

**Municipal Engineering Foundation Victoria
Overseas Study Tour 2013
USA, Canada & United Kingdom**

How to train your dragon ...

**Rethinking Organisational Approach to Project
Management, Long Term Infrastructure Planning and
Capital Works Delivery**

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Executive Summary

Local governments in Victoria are under considering new ways to deliver infrastructure to meet community needs in an increasingly financially constrained environment. The planning and delivery of long term capital works programs in local government in Victoria is undergoing transition. There is an increased focus on strategy led planning in an environment of increased community expectation on levels of service, coupled with an expectation of organisational transparency, guiding strategies and accountability.

Sustainability, accountability, transparency, management frameworks, gateways and project governance are becoming important phrases.

Many of the Councils and Authorities we visited on this study tour had experienced this in the past and had undertaken, to varying degrees, a re-think, process re-design and in some instances restructure within the organisation. There were successful examples of this demonstrated at Manchester City Council and the Chicago Metropolitan Agency for Planning.

With regard to ensuring a strategic focus to the development of capital programs, Manchester City Council developed guidelines to ensure a strategic approach to decision making that met the priorities of the City. The Chicago Metropolitan Planning Authority developed both short term and long term programs, informed by its Regional 2040 Plan.

Some Councils had responded to these challenges through innovative partnering approaches. An example of co-design, co-location and collaboration across various authorities to achieve a significant community infrastructure building was demonstrated in the Halton Recreation Centre in the City of Burlington, Canada.

In response to constrained financial environments, organisations were developing different models for funding the delivery of infrastructure. An example was the Transbay Terminal project in San Francisco which developed alternative funding partnerships to achieve important community infrastructure.

Common to all these changes made by these organisations, was clarity of roles and responsibilities, clarity of process and governance, accountability and measures informed by clear organisational and City goals, policies and strategies.

Recommendations

The key recommendations are summarised below:

Recommendation 1: Project Management

- Strong Project Management Framework with clear gateways, roles and responsibilities, performance measures, delegations and governance structure.
- Clearer separation between strategy and operational inputs by service departments.
- Utilising a flexible resource management approach to ensure the right people with the right skills are working on the right project at the right time.
- Developing a program / project centric culture in the organisation and capital projects teams.

Recommendation 2: Long Term Capital Works Planning

- Development of strong cross organisational partnerships to facilitate strategy led long term capital works programs.
- Balanced multi-year capital works program integrated with the long term financial planning.
- Project readiness and risk to delivery assessment on projects and staging projects over multiple years.
- Multi-year staged early planning discussions on future programs with internal stakeholders and Council.
- Ongoing review of the 10 year capital works program and links to strategies and prioritisation of related projects in a place-making approach.
- Identify external partnerships in long term planning and potential funding opportunities.

Recommendation 3: Capital Works Delivery

- Processes documented as per the Project Management Framework.
- Consideration of different forms of construction contracts in future major projects including potential for shared risks and benefits.
- Strong capital works delivery performance reporting.

Introduction

The Municipal Engineers Foundation Victoria offered 5 overseas study tour scholarships in 2013, providing opportunity to visit USA, Canada and the United Kingdom to review different organisations' approaches in our selected study tour topics.

My study tour topic focussed on:

- Project Management
- Long term capital works planning
- Capital works delivery

Background

The City of Wyndham is a growth Council in Melbourne's West and is one of the fastest growing Councils in Australia. Wyndham's current population is 185,000 residents and is expected to increase to between 450,000 to 480,000 within 25 years.

Due to its rapid growth, there is a high need for significant community infrastructure to be delivered, enabled by an annual capital works budget expenditure of over \$100M.

The challenges of rapid growth have led to opportunities for innovation in the provision of community infrastructure.

At Wyndham City, I am developing a Project Management Framework, managing and monitoring the planning and delivery of the annual and long term capital works program, as well as constructing the two largest capital building projects every undertaken by Wyndham City Council at a combined project value of almost \$100M.

My study tour topic was selected to provide insight into how other organisations strategically plan their capital programs, manage and monitor the delivery of capital projects.

Study Tour Findings

1. Project Management

1.1 Key Points:

- Organisational restructure
- Separating Strategy and Operational functions
- Program centric and flexible resourcing

Manchester City Council is renowned for its project management framework known as “The Manchester Method” and since 2002 has been implementing a capital strategy through organisational change, restructuring their capital works delivery and planning towards a non traditional capital program organisation structure. Their capital program divisions provide clear separation between strategy and operational areas, and include the:

- **Planning and Strategy for Capital Delivery** division which is responsible for implementing a generic approach to project management based on Prince 2, their in-house Manchester Method and implementing their corporate Project Management System (PMS).
- **Project and Program Management Group** which manages the delivery of a wide range of projects.

