24 May 2017

Queensland
IPWEA
INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA

Committee Secretary
Infrastructure, Planning and Natural Resources Committee
Parliament House
George Street
Brisbane 4000
ipnrc@parliament.qld.gov.au

Dear Sir/Madam,

**INQUIRY INTO THE LONG-TERM FINANCIAL SUSTAINABILITY OF LOCAL GOVERNMENT**

Thank you for the opportunity for the Institute of Public Works Engineering Australasia, Queensland (IPWEAQ) to make a submission on the long-term financial sustainability of local government.

IPWEAQ is the peak body representing those working in the public works sector in Queensland. Our purpose is to enhance the quality of life for all Queensland communities by advancing the skills, knowledge and resources available to those involved in the planning and provision of public works and services. Our membership primarily comprises of engineers and we are an assessment entity for the BPEQ (Board of Professional Engineers Queensland). IPWEAQ is also registered as a charity with the Australian Charities and Not-for-Profit Commission (ACNC).

We have developed a number of key sector products and publications including Standard Drawings, Complete Streets (urban street design), Lower Order Road Design Guidelines (LORDG) and our non-proprietary schema, ADAC (Asset Design as Constructed). IPWEA has also developed the internationally-recognised premier manual for asset management, the International Infrastructure Management Manual (IIMM).

We will address the following areas of the Terms of Reference in our submission:

1. Asset condition data and asset management plans
2. Decision-making frameworks for major infrastructure asset investments
3. Community engagement on future service levels
4. Organisational governance
5. Strategic planning and organisational capacity
6. Procurement policy and value for money

Please do not hesitate to contact me if you would like to discuss our submission further. Thank you again for this opportunity.

Yours faithfully,

**Leigh Cunningham**
**Chief Executive Officer**

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**EXECUTIVE SUMMARY**

The Queensland Audit Office's (QAO) reports 2 and 13 for 2016-2017 raised questions regarding the long-term financial sustainability of local governments across Queensland. To be financially sustainable, councils need to generate sufficient income from primary sources ie rates, fees/charges and grants to cover expenses including asset maintenance and depreciation. Being asset-intensive entities, asset maintenance and depreciation have a major impact on profitability.

The financial sustainability of councils is therefore intrinsically linked to the management of assets. Planning at the outset requires an understanding of the level of service infrastructure should deliver, then an informed decision on the most effective lifecycle strategies to deliver those services. To best manage those assets, councils need to continually capture asset data and make an accurate assessment of 'asset consumption and remaining life'. Understanding major assets, their procurement, maintenance, renewal and life cycle requires technical skills best delivered by registered engineers (RPEQs). Queensland is currently the only Australian jurisdiction that has a comprehensive professional registration system for engineers prescribed by the *Professional Engineers Act* (2002). The Queensland Government recognised that engineers occupy positions of trust and responsibility within the community and perform a critical role in the design and construction of major infrastructure. Lives and livelihoods are dependent on the work performed by engineers in the public works sector, so it is of paramount importance that their skills and ethics are maintained at the highest level.

Councils should commit to having a strong team of RPEQs on staff and commit also to their continuing professional development (**minimum** 150 hours over three years to continue to be eligible for registration).

In the past, each council had a chief engineer, the status of which was equal to other 'C level' positions. The focus of councils changed from being engineering-driven to financially-driven and the position of Chief Engineer has disappeared from many local councils particularly the smaller councils. The erosion of this position may be linked to the declining sustainability of local councils.

## 1. ASSET CONDITION AND ASSET MANAGEMENT PLANS

ISSUE IDENTIFIED IN QAO REPORT

*A key risk to councils is maintaining and renewing their extensive infrastructure networks while operating at sustainable levels. If councils are not renewing their assets at optimal times, future ratepayers may have to bear the cost rather than the ratepayers who are using the assets now.*

*Determining the right level of maintenance to achieve the best service potential and maximum life from an asset requires good asset data. Rigorous evaluations are required of asset condition. Councils' assets are widespread and sometimes it is impractical to cover them all on an annual basis. Some asset types, particularly underground assets, are difficult to assess.*

*Asset management plans are crucial in ensuring that community assets are maintained and continually renewed to provide the levels of service expected of communities. They are a key component in developing accurate long-term forecasts.*

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## COMMENTARY

### Asset Condition

Asset data is the basis of asset management planning. To properly manage assets, councils need to be able to locate, identify and describe assets in sufficient detail to accurately value, determine lifecycle optimisation and manage potential asset failure risks.

