Dear Sir/Madam,

Thank you for this opportunity to provide input to the Smart Cities Plan.

Regional Development Australia (RDA) is a partnership between the Australian, State, Territory and Local governments established to support the growth and development of Australia’s regions.

Please do not hesitate to contact Bob Germaine, CEO, Regional Development Australia Sydney on 9890 7804, mobile 0418 969 775 or email bob.germaine@rdasydney.org.au should you have any further questions. We are very interested in continuing the dialogue regarding the recommendations outlined in this Submission.

Yours sincerely,

Dr Robert Lang
Chair
Regional Development Australia Sydney
Submission on the Smart Cities Plan

*June 2016*
Background on RDA Sydney Position

Regional Development Australia, Sydney (RDA Sydney) welcomes the opportunity to comment on the \textit{Smart Cities Plan (The Plan)}, issued by the Department of the Prime Minister and Cabinet.

RDA Sydney is a COAG initiated partnership between the Australian and NSW governments created to strengthen communities. It is part of a national network of 55 RDA committees made up of local leaders representing government, business, community groups and other key regional stakeholders to provide targeted advice to government on key issues affecting the economic development of their region.

For some time now RDA Sydney has been working with all levels of government, industry groups, business, research, development and education institutions and community representatives to identify the needs and opportunities of Sydney, and facilitate the development of new ideas, projects and initiatives that create sustainable economic outcomes across the Sydney regions.

We progress agendas through the establishment of or the participation in interest groups, round table discussions and leadership networks.

- RDA Sydney in partnership with WSROC and Penrith Business Alliance commissioned the University of Technology Sydney to conduct an analysis of demand in Western Sydney for Smart Work Centres. This report informed NSW Government decision makers to conduct pilots in two sites in Western Sydney. (See http://www.rdasydney.org.au/imagesDB/wysiwyg/SmartWorkCentres-analysisondemandinWesternSydney.pdf )

- RDA Sydney project managed the development of a 3D \textit{Virtual Sydney} Proof of Concept Planning model for Sydney to advocate the benefits to government of utilizing 3D technology as a communications and complex planning tool for strategic and urban development. The concept Virtual Sydney video was launched at the 2012 CeBIT Australia exhibition and the ideas have been further promoted and utilized by progressive government planning agencies including the Major Cities Unit, NSW Planning and Infrastructure and NSW Lands and Property Information.

- RDA Sydney and SEGRA Foundation Ltd initiated a Collaborative Investment Roundtable as part of a broad national conversation to consider the growing usage of collaborative financing methods and how this can encourage more private sector involvement in national and regionally significant projects.

- RDA Sydney is delivering two projects funded by the NSW State Government that focus on:
a) Exploring the potential strategic industries that could be developed with a 24/7 airport at Badgerys Creek and possible innovation centres of excellence that could be located in Greater Western Sydney;

b) Mapping the ecosystem of the biomedical and medical technology industries in Western Sydney with the aim of providing a resource for policy initiatives to grow these industries in the future. The study is also a way to understand the sector and reveal any trends in terms of location and connections with research and health infrastructure.

- RDA Sydney has a good overview as to the current strategic planning, overall economy and industry development of Metropolitan Sydney. Since 2009, RDA Sydney has produced a Regional Plan, and the annually updated RDA Sydney Economic Baseline Assessment, which brings together a lot of information with respect to GRP, population, employment by industry sector for all districts and 41 LGAs. This information has been used by NSW and Australian government agencies.

- RDA Sydney is the founder and facilitator of the Sydney Aerospace and Defence Interest Group (SADIG), a group of industry associations representing over 200 companies, research and education institutions in Sydney (See www.sadig.org.au)

- RDA Sydney with its partners Consult Australia and 10,000 Friends of Sydney helped with an expert group in 2012, a clear vision and practical recommendations to Sydney 2051 A greater Global City – A Plan for Action for Realising a Better Sydney (See http://www.rdasydney.org.au/imagesDB/wysiwyg/Sydney2051_AGreaterGlobalCityReport.pdf)