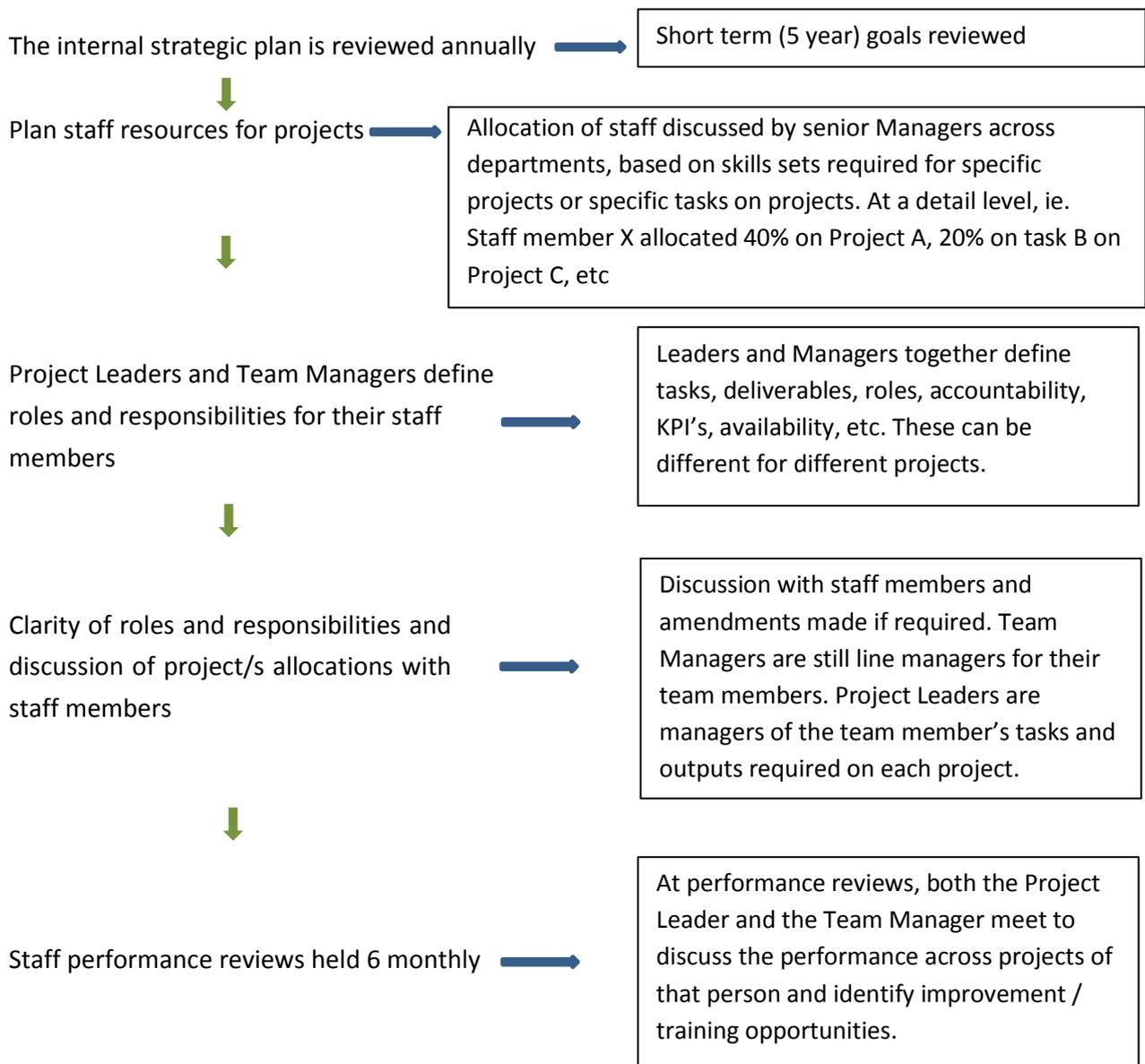
A new unit, the **Capital Program Group** was created within the Corporate Services Directorate covering strategic planning, procurement, partnerships and project / program management. From inception the Capital Program Group has adopted a number of key indicators (KPIs) to assess its own performance and measure delivery of the capital program in terms of time, cost and quality.

The **Chicago Metropolitan Agency for Planning** is a regional planning body for 8.5 million people and is a unique agency, only accountable to their board of directors. They call themselves a ‘quasi government’ agency, in that the agency is a creation of State Government and receives most of their funding from public reserves, but is not a government body. It is also the designated metropolitan planning organisation in that it is the responsible authority for approval of plans for regional infrastructure, and has authority to allocate Federal funds for projects. At a high level, the agency has responsibility for:

- Developing a Regional 2040 Plan and Program (“Go to 2040”)
- Developing a Transport Improvement Program (short term planning and project implementation over 5-6 years)
- Developing a transportation plan with a 30 year horizon (long term planning)

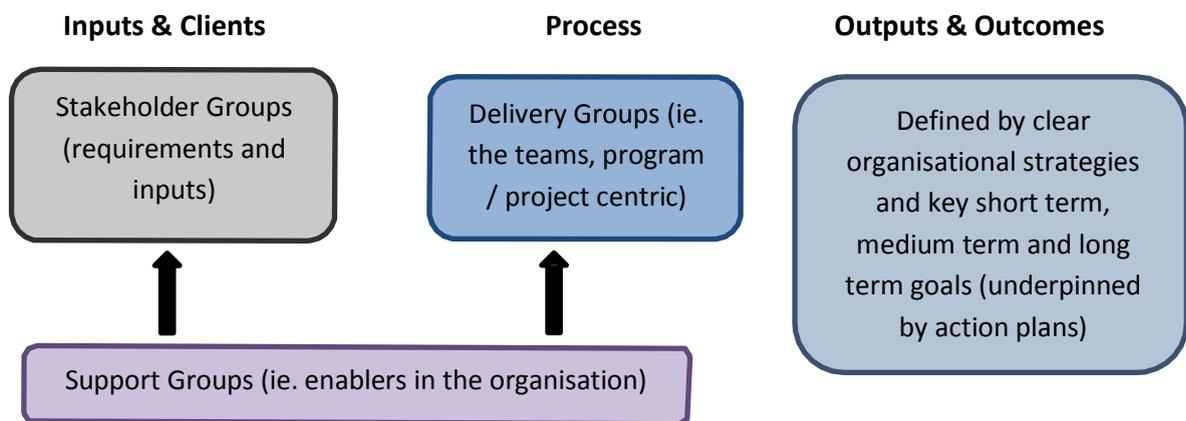
This organisation demonstrated a significant restructure implemented to enable the achievement of their organisational strategies and goals. The 109 staff members were reallocated in the organisation into groups defined by projects to be delivered, to form a project centric organisational structure rather than a traditional vertical management and department hierarchy.