Asset condition assessment is the process of inspecting or testing assets and capturing condition data. Given the enormity of this task for most councils, sampling should be considered and as a general rule, 80% of data can be collected for half the cost of undertaking a complete collection of data.[i]

While an understanding of the condition of an asset at a single point in time can assist to determine its useful life, it is important to understand how the condition and performance of the asset changes over time to plan properly for maintenance, renewal or replacement in order to continue to deliver service levels (or to enable a review of service levels). Asset condition assessments should therefore be a regular procedure undertaken by councils and overseen by suitably qualified personnel ie an RPEQ. This is a critical task which forms the basis of asset management plans, guides decision-making and has subsequent implications for the financial sustainability of councils. It is imperative that this task is not treated as 'administrative' but is recognised as 'technical' requiring engineering skills and knowledge.

Although this may be a costly exercise, it will result in cost savings over the longer term and allow for better decision-making, for example with regard to choosing between replacement and renewal and the depreciation implications of each option. Early intervention also results in cost savings and may reduce the detrimental impact on service levels.

Inconsistency in reporting asset condition and even a slight 'manipulation' of condition assessments, given the size of a council's asset base, can result in a significant change to the council's financial result. This will affect decisions on maintenance and replacement and possibly put lives at risk. To ensure asset condition assessments are accurate, it is recommended that the process is undertaken or overseen by an RPEQ who must uphold the highest standards of ethics in addition to high standards of technical knowledge.

### Asset Management Plans

The majority of a council's assets are multi-generational and should be supported by longer-term plans. A minimum plan period is 10-20 years and moves the organisation away from thinking about yearly budgets or election-cycle budgeting. This may assist councils when communicating with constituents about the merits of choosing asset renewal as opposed to replacement.

Councils have a legislated obligation to prepare long-term asset management plans for a minimum 10 year period (s167, Local Government Regulation 2012) which should correlate with other prescribed plans including a 5-year corporate plan incorporating community engagement, a long-term financial forecast and annual budget including revenue statement (s104 *Local Government Act* 2009).

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SOLUTIONS

We are available to work with councils to help them better understand the importance of asset condition assessments and asset management planning undertaken by suitably qualified technical professionals. These tasks should not be delegated to administrators or financial personnel who do not understand the greater implications of the data.

As mentioned, RPEQs are required to attend a **minimum** 150 hours of continuing professional development to maintain their registration. The training we provide for our engineers incorporates best practices and latest innovations for inspections and condition assessments of all asset classes and asset management planning.

## 2. DECISION-MAKING FRAMEWORKS FOR MAJOR INFRASTRUCTURE ASSET INVESTMENTS

RECOMMENDATION OF QAO REPORT

*QAO recommends that all councils implement a scalable project decision making framework for all infrastructure asset investments.*

COMMENTARY

The Queensland Treasury Corporation's (QTC) Project Decision Framework (PDF) offers a valuable process and tools for councils to assess the merits of investment options however councils may struggle with this framework.

SOLUTION

A better understanding of the options and analysis can be achieved when councils involve their Chief Engineer or most senior engineer at the outset. This would ensure the financial implications of each option are considered for the asset's life and not just assessed based on the initial capital expenditure which can be misleading when preparing a cost-benefit-analysis. Additionally, as councils must consider multiple projects across different asset classes with limited funding, it is difficult without engineering expertise, to determine the order of priority for each project and the associated impact on future costs.

## 3. COMMUNITY ENGAGEMENT ON FUTURE SERVICE LEVELS

RECOMMENDATION OF QAO REPORT

*The Local Government Act 2009 is underpinned by local government principles: one is the sustainable development and management of assets and infrastructure and delivery of effective services. It does not prescribe how to measure the appropriateness of service standards and levels. This would be achieved primarily through community engagement. The robustness of this process is at the discretion of councils.*

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*Councils need to balance maintaining assets to a reasonably high standard (which brings forward costs) with allowing the asset to deteriorate. Allowing assets to deteriorate defers costs but frequently results in a higher cost to renew or replace.*

COMMENTARY

A key objective of asset management planning is to match the levels of service with community expectations. There are three consultation stages[ii]:

1. Identifying what customers value (focus groups, surveys)
2. Seeking input on a specific level of service, issues and options (surveys and group meetings)
3. Seeking agreement to levels of service (submissions, surveys, meetings)

Community engagement on service levels can be a difficult process for councils and as a result, it often does not occur.

SOLUTIONS

Councils should seek the advice of their engineers who have extensive knowledge and understanding of service levels as they relate to asset management and financial implications. Our professional development program includes courses and workshops on communicating with and influencing stakeholders and leadership skills. Councils should feel confident about involving our engineers in the community engagement process. It is important to be able to sell what cannot be achieved and often, the advice of a technical expert as opposed to a politician may achieve a better outcome when the role and status of the engineer is understood by the wider community.

