CABINET

Report subject	**Smart Place Programme**
Meeting date	15 January 2020
Status	Public Report
Executive summary	A Smart City or Place transforms the way that residents can live their lives, through the provision and adoption of digital applications and services. It empowers our communities with the tools required to drive behaviour change, enabling them to help solve the complex social, economic, environmental and financial challenges our place is facing This report explains how a Smart Place Programme for Bournemouth, Christchurch and Poole could enable communities to work with the Council and other organisations to create new applications and services through new business models and better use of data. It also explains how a Smart Place Programme can and is helping the Council to deliver its Corporate Strategy and boost income to help reduce the financial challenges it faces. As well as driving social transformation and behaviour change, it also drives value in our place, through the provision of tools to enable large local multi-national organisations and small local businesses the opportunity to remain competitive More intensive work is required to establish an investment plan that will be used to quantify the benefits of the Programme.

Recommendations	**It is RECOMMENDED that Cabinet endorses:**
	
	1. The continuation of work by officers in developing the Smart Place programme including:
	
	   (i) The development of a Smart Place Investment Plan (subject to funding from Dorset Local Enterprise Partnership)
	
	   (ii) The consideration of the Smart Place Investment Plan at a future Cabinet meeting

	(iii) The continuing development of Smart Place Programme applications, use cases and associated benefits for residents and businesses (iv) The development of a Smart Place workstream within the Key Cities Programme
Reason for recommendations	To quantify the benefits of the Smart Place Programme To show leadership at a national level To support the delivery of the Corporate Strategy To encourage the engagement of all Council teams and communities in the development of the Programme

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Wards	Council-wide
Classification	For information and decision

Background

Global Context

1. Cities around the world are exploring what it means to be a Smart City, with places such as Singapore, Toronto and New York currently leading the way. In Europe, Amsterdam, Berlin and Copenhagen are considered exemplars, whilst in the UK, the UK Smart Cities Index 2017 puts London and Bristol as 'Leaders' and places such as Nottingham, Oxford and Milton Keynes as 'Contenders' **See Background Paper 1**

2. There is no universal definition of a Smart City or a 'one size fits all approach' but it is generally acknowledged that a Smart City utilises big data, connectivity and emerging technologies to help address local problems and challenges. These local challenges are identified by local communities and organisations and the solutions are co-delivered

BCP Smart Place Challenge

3. The Bournemouth, Christchurch and Poole (BCP) region has a thriving economy, a world class natural environment and is an attractive place to live, work and visit. More people are choosing to live in the area and people's life expectancy is increasing. This is projected to continue for the next twenty years and will put increasing pressure on our transport systems, healthcare, housing, energy, communities and our environment.

4. BCP is facing unique challenges in how it manages sustainable growth such as: its demographic (an elderly population that over indexes against UK combined with a younger population driven by the success of the two universities); its transport network (being a coastal region restricts our ability to make as many interventions); its economy (balancing the needs of a transient and seasonal tourism economy with growth in high value sectors such as advance manufacturing, creative & digital and financial services) and protecting its natural environment (balancing the requirements of a growing region with climate change ambitions)

5. There is also reducing resource available to deliver services. The combination of increasing demand and reducing resources mean that the breadth and quality of

services residents and businesses access may suffer in the future, which may have an impact on people's quality of life.

Smart Place Vision

6. The proposed Smart Place Programme for Bournemouth Christchurch and Poole will help to respond to these challenges, help deliver the Council's vision for vibrant communities with a high quality of life where everyone plays an active role and aims to be a UK exemplar It does this by harnessing the power of co-operative delivery, developing innovative business models, through the provision of digital infrastructure connectivity and optimised use of data and analytics.

7. The Programme will work with communities, the public sector, voluntary sector, academia and businesses, indeed everyone connected with and in our places. Doing this together means there is the potential for a transformational impact..

What is a Smart Place?

8. A Smart City or Place transforms the way that residents can live their lives, through the provision and adoption of digital applications and services. Examples that are already part of our daily lives are Netflix, Match.com and Ebay, which have all been possible because of better access to digital connectivity, improved data and analytics and advancements in mobile phone technology. Cities such as Barcelona, Seoul and Shanghai are already adopting Smart City applications and services to transform the way their places operate.

9. The Smart Place Programme will, with others, aim to create a series of applications and services that residents and businesses in Bournemouth, Christchurch and Poole can use to transform their lives. They will also help us deliver the Corporate Strategy. For example, this might be a volunteering app, where people who need support are connected with those who can best provide it. The provision of a local digital marketplace for independent shops on the high street so they can remain competitive online; or a multi-modal transport app which enables people to make more sustainable travel choices. This is highlighted in Appendix A in the top layer of the diagram.