This was a significant culture change for the organisation and an overarching change management program was implemented. The organisational structure to implement the Project Management approach was outlined as:



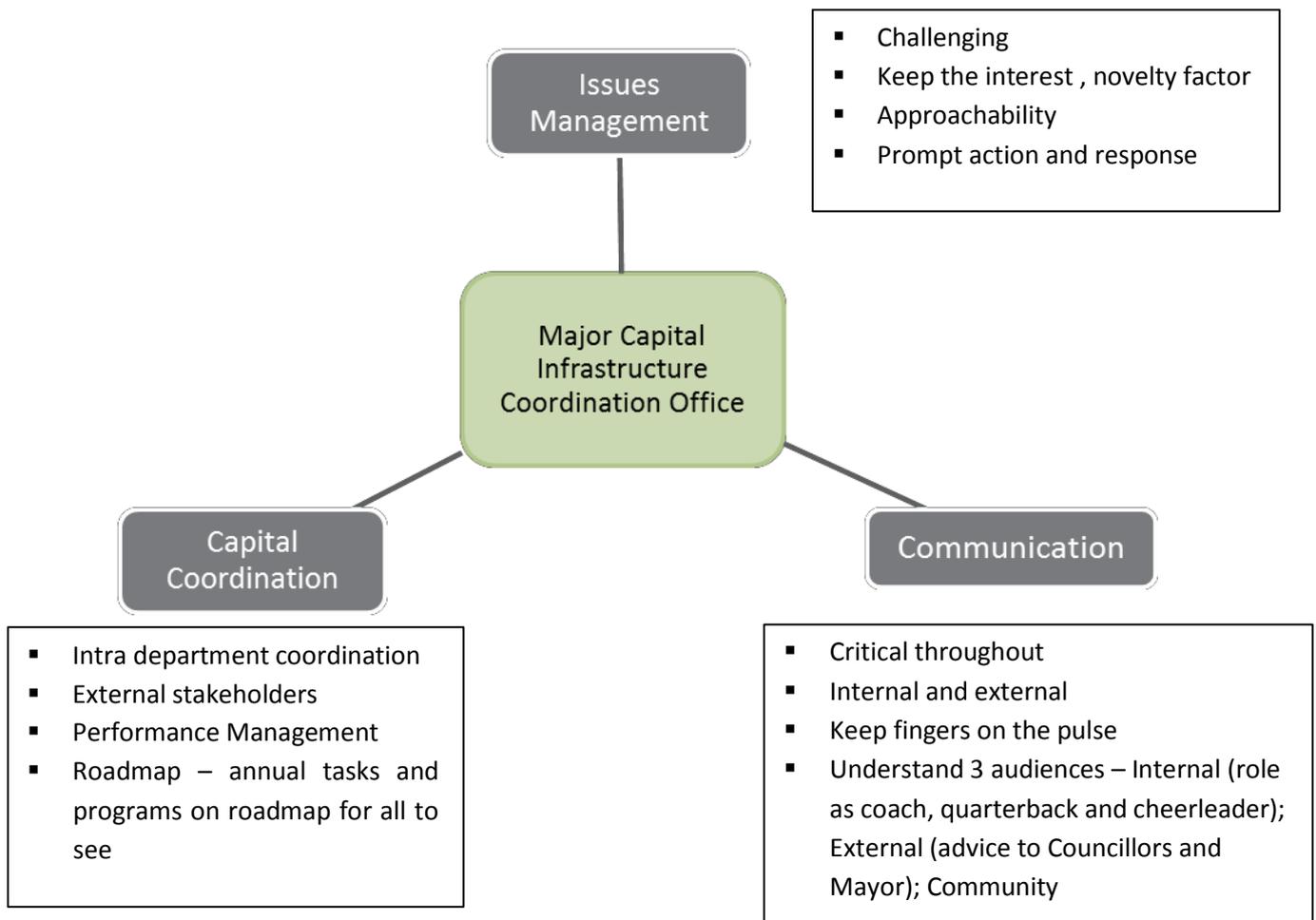
The organisational restructure supports a program centric focus with flexible skills based resourcing, ensuring the right people on the right project/s at the right period of time.

