planning Framework*, The State of Queensland (Department of Local Government and Planning), Brisbane, Queensland, Viewed 24 July 2011, <a href="http://www.dlgp.qld.gov.au/regional-planning/surat-basin.html">http://www.dlgp.qld.gov.au/regional-planning/surat-basin.html</a>>.

- Department of Local Government and Planning 2011b, *Surat Basin Resource Town Housing Affordability Strategy*, The State of Queensland (Department of Local Government and Planning), Brisbane, Queensland, Viewed 25 March 2011, <a href="http://www.dlgp.qld.gov.au/regional-planning/surat-basin-resource-town-housing-affordability-strategy.html">http://www.dlgp.qld.gov.au/regional-planning/surat-basin-resource-town-housing-affordability-strategy.html</a>.
- Department of Sustainability, Environment, Water, Population and Communities 2011, 
  Sustainable Australia, Sustainable Communities, Department of Sustainability, 
  Environment, Water, Population and Communities, Commonwealth of Australia, 
  Canberra, Australian Capital Territory, Viewed 06 August 2011, 
  <a href="http://www.environment.gov.au/sustainability/population/index.html#strategy">http://www.environment.gov.au/sustainability/population/index.html#strategy</a>.
- Local Government Association of Queensland 2010a, *electronic Development Assessment*,

  Local Government Association of Queensland, Housing Affordability Programme

  Queensland, Brisbane Queensland, Viewed 3 October 2011,

  <a href="http://www.lgaq.asn.au/web/guest/housing-affordability-programme">http://www.lgaq.asn.au/web/guest/housing-affordability-programme</a>>.
- Local Government Association of Queensland 2010b, *Target 5 Days (T5)*, Local Government Association of Queensland, Housing Affordability Programme Queensland, Brisbane, Queensland, Viewed 3 October 2011, <a href="http://www.lgaq.asn.au/web/guest/housing-affordability-programme">http://www.lgaq.asn.au/web/guest/housing-affordability-programme</a>>.
- Local Government Planning Alliance 2009, *Roma Regional Council Planning Scheme*Statement of Proposals, Maranoa Regional Council, Roma, Queensland, Viewed 03

  September 2011,

  <a href="http://www.maranoa.qld.gov.au/planning/P\_and\_E\_town\_planning.shtml">http://www.maranoa.qld.gov.au/planning/P\_and\_E\_town\_planning.shtml</a>>.
- Maranoa Regional Council 2012, Flood mitigation options up for community consultation,

  Maranoa Regional Council, Roma, Queensland, Viewed 18 March 2012,

  <a href="http://www.maranoa.qld.gov.au/web/guest/home/-/asset\_publisher/7ksF/content/flood-mitigation-options-up-for-community-consultation">http://www.maranoa.qld.gov.au/web/guest/home/-/asset\_publisher/7ksF/content/flood-mitigation-options-up-for-community-consultation</a>.
- Maranoa Regional Council 2011, *Maranoa Economic Snapshot, March Quarter 2011*, Maranoa Regional Council, Roma, Queensland, Viewed 11 June 2011, <a href="http://www.maranoa.qld.gov.au/">http://www.maranoa.qld.gov.au/</a>>.

- Maranoa Regional Council 2009, *Maranoa Regional Council Corporate Plan 2009-2013*, Maranoa Regional Council, Roma, Queensland, Viewed 11 June 2011, <a href="http://www.maranoa.qld.gov.au/">http://www.maranoa.qld.gov.au/</a>>.
- Pinnegar, S., Easthope, H., Randolph, B., Williams, P., Yates, J. 2009, *Innovative financing for homeownership: the potential for shared equity initiatives in Australia*, AHURI Final Report No. 137, UNSW-UWS Research Centre, Australian Housing and Urban Research Institute, Melbourne, Victoria, Viewed 26 April 2011, <a href="http://www.ahuri.edu.au/">http://www.ahuri.edu.au/</a>.
- Queensland Treasury 2011a, *Population and housing profile: Maranoa Regional Council May 2011*, The State of Queensland (Queensland Treasury), Office of Economic and Statistical Research, Brisbane, Queensland, Viewed 02 October 2011, <a href="http://www.oesr.qld.gov.au/products/profiles/pop-housing-profiles-lga/index.php">http://www.oesr.qld.gov.au/products/profiles/pop-housing-profiles-lga/index.php</a>.
- Queensland Treasury 2011b, *Queensland Regional Profiles: Maranoa Region, Profile generated on 5 August 2011*, The State of Queensland (Queensland Treasury), Office of Economic and Statistical Research, Brisbane, Queensland, Viewed 02 October 2011, <a href="http://statistics.oesr.qld.gov.au/qld-regional-profiles?region-type=LGA\_10&regionids=6614,6640&custom-name=Maranoa">http://statistics.oesr.qld.gov.au/qld-regional-profiles?region-type=LGA\_10&regionids=6614,6640&custom-name=Maranoa</a>.
- Queensland Treasury 2011c, *Surat Basin Population Report, 2010*, The State of Queensland (Queensland Treasury), Office of Economic and Statistical Research, Brisbane, Queensland, Viewed 2 October 2011, <a href="http://www.oesr.qld.gov.au/products/publications/surat-basin-pop-report/index.php">http://www.oesr.qld.gov.au/products/publications/surat-basin-pop-report/index.php</a>>.
- Urban Land Development Authority 2011, *Bowen Street Roma Urban Development Area Development Scheme*, Urban Land Development Authority, Brisbane, Queensland, Viewed 10 September 2011,