One of our goals as a peak body representing the public works sector is to improve the understanding in the wider community of the vital role engineers play in delivering local government projects and services. As we progressively achieve this goal, councils will be better equipped when engaging with constituents on service level issues and major infrastructure investment decisions.

Most councils would likely have a Communications Plan however if not, the IIMM offers a number of sections that will assist:

Section 2.1.6 identifies various customer and stakeholder groups, their value and interests and the different types of information and decisions they may wish to be involved in.

Section 4.1.4 discusses internal communication processes and presents a Communications Plan template which is also applicable to external customers.

Section 4.2.2 covers methods for engaging customers and stakeholders specifically in relation to the development of the Asset Management Plan.

## 4. ORGANISATIONAL GOVERNANCE

CONCLUSION OF QAO REPORT

*Those charged with governance in many councils are running deficits and have not developed strategies to return to surplus within the next 10 years, or have not developed plans to sustainably*

*manage assets. This is contributing to assets being run down and will result in unaffordable capital costs when these assets fail.*

## COMMENTARY

As mentioned in our Executive Summary, the position of Chief Engineer has disappeared from many councils and where still in existence, now lacks the stature of the former City/Town/Shire Engineer who was equal to the City/Town/Shire Clerk (now CEO). This was a sensible structure given that the primary business of local councils is the delivery of engineering or technical projects and services.

History now shows that the management trend of downsizing in the 1980s while aimed at economical efficiencies, resulted in a decline in profitability (and customer services) as it was a short-sighted solution. Similarly, councils that forego the role of Chief Engineer and a strong technical/engineering team in favour of financial imperatives then lack the expertise needed to make informed decisions that will deliver sustainable and financially-sound outcomes. In 2006, the Queensland Department of Transport and Main Roads (TMR) rectified this situation with the appointment of Ian Reeves as its Chief Engineer (now Julie Mitchell).

The main objectives of the *Professional Engineers Act* 2002 are to (a) protect the public by ensuring professional engineering services are provided by a registered professional engineer (RPEQ) in a professional and competent way; (b) maintain public confidence in the standard of services provided by RPEQs and (c) uphold the standards of practice of RPEQs. In accordance with the Act, council staff and councillors who are not RPEQs should not be making engineering decisions. The consequences, as outlined in the act is a risk to public welfare which should be paramount for all local councils and the state government.

Additionally, RPEQs are required under the Act and supporting Code of Practice to carry out their roles within a framework of integrity, competency and care for the public safety. The organisational culture and environment within councils must therefore be supportive of these legal and professional requirements allowing RPEQs to provide technical advice without undue pressure. When technical advice is not respected and/or ignored, sub-optimal solutions are adopted which again may affect the long-term financial sustainability of council and potential safety of citizens.

## SOLUTIONS

Elected members of councils should seek the advice of their engineers who have extensive knowledge and understanding of asset management and the effects of not maintaining declining assets in a timely manner. Ultimately an immediate resolution to a problem, if undertaken with the requisite technical knowledge and expertise, will likely save a council more in the longer term. Councils should be willing to trust and rely on the advice of engineers and to engage them when communicating unpopular but necessary decisions to the community.

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## 5. STRATEGIC PLANNING AND ORGANISATIONAL CAPACITY

RECOMMENDATION OF QAO REPORT

*Councils should strengthen their strategic planning by building their capability and capacity to produce 10-year financial forecasts and asset management plans that can be relied on and are integrated with annual budgetary processes. These should be renewed and updated at least every four years.*

COMMENTARY

There is a lot of pressure on councils to reduce their technical capacity to achieve economic efficiencies – far more so than exists in the private sector. Outsourcing of engineering and technical services is often chosen as a financial solution with FIFO contractors engaged in regional areas to meet base-level demand. Contractors may not understand marginal and non-standard local road-making materials as well as a local engineer. The economies of maintaining a strong technical local team including local engineering consultancies far outweighs the short-term financial benefits of FIFOs. A more sustainable council and community becomes possible with an in-house engineer and technical team.

It is critical that councils employ the right people with the right skillset for the right roles. This is particularly important with regard to asset management which requires oversight by an engineer who has the position and authority to contribute to asset/engineering related decisions. It is also critical to ensure a timely and adequate response for major weather events for example, floods.

The high turnover of local government CEOs which exceeds all other sectors may lead to instability and job dissatisfaction for council employees. This, plus the devaluation of the role of engineers may make the sector unappealing to graduates and lead to a shortage of engineers to deliver local government projects resulting in an unsustainable sector.