The Assistant City Commissioner, Infrastructure Division at **Westminster City Council** describes themselves as a commissioning organisation, focusing on the delivery of the City's key strategic goals. Their organisation was restructured over 5 years ago with a clear aim to remove inter-departmental silos and separate strategy from operational. This revised non traditional structure has resulted in the operations activities being undertaken by a contracted out division, and has enabled the organisation to define core strategy and policy focus areas for planning and delivery of longer term programs, using a systems view approach, namely:



As a commissioning agency, this enables the organisation to think together, plan together and commission together to achieve cross organisational project or program goals, not just individual department goals. This systems view approach also enables environmental scans to take place across the organisation in an integrated way, to determine any cross organisational impacts on achieving the key goals. Westminster City Council advised that this approach has enabled the organisation to look outwards and bring outstanding industry practices back into the organisation, which has resulted in more innovation within the organisation.

The **City of Toronto** set up an umbrella **Major Capital Infrastructure Coordination Office** focusing on process, performance management and partnership. This brought other departments together providing opportunities for synergy, efficiency and partnerships. Their motto is communication, transparency and accessibility.



All parts are moving simultaneously although at different speeds. The goal was to develop a fully coordinated 5 year capital works program. The **City of Toronto** confirmed this restructure was a 5 year culture change process.

1.2 Key Points:

- Redefinition of frameworks
- Project governance

A number of organisations we visited had redefined their frameworks on the planning and delivery of their capital works programs.

Manchester City Council developed a long term strategy in four phases to support the planning and delivery of their capital program, these phases included:

- **Phase 1: The Manchester Method**

Introduced a framework and process for delivery of capital projects that could be adopted across the organisation by all service departments. This approach is now known as the “Manchester Method”. A Project Management Handbook was produced, which has been updated in subsequent years to incorporate amendments from continuous improvement reviews. The framework forms part of the corporate training calendar.

- **Phase 2: Gateway Review**

Manchester City Council developed a Gateway process in-house to provide the capital program with an enhanced level of scrutiny. The Gateway process is managed and monitored by the Capital Program Group who developed a set of generic templates for each stage.

The Gateway process is intended to provide strategic, operational and financial check points in the capital program and the process embraces the project lifecycle from adoption to completion. It is aimed at involving the right people at the right time adding value to existing procedures. It is designed to encourage early submissions to a Review Group (Gateway 1) and will be followed by thorough project appraisal via a Scrutiny Panel (Gateway 3). Projects and programs are reviewed at completion to confirm project objectives have been met and examine lessons learned (Gateways 6 and 7). The process will be expanded to include benefits realisation post completion and enhanced asset management coordination.

- **Phase 3: Project Management Software (PMS)**

The Project Management Software system has been introduced to help manage the delivery of the capital program.

- **Phase 4: Project Management “Centre of Excellence”**

Their strategy for a Centre of Excellence was to have a number of qualified and experienced program and project practitioners both centrally and at departmental level. They advised this in-house resource had reduced expenditure on consultancies.

The **City of San Francisco** developed a new Project Management Framework and delivery structure for major projects called Integrated Project Delivery (IPD) which was initially developed for the Public Utilities Commission (PUC) building project. This incorporated an end to end process. A key benefit and learning for incorporation into future project management models was the setting of clear guiding principles which are overarching, well defined and against which the project was measured at each stage.

Given the goal was to achieve the highest possible Environmental Sustainable Design (ESD) accreditation for this building, these guiding principles and measures were the constant check in points along the project development and implementation and formed the final objective measures at the completion. The IPD framework also enabled a new way of contractor engagement and management during construction, as discussed later in this report.

Through its separation of strategic from operational, **Westminster City Council** has contracted out on a 10 year contract, the design and delivery of their annual infrastructure capital works program to West One, an external managing company set up specifically to manage this contract. West One comprises of external consultants and contractors and project manages the capital works program. To enable this outsourcing of the full capital works program, a Project Management Framework was developed by West One specifically for the Westminster contract, with manuals and templates, and has been fully embedded in the organisation with clearly defined gateways, check points and workflow implementation.

As part of its capital works organisational restructure, **Toronto City** developed new processes to support their new framework. The processes were focussed on a lifecycle approach to capital works planning and incorporated 5 steps:

- Step 1: Project Idea** - departments start the ball rolling with a project idea based on need or service strategy.
- Step 2: Clearances** – between departments, identify projects with the highest risk, highest priority, stage of planning, project phasing.
- Step 3: Detail Design** – commencement of detailed design, usually 3 years prior to construction commencing.
- Step 4: Contract Documentation and Permits** – get tender ready 2 years before construction.
- Step 5: Budgets** – one year out from construction, prepare all budgets and apply for funding.

1.3 Key Points:

- Clarity of roles & responsibilities
- Accountability

The restructure of the **Chicago Metropolitan Planning Authority** project management group into multiple project centric groups necessitated clear, well defined roles and responsibilities, as well as good processes and frameworks to enable discussion, flexibility and adjustment along the way. Relationship building was identified as critical to ensure common goals and outcomes. Staff reporting to more than one Manager could be fraught with problems, however it is the Managers and Project Team Leaders responsibility to work well together, communicate regularly and have the agility and strong relationships to effect success and deal promptly with any potential arising issues or culture destabilisers.

Role clarity and responsibility is critical in a cross organisational approach and **Westminster City Council** has a Strategic Executive Board with clear role and responsibility descriptions, focussed more on what they are not required to do, to enable the Executive to remain in the strategic space. They advised clarity of roles and delegations of the external contracting company, West One, has been critical as was the focus on developing strong relationships and partnering with West One. They noted that the challenge for the **Westminster City Council** Strategic Executive Board and staff has been to keep hands off the operational side and trust the process and reporting. In order to facilitate this process, setting the external consultant team up in the same physical office has been successful in developing open and strong relationships, along with a clear understanding by both parties on where the line is.