- RDA Sydney has in partnership with NSW Federation of Community Housing Associations, Community Housing Providers (CHPs), NCOSS and Shelter NSW commissioned ‘Doors to Ownership’ a business case and guidelines for a shared home ownership scheme in NSW. (See http://www.rdasydney.org.au/imagesDB/wysiwyg/DoorstoOwnership_RDA_Web_Final.pdf)

**RDA Sydney’s Strategic goals underpin our response to the Smart Cities Plan:**

**Goal 1:** Nurture innovation and industry development to get the right jobs in the right places;

**Goal 2:** Seek to influence government policy to make Sydney a liveable city with affordable housing, amenity and improved well-being and social equity;

**Goal 3:** Develop and promote ‘Whole of Metropolitan Sydney’ integrated planning and tools;

**Goal 4:** Develop RDA Sydney’s organizational capacity to deliver successful outcomes through partnership.
The following RDA Sydney, stakeholder and topic expert documents have provided key inputs into this submission:

- **A Greater Global City Sydney 2051.** RDA Sydney, Consult Australia & 10,000 Friends of Greater Sydney.
- **Smart Work Centres: An Analysis of Demand in Western Sydney.** Institute for Sustainable Futures, UTS for Regional Development Australia Sydney, the Western Sydney Regional Organisation of Councils and Penrith Business Alliance.
- **Doors to Ownership - A business case and guidelines for a shared homeownership scheme with NSW community housing associations.** Sphere Company was commissioned by the Shared Homeownership Working Group that was convened by the Council of Social Service of NSW (NCOSS) and Regional Development Australia Sydney (RDA Sydney).
- **Introducing UK City Deals. A smart approach to supercharging economic growth and productivity.** KPMG & Property Council of Australia.
- **London Infrastructure Plan 2050 Mayor of London.**
- **RDA Sydney Regional Plan for Sydney 2013-2016**

**Preamble**

The *Smart Cities Plan* and specifically its 3 pillars of Smart Investment, Smart Policy and Smart Technology is a good starting point. It summarises the opportunities and challenges of smart cities, and why they are important to Australia’s future economic and social wellbeing. It importantly recognises cities as both urban and regional, including rural cities. However the *Plan* seems to be a description of the status quo of currently announced Federal policies, with little forward vision or ‘stretch’ aspirations.

The appointment of a Minister for Cities and the release of this *Plan* are critical messages from the Federal government demonstrating its interest in cities, and their intention to invest in both our cities and public transport. It is vital that a bipartisan commitment is gained to progress the *Plan* from a hypothetical statement into a national sustainable framework.
Submission Discussion

1. Promoting job clusters in cities to deliver economic growth, innovation and better paid jobs

RDA Sydney endorses the Plan’s view on the agglomeration benefits of ‘job clusters – concentrated areas of economic activity – foster access to employees, suppliers and customers while providing economies of scale’. But would like to provide two cautionary notes.

Firstly, the mere existence of concentrations of economic activity and population in agglomerations does not necessarily lead to a net increase in jobs and growth; other factors need to be in place to turn an agglomeration into an innovative economic and social hub. Secondly, smart cities are not just about economic development. Rather, smart cities are those that are well-planned and well-managed to achieve an equal mix of industry and economic growth, a sense of community and social cohesion, and sound measures of liveability and sustainability.

The Plan sets out the characteristics of job clusters forming in cities as: concentration of a few specialised industries; effective networks of people and organisations; active participation of research institutions; and access to a skilled workforce. RDA Sydney supports these basic concepts and strongly encourages that the focus go beyond the existence of these features to their dynamics, namely, what needs to be done to ensure these features are working for optimal jobs and growth benefits.

The relationships and interactions between the participants is the active ingredient that turns an agglomeration into an innovative hub. More than a simple co-location, the hub operates best as an organic, self-directed collaborative community. How participants are helped to interact and engage with each other in changing and evolving relationships is key. This provides the momentum that generates new and enduring capabilities, which act as magnets for more investment, talent, ideas and opportunities and that results in a stronger, more resilient hub.

