# ITEM No ...7.....

REPORT TO: CITY DEVELOPMENT COMMITTEE - 26 OCTOBER 2020

REPORT ON: UPDATE REPORT ON THE MOBILE INNOVATION LIVING LABORATORY

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

**REPORT NO: 261-2020** 

#### 1 PURPOSE OF REPORT

1.1 To provide an end of project update on progress of the Mobility Innovation Living Laboratory (The MILL) Phase 1 and to seek approval in principle to progress Phase 2.

#### 2 RECOMMENDATIONS

- 2.1 It is recommended that Committee:
  - a notes the outcome from the MILL Phase 1 Project; and
  - b delegates the Executive Director of City Development to carry out a procurement exercise for a consultant to deliver MILL Phase 2 as outlined in section paragraph 5.4 of the report.

#### 3 FINANCIAL IMPLICATIONS

- 3.1 The MILL Phase 1 project commenced in 2017 with a total funding package of £1.427m (article VII of the minute of the City Development Committee meeting held on 27 March 2017 refers). Dundee City Council identified £704k of revenue and capital funding for the MILL which was then supplemented by £152k from the (Scottish Cities Alliance) Cities Investment Fund. Together these two sources of funding were then used to secure £571k (40%) of match funding from the European Regional Development Fund (ERDF).
- 3.2 A programme management contract with a value of £465k was awarded to Urban Foresight in October 2017 (article VI of the minute of the meeting held on 30 October 2017 refers). The remaining MILL funding was allocated to individual projects bringing innovative transport solutions to Dundee. In August 2018, following a second round of procurement, City Development Committee (article II of minute of the meeting held on 20 August 2018 refers) approved the award of contracts to six individual suppliers, covering seven discrete pilot projects with a total value of £747,349 as shown in the table below:

Project	Supplier	Contract Values
Easy Access Car Club	Co-Wheels Car Club	£96,615
Community Minibuses	Co-Wheels Car Club	£32,205
Fleet Sharing	Enterprise Car Club	£150,250
Social Care Car Club	E-Car Club	£51,800
Smart Parking Sensors	Atkins/AppyParking	£283,879
Cashless Parking	JustPark	£132,600
Electric Bike Sharing	Ride On	£0 (zero cost award)

3.3 A contract for a further project theme "Advanced Use of Urban Data" was not awarded in 2018 due to there being no suitable tender submissions. Dundee City Council match funding for this project has subsequently been secured from Transport Scotland's Switched On Towns & Cities Fund and the Council is in the process of selecting a partner for the development of a smart

2 Report No 261-2020

mobility app which will use datasets from the MILL projects and other available sources to help travellers in Dundee make more informed decisions about their journey options.

## 4 BACKGROUND PROGRESS - PHASE 1 PROJECT UPDATES

- 4.1 The MILL and its component pilot projects sought to drive mobility innovation and test run new products while generating datasets to improve transport planning, encouraging modal shift and reducing emissions and carbon footprint. The programme also addressed a number of social, economic, and technological trends that are poised to change urban mobility. By 2030, mobility innovation has the potential to radically transform everything from power systems to the use of public space. This MILL was established as part of Dundee's contribution to the Scottish Cities Alliance's Smart City Programme allowing Dundee City Council to secure match funding from this ERDF strategic intervention. Scotland's 8th City was a collaborative programme of demonstrator projects delivering smart solutions that looked to embrace digital technology and data to make cities more attractive, liveable and resilient. Dundee was selected to lead on smart mobility and the projects described below were selected for inclusion in the programme because they embraced using new technology and data sharing to develop solutions to resolve existing problems. Experiences from the projects would then be communicated with all of Scotland's cities allowing learning to be shared, positive aspects to be further developed, and unsuccessful elements not to be repeated.
- 4.2 **Co-Wheels** are developing a new, innovative model of car club operation which from June 2020 has seen eight vehicles located in defined zones (small residential areas around Dundee, close to the city centre) rather than in marked car club bays. New functionality has been developed on the Co-Wheels App. This back to zone approach gives car club operators and their customers greater flexibility and removes the requirement for dedicated car club bays, thus simplifying expansion of operations.
- 4.3 In 2019, **Co-Wheels** installed telematics in two Council minibuses and are using the data collected to help develop a system that would allow greater use of the Council's minibuses by community groups in Dundee. The project sought to simplify the external hire of minibuses by taking the same operating protocols that had been developed for car hire and applying these to minibuses. By simplifying the booking processes, it was hoped that under-utilised minibuses would be hired more readily by local community groups. The Covid19 crisis has impacted on the demand for community minibuses and this could be expected to continue for the remainder of the year.
- 4.4 Enterprise Car Club have delivered six car club vehicles and these are now available for Dundee City Council staff use. The next step is to integrate the Council's fleet with the Enterprise booking systems so that these vehicles can be booked online using these tools. This would make vehicles available 24/7 and dispense with the need for collecting keys/signing out vehicles. Cars will be available to Council staff and then potentially to employees of partner organisations (e.g. Police Scotland, University of Abertay) and ultimately the wider Dundee public. In delivering this project it is hoped to make fleet vehicles more widely available to the local communities in which they are based while minimising asset under-utilisation. In addition to the cars available to staff, Enterprise have introduced further cars to the city for use by members of the public including one electric car.
- 4.5 The **E-Car Club** project was formally discontinued in September 2019 when it became clear that E-Car Club could not find a partner organisation within the Social Care Sector with whom to develop this product.
- JustPark launched in Dundee in April 2019 and fully replaced the RingGo payment system in July 2019. JustPark have used the data that they have gathered since launch to refine their parking prediction tool that helps guide drivers to areas of the city where there is likely to be available parking. JustPark have also initiated a number of other workstreams around enforcement, pre-booking of Electric Vehicle (EV) bays and emission based charging. JustPark also seek to integrate their app with the payments systems within Dundee City Council multistorey car parks opening up the possibility to develop new parking products for use by