At **Toronto City Hall**, communication of the new structure and ongoing communication was critical. An understanding that each participant in the capital works roadmap had a different horizon (for example roads versus buildings) and realising what's early for some is too late for others. Providing clarity to everyone on where their project fitted into the roadmap and understanding their project dependencies, priorities and expectations was important.

2. Long Term Capital Works Planning

2.1 Key Points:

- Long term programs
- Strategy led capital works programs
- Integrated planning with stakeholders and authorities
- Partnering, co-design and co-planning
- Initiatives to overcome challenges

The **City of San Francisco** advised their capital improvement program is a US\$25 billion program over 10 years, of which US\$3.5 billion is under public works management. Major buildings projects are phased over multiple years, ie. planning, feasibility including engagement and voting, then permits and approvals, followed by design, tender and construction. In terms of the long term asset renewal planning, all road reserve assets are linked together with a unique identification number which is incorporated into all GIS and asset databases. The city has a 5 year road paving program which shows graphically on a map where works are planned within that period. This is shown on a GIS background and any asset detail can be identified, including the contact person for that project. This live GIS plan is made available on their website to all service authorities and agencies to assist in their long term planning of works and to identify any potential conflicts. New streets have a 5 year moratorium for new utilities and only emergency works are allowed within that time. A limited version of this 5 year plan is available as a map on the website for public view. The capital improvement program is informed by their roads asset condition database.

The **City of Napa** has a 5 year road renewal program and the water infrastructure capital improvement program has a 20 year planning horizon. There is also a 5 year moratorium on new and renewed roads for works by service authorities. Projects are prioritised for works on operational and community needs, age of asset, risk, history and dependency. A new State Government policy which has impacted on their long term financial planning has been the requirement for up to 20% of a project's budget to be spent on stormwater pollution prevention and protection which is placing a significant constraint on budgets. Public art is included in the long term program with an allocation of 1% of the capital budget.

The **Golden Gate Bridge Authority** manages the independent Golden Gate Harbour and Transport District, which was formed in 1925 for the sole purpose of financing, constructing and managing the Golden Gate Bridge. The authority has a 10 year capital works renewal program informed by biannual condition inspections.

They advised a US\$770 million capital improvement project currently in progress over multiple years in 4 phases, of which 2 phases are completed, is the seismic retrofit project which is being undertaken whilst the bridge remains open, resulting in innovative techniques and planning of the works.



*Golden Gate Bridge
Authority : innovative
capital works delivery*

Manchester City Council has a 2 year financial and capital works program. This is informed by an overarching Strategic Response Report which sets out the strategic framework for the delivery of a balanced budget for the current 2 year period, as well as a strategic framework for informing the following 2 year period. The framework is aligned to the priorities of the City's Community Strategy. This Community Strategy Spine has 4 goals which contribute to this Strategic Response Report, namely:

- Performance of the economy of the region and sub region
- Reaching full potential in education and employment
- Individual and collective self esteem
- Neighbourhoods of choice

At the start of the year, Council approves a Medium Term Financial Plan for the following 2 years, which sets out the likely financial parameters and the strategic priorities for the Council, as well as the budget principles used for decisions to achieve the required budget. **Manchester City Council** is facing significant reductions in expected future funding income, largely due to reduced grants. This has necessitated the Council to look for significant reductions in budget over the 2013 to 2017 period. A well defined and considered savings strategy, whilst still achieving the City's priorities for the community and staff goals was required.

This information is captured and considered as part of their Strategic Response Report, which is prepared ahead of Council budget considerations and provides a way forward on a range of other conversations and work that needs to occur prior to preparing the budget for consideration by Council. For example, it:

- sets out the financial context and how the Council intends to respond to these significant challenges in the context of the priorities for the City as set out in the Greater Manchester Strategy and the Community Strategy.

- sets the framework for the difficult decisions that will need to be made.
- sets priorities for the City as per their Community Strategy and the Greater Manchester Strategy.
- considers the impact of their Growth and Reform Plan and sets out the approach to implementing these strategic priorities.
- forms the basis for an ongoing dialogue with Government over the coming months.
- sets out how the City will use its influence both at a national level and at a local level to obtain more integrated commissioning across agency boundaries.
- sets the way for creating innovative financial mechanisms that bring together central and local resources.

This enables an innovative approach to investment to be developed, building on existing funds and developing other investment funds, perhaps looking at partnership opportunities. These conversations also ensure that public sector resources beyond the Council are aligned to the City's priorities.

The Strategic Response Report also recognises the need to set parameters in order to provide a joined up strategic approach to decision making to ensure they are not made either in a piecemeal way or in a way that cuts across the priorities for the City, and sets parameters for an evaluation framework upfront.

This evaluation framework considers the impact of all proposals in the context of what sort of City they are committed to deliver. It includes the following evaluation principles:

- Economic growth
- Reducing dependency
- Integration at a place level
- How the proposal maximises use of all relevant resources in the City, not just focusing on the Council's portion of funding
- Impact assessment and options appraisal

These are higher level strategic criteria, not just budgetary.

The key learning in this approach is a multi step longer term detailed planning horizon for budgets (including capital projects) which are clearly informed by City strategies, enabling time to undertake an environmental scan beyond the Council, and to look into the future at trends in funding, services delivery and opportunities for co-location or partnering. This enables the parameters and criteria for assessment to be set and agreed to prior to the budget

considerations and also sets out advocacy requirements to other levels of government. This approach would be of value for a growth Council such as Wyndham City.