Also critical for benefits to be achieved from these innovative hubs is the smooth flow, sharing and use of knowledge. The knowledge economy is not restricted to high technologies and service industries. Smart cities with investment in stable or declining industries can prosper by helping their industries compete by superior knowledge. Knowledge can take many forms such as design, market analysis, customer relationships, engineering developments, in-house training, or operational skills from new capital goods. Further, knowledge comes from interactions with others such as university linkages, personnel movements, inter-firm collaboration, joint ventures and alliances, professional associations, standard setting bodies and the like.
The Plan refers to increasing jobs growth closer to where people already live – by creating new employment zones which can attract employers and support the growth of their organisation.

RDA Sydney agrees with the Plan’s reference to jobs growth being increased closer to where people already live. According to A Plan for Growing Sydney 28 per cent of Western Sydney’s resident workforce, or 226,000 people need to travel to other parts of Sydney for work, particularly for knowledge-based jobs. The startup sector and the opportunities that successful startups may bring, is becoming increasingly acknowledged as a key part of the transition of the national economy from a resources-based to an innovative economy. In Sydney, the startup sector is concentrated in the inner ring of the city with relatively few tech startup incubators and/or startups outside this area.

RDA Sydney acknowledges the importance of the concentration of startups in tight geographical areas that will foster collaboration, sharing and idea exchange. Initiatives under the National Innovation and Science Agenda are aimed at growing the potential of the startup sector and giving Australia a competitive edge.

In the context of jobs closer to where people live and also taking advantage of existing innovation systems outside of the CBD, RDA Sydney would like to see exploration of viable tech startup ecosystems outside of the inner CBD, in areas such as Western, Southern and Northern Sydney. Parramatta, for instance, as Sydney’s second city with growing educational and research facilities, would be an ideal location for a network of startup incubators, assuming viable business cases.

The role of Government in the startup sector is ensuring conducive policy settings and favourable incentives for risk takers developing disruptive technologies. Key initiatives such as the Incubator Support Program are to be commended as they will help in the diversification and growth of the sector, particularly in areas that are not “traditional” homes of tech startups.

There are many areas in metropolitan Sydney that can provide the environment for future clusters for example the advanced manufacturing facility at Lucas Heights and the Western Sydney Airport – the most significant piece of infrastructure that will ever be built in the region\(^1\) provides the opportunity to create new employment zones which can attract employers and support the growth of their organisations. In RDA Sydney’s submission to the Draft Broader Western Sydney Employment Area Structure Plan in

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\(^1\) Malcolm Turnbull Prime Minister & Mike Baird Premier of NSW contributors to media release 20\(^{th}\) June 2016
2013 potential options for Innovation Centres in the area were highlighted these included, an aerospace and Defence industry technology, sustainment and manufacturing facility, a transport and logistics centre of excellence, an environmental, water and renewable energy cluster, a bio energy, recycling and waste remediation cluster around the SITA waste site. These proposals were suggested based on existing industry strengths and their potential for growth.

What we propose is not to diminish the growth rate of the Sydney CBD but to explore how this next revolution can be facilitated in areas outside of a CBD? The Plan does not explore this paradigm it stays within the confines of what is already happening. If for example you examine the Singapore Smart Nation strategy its focus is not on infrastructure, although a very important enabler, it focuses on industry and talent attraction and making a space for it to grow with a clearly defined vision with a sophisticated communication strategy that promotes worldwide.

The Plan explains in relation to human capital that ‘Under the National Innovation and Science Agenda we are improving our visa system to attract and retain the best and brightest entrepreneurial and innovative talent. But we must also attract great organisations, and support their growth and success. To secure Australian talent and attract talent from overseas, our cities must offer access to career opportunities, education and training’.

