ENGINEERS
AUSTRALIA

Inquiry into the long-term financial sustainability of local government

Engineers Australia Submission

26 May 2017

Engineers Australia
11 National Circuit, Barton ACT 2600
Tel: 02 6270 6555
Email: publicaffairs@engineersaustralia.org.au

www.engineersaustralia.org.au

About Engineers Australia

The Institution of Engineers Australia (Engineers Australia) is the not-for-profit professional association for engineers. Established in 1919, Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Engineers Australia is the trusted voice of the profession. We are the global home for engineering professionals renowned as leaders in shaping a sustainable world.

Introduction

Engineers Australia would like to thank the Queensland Parliament for the opportunity to make a submission to the Inquiry into the long-term financial sustainability of local government.

Local government plays a vital role in the lives of many millions of Queenslanders. Local governments though are under coming increasing stress, especially in rural and regional centres.

For these local government areas managing current services and assets is becoming increasingly difficult. Populations are changing as people move closer to larger population centres.

As the Productivity Commission[1] noted in its interim report on regional economies, the growing trend now is a shift of populations into these larger centres.

Centralisation of services, changing agricultural practices, and changes in mining from extraction to production are some of the factors bringing people into regional and urban areas.

This shift can be a double edged sword as local governments wrestle with either increasing populations applying pressure on existing infrastructure, or decreasing populations which deplete finances to maintain infrastructure.

As the inquiry is already aware from the Audit Office's report, local governments will be faced with managing not just the existing assets on their books but also new assets which will be required to replace current stock.

Sustainability of budgets needs to be balanced by understanding the long term life cycles of assets, and ensuring that those assets are maintained, that new assets are purchased through stringent cost analyses that factors in the entire life cycle cost. This will allow revenue to be well managed and for the infrastructure to meet the needs of the community.

Engineers Australia believes that infrastructure is a key component to long term economic viability. It is the enabler of employment, the generator of revenue and the provider of long term economic sustainability. Investing in infrastructure is an investment in the future, and the long term sustainability of communities.

[1] Productivity Commission, *Transitioning Regional Economies*, April 2017. Available at: www.pc.gov.au/inquiries

In this submission Engineers Australia will focus on the procurement and maintenance of engineering intensive public infrastructure, and how this form of infrastructure can enable local governments to stabilise their infrastructure assets and plan for future asset procurements.

Infrastructure asset life cycles

Modern, effective infrastructure is an investment in Queensland's future. It is a key enabler of productivity growth which in turn is a driver of improved living standards. The state's prosperity depends on this relationship continuing.

Engineers design, build, operate, maintain and use infrastructure. Their specialised skills and engagement in almost every sector of the economy gives engineers a special insight to the capacity, adequacy and innovative potential of infrastructure.

Infrastructure should be managed sustainably over its full expected life. This can be achieved through regular maintenance programs consistent with transparent infrastructure service standards.

The reality is that much of the maintenance of local infrastructure rests with local governments, who are under increasing pressure to deliver efficiency gains. This is increasingly true for rural local government areas who are facing pressures of population declines, shrinking land values and slender resources.

Up to 50 per cent of Queensland councils are recording operating deficits[2] and long term forecasts show that councils will be required to manage more assets that will be rapidly approaching the end of their life cycles. This means that ensuring their maintenance and replacement with newer assets will be critical for councils to manage their own investments and financial sustainability.

Engaging engineers at a local government level would ensure infrastructure assets are managed effectively. Too often, political involvement with technical aspects of infrastructure planning and asset management has led to sub-optimal outcomes and higher than necessary costs.

Managing whole of life cycle costs of infrastructure assets should be a primary, rather than a secondary, focus of councils dealing with their assets.

Assets should consistently go through rigorous analyses, including cost-benefit analyses to ensure that the asset is fit for purpose. Ensuring transparency in terms of whole-of-life costs will add to better value for infrastructure assets that are not only going to be purchased, but are also currently being used.