The **Chicago Metropolitan Planning Authority's** transportation improvement program is a US\$4.5 billion 5 - 6 year short term program. Although designated as the responsible authority to distribute Federal Government capital funds for short term projects, they advised they were finding it hard to spend money, as the process was onerous, projects submitted were not ready for funding and it could take up to 4 years to approve funding for a simple project. An initiative implemented to assist processing of projects for funding approval was an Active Program Management initiative, which updates the status of projects at regular intervals and sends these updates to all project owners. They also consider trends and areas of consistent problems across all projects and communicate them back to the project owners to amend their proposal.

The process has been separated into 2 phases, phase 1 being the design, undertaking all studies and obtaining permits. No Federal Government funding is available for this phase. Phase 2 is the contract documentation and delivery. Completion of phase 1 is now a mandatory criteria before submitting a funding application. This has ensured the projects were ready for delivery and ensured the commitment of the applicant to the project, as they had to commit funds to the project development in phase 1. All the permit and investigation hurdles would have been undertaken and the project would be ready for delivery. This revised process streamlined the funding award process and also resulted in improved delivery of funded projects.

With regard to the **Chicago Metropolitan Planning Authority's** longer term Regional 2040 Plan and Program ("Go to 2040") implementation, the agency is working towards advancing some recommendations in this plan for early implementation. They have embarked on a funding campaign for these works, which is largely focused on education rather than advocacy, using evidence based data and modelling analysis. They are working with legislators in Federal Government to identify long term sustainable revenue resources, developing accountability and transparency measures on a performance based program for funding. The aim was to have a bigger picture regional focus and a plan that identified 5 regional type projects, so that rather than 30 small projects separately competing for funds, defining early the 5 key projects that need to be done to achieve the regional focus outcomes. Given the long term nature of planning and designing these projects, the focus is on forming agreed criteria for funding and prioritisation methodology for projects should funding streams change under future governments. They have also provided assistance to local governments in developing their local projects and plans to feed into and meet the regional plan objectives and the key 5 regional projects. This was a good example of proactive co-design for developing long term programs and projects.

Another excellent example of co-design, co-location and collaboration across various authorities to achieve a significant community infrastructure building was demonstrated in the Halton Recreation Centre in the **City of Burlington**, Canada. This project was a collaboration between Burlington City Council, Halton Schools Board and Libraries department to co-design, co-fund and construct a co-located secondary school, library (which is shared as a public library with the community), community centre rooms, and indoor and outdoor sports facilities, including 2 indoor sports courts and an outdoor athletics track and ancillary sporting facilities. All facilities are for the use of the secondary school students during the school day. After school hours and on weekends, all sporting facilities are used for community and club level sports and the community rooms, which are used by school during the day for arts and other activities, are used to run community programs. The library is accessible from both the school building and externally, and is a space shared all day by the community and the school students.



*Halton Council, Canada :
co-located Library,
Recreation Centre and
Secondary school*

A strategy focused and led capital works program was demonstrated by the **City of San Francisco**, which had long term strategies for the City incorporated into their capital works program and embodied in the projects delivered. A good example of this was the recently completed Public Utilities Commission (PUC) Building, which has been designed and constructed to demonstrate the City's commitment to its strategies and policies. A key city strategy is to promote a transit orientated city.

This is embodied in the PUC building through constructing only 4 car parks for a 9 floor building, of which 2 of these car parks are for electric vehicles only and have free charging stations. This also supports one of the City's other key strategies, which is incorporating Environmentally Sustainable Design (ESD) in all its projects. The PUC building was designed as a living building and achieved a LEED platinum environmental rating for office buildings, which is the highest possible rating on the widely used ESD measure in the United States.



*City of San Francisco
PUC building : visible
ESD initiatives – grey
water treatment in foyer*

The ESD initiatives in the PUC building are highly visible and are used to demonstrate and educate the visiting public, for example, one of the grey water treatment gardens is located in the foyer of the building and has information signage attached. Another electric vehicle charging point is located on the sidewalk adjacent a parking bay on the street and is provides free charging. The City also has a key strategy on public art provision in its capital works program, and 2% of any project budget is allocated to public art. In the PUC building, this is incorporated through integration of public art in the façade of the building, in a water wall inside the building which is also used for passive cooling and through a digital wrap around screen throughout the foyer which also provides opportunities to showcase changing art exhibitions as well as to provide presentations, digital art and information.

2.2 Key Points:

- Community voting
- Borrowings strategies and different funding models

All major projects delivered by the **City of San Francisco** are required to be prepared for public ballot for approval. A minimum two thirds majority is required for a project to proceed. As part of this process, a full project report is prepared which outlines the positives and negatives of the projects, the risks, the options and the proposed funding models, including borrowings. Significant community engagement is undertaken prior to the public ballot to ensure public feedback and comments are included in the report. These reports presented to the voters also include the concept design, test pricing by the Quantity Surveyor and a business case for the funding.

In terms of funding for major projects, loan borrowings are raised for each specific project and repayments and terms negotiated for each project. Loan borrowings are largely through government bonds.