RDA Sydney fully supports the concept of the National Innovation and Science Agenda and in fact is quite disappointed that the emphasis of the Plan is not on human capital and how we take advantage of this revolution. Contemporary international literature from the OECD, European Union and the US Obama administration, among others, chart new approaches to city and regional development that directly connect the success of place-based policies with their internal ability to mobilise untapped potential and their own distinctive knowledge, skills and innovation capabilities. Evidence shows that investment in infrastructure in cities and regions has a positive impact on growth if it is accompanied by improvements in human capital and innovation capacity\(^2\). Connectivity through infrastructure is vital but the current Plan as stated is partly a response to the Australian Infrastructure Plan and it addresses ‘it’ very well, however, as a Smart Cities Plan it lacks a very important component regarding its engagement strategy with community, business and other levels of government. It is briefly addressed but it is not treated as the centerpiece of the Plan as stated in Chapter Three ‘Cities are first and foremost for people. Their function is to serve humanity, so they must have a human form.’ The Plan should be about setting a framework for how we

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\(^2\) John Tomaney, University College London, “ The Role of Local and Regional Institutions”, in Göran Roos and Narelle Kennedy (Editors) ’ Global Perspectives on Achieving Success in High and Low Cost Operating Environments’, IGI Global, 2014.
transition community, business and governments into this new era. The Plan should not be a framework for Federal Government funding of infrastructure, it limits its vision.

2. **Delivering affordable housing close to the jobs and services in cities that people want**

According to the Real Estate Institute of Australia (REIA) Sydney’s median house price for the December quarter 2015 was $1,025,478. RDA Sydney agrees that increased provision of and investment in public transport will facilitate opportunity to provide greater access to housing and greater housing choice however this may not address the affordability issues faced by many residents of Sydney. This is supported by a recent AHURI report that states ‘The housing policy response therefore needs to be more nuanced than simply more supply. First and foremost, low income workers have a major housing affordability problem wherever they work. The report goes onto to say that the market will not fix the problem and that ‘only government support for an affordable, sub-market housing sector can do this, be it with properties for sale or for rent’. The City Deals present an opportunity to develop and implement smart policy regarding affordable and social housing supply.

RDA Sydney fully supports the exploration and implementation of alternative funding models for affordable housing. RDA Sydney and the NSW Federation of Community Housing Associations co-facilitate the Shared Homeownership Working Group. A Shared homeownership arrangement enables the purchase of a home by two parties: an individual (home owner) and a community housing association. The scheme a viable alternative to the costs of full homeownership for families and individuals on moderate incomes. It is a suitable way of creating affordable housing for households on stable, moderate incomes; key workers (nurses, teachers, police, etc), for households who are currently renting in private or community housing but are unable to buy a home due to deposit hurdle and dwelling prices. This presents an exit strategy.

The working group has been lobbying NSW Government to include purchasers of dwellings under this arrangement to be eligible for the First Home Owner’s Grant and a Community Housing Provider member is developing a shared homeownership pilot project. The working group is raising awareness of shared homeownership as a product offering among financial institutions. It is also promoting the benefits of this scheme to government, the housing and financial sector as well as the NDIA.

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3 Ryan van den Nouwelent, Laura Crommelin, Shanka Herath, Bill Randolph (for AHURI at UNSW). *Housing affordability central city economic productivity and the lower income labour market*. April 2016
3. **Improving accessibility and liveability of our cities through better infrastructure and transport connections between people**

City Deals, with specific capital investment connected to reform and governance and performance measures will go a long way to improve both financial and economic returns. Regulatory reforms should include greater consideration of ‘the public interest’ which is important to achieving success and affordable, value for money outcomes. RDA Sydney makes the following recommendations:

- Reform the current processes of preparing business cases which focus on capital costs and instead provide much greater focus on the 30 year plus return on investment and service offering, otherwise, the wider economic outcomes can be lost, especially with market interest in construction and transaction fees. RDA Sydney suggests that the service offering be explicitly tied to land value capture.

- London Infrastructure Plan 2050 Update is worth reviewing for ideas that could be adopted for the 2nd issue of this Plan.

4. **Increasing the liveability and sustainability of our cities through urban design and green spaces**

RDA Sydney whilst supportive recommends that greater detail is provided in the Plan as to how this will be measured and directed and what are the consequences of not achieving these values. There is a need for strong leadership from the CEFC and greater visibility on the National Energy Production Plan/MEPS. RDA Sydney suggests that there is potential for NABERS to be applied to transport projects.

5. **Driving smart investment that allow for new ways to fund the infrastructure**

The Plan provides a good first step through its smart investment, smart policy and smart technology approach with the vehicle of City Deals. However, more detail is required in the Plan as to the timeline to progress actions. Perhaps in the 2nd issue a draft Heads of Terms for an Inter Government Agreement could be included so to inform other levels of government and the private sector.