It is essential that new assets are fit for purpose. Achieving real value for money will require that the decision to buy an asset has a comprehensive whole of lifecycle costing model applied. This means that councils need to act as informed buyers in the consumption of infrastructure assets and understand:

- What, when and why to buy and asset
- How to efficiently make purchases, and
- How much to pay both in the short term and the long term.

As the Audit Office report noted:

"…decision makers need to accurately determine the optimal time and expected forecast costs

[2] Queensland Audit Office, *Local government entities: 2015-16 results of financial audits (Report 13:2016-17),* Available at: www.qao.qld.gov.au

before determining whether they should build or purchase an asset. They should also include whole of life costs into the long term forecast once they make a decision to purchase."

For engineering intensive assets, having the relevant professional knowledge will enhance the benefits over the life of the asset.

The cost of inadequate engineering expertise can be huge. A loss of public sector engineering expertise could increase cost by 20 per cent.[3]

The Chief Engineer

Engineers Australia sees the establishment of the Capital and Operating Advisory Panel within Redland City Council as a best practice example of how having expertise within a local government setting can enhance long term outcomes.[4]

Reintroducing engineers into the decision making process will enhance the capabilities of councils to determine their financial sustainability.

The establishment within the Department of Infrastructure, Local Government and Planning of the Chief Engineers Office is a positive step to assist local councils in understanding the priorities of engineering intensive programs.

As was noted by the Director General of the Department:

"This [Office of the Chief Engineer] has been especially valuable for remote councils that may not have in-house expertise on managing and maintaining assets such as water treatment plants. One of the approaches taken by the chief engineer is to try to build networks between councils, putting them in touch with each other to learn from councils that might have a particular strength or expertise in an area of asset management or maintenance. The chief engineer's office is also involved in projects based on identified needs such as the current project to assess and make recommendations on the condition of water and wastewater assets in Indigenous local government areas."[5]

These are good steps at a departmental level, and establishing an Office of the Chief Engineer at a whole of government level would provide a more centralised and more overarching support for local governments.

Good governance relies on having the right people in place to make informed decisions. It is about ensuring that decision makers have access to experienced and knowledgeable professionals when planning projects or structuring policy.

Engineers Australia believes that the appointment of a Chief Engineer will help governments to attain access to the profession's perspective on technical considerations and therefore reduce the risk of service, project or policy failure.

To provide advice on big ticket questions—such as, what is needed, when and how much will it cost?—requires the expertise of an engineer who can examine a project in its entirety and provide balanced long term advice. Governments can then make informed decisions on the best course of action.

---

[3] Engineers Australia, Gov*ernment as an informed buyer,* 2012

[4] Queensland Audit Office, *Local government entities: 2015-16 results of financial audits (Report 13:2016-17),* Available at: www.qao.qld.gov.au

[5] Infrastructure, Planning and Natural Resources Committee Queensland Parliament, *Transcript of Proceedings, Public Hearings* 10 May 2017

A Chief Engineer would provide leadership and strategic advice to improve social and economic outcomes and establish policy and practice frameworks that foster collaborative approaches across government in a multitude of issues such as infrastructure, workforce capacity, resilience and technical responses to current and potential threats.

The Chief Engineer would help to reduce risk and exploit opportunities by:

- Providing independent advice on engineering intensive policies and projects.
- Provide advice on policies and programs that foster innovation.
- Assist governments develop policies and programs that will drive economic growth and boost productivity.

The Chief Engineer would provide policy direction, oversight, and assessment for the government's engineering programs. They will serve as principal advisor to the government and other senior officials on matters pertaining to the technical readiness and execution of government's policies, programs and projects.

The Chief Engineer would ensure that the government's efforts are planned and conducted on a sound engineering basis with proper controls and management of technical risks.

A Chief Engineer would assist government delivery across engineering intensive programs. Through independent and rigorous assessment, the Chief Engineer would work with governments to ensure that strategies, programs and policies are measured and aligned with whole-of-life cost benefits, long term projections and are delivered for the benefit of the community.

A state wide Office of the Chief Engineer would improve government policy development, increase the ability of governments to be an informed buyer, assist governments avoid project cost blow outs, and advise on workforce planning.