The Transbay Terminal Project is a multi-modal transit centre located across 4 city blocks in San Francisco, with 2 underground levels for rail interchanges and a ticketing hall. Bus interchanges, retail and cafes will occur at street level, and the podium will be a 5.4 acre public park. The final development will have 7 high rise residential buildings and one office tower. The transbay terminal component of the works is managed by a private consortium and is largely funded by the developers of the future residential towers, who were sold the land at a reduced value. This is an example of non traditional funding and opportunities to explore Public Private Partnerships (PPP's) and alternative funding models to achieve important community infrastructure.

3. Capital Works Delivery

3.1 Key Points:

- Multi-year balanced programs

Most organisations we visited had a multiple year capital works program, both in terms of planning, but also in adopted budget.

The **City of Napa** has a 5 year road renewal program and a 20 year water infrastructure capital improvement program, but undertakes biannual budgeting and Council approval with an annual budget review.

The **Golden Gate Bridge Authority** has a long term 10 year capital works program, which is reviewed annually.

The **Chicago City Water Department** has a 10 year capital works improvement and renewal program.

Toronto City Council adopts an annual budget but has a 10 year largely balanced capital works program.

As mentioned previously, **Manchester City Council** has a 2 year rolling capital works program. Their program is reviewed monthly and they are working towards developing a process to recognise programs or projects that can be accelerated from year 2 into the current year, to increase spend and delivery in a particular year, if its clear that potential slippage of some programs or projects may occur.

3.2 Key Points:

- Form of contracts

The **City of San Francisco** constructed the Public Utilities Commission (PUC) building under a Construction Management General Contract, which is a form of Managing Contractor contract. The contractor was appointed early in the design phase to work with the architect and consultants in the design development of the building. A shared risk and benefits relationship

was incorporated into the contract. Given the high capital investment for the City in this project and the high standard of goals and objectives for the project around industry leading, private sector leading and platinum LEED ESD rating, it was critical to the delivery of the project that all the key players were involved in the development of the project from the start of design to the completion of construction.

Another project being undertaken by the **City of San Francisco** was the construction of the new US\$890M San Francisco General Hospital and the group was given a site tour. The form of contract was again a Construction Management General Contract and the contractor was engaged at the end of design development stage, including their specialist sub-contractors, to work with the architects and consultants on the further resolution and documentation of the design. This was highly beneficial in a complex building such as a hospital where the builder's specialist sub-contractors could be integral in the design of specialist systems, for example mechanical services based on their industry knowledge and to ensure the constructability and future maintenance requirements would be met. Full mock up test rooms were constructed at the start of construction and were tested with hospital staff to ensure the design, layout and fitout was correct and met their functional needs. The contract also included shared risks and benefits, including a percentage of any project contingency remaining at the end of construction would be given to the contractor as a bonus.

Early engagement of the contractor also resulted in other unforeseen issues being allowed for in the project, the example they gave was the contractor identifying the need to provide a park and ride arrangement and a project commuter bus service for workers to the site, as onsite parking was severely constrained.

3.3 Key Points:

- Contract administration and Project governance
- Variations Management
- Reporting and performance management

In the construction delivery of the new **San Francisco General Hospital** project, as the contractor was engaged to form part of the design process, any omissions in the documentation or contractor pricing or due to any document clarifications, is not considered for variation by the client. This is the contractor and consultants' risk and they are required to fund any variations relating to these issues. They advised the client only pays for variations that are client caused changes or scope definition gaps. This is clearly understood by all parties and the time and effort

in assessing contract variations and apportioning costs is significantly reduced. This would reduce any potential contract dispute claims based on variations.

At the site tour of the US\$80M Springfield treatment plant upgrade project with the **Chicago Water Department**, the project governance structure during construction phase included a full time client representative on site in addition to an external project manager and the contractor. The client representative stated his full time position on site had proved critical in protecting the client and ensuring the ongoing operation of the facility during the upgrade works. Weekly meetings were held on site between the client representative, the project manager, contractor and lead design consultant to review the upcoming 4 week program. Any variations due to unforeseen site conditions or client caused changes were approved by the client, however and design omissions or errors were charged directly back to the design consultants. Holding consultants financially responsible for their design error or omissions, in my experience, is something we generally do not implement in local government contracts in Australia.

Toronto City Council through their **Major Capital Infrastructure Coordination Office** runs a strong project governance structure around project planning and development across various service departments. They have clear processes on identification of projects, timelines, change management procedures, gateways, stakeholder management and engagement, etc. The key to the success of this cross organisational approach has been the communication, transparency, consistency and accessibility.

At **Manchester City Council**, the newly created **Capital Program Group** has developed a number of key indicators (KPIs) to assess the performance and measure delivery of the capital program in terms of time, cost and quality. This **Capital Program Group** collects information on 5 KPI's covering project management and project delivery that are reported quarterly to the **Manchester City Council** Capital Board. Performance measurement enables proactive management of the capital program and provides an opportunity to forecast expenditure and where possible reallocate funds ahead of year end to reduce slippage and maximise service delivery improvements.

Their traffic light reporting, known as Red Amber Green (RAG) reporting, process has been successful in giving an early warning status on progress, cost and risk on a project by project basis. The monthly RAG Report has been further defined to report the financial status of project against the budget and in future the RAG Reporting process will be developed further, to enable the Project Management Software to summarise reporting at program and project levels.

4. Recommendations

There are a number of key learnings that could be considered for implementation in Wyndham City and potentially across the sector.