The Plan does not provide any real detail on the new ways of funding infrastructure, RDA Sydney is positive that the discussion has commenced but would like the approach to go further e.g. applying the ‘public interest’ test in which there may be a need for acquisition of greater parcels of land by government when building infrastructure to include property development, rather than just construction sites.
6 **Delivering smart policy approaches that allow for coordination of actions and investments across all levels of government to increase the liveability, productivity or accessibility of our cities**

The *Plan* indicates a ‘commitment to a cooperative approach to long term planning, targeted investment and reform. Cities succeed and perform best when all tiers of government, the private sector and the community, work together to deliver a shared vision for their city.’

RDA Sydney strongly supports this view and in 2012 with its partners Consult Australia and 10,000 Friends of Sydney helped develop with an expert group, a set of practical recommendations for the development of *Sydney 2051 A Greater Global City – A Plan for Action for Realising a Better Sydney*. Many of these recommendations reflect the central commitment of the *Smart Cities Plan* for a cooperative approach where all tiers of government, the private sector and the community, work together to deliver a shared vision for their city. The following are some of the 10 recommendations and although some have been advanced many remain relevant to the *Smart Cities Plan*:

- Communicate an agreed vision for Sydney using technology and effective consultation and engagement:
  - Defines liveability and best practice
  - Highlights the benefit of the vision
  - Educates the wider community
  - Creates stakeholder support; and
  - Facilitates civic pride

- Reform governance across Sydney providing leadership through a more integrated collaborative model that delivers clear roles and responsibilities for all stakeholders, along binding bi-partisan support for a single urban development strategy e.g. an independent metropolitan commission assuming responsibility for the development of economic, spatial and transport planning outcomes; up to six stronger, larger and better resourced regional/local government authorities.

- Implement an integrated funding framework for long-term infrastructure investment to encourage risk sharing and certainty, including mechanisms supporting:
  - Better use of existing assets
  - Tax increment finance and value
  - Infrastructure bonds
  - User charges

- Identify and preserve land and corridors today supporting strategic infrastructure assets that reflect demand and realise long-term economic benefits. A proactive,
objective evidence–based approach must be implemented to preserve and enhance the future feasibility of:

- Metropolitan and freight networks
- Increasing modal shifts to public transport
- Intercity high speed rail
- A second Sydney airport

• Support investment in infrastructure and decisions regarding land release through cost benefit analyses that incorporate longer term economic benefits, and accounts less easily for quantified liveability and sustainability.

The imperative for smart cities to meet social and sustainability objectives as well as economic ones, guides the necessary policy actions, and their coordination. One particularly useful summary of where policy action should be directed to help regions and localities prosper in modern knowledge-based economies and which has stood the test of time is the set of ‘smart infrastructure’ factors identified in 2002 by SGS Economics and Planning Pty Ltd. Smart Infrastructure factors are:

1. Factors that reduce investment and operating uncertainty, such as transparency in government processes, leadership directions and economic management.
2. Infrastructure to support basic production processes such as transport, labour, communications, power.
3. Workforce skills and accessibility to quality education institutions for ongoing skills development.
4. Innovation infrastructure and programs that underpin the development and commercialization of new ideas.
5. Business cultures that promote competition, collaboration, entrepreneurship, risk taking and openness to new ideas.
6. Connectedness to other members of the value chain, including relevant research institutions and brokers of market intelligence, capital etc. through clustering.
7. Quality living environments that offer the necessary services for attracting and retaining knowledge workers.
8. A strong cultural economy which helps to power the industrial economy with new ideas and which keeps knowledge workers engaged with their local community.
9. Social cohesion, whereby the various economic and other agents in the community have a strong sense of a shared future and a willingness to support each other’s ultimate competitiveness.

The Plan singles out a new vehicle to create partnerships between the three levels of government to drive sustainable and customized growth in cities, called City Deals. RDA

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4 See Urbecon, December 2002
Sydney supports the concept of City Deals but draws attention to the need for due diligence based on the UK experience, before embarking on this policy. For example, Manchester is considered an economic success through their City Deal, however, ‘socially the city has shown little improvement with deprivation and worklessness running at some of the highest rates in England. This shows the trickle-down effect is not working for the city’s own residents.’ It is essential that any Smart City Policy and the City Deals vehicle create not only economic but also social and sustainability outcomes.