3 Report No 261-2020

commuters who may not find a monthly permit an attractive option due to their working patterns (e.g. part-time).

- 4.7 The **Atkins/Appyway** project proposed the use of bluetooth parking sensors within parking bays to produce data that could then be used to manage parking within the city and develop innovative solutions to problematic parking issues. It would allow improved enforcement of time limited bays by providing accurate data about arrival times of vehicles, leading to more efficient deployment of enforcement officers. The project would also support the management and usage of EV bays and direct motorist to available parking bays. The project is expected to be delivered by summer 2021.
- 4.8 The public bike hire project was not financed by Dundee City Council or ERDF/SmartCity funding and was entirely reliant on the commercial investment made by the successful bidder. Dundee City Council contracted with a Spanish bike hire company called **Ride On**. During 2019, reasonable progress was being made with docking station sites being identified, a number of planning applications submitted and a Dundee based manager appointed by Ride On. As the city moves out of lockdown, installation work has recommenced and a lead sponsor Embark Group has been identified. Ride On have indicated that an initial launch in late 2020 is planned with further investment in more docking stations expected in early 2021. It is noted that Dundee City Council has secured additional funding from Transport Scotland to support the launch and roll out of the bike hire scheme in Dundee during Financial Year 2020/2021.
- 4.9 In common with other tests of change, not all aspects of the MILL project have been successful. The principal challenges faced in delivering MILL Phase 1 can be summarised as follows:
  - At the time of awarding the initial programme management commission to Urban Foresight, there was a recognition that the accompanying procurement exercise to select project partners had not secured the quality of submissions that Dundee City Council had expected. As a result, the commission with Urban Foresight was redesigned so that they would lead a follow-up procurement process to identify new partners for the pilots. Although it was hoped that this process would be completed by early 2018, contracts were not formally awarded until September 2018.
  - Following contract award in September 2018, due to staffing changes within Dundee City Council, there was a delay to the inception meetings to kick-start the project development stages. These issues were addressed in spring 2019 with new governance arrangements agreed and the establishment of a MILL project team made up of Council officers and Urban Foresight staff.
  - The expectation of the original programme management commission given to Urban Foresight in 2017 was that they would project manage the MILL programme and its constituent projects to their conclusion in December 2019. Due to the delays experienced to date, a number of projects have not been delivered. A Memorandum of Understanding with Urban Foresight ensured that they continued to deliver project management services without additional fees until 30 June 2020. Thereafter programme management has been led by City Development officers.
- 4.10 In summary, key developments to date from the MILL include the following:
  - Cashless payment service offering additional functionality to over 150,000 user sessions per annum.
  - Smart parking sensors to be deployed in 500 city centre locations.
  - Over 200 bookings of new zonal based Co-Wheels car club vehicles
  - Over 600 bookings of new Enterprise vehicles reducing demand for spot hires.
  - E-Bike docking stations installed at 12 locations across Dundee.