It's worth noting that some of the organisations we visited demonstrated significant changes in their structure and approach to take the step change they felt was necessary. These changes were not continuous improvement adjustments, but rather step changes with organisational culture implications.

So, organisations would need to first ask the question: Why change? And how do we recognise if its continuous improvement or if a step change is required?

This will be different for different organisations. My opinion is that local government is entering a different phase in its evolution and in order to continue to be a sustainable entity meeting its obligations, needs and demands of the community, in an environment of increased financial constraint but also heightened standards and expectations, we need to do our business differently in some areas in the future.

The need for this is perhaps clearer in a rapidly growing municipality and organisation such as Wyndham City, which has to plan and deliver much needed community infrastructure and services quickly, and arguably has an unprecedented opportunity to develop innovative practices and be a leader in the definition of the future look of local government in this area.

The work environment at Wyndham is dynamic, energised, complex and rapidly changing, highly influenced by State and Federal Government changes and programs. Particularly with regard to funding and as an organisation Wyndham has a strong government advocacy focus.

Given that Wyndham City is currently at less than half its final expected population, the next years will be crucial for us to determine sustainable strategies for core services definition, service delivery models and service strategies informing infrastructure planning and delivery, including new, potentially non-traditional partnerships and ways of doing our capital program business.

This has been reinforced to me in the approaches and changes made by some of the government organisations visited on the study tour, which have already embarked on this journey of significant change. In particular:

- Far reaching organisational restructures and functional relationships, with appropriate accountability as demonstrated by Manchester City Council, Chicago Metropolitan Planning Agency, Westminster City and the City of Toronto to achieve a cross organisational, strategy led, matrix structure to capital works planning, project management and delivery – different to the tradition vertical organisational hierarchy structure;
- The agility, enthusiasm and tenacity of these organisations to make changes, improvements and work through the culture change process over a number of years;
- Strong focus on strategy led capital works planning, early and multi staged;
- Clear separation between Strategy and Operational functions by Westminster City, Manchester City Council and Chicago Metropolitan Planning Agency, with clear role, responsibility and accountability definition and in-house processes and training to support this;
- Relationship building and developing a partnership approach to forward, long term planning by organisations such as Chicago Metropolitan Planning Agency, as well as partnerships across sectors and agencies, such as the Recreation Centre project by the City of Burlington;
- Clear frameworks, consistent reporting and support processes;
- Understanding their role in advocacy, across agencies, internally cross organisationally and with neighbouring organisations as demonstrated by the Chicago Metropolitan Planning Agency “Go to 2040” regional plan;
- Practicing what they preach – delivering projects that embody the City’s strategies and policies and lead the way in both private and public sector, such as the Public Utilities Commission Building by San Francisco City.

Areas of focus for implementation in my role as Manager Major Projects and coordination and planning of the annual and 10 year capital works program at Wyndham City:

Recommendation 1 : Project Management

- Continuing to develop the planning and allocation of resources to project manage capital projects, in particular major projects which are complex and require a diverse range of internal stakeholders with different expertise at different stages of a project. Utilising a matrix management approach to ensure we have the right people, with the right skills around the table at the right time.
- Continuing the development of our Project Management Framework, with clear gateways, delegations and governance structure.
- Clearer separation between strategy and operational inputs by service departments.

- Developing a program / project centric culture in the capital projects teams.

Recommendation 2 : Long Term Capital Works Planning

- Continuing to develop cross organisational partnerships to facilitate strategy led long term capital works programs.
- Working towards a balanced multi-year capital works program, integrated with the long term financial planning.
- Continue to review multi-year program for project readiness and risk to delivery assessment on projects, staged over multiple years.
- Multi-staged early planning discussions on future programs, with internal stakeholders and Council.
- Ongoing review of the 10 year capital works program and links to PSP's, strategies and between related projects in a place making approach.
- Identify external partnerships in long term planning and potential funding opportunities.

Recommendation 3 : Capital Works Delivery

- Contract administration, project reporting and project completion processes documented as per the Project Management Framework.
- Review opportunities for different forms of construction contracts in future major projects, including potential for shared risks and benefits.
- Continued improvements to capital works delivery performance reporting.

Conclusions

This unique opportunity to undertake a study tour to three different countries has enabled me to learn how other organisations undertake their capital works planning, management and delivery. It has also given me a point of reference for the processes we use and are developing in local government in Victoria. Generally, my observations were that we compared favourably in most instances, however there were key areas of learning from some of the organisations we visited.

My aim is to use these learnings to continue to inform the approach and ongoing development of systems for capital works planning and delivery at Wyndham City.

References

1. Meetings with:

City Engineer and Deputy Director Public Works, City and County of San Francisco

Public Works Director, City of Napa

District Engineer, Golden Gate Harbour and Transport District

Government Affairs, Chicago Metropolitan Agency for Planning

Manager Business Services Public Works, Regional Municipality of Halton

Director Business & Technical Services, Public Works Department, Regional Municipality of Halton

Senior Asset Analyst, Regional Municipality of Halton

General Manager Development & Infrastructure Division, City of Burlington

Coordinator Facility Assets, City of Burlington

Assistant City Commissioner, City of Westminster

Project Manager, West One Infrastructure Services

Head of Programme and Project Management, Manchester City Council

Principal Policy Officer, City Policy, Manchester City Council

Asset Preservation & Capital Works Departments, Toronto City

Capital Strategy, Manchester City Council (2007 – 2010)