In fact, the Plan overall requires the integration of policies that are typically treated as separate. For the Smart Cities Plan to succeed, priority must go to initiatives at the intersection of industry and economic policy, innovation and business support, social policy, infrastructure, urban and land use planning, education and employment policy, to name the key areas.

7 Encouraging the use of smart technology in our cities to drive innovation and change how we live and work

In 2014, RDA Sydney commissioned the University of Technology to conduct research into the feasibility of Smart Work Centres in Western Sydney. Smart Work Centres, for the purposes of that study, are defined as commercially run centres in suburban locations where there are facilities for people to co-work (particularly for home-based businesses and entrepreneurs) and also to telework. The latter is for people work in computer-based jobs a long way from home and who may be able to work remotely from a centre closer to home (if not possible from home itself).

Subsequently, the NSW Government launched a Smart Work Hub Pilot in 3 locations in Western Sydney as well as 2 on the Central Coast. The results of this pilot have not yet been released publically but in the context of smarter cities it would be interesting to know what the patronage of the pilot centres has been and what the issues are. RDA Sydney recommends that there is follow-up with the NSW Government to explore the results of this pilot.

RDA Sydney is aware that the NSW Government is exploring and acting on broader flexible work solutions for relevant staff based on current and potential technological innovations. Government, at all levels, has an opportunity to be leaders in this area, creating flexible work practices that can help reduce travel during peak periods and create greater job satisfaction.

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Overall the Plan’s exploration of the uses of smart technology is limited and further detail is required. For example Singapore’s Smart Nation Platform is described as ‘having pervasive connectivity, better situational awareness through data collection, and efficient sharing of collected sensor data’\(^6\) The platform is used for greater citizen-centric platforms creating an environment where governments can anticipate the needs and expectations of citizens and provide better services. Citizens are empowered with knowledge and ideas that enables them to make well informed decisions. The platform enables innovation for citizens and businesses alike and creates greater efficiency and inter-agency cooperation for government agencies. The Plan needs to explain how smart technology will connect with citizens as part of the consultative process and how ongoing dialogue will be implemented.

RDA Sydney endorses the strategy for businesses and start-ups taking advantage of information and communications technology, including the National Broadband Network, to provide new types of real time personalized services. However, we hold concerns regarding Australia’s future capacity to funnel large volumes of data with the fibre to node roll out of the NBN. In a recent article Professor Kondepudi of the National University of Singapore stated ‘You can get fairly decent speeds in copper in the last mile (but) what we don’t realise is that there’s going to be 10s of 1000s of sensors in everything, they’re all putting up data, and at some time when they’re going to start to converge. So that pipe had better be big enough’\(^7\). Smart policy and technology is required to develop a next step plan to build the capacity of NBN for the future.

8 Other feedback pertaining to the Plan

Measuring success

RDA Sydney recommends that a smart data framework be implemented with real time and predictive analytics especially for infrastructure performance.

The measurement of economic growth should include the dimensions of social well-being and social inclusion. RDA Sydney also recommends that well-being measures such as those measured by the Australian Centre on Quality of Life (http://www.acqol.com.au/reports/auwbi.php) be included in the matrix. We would also like to recommend that a platform such as resultsscordioncard.com.au could be used for reporting purposes using the input of a diverse group of stakeholders.

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\(^6\) Infocomm Development Authority of Singapore. Factsheet Smart Nation Platform. 2014

\(^7\) Benedict Brook. *With Singapore aiming to become the world’s first ‘smart nation’, Australia needs to embrace technology for cities to prosper*. news.com.au. June 5, 2016
Additional Focus

RDA Sydney recommends that the Plan requires greater focus on healthcare in particular preventative and out of hospital care systems which require Smart Policy and Smart Technology.

Also RDA Sydney recommends greater emphasis is given to cyber security and how this will be managed in the overall Smart Cities Plan.