SOLUTIONS

The capacity of councils will be enhanced with the reinforcement of their engineering and technical teams and reinstatement of the position and stature of Chief Engineer. This sends a clear message to constituents that councils consider their safety and wellbeing as paramount.

## 6. PROCUREMENT POLICY AND VALUE FOR MONEY

FINDINGS OF QAO REPORT

*Deficiencies were identified in relation to procurement including the tendering and contracting processes (17 councils of 77)*

COMMENTARY

Each year Queensland Local Government entities spend approximately $12 billion on operating and capital expenditure and manage over $108 billion of assets. Owned by LGAQ, Local Buy has established

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prequalified arrangements with 1,200 suppliers offering quotation services as an alternative to tendering. This is a valuable service for local councils.

From the start of the procurement process, councils should ensure their engineer is involved in scoping and reviewing requirements, not just for infrastructure related purchases but also for the systems and processes required to manage it. This is a fundamental step before any decision is made on what is required and how to procure it, and it is most critical given the ongoing costs to council of maintenance and replacement. Often, the initial cost of purchase is the primary consideration yet from an engineering perspective, there are far more important criteria to be factored into the decision which may lead to an entirely different decision, particularly when prioritising multiple project needs. Quite often, a cheaper option will result in significantly greater costs over the asset's lifecycle which affects the financial sustainability of councils. Engineers are best equipped to explain these consequences.

Additionally, while a local product or service may not be the cheapest, there are ongoing financial benefits and value-for-money effects accruing for the community when councils purchase locally (when it is reasonable to do so). Creating competition in the marketplace – by opening up the process will have longer term benefits for sustainability.

Joint procurement is an avenue some councils have not adequately investigated or deployed which could have a positive impact on the financial sustainability of local government. For example, if a number of councils were to go to market with a spray seal program, they would each pay for the establishment costs of the sprayer, crew etc but as a regional group of councils with a combined program, there would only be one establishment cost and other efficiencies with the contractor working across a larger network. The FNQROC (Far North Queensland Region Organisation of Councils) has successfully undertaken joint procurement asphalt and reseal programs for a number of years generating savings for all member councils.

SOLUTIONS

The importance of involving engineers in the procurement process from the outset cannot be overstated. This is likely to deliver cost savings for councils in the longer-term and contribute to financial sustainability.

Our engineers are required to undertake a **minimum** of 150 hours of continuous professional development in each period which we deliver through our state and branch conferences and our Professional Development program. These conferences and courses focus on engineering innovation which keeps our engineers up-to-date with the latest in technology, products and equipment and best-practice solutions for project delivery. This knowledge and expertise should be utilised by councils in the procurement process to ensure the best possible outcomes for the council and ratepayers across generations.

## SUMMARY

The Institute of Public Works Engineering Australasia, Queensland (IPWEAQ) is the peak body representing those delivering infrastructure projects for local councils across Queensland. Our members contribute their valuable knowledge and experience to the delivery of major infrastructure projects and the maintenance of those assets for local councils.

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In the past, councils had a Chief Engineer, the status of which was equal to that of CEO. However, with a focus on financial imperatives over the last decade, this position has disappeared from many councils or has been relegated in others which has led to some councils making poor investment decisions with regard to major infrastructure which affects constituents across generations. The erosion of this position may be linked to the declining sustainability of local councils.

Asset management is a critical aspect of the role of councils. In many councils, engineers are not involved in the decision-making process related to the management of assets which would enable improved decision-making which would likely result in better financial outcomes.

It is now widely accepted that asset management practices within many councils needs improvement. We believe the journey to improvement begins with the engagement of the council's engineering team in every element of asset management planning from asset condition assessments to the ongoing implementation of the Asset Management Plan. The oversight of a council's assets cannot be delegated to administrators or financial personnel who do not understand the long-term implications of engineering-related decisions.

Councils' commitment then to their engineers' ongoing professional development – including registration as an RPEQ – ensures best practices in asset management and maintenance continues to deliver sustainable financial outcomes.

We appreciate that there is no one-size-fits-all solution and councils, particularly smaller isolated councils continue to struggle with limited resources. However, we do believe that some investment now in skilled, professional technical people will deliver longer-term benefits and financial sustainability for councils.

We would be pleased to present our submission to the committee and to work closely with the state government and other related peak bodies to resolve the issue of the long-term financial sustainability of our local councils.

Leigh Cunningham
**Chief Executive Officer**

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[i] International Infrastructure Management Manual (2015), Institute Public Works Engineering Australasia (IPWEA)
[ii] ibid