Municipal Engineering Foundation Victoria 2019 Overseas Study Tour

Overview

The 2019 Municipal Engineering Foundation Victoria Overseas Study Tour involves four Australian Local Government Engineers, from the State of Victoria, travelling as a group with the aim of visiting and learning from Local Authorities and related organisations in the United States and Canada. The group are particularly keen to explore technological innovation and community engagement in the management of municipal assets. The group are interested in emerging trends such as Smart Cities, deliberative democratic engagement for asset management and the culture of organisations that encourage technological innovation.

Visit

The group would be pleased to learn and share experiences and knowledge with your city. As such we would appreciate the opportunity to visit your organisation and meet with the appropriate members of staff to provide us your experiences and knowledge related to the study topics. We would anticipate that this may take about half a day, and where appropriate specific site visits.

The Tour Group are organising all our own travel and accommodation requirements.

Issues we would appreciate discussing:

- Overview of your organisation to allow an understanding of the relative size/complexity of services, assets, budgets and issues compared to our Councils and the Victorian sector.
- Responsibility of the organisation relating to infrastructure assets, shared responsibilities between other levels of government and other relevant authorities.
- Trends and any contextual issues (e.g. restructuring, reforms, legislation, industry and demographic pressures).
- Specific issues in place for Asset Management and Lifecycle issues, managing infrastructure and drainage assets, mitigating impact of climate change and environmental challenges.
- Capital Works planning, Works procurement and project governance.
- Issue around sustainability and infrastructure that supports Active Transport
- Innovative maintenance practices particularly in busy activity areas.
STUDY TOPIC DETAILS:

Kurt Pitts
Coordinator Roads & Infrastructure
Manningham City Council

Topic of Study: Smart Cities – Smart maintenance & asset management of key infrastructure

Manningham is in Melbourne's eastern suburbs. It stretches from Bulleen, about 12km from Melbourne’s Central Business District (CBD), to Wonga Park, about 32km from the CBD. Covering 114km², Manningham has large areas of open space, including more than 300 parks and reserves, and a mix of shopping and dining precincts. With vibrant residential neighbourhoods and lots of housing options, Manningham also includes attractions such as local galleries, nurseries and community centres. A large section of the eastern half of Manningham is designated as a Green Wedge to protect Melbourne’s significant natural and rural environment.

Manningham also has a diverse and multicultural community that brings a wealth of languages, music, food and cultural traditions to our region. We are a diverse community of about 124,500 people. The population spans a wide range of ages, incomes and cultural backgrounds.

The history of Manningham dates back millennia to the Wurundjeri people whose way of life is closely linked to the natural environment. In the late 1830s, the first European settlers began growing wheat, vegetables and grapes, before eventually planting orchards throughout the area. The discovery of gold in Warrandyte was a real turning point and by 1851, fortune hunters were trying their luck panning the streams and digging the rich soil around Harris Gully.

Our economy mostly relates to retail and tourism. Many residents of Manningham travel outside of the municipality for work. Manningham does include some agriculture and education. A major retail drawcard is the major Westfield Doncaster Shopping Centre.

One of the challenges facing Manningham is the increased level of development within our urbanised areas. There has been a large increase in the number of multi-unit developments, and high-rise apartment complexes. Manningham must balance the need for growth with our green-wedge requirements, and the desire to maintain our current level of open space within the municipality.

The objective of my study topic is to investigate various Smart City technologies and initiatives with the aim of assisting Manningham City Council and other Victorian municipalities with the management of key infrastructure through improved methods of maintenance and asset management. Of particular interest is innovative technology and collaboration with autonomous vehicles, as well as opportunities for smart sensors within key infrastructure.
Tony McGann  General Manager Infrastructure & Leisure Services  
Colac-Otway Shire Council

Topic of Study: How community engaged asset management can underpin long term financial sustainability and help decision making.

Colac Otway Shire covers 3,500 square kilometres and is home to 21,000 people. Our landscape includes volcanic plains to the north and rainforest fringed coastline to the south which boasts the Great Ocean Road. Our main towns are Colac and Apollo Bay. Hence we have a large area with a lot of assets and few people to pay for those assets.

Our economy is diverse. We have an agricultural sector that is centred on dairy farming and we have upstream value adding to that dairy product at the Bulla ice cream factory and the Regal cream plant. The Australian Lamb Company is a meat processing facility that produces 20% of all lamb in Australia and exports to many countries including the USA. AKD is a timber milling company that is the second largest in Australia. It focusses on plantation grown softwood and has grown 100% in the last 6 years in staff numbers. Tourism is a sector that is growing at 10% per year on the coast but we need to develop a better offer to encourage people to stay rather than move through. Our economy is performing very strongly and our main issue is the availability of workers for our industry as we have very low employment at around 3%.

Our biggest challenge is to set our Shire up for long term financial sustainability. To do this we need to improve our asset management and we need to give our Councillors the information they need to make strategic decision which will often be hard to make. We need to better engage with our community so that they can have input into service levels, understand the costs that flow from those service levels and the choices their Council is faced with.

The goal of this study tour is to investigate innovative international approaches to engagement and asset management.
The City of Port Phillip (CoPP) in the state of Victoria, south of the city centre of the capital Melbourne, on the northern shore of Port Phillip Bay. The area that now constitutes Port Phillip has been inhabited by the indigenous, Yaluk-ut Weelam Clan of the Boon Wurrung, people for tens of thousands of years. Port Phillip is one of the oldest areas of European settlement in Melbourne, known and treasured by many for its urban village feel and artistic expression. It is a city of neighbourhoods, each with its own character, defined by its extensive foreshore, heritage buildings, strip shopping precincts and tree-lined streets. At only 21 square kilometres, Port Phillip is one of the smallest and most densely populated municipalities in Australia, with more than twice the population density of the metropolitan Melbourne average.

Port Phillip is home to 111,000 people with that population rapidly increasing. An additional 80,000 people are expected to call Port Phillip home in the next four decades. Port Phillip is a place of economic extremes with approximately 8% of the population living in social or public housing and 30% of the population having incomes significantly exceeding the national average. Areas in Port Phillip are amongst the most expensive residential properties in Australia measured on per square metre basis.

Nearly three million visitors are attracted to Port Phillip each year, enjoying vibrant villages, beautiful beaches and local festivals, and making it one of the most visited places in metropolitan Melbourne. The foreshore stretches over 11 kilometres and a network of public open spaces makes the City a desirable place for residents and visitors alike.

Port Phillip is well served by public transport including light rail tram lines, train lines and an expansive network of bus routes. Being located so close to the central business district of Melbourne, many residents walk or cycle into the city via an extensive 65-kilometre network of off-road paths.

Port Phillip is a sought-after inner-city area of Melbourne. The physical environment is changing rapidly with extensive population growth and residential development. Substantial growth is anticipated over the next 40 years in the Fishermans Bend urban renewal area located in the north of the municipality.

Port Phillip faces many challenges, all of which are exacerbated by ever increasing population density. The municipality sits 1-3m above sea level and as such is significantly vulnerable to sea level rise and changes in the climate. The City’s infrastructure is straining under increased demand from the growing population. At the same time, the City is very progressive and has high aspirational targets for social inclusion and environmental sustainability.

A goal of the study tour is to examine how technological innovation can help Port Phillip continue to provide an amazing place to live and work in the face of these significant challenges. Of particular interest are Smart City initiatives and technologies that are helping infrastructure work more efficiently as well as innovative technologies for infrastructure design and management such as Building Information Modelling and Digital Engineering.
**Municipal Engineering Foundation Victoria**

The Foundation has been in existence since 1966 and was established for the express purpose of providing opportunities for engineers working in local government in Victoria (Australia) to enhance their technical and managerial skills. This is achieved by annually allocating scholarship awards to research a wide range of internal and overseas study topics. Further details of recent awardees and reports are detailed on our website.

A major focus of the Study awards is a group attendance at the American Public Works Association Annual Congress followed by individual study tours within Canada, USA and the UK.

The 2019 Tour provides the opportunity for the group of Local Government Engineers and tour leader to attend the Seattle APWA Congress and to visit a number of Local Government Authorities within Canada, USA and the UK. The awardees will prepare a detailed report on learnings and experiences from the study tour on their return to Australia that will be shared with Victorian Local Government and Public Works professionals.

**Local Government in Victoria, Australia**

Australia has a three-tiered system of Government:

**Australian Federal Government**

Responsible for matters such as defence, immigration and nationally significant roads linking capital cities, health. Raises income via taxes on private and company incomes, import/export duties, fuel excise and a 10% GST.

**State and Territory Governments (Victoria is one of seven)**

Responsible for matters such as health, education, police and significant state roads linking population centres. Raises income via sales tax/stamp duties on property sales and fees for various services. The Federal Government allocates funds to State Departments some of which is apportioned to Local Governments.

Most State-owned income generating businesses (electricity, gas) were privatised or corporatised (water supply) in the 1990s.

**Local Government (Victoria has 79 Local Government Councils)**

Responsible for matters such as aged and child care, local land use planning, building regulation, local infrastructure and local roads, parks and recreation, waste and environmental management, economic and cultural development and community facilities. Income is via property rates, fees for service, grants and funding allocation from other levels of government.
## Municipal Engineering Foundation Victoria

### Our Councils and Contact Details:

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<th>Contact</th>
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<th>Population Area Budget</th>
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| **Kurt Pitts**  
Coordinator Roads & Infrastructure  
*Email: kurt.pitts@manningham.vic.gov.au*  
*Phone: +61 475 975 650* | Manningham City Council  
*Population: 124,500*  
*Area: 114km²*  
*Budget: $AUD143M*  
*Capital Budget: $AUD48M* | Manningham City Council is a suburban local government authority located in the leafy middle north-eastern suburbs on Melbourne. The municipality faces challenges with increasing density and protecting the local environment. |
| **Tony McGann**  
General Manager Infrastructure & Leisure Services  
*Email: tony.mcgann@colacotway.vic.gov.au*  
*Phone: +61 3 5232 9482* | Colac-Otway Shire Council  
*Population: 21,000*  
*Area: 3,500km²*  
*Budget: $AUD55M*  
*Capital Budget: $AUD16M* | Colac-Otway Shire Council is a regional municipal authority located approximately 160km to the south-west of Melbourne. Dairy, forestry and tourism are major contributors to the local economy. The Council faces a challenge to provide services for the community in a sustainable manner. |
| **Lachlan Johnson**  
Manager Project Services  
*Email: lachlan.johnson@portphillip.vic.gov.au*  
*Phone: +61 409 533 478* | The City of Port Phillip  
*Population: 110,000*  
*Area: 21km²*  
*Budget: $AUD252M*  
*Capital Budget: $AUD60M* | The City of Port Phillip is an inner city, densely populated municipality. The City is experiencing significant population growth. A key focus is to make our infrastructure work smarter to maintain a high quality of living for our residents. |
| **Warren Roberts**  
(Tour Leader)  
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*Phone: +61 418 564 783* | Chairman Municipal Engineering Foundation  
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| **Municipal Engineering Foundation Victoria** | | | | |