




STAFF REPORT

Date: Tuesday, September 27, 2016
To: Bryan H. Montgomery, City Manager
From: Kevin Rohani, P.E. Public Works Director/ City Engineer
SUBJECT: Smart City Program for City of Oakley

Approved and Forwarded to City Council:


Bryan H. Montgomery, City Manager

Background and Analysis

The City of Oakley as part of its growth and progression into the future is interested in the identification and application of smart city technologies to enhance service delivery, lower operational costs, improve residents' quality of life, and serve as a catalyst for accelerating the City's growth ambitions. The proposed City of Oakley Smart City Program (OSCP) concept plan will define the steps necessary to achieve these objectives -- which is to provide the City with a blueprint to implement smart city services over time, as funding becomes available.

A smart city, as defined by the Smart Cities Council, "gathers data from smart devices and sensors embedded in its roadways, power grids, buildings and other assets. It shares that data via a smart communications system that is typically a combination of wired and wireless. It then uses smart software to create valuable information and digitally enhanced services."

The fusion of information and physical layers into an integrated and synergistic portfolio of smart city services will transform how we live, work, learn and play. The benefits include significant operational efficiencies coupled with economic development opportunities through creation of a platform which promotes connected, sustainable and thriving communities. Smart city services leverage advanced technologies, including high speed communications, Internet of Things (IoT), intelligent software, data analytics and mobility solutions that will accelerate the urban landscape transformation taking place. Globally, numerous brand new smart cities are being built while in other locations this change is starting from within existing environs. Not all of these areas will be relevant to the OSCP objectives but they illustrate the range of services.

Staff believes development of the OSCP will enhance the City's ability to meet the objectives of the General Plan and ultimately position Oakley as one of the first smart

cities in California. This will also increase our effectiveness in attracting commercial development which will bring resources for funding city services.

Fiscal Impact

The Contra Costa Transportation Authority (CCTA) Measure J Funds will provide the initial funding for City of Oakley's Smart City Program, and no general fund resources will be needed for the project implementation.

Staff Recommendation

The Oakley City Council to provide comment and input to staff towards the Smart City Program and its implementation.