  <a href="http://www.ulda.qld.gov.au/01\_cms/details.asp?ID=427">http://www.ulda.qld.gov.au/01\_cms/details.asp?ID=427</a>>.
- Urban Land Development Authority 2010a, Residential 30: Guideline to deliver diversity in new neighbourhood development, ULDA guideline no. 01, March 2010, Urban Land Development Authority, Brisbane, Queensland, Viewed 06 May 2011, <a href="www.ulda.qld.gov.au/dbase\_upl/20100304\_R30ResGuideline.pdf">www.ulda.qld.gov.au/dbase\_upl/20100304\_R30ResGuideline.pdf</a>>.

- Urban Land Development Authority 2010b, *Roma Newsletter #1*, *October 2010*, Urban Land Development Authority, Brisbane, Queensland, Viewed 06 May 2011, <a href="http://www.ulda.qld.gov.au/01\_cms/details.asp?ID=354">http://www.ulda.qld.gov.au/01\_cms/details.asp?ID=354</a>>.
- Urban Land Development Authority 2010c, *Bowen Street, Roma UDA Development Scheme:*Submissions Report, November 2010, Urban Land Development Authority, Brisbane,
  Queensland, Viewed 06 October 2011,

  <a href="http://www.ulda.qld.gov.au/01\_cms/details.asp?ID=427">http://www.ulda.qld.gov.au/01\_cms/details.asp?ID=427</a>>.
- Visit Maranoa 2011, *Roma*, Visit Maranoa, Viewed 28 May 2011, <a href="http://www.visitmaranoa.com.au/index.php/ourtowns/roma">http://www.visitmaranoa.com.au/index.php/ourtowns/roma</a>>.
- Yates, J., Gabriel, M. 2006, *Housing Affordability in Australia, National Research Venture*3: Housing Affordability for Lower Income Australians, Research Paper 3, Sydney
  Research Centre and Southern Research Centre, Australian Housing and Urban
  Reserach Institute, Melbourne, Victoria, Viewed 22 May 2011,

  <a href="http://www.ahuri.edu.au/">http://www.ahuri.edu.au/</a>>.
- Yates, J., Milligan, V., with Berry, M., Burke, T., Gabriel, M., Phibbs, P., Pinnegar, S. and Randolph, B. 2007, *Housing affordabliity: a 21st century problem, National Research Venture 3: Housing affordability for lower income Australians*, Final Report No. 105, Sydney Research Centre with RMIT-NATSEM Research Centre, Southern Research Centre, Swinburne-Monash Research Centre, UNSW-UWS Research Centre Australian Housing and Urban Research Institute, Melbourne, Victoria, Viewed 22 May 2011, <a href="http://www.ahuri.edu.au/">http://www.ahuri.edu.au/</a>.

# Legislation

Mackay, Isaac and Whitsunday Regional Plan 2012 (QLD).

Maranoa-Balonne Regional Plan 2009 (QLD).

Roma Town Council Planning Scheme 2006 (QLD).

State Planning Policy 1/02: Development in the Vicinity of Certain Airports and Aviation Facilities 2002 (QLD).

State Planning Policy 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide 2003 (QLD).

State Planning Policy 1/07: Housing and Residential Development 2011 (QLD).

State Planning Policy 1/92: Development and the Conservation of Agricultural Land 1992 (QLD).

State Planning Policy 5/10 Air, Noise and Hazardous Materials (2010)

Statutory Instruments Act 1992 (QLD).

Sustainable Planning Act 2009 (QLD).