10. To do this, the Programme will need to develop the following foundations:

   (i) A mechanism for delivery that enables joint working with the public sector, private sector, volunteer sector and communities across the area. A Special Purpose Vehicle (SPV) could be an option that is considered

   (ii) A data hub (Appendix A middle layer) that combines   local authority data withwith public and voluntary sector data providing optimised information to applications and services, making them useful for users

   (iii) Ubiquitous, high speed, reliable and affordable digital connectivity infrastructure across the area so that applications and services can be easily accessed, anywhere, any time (Appendix A bottom layer).

(iv)   New income generation streams derived from the applications and services that can be re-invested into the area, enabling the BCP Council and potentially other public sector partners to see a long-term income stream

(v)   A platform for community participation, where communities are able to directly develop their own applications (with common design principles needing to be met)

11. By working together with others, the Smart Place Programme will encourage local social innovation that will be fundamental in helping to solve place-based problems such as climate change, the demands of a growing population and the decline of the high street.

12. Pilot initiatives are currently being considered and trialled which directly support delivery of the Corporate Plan, with all five priorities are being addressed, including:

(i)   Sustainable Environment: An application has been developed for Officers to remotely monitor cliff stability at East Cliff in real time. Data on soil movement is collected and transmitted to a computer dashboard, which alerts Officers to irregularities, enabling earlier intervention measures. Reliable digital connectivity is required for this application to function

(ii)   Fulfilled Lives: An application, myHeart, has been developed by the Dorset Clinical Commissioning Group to enable patients to manage their own care. Consultants are able to remotely monitor patients through wearable technology and a mobile phone application and make interventions in real time where necessary. Reliable connectivity is required for this application to function outside the home

(iii)   Brighter Futures: An application is being considered that may enable Children's Services to use historic data from a wide range of sources to predict and alert where early intervention may be needed as part of the Troubled Families Programme. This is being considered by the Children's Services Director who will lead on appropriate data sharing across organisations and any privacy impact assessment required

(iv)   Dynamic Region: the development of a pilot to include new connectivity technologies such as fibre, 5G and Internet of Things (IoT), contributes to the development of a 21st century digital infrastructure

(v)   Connected Communities: An application that connects people who want to volunteer with the people who need the help. Data sharing and machine learning are required for this application to function

13. The Smart Place Programme complements the Council's new Operating Model by helping to either reduce, delay or stop demand upon services and by delivering significant cost and efficiency savings. It also features as one of the key pillars of the Council's draft Digital Strategy.   However, this programme also has the potential to create significant income generation opportunities for the Council and create the opportunity for private capital investment in digital connectivity infrastructure (not

Local Authority capital investment). The new income streams can be re-invested into BCP Council helping to deliver long term financial sustainability.

Smart Place Investment Plan

14. It is clear that there is significant financial (income), economic, social and environmental value in the applications and services that could be created through the Smart Place Programme.

15. A bid has been submitted to Dorset LEP for funding to produce a Smart Place Investment Plan that will subsequently be used to attract significant inward investment of up to £1bn for the area to create a Smart Place. This will enable the implementation of the foundations outlined in 12 which will then create the environment for the development of future applications and services. **See Background Paper 2**

16. There is more detail in the Background Paper, however the key objectives of the Investment Plan are:

    (i)   the development of new business models for income generation for BCP Council through applications and services

    (ii)   A cost/benefit analysis of the digital connectivity infrastructure and Place Data Platform required to enable maximum demand for applications and services

    (iii)   Assessment of anticipated economic, social and health benefits and cost savings for the public sector

    (iv)   Recommendation of the appropriate mechanism required to deliver the Programme, likely to be a Special Purpose Vehicle, supported by legal and procurement advice

    (v)   create the case for raising private investment for the programme

17. The Investment Plan bid has been assessed by Dorset LEP and is shortlisted under its Pipeline funding programme. It is due to be considered for funding in January 2020. If funding is secured, the Investment Plan will be presented to a future Cabinet upon completion.

Smart Place Pilots

18. The Council is already running several Smart Place Pilots. One is funded by the Dorset Local Enterprise Partnership and is focused on the Lansdowne area of Bournemouth. This is helping BCP Council to develop and conduct use cases and trials and for partners to create new applications and services in health, advanced manufacturing and other verticals. The Smart Place Pilot (Lansdowne) Cabinet Report was approved in December 2019.