While the current placements of Chief Engineers within departments are constructive, Engineers Australia believes that to be an effective advocate between state treasury and finance with local councils, the Chief Engineer is best housed within the Department of Premier and Cabinet. This would allow a more transparent reporting line from and to councils on engineering focussed projects.

Procurement

For future procurement of engineering intensive infrastructure, the expertise of engineers can make a substantial contribution to improving procurement through two main mechanisms. The first is the application of technical skill and domain knowledge to procurements that are engineering intensive. Using engineering expertise will result in local governments being a more informed buyer, thus increasing the likelihood of better value for money. The second contribution is the application of engineering practices/approaches, and organisational techniques, such as project management, to procurement more broadly. This can deliver more logical, measured and justifiable activities and systems that can improve the procurement cycle, procurement systems and the alignment between procurement and governmental objectives.[6]

Asset management should be an emphasis of the operations within local government. However, if councils consider the inputs of asset data a non-essential operation they will only

[6] Engineers Australia, *Government as an informed buyer,* 2012

incur longer term costs to rate payers as they have no line of sight to the end of life of the asset.

Ideally, Governments should provide transparent and objective reports on the status and condition of infrastructure and base decisions about future infrastructure projects on assessments of this material. Similarly, rigorous quantitative benefit/cost assessments of new project proposals are still an uncertain business and too many project decisions are based primarily on political considerations, even at the local government level.

Infrastructure planning and the institutional frameworks in which it occurs are especially important. Planning is too often short term, reactive, piecemeal and inconsistent.

Engineers Australia has long argued that infrastructure investment, planning, and project selection should be de-politicised in favour of politically neutral approaches favouring the overall community. The technical and political responsibilities for infrastructure management and development need to be separated and clearly defined. Governments, including local governments, have a responsibility to provide the context and narrative to the community through comprehensive community consultation processes.

Technical decisions and recommendations on engineering matters such as planning, design specification, final project selection, evaluation of tenders and monitoring of progress against contractual requirements need to be undertaken by competent practicing engineers.

With governments consistently treating infrastructure as a cost rather than an investment they limit infrastructure development to perceptions of what can be afforded rather than what should be invested in for the future.

Government infrastructure procurement arrangements need reform to reduce overall project costs, reduce transaction costs imposed by tender bidders, enhance rather than impede the adoption of innovation and to ensure value for money.

Recommendations

Recommendation 1. The Queensland Government establish the Office of the Chief Engineer within the Department of Premier and Cabinet.

Recommendation 2. The Queensland government should provide incentives to local government areas to adopt the Redland City Council Capital and Operating Advisory Panel model to integrate engineers into the decision making process.

Recommendation 3. Local governments should prepare and publish infrastructure operational and improvement plans.

Recommendation 4. Communities should be comprehensively engaged to ensure the provision of high quality infrastructure to support their needs.

Recommendation 5. Reforms should be implemented with particular regard to simplifying tenders, reducing tender costs and greater involvement of tender respondents in detailed design.

Recommendation 6. Procurement decisions should be based on rigorous analyses, international standards and contemporary management technologies.

Recommendation 7. Procurement decisions should be signed off by engineers. Where councils do not have direct access to engineering capacity these decisions should be signed off

by the Office of the Chief Engineer within the Department of Infrastructure, Local Government and Planning.

Conclusion

Ensuring the financial security of local governments requires long term planning and long term thinking. Short term, piecemeal approaches to infrastructure procurement based on political expediency rather than long community based decisions should end.

Local government plays too critical a role in the lives of many millions of Queenslanders to have inconsistency across the pipeline.

Ensuring rigour and cost analysis of projects, asset management protocols and planning that utilises best practice in land use and is engaged with the community through proper consultation and comprehensive analysis will provide sustainability of local governments.

Engineers Australia would welcome the opportunity to discuss any matters in this submission with the committee.

Should the committee have any questions in regards to this submission please contact Stacey Rawlings, Division Manager Engineers Australia on (07) 3226 3041, or by email at srawlings@engineersaustralia.org.au


ENGINEERS
AUSTRALIA