4 Report No 261-2020

#### 5 THE MILL PHASE 2 – FUTURE PROJECTS AND FUNDING

5.1 Although not directly funded within the ERDF 8th City programme, during the MILL Phase 1 period, Urban Foresight worked with Dundee City Council officers to identify potential sources of funding that could allow further investment in the city's transport networks and ensure Dundee retains its leading status as a city that is ready to adopt developing transport technologies. Urban Foresight added value by providing additional expertise and knowledge in this area and they have supported the submission of multiple bids that have secured awards in the region of £7m for low carbon and mobility innovation projects. This funding will allow Dundee City Council the opportunity to move into a second phase of the MILL without the requirement to identify capital or revenue funding from Council budgets. The external funds have come from three primary innovation programmes – Clean Streets (Innovate UK), Switched on Towns & Cities (Transport Scotland) and the MAAS Investment Fund (also Transport Scotland). These grants can be used as match funding, with which a further £750k (already earmarked for Dundee by the Smart Cities programme management office) can be secured and invested in Dundee's transport infrastructure.

- 5.2 The £750k of ERDF funding would be used to support the development and extension of four discrete projects under the banner of the MILL programme. While these projects have the potential to stand alone, bringing them together within a second phase of the MILL programme will allow each development to be integrated with each other and the successful elements of the first phase MILL projects. Moving in to a second phase of the MILL would re-establish a management structure that would give the MILL phase 1 projects increased support to realise their full potential in 2021. It would also provide an environment in which inter-related developments can take greater advantage of the datasets that become available for wider sharing and product development. Further, moving to MILL Phase 2 will help Dundee City Council position itself to secure further funding streams and allow the current strategy of supporting self-funded mobility innovation in Dundee to continue beyond the period of the Smart City ERDF strategic intervention.
- The four new projects seek to take Dundee to the next level of mobility innovation with a specific focus on EV technology and the transition to decarbonised travel. The new projects proposed to be managed through a second phase of the MILL programme have been termed as Project ZED (Zero Emission Dundee) and are as follows:

## Mobility as a Service

E-hailing, car sharing and new modes of mobility such as e-scooter and e-bike are likely to see rapid expansion as they offer a cost-effective, convenient, and less stressful alternative to car ownership. Mobility as a Service (MAAS) will be a series of innovation pilots introducing mobility services which integrate smart ticketing for journeys with event ticketing. This includes establishing flexible travel options to the Michelin Scotland Innovation Parc (MSIP), St Andrews (in preparation for the 150th Open Championship), Dundee Airport and international links through Edinburgh Airport. It will also include strategic investment in enabling infrastructure, such as EV charging and wider systems for collecting and sharing real time data.

## **Electric Vehicle Charging Innovation**

In 2019, EV sales set another sales record globally, and EVs became much more prominent in the automotive markets. EVs are nearing an inflection point due to changing consumer attitudes, battery economics, infrastructure, and regulatory policies. Together these have placed new demands on the auto industry. Solutions to improve the availability of EV charging infrastructure throughout the city, particularly for those without access to off-street parking. This will be achieved through a pilot of innovative on-street "pop-up" EV charging infrastructure throughout the city and by making data associated with Dundee's pioneering EV charging hubs open to innovators for generating insights and services around current and future charging models in cities and, therefore, optimising air quality management. To support this, the workstream will include strategic investment in a fourth EV charging hub for the city, with integrated charging and access control.

Author: John Berry

## **Innovation in Fleet Services**

Deployment of fully electric HGVs, including minibuses and refuse collection lorries, with associated development of software and hardware to support smart charging and dynamic scheduling of the vehicles.

#### **Multi Modal Mobility Hub**

Exploring how to repurpose city centre car parks as hubs for innovative low carbon and active transport options. A range of innovative mobility technologies and services will be piloted at a location to be determined.

The next step for Dundee City Council is to re-establish a MILL programme office and project management function that will support the development of the second phase of the MILL programme (Project ZED - Zero Emission Dundee) and successfully integrate with the earlier phase 1 projects (Share MORE). Dundee City Council will therefore procure an external consultancy to provide full programme management support for this next phase while ensuring appropriate project governance by the Council. External management costs will be met from the external grants awarded, with Dundee City Council officer time being met internally. Lessons have been learned from the first phase of the MILL programme and the next phase will focus on innovative solutions that complement existing projects and address transport issues identified by Dundee City Council.

#### 6 POLICY IMPLICATIONS

6.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. There are no major issues.

### 7 CONSULTATIONS

7.1 The Council Management Team were consulted in the preparation of this report.

## 8 BACKGROUND PAPERS

8.1 None.

Ewan MacNaughton Head of Sustainable Transport and Roads

Robin Presswood
Executive Director of City Development

Dundee City Council Dundee House Dundee

EMacN/JB/KAS 15 October 2020