19. BCP Council is also a participant in SPEED (Smart Ports Entrepreneurial Ecosystem Development), a European Union funded programme across Belgium, Netherlands,

Poole, Portsmouth and Portland specialising in the development of applications and services in ports and logistics.

20. Both these pilots will trial new connectivity technologies, engagement programmes and business models, learning about associated costs, benefits and risks to help inform the Smart Place Programme.

Next Steps

21. To realise the potential the Smart Places Programme can generate, Cabinet is asked to approve the recommendations outlined. By doing so, BCP Council has the opportunity to show real leadership on a national and even international level. A draft 'Smart Place Prospectus' is being developed which will be used to raise the Council's profile as a leader on this work and to attract further investment. This is an exciting and game-changing approach to the challenges our places face now and into the future, and one that if structured correctly will also yield financial benefit to the Council helping to ensure it remains financially sustainable.

2   Options Appraisal

22. Option 1: To approve the recommendations and develop a robust analysis of the social, economic, environmental and financial benefits, costs and risks involved in a Smart Place Programme for the entire BCP region, giving us the ability to attract major inward investment into the area

23. . Option 2: To not approve the recommendations and rely on the Smart Place Pilot (Lansdowne) to inform only the economic benefits of the Smart Place Pilot (Lansdowne) (conducted for the purposes of the Local Enterprise Partnership funding reporting requirements)

3   Summary of financial implications

24. The Investment Plan will provide the information to understand what the appetite is from private investors that may be leveraged into the area. It is possible that external legal support will be required to support the internal resource if the recommendations are agreed and the detailed Investment Plan developed. This will have some financial implications which will be funded from the budget secured to write the Investment Plan **Summary of legal implications**

25. Use cases are being conducted either with internal departments, other private/public sector bodies and/or under the banner of the Smart Place Research & Development Consortium. The scale of the use case trials means that these are being developed and decisions made within services at officer level and legal implications are being considered as part of normal working practice.

26. There will be several wide-ranging legal implications arising in future should the recommendations be agreed. This could include work required to consider mechanisms to enable the necessary joint working such as the potential option of a Special Purpose Vehicle and data sharing, ensuring GDPR These will be explored in detail as part of the proposed Investment Plan. Therefore, the intention is that these

legal implications will be considered in a future Cabinet report relating to the Smart Place Investment Plan.

5. Summary of human resources implications

27. Staffing: Two existing full-time roles will continue to support the Smart Place programme. Approximately 25% of their time is being recharged to the Dorset LEP-funded Smart Place Pilot (Lansdowne). Should further funding be authorised by the LEP board to fund the development of the Smart Place Investment Plan this funding will support internal resources required from legal, finance and procurement.

6   Summary of sustainability impact

28. If Cabinet agrees to the recommendations, it is expected the Investment Plan will outline of the provision of applications and services that will enable the communication of relevant, up-to-date and accurate information to residents, such as around waste and energy management and sustainable transport – helping to facilitate behavioural change, with a positive impact on the environment and climate change.

7   Summary of public health implications

29. If Cabinet agrees to the recommendations, it is expected the Investment Plan will outline major positive public health impact such as outcomes from travelling more sustainably via walking and cycling, management of self-care, and reduction in social isolation here is the potential to transform how BCP delivers services, particularly in Adult and Social Care.

Note: Following Overview & Scrutiny's Call for Evidence: 5G Connectivity in the BCP area the panel has made recommendations around 5G deployment. These recommendations were approved in the December Cabinet Report on the Smart Place Pilot (Lansdowne). When 5G is deployed, levels of non-ionizing radiation will be within the limits set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and be continuously monitored

8   Summary of equality implications

30. If Cabinet agrees to the recommendations, it is expected the Investment Plan will outline significant beneficial impact upon equality across the Bournemouth, Christchurch and Poole area through the provision of ubiquitous connectivity, the ability to share and access data and therefore associated Council services. An Equalities Impact and Needs Assessment will be developed as part of the Investment Plan

9   Summary of risk assessment

31. As the programme is currently unfunded, the biggest current risk to the programme is not securing funding from the LEP to develop the Business Case for investment as the full extent of the potential benefits will not be produced.

32. Through the creation of the Smart Place Research & Development Consortium, BCP Council is working with local and multi-national partners via a Memorandum of Understanding on pilot projects. This means the Council is sharing the risk by working with other organisations in the public and private sector. 33. Through the

Smart Place Pilot (Lansdowne), the Council is already learning about the costs, benefits and risks through these type of technologies through this pilot project which will continue until March 20218

Background papers

 1 UK Smart City Index 2017

2 Dorset LEP Smart Place Investment Plan bid

Appendices

A: Smart Place Programme Diagram