



8.15	PARKING TECHNOLOGY TRANSFORMATION
WARD:	WHOLE OF MUNICIPALITY
GENERAL MANAGER:	FIONA BLAIR, INFRASTRUCTURE & AMENITY
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TRIM FILE NO:	16/01/685
ATTACHMENTS:	1. Investment Logic Mapping 2. Fishermans Bend Map Precincts and Restrictions 3. Proposed Implementation Timeline for Parking Technology

PURPOSE

- To present Council with smart parking technology options included in the Parking Technology Strategic Business Case and to seek endorsement from Council to commence a public tender process to procure parking technology.

RECOMMENDATION

That Council:

- 1.1** Notes that there is a need to manage parking differently in order to improve parking availability for people across different times of the week and year and to account for seasonal variations.
- 1.2** Considers as a Confidential Item listed for Council on 6 December 2017, smart parking technology options included in the Parking Technology Strategic Business Case to be procured through a public tender process.

2. BACKGROUND

Port Phillip is a city of nine defined neighbourhoods, each with a distinct character and attributes. Population growth and increased housing density across the municipality will vary significantly between these neighbourhoods, creating a non-uniform level of localised impact and challenges.

Fishermans Bend is expected to be home to a future population of approximately 80,000 residents and 60,000 jobs across the five precincts within the next 10 years.

Despite a non-uniform level of growth, the impact of this change will be felt by all of our community,



residents and visitors alike. Most notably this change will be felt in the streets we share to get around and spend time in. If we continue to travel the same way we do today – 72% daily movements by private car – our limited street network will have to carry an additional 72,000 private car trips every day.

If the current rates of car ownership continue, by 2027 Port Phillip residents will own approximately 63,000 cars, representing an additional 12,000 vehicles needing to be stored in Port Phillip. The year 2021 represents a tipping point where, for the first time, the projected number of cars stored in Port Phillip will exceed the 53,000 of on-street parking spaces.

The storage of these vehicles within Port Phillip combined with growing numbers of workers and visitors points will make it increasingly difficult to find a park near to places that residents, workers and visitors wish to visit, adding further car traffic to increasingly congested roads and streets.

There is a need for the City of Port Phillip to manage parking differently in order to improve parking availability for people across different times of the week and year and to account for seasonal variations.

Developing an Integrated Transport Strategy (ITS) and Parking Management Plan has been identified in the Council Plan 2017-27 as a key strategic priority to enable Council to respond to the challenges of population growth, accessibility, transport options and car parking.

Council's Ordinary Meeting of 21 June 2017 and 18 October 2017

Reports were presented to Council on the approach to paid parking and community engagement to feed into the development of a draft ITS.

At the 21 June 2017 meeting Council resolved, amongst other things, the following items that pertain to this report:

- “Notes that a Council report on a Strategic Business Case for paid parking technology procurement and implementation will be presented at a future Council meeting for decision.
- Endorses the draft paid parking objectives, triggers for reviewing parking controls and paid parking policy table as the basis for a Paid Parking Policy as part of Council's Parking Management Plan.
- Informs the local community and implements on-street paid parking within the Sandridge and Montague neighbourhoods, supported by the introduction of appropriate time based controls between Boundary Street and Bridge Street North of Williamstown Road and in the uncontrolled residential area South of Williamstown Road bounded by Ingles, Evans and Bridge Streets to protect residential access to parking.”

Parking Management:

Currently the main elements of our service relating to parking management technology include:

1) Parking Enforcement

Council's 25 parking officers work 363 days per year and issue approximately 163,000 infringement per annum. The parking officers are using outdated handheld devices that have passed their useful asset life. The total income generated is approximately \$14.9million per annum. The aim of enforcing parking restrictions is to:

- a. Support safe and equitable use of parking bays and roads;
- b. Provide residents, visitors and local businesses with access to parking including:
 - i. Paid Parking (5,600 spaces)
 - ii. Time Limited spaces (14,900 spaces)
 - iii. Permit Parking



2) Paid Parking

Council has 465 machines (243 credit card and coin and 222 coin only machines) serving 5,600 spaces. Pay by phone option is not currently available. The income is \$13.6 million per annum. The revenue generated from paid parking along the foreshore directly funds the maintenance and improvement of the foreshore parkland and paths, in accordance with the Foreshore Management Plan.

The paid parking machines are more than 10 years old and are maintained by Council's contractor. The estimated remaining life of the technology is 5-8 years.

Paid parking has been proven to increase the turnover of the limited on-street parking spaces and improve parking availability when implemented in a coordinated way, enabling more equitable access to on-street parking for various users including visitors, residents and local employees. This occurs predominantly in retail/commercial areas and regional attractors such as the foreshore. The software used for the paid parking ticket machines does not generate data that can easily be used to determine parking utilisation and pricing. Pricing is reviewed annually as part of the fees and charges included in Council's annual budget process.

Council has three paid parking tiers:

- (A) Foreshore \$5.20/hr – All Day \$12.60
- (B) Activity Centres \$3.80/hr – All Day \$12.00 (precinct dependent)
- (C) Activity Centre \$1.80/hr – All Day \$6.50/8.50 (precinct dependent).

Additionally, Council endorsed the following paid parking trials from 2017 – 2019:

- (D) Fitzroy Precinct/Waterfront Place
 - April 1 - Sept 30: \$1.80 per hour, Oct 1 - March 31: \$3.80 per hour
 - April 1 - Sept 30: \$8.50 max/daily Oct 1 - March 31: \$12.60 max/daily
- (E) Elwood Off Street Carpark
 - April 1 - Sept 30: \$1.80 per hour, Oct 1 - March 31: \$5.20 per hour
 - April 1 - Sept 30: \$8.50 max/daily, Oct 1 - March 31: \$12.60 max/daily

Council has a coin collection that was jointly procured for the Cities of Port Phillip, Yarra and Maribyrnong and commenced in 1 July 2017 for seven years. The structure of the contract allows for further operational savings if payment services such as pay by phone are added to the payment options available for customers.

Council does not offer pay by phone option to customers currently.

3) Parking Permits

Parking permits are issued in accordance with Council's Parking Permit Policy. In 2016/2017 Council issued 28,548 permits generating approximately \$2 million. This revenue is used to support Sustainable Transport initiatives.

A draft Paid Parking Policy will be presented at a Councillor Briefing in December 2017.

4) Data Analysis and Continuous Improvement

An opportunity to obtain meaningful customer user data from parking officer's handheld equipment paid parking ticket machines, sensors and Parking Overstay Devices (PODs) has been identified. The data would be used to optimise residents' and visitor' access to parking, improve paid parking ticket



machine pricing and improve parking officer efficiency.

5) Parking Projects funded in the 2017/18 approved budget

Council funded the following parking technology upgrades in 2017/18:

- Upgrade of 204 paid parking machines, including 50 credit card machines, from 2G to 3G network;
- Parking Machine rationalisation, including to review the current stock of paid parking ticket machines and recommend or implement changes;
- Parking Efficiency and Integration Program, including the development of a Parking Technology Business Case.

City of Port Phillip Paid Parking Recommendations Report

- The MR Cagney (2017) “*Paid Parking Policy*” report commissioned by Council, identified that implementing changes to paid parking on-street needs to be accompanied by changes to physical assets (signage and parking machines), technology software and hardware and deployment (parking sensors), and operations enforcement support (staff).
- A broader range of price tiers was recommended for paid parking to enable finer levels of parking pricing adjustment to align with proximity to activity centres and public transport nodes. This report also recommended the removal of daily parking rates and a reliance on time limits and per hour charges.
- The MR Cagney report “*Fishermans Bend Paid Parking*” (2017) recommended introducing paid parking and time parking for the following reasons:
 - Currently parts of the area experience very high demand during weekdays, with difficulty finding a parking space particularly the eastern parts of the area and thereby increasing road congestion as people ‘cruise’ for available parking space.
 - The areas identified as suitable for implementing paid parking had approximately 1133 on street parking spaces with weekday occupancy rates between 94-98%.
 - The area is in transition and the implementation of paid parking in advance of the occupation of new higher density residential and mixed use developments is necessary to limit any expectations of free on-street parking for new residents and the formation of new travel behaviours.
 - The area is located in close proximity to the Melbourne CBD and Docklands and is unusual in providing a large amount of free all day parking.

3. KEY INFORMATION

3.1 There are two primary reason why Council should implement smart parking technology, including:

(a) Alignment with the ITS and Paid Parking Policy

The parking technology transformations detailed in the Parking Technology Strategic Business Case helps to deliver the primary aim of the ITS (“Setting the Direction” position paper) including smart parking management and supports the aims of complete connections (transport) and great places. The use of parking technology also aligns with the draft Paid Parking Policy.

This Strategic Business Case has been developed to find integrated smart parking technological solutions that will optimise residents’ and visitors’ to access car parking opportunities within the City and assist Council to manage car parking supply. Council will be able to use real time data,



mobile phone enabled automated payment systems, and way finding systems that allow people to find and pay for parking in paid parking areas. The transformation is critical to ensure we can continue to respond to the pressures of a growing city, improve community outcomes and better meet community needs as outlined in the Council Plan.

Council requires data to be able to measure the current utilisation and turnover of on street parking spaces in industrial, commercial and mixed uses areas which cannot be obtained using existing parking technology. The parking utilisation and turnover data could be used to set paid parking pricing to maximise accessibility for all residents.

(b) Smart Parking Management

Smart parking has the following benefits:

- Improved accessibility to available car parking opportunities within the municipality, with residents and visitors spending less time looking for a car park;
- Reduces car emissions in urban cities due to block circling;
- Improved user amenity, precinct vibrancy and place making by providing access to data that will enable Council Officers to better understand parking demand, to better plan parking supply, road and parking infrastructure;
- Improved parking availability with new technology and user fees linked to demand and land use;
- Progressive decrease of on-street car parking by conversion to higher value community use;
- To better control illegal car parking; and
- Selectively develop council owned car parks for higher value community use.

Investment logic mapping was conducted to better understand the problem, benefit, strategic response and the parking solutions to address the problem (Attachment 1).

3.2 Options

Three options, A, B and C are presented in this report to improve the level of parking services provided to the community and improve data collection that can be used to improve parking infrastructure, set pricing and in placemaking.

The proposed deployment timelines in the options are subject to successful tender and evaluation, and the outcomes of community engagement.

Options A, B and C include the following parking technological upgrades:

- Replacement of the obsolete hand held parking devices used by Councils Parking Officers (28) in 2018;
- New paid parking ticket machines in Fisherman’s Bend covering approximately 1,100 parking spaces in the Sandridge and Montague neighbourhoods, supported by the introduction of appropriate time based controls between Boundary Street and Bridge Street North of Williamstown Road (further 1,100 spaces) and in the uncontrolled residential area South of Williamstown Road bounded by Ingles, Evans and Bridge Streets to protect residential access to parking. (Council resolution on 21 June 2018). Refer to Attachment 2.
- Project delivery costs including project management, signs, line marking, and business technology integration costs.



- Sensors deployment, including in Fitzroy Street (139), Station Pier (98), Waterfront Place (35), Carlisle Street (141) and York Street (87). This will be completed in 2018.

Option B includes all parking technology included in Option A plus the following:

- pay by phone for paid parking ticket machines and way finding app deployment in 2018/19;
- images-on-line to enable people to view on-line photographs taken by Council's parking officers to improve transparency and potentially reduce infringement appeals;
- 28 fewer paid parking ticket machines are required in Fishermans Bend area if pay by phone is deployed;

Option C all parking technology included in Options A + B plus the following:

The installation and deployment of approximately 1,200 sensors in 2019/20 in major activity precincts where parking demand is highest, for example in Bay Street, Port Melbourne, Clarendon and Cecil Streets, South Melbourne, Ormond Road, Elwood and Armstrong Streets, Middle Park.

Benefits of each option (A, B and C):

Implementing new smart parking technology solutions will have the following benefits:

- Improved user amenity, precinct vibrancy and place making by providing access to data that will enable Council Officers to better understand parking demand, to better plan road and parking infrastructure and reduce traffic congestion;
- Supports growth and more equitable paid parking pricing with the capacity to support a more responsive demand driven pricing model;
- Improved accessibility to available parking for motorists in the Fishermans Bend area by residents and visitors through the implementation of paid parking technology and data systems to measure and improve accessibility;
- Reduced whole of life cost associated with replacement technology. The deployment of new parking technology will alleviate the problem of ageing parking assets, hand held enforcement devices and ticket machines; and
- Improved efficiency and effectiveness of compliance practices and subsequent income which is used to deliver services and amenity improvements.

Additional outcomes achieved by **Option B** include:

- Improved customer experience by introducing pay by phone and way finding mobile app technology to help the residents and visitors pay for paid parking and find available parking spaces;
- Fewer paid parking ticket machines (55) will need to be purchased for Fishermans Bend compared to Option A (83) based on the estimated take up of pay by phone.
- Motorists who have received an infringement would be able to view the photos taken by a parking officer of their vehicle. This would improve the transparency of the reason infringements were issued.

Additional outcomes achieved by **Option C** include:

- An additional 1,200 parking sensors in this Option would enable Council to obtain data regarding utilisation of parking spaces in major activity/commercial precincts for example in Bay Street, Port Melbourne, Clarendon and Cecil Streets, South Melbourne, Ormond Road, Elwood and Armstrong Streets, Middle Park. However, as parking technology is anticipated to change over the next few years the increased roll out of in-ground sensors may be premature and too great a financial commitment at this time. It is anticipated that cameras will be used rather than sensors in



the future to measure car parking utilisation. Council could consider installing additional in-ground sensors or alternative technologies in two to three years.

Financial implications

Capital budget is required to upgrade the parking technology for each option (A, B and C). The cost of the capital upgrades is the same in the 2017-18 financial year for all three options and includes the replacement of the hand held parking devices and installation of 500 parking sensors and project management and delivery costs. Installation of paid parking ticket machines in Fishermans Bend is proposed to be completed in 2018-19.

The capital cost of Option B is less than Option A for the 2018-19 financial year as with this option 26 fewer paid parking ticket machines need to be purchased due to the introduction of pay by phone technology. Option C proposes that an additional 1,200 sensors to be implemented in 2019-20 financial year.

The transaction cost of the new pay-by-phone parking technology, anticipated to be approximately 29 cents per transaction, will be added to the paid parking ticket machine fee amount. Motorists who do not want to use pay by phone to pay for their car park will continue to be able to use coin or credit card.

Table I below includes the budget allocated for parking infrastructure included in the Council Plan 2017-2027.

Table I

Total Approved Capital Budget in Council Plan 2017-27	FY 17/18 \$ 000	FY 18/19 \$ 000	FY 19/20 \$ 000	FY 20/21 \$ 000	FY 21/22 \$ 000	Total \$ 000
PJ172857: Parking Technology Renewal Upgrade Program	35	800	600	600	400	2,435
PJ175779: Paid parking ticket machine rationalisation	100	Nil	Nil	Nil	Nil	100
Total	135	800	600	600	400	2,535

Over the five year period the revenue collected will be greatest for Option C. The costs of installing in-ground sensors will be higher than the anticipated increased revenue collected from enforcement within the five year period.

Option B is anticipated to generate the best net financial position for Council. The revenue in Option B is greater than the capital expense over the five year period compared to Option C due to the additional sensors proposed in Option C (1,200). However the additional in ground sensors in Option C will achieve a greater financial return in the longer term.

Should Council wish to proceed with Option B, a significant capital investment would be required in 2017/18. This amount could be partly offset by project savings included in the 2017/18 budget approved by Council for parking projects. The remaining capital amount could be allocated from savings in the 2017/18 capital budget.

Considerations/Risks

In the short term, parking officer hours will not decrease, however be more effectively utilised to meet the parking requirements generated by the additional population growth and density.



It is anticipated that the revenue will increase in Carlisle Street and York Street (time limited parking areas) with the introduction of parking sensor technology, however we would expect to see increasing compliance over the coming years as people become more aware of this technology. Therefore, the increased revenue obtained parking sensors may not be sustained.

Parking sensors in Fitzroy Street, Station Pier, and Waterfront Place are expected to slightly increase revenue.

Community engagement on the introduction of paid parking ticket machines in Fishermans Bend will be conducted prior to the introduction of the paid parking ticket machines. The engagement process is likely to include informing the community of the proposed changes and seeking their feedback on location of machines and primary concerns. The outcome of the consultation and engagement process may impact upon the timeline for the roll out of the paid parking ticket machines, which is proposed to occur in July to October 2018.

Community consultation will also be conducted for the introduction of parking sensors however will include 'informing' rather than 'consulting' with the community.

Summary

The ITS ('Setting the Direction') position paper has three aims including *complete connections* (to improve connections of all modes of transport), *smart parking management* and *creating great places*. The smart parking technology upgrades proposed in this report are closely linked to the aims of smart parking management and creating great places.

Taking into account the community benefits and risks, Option B is the recommended option detailed in Section 3.2 "Options" of this report.

Option B achieves the objectives in the ITS and draft Paid Parking Policy, including:

- Improved user amenity, precinct vibrancy and place making by providing access to data that will enable Council Officers to better understand parking demand, to better plan road and parking infrastructure and supply, and thereby reduce traffic congestion;
- Better understanding of parking demand that can lead to a progressive decrease of on-street car parking by conversion to higher value community use;
- Improved parking availability with new technology and user fees linked to demand and land Use;
- Improved customer experience by introducing pay by phone and way finding mobile app technology to help the residents and visitors pay for paid parking and find available parking spaces;
- Supports equitable parking access through increased turnover and accessibility;
- Fewer paid parking ticket machines (55) will need to be purchased for Fishermans Bend based on the estimated take up of pay by phone;
- Motorists who have received an infringement would be able to view the photos taken by a parking officer of their vehicle. This would improve the transparency of the parking infringement process and may reduce the number of infringement appeals and;
- Ensure business continuity and secure revenue streams.

Should Council wish to proceed with Option B, a significant investment would be required in 2017/18. This amount could be partly offset by project savings in the 2017/18 budget approved by Council for parking projects. The remaining capital amount could be allocated from savings in the 2017/18 capital budget.



FURTHER SUPPORTING INFORMATION

4 ALIGNMENT TO COUNCIL PLAN AND COUNCIL POLICY

4.1 Strategic Direction 2: We are connected and it's easy to move around.

- Develop a Parking Management Plan as part of the Integrated Transport Strategy (ITS), and develop new policies for paid parking, on-street permits and parking provision rates for new developments.
- Implement clever parking initiatives that help manage parking supply and turnover, and improve customer experience.

3.3 Strategic Directions 6: Our commitment to you.

- Improving customer experience and technology and being more innovative.
- Investing in improving the condition, functionality, capacity and sustainability of Council assets.

5 CONSULTATION AND STAKEHOLDERS

3.1 The Parking Technology Strategic Business Case facilitates the decision making process to determine the pathway to deploy necessary parking asset upgrades and technology.

Therefore the immediate stakeholder engagement dates include:

- In January, we will provide information to the broader community about this project via Council's website and media release.
- This will be followed by targeted information to residents and businesses in areas where parking sensors will be installed.
- Separately a communication and engagement strategy is being developed for the introduction of paid parking into Fisherman's Bend. This process will be run via the ITS group with the following timelines:
 - Feb 2018 Commence Community engagement
 - July 2018 Implementation of paid and time based parking restrictions
 - Jan 2019 Adjust parking pricing or parking controls if required
 - Jul 2019 Inform Council on the post implementation evaluation

6 LEGAL AND RISK IMPLICATIONS

- The procurement process will be conducted in accordance with Council's procurement policy and the requirements of the Local Government Act 1989.
- The requirement to replace Council's Parking Infringement Issuing devices and software is critical to optimise motorists access to available car parking spaces and to ensure business continuity.
- Risk will be managed via the Safety and Amenity Project Control Group with regular updates provided to the Executive Leadership Group.



7 SUSTAINABILITY – Triple Bottom Line

7.1 ENVIRONMENTAL IMPLICATIONS

- Improved parking management will optimise parking access when combined with pricing policy and help with mode shift to sustainable transport alternatives.
- Pay by phone technology is expected to reduce paid parking tickets and infringements in the longer term.

7.2 SOCIAL & CULTURAL IMPLICATIONS

- The social impacts for the project on the community are identical in most part to any transport improvement. There are social impacts that improved parking solutions generates by reduced traffic congestion.
- Equity of access to parking will increase as improvements in parking management including paid parking pricing reflecting demand and informed by clear rationale and parking data.

7.3 ECONOMIC IMPLICATIONS

- The economic impacts will be realised over the coming years as the Parking Management Systems working in conjunction with Paid Parking Policy and other Integrated Transport Strategy initiatives delivers equitable access to parking, optimisation of parking access and robust data to inform decision making. Improved parking optimisation will ensure highest benefits based on the parking priority of areas such as increased turn over in commercial areas.

7.4 FINANCIAL IMPLICATIONS

- The financial Impacts are dependent on the option taken as outlined in detail within the Strategic Business Case and as summarised in Section 3.1

8 IMPLEMENTATION STRATEGY

8.1 TIMELINE

- A report will be presented to Council in early 2018 to approve the Paid Parking Technology Upgrade Tender. Community and businesses will be informed of final parking changes and parking sensor installation;
- The proposed timelines for implementing the parking technology upgrades is 2018.
- Proposed Implementation Timeline as detailed in Attachment 3. The proposed timelines are subject to a successful tender and evaluation, and the outcomes of the community engagement.

8.2 COMMUNICATION

- Community engagement plan is to be developed prior to the implementation of the Parking Technology Solutions, including Fishermans Bend paid parking, sensor deployment in impacted areas and introduction of the new pay by phone option for all paid parking areas within the municipalities.



9 OFFICER DIRECT OR INDIRECT INTEREST

9.1 No officers involved in the preparation of this report have any direct or indirect interest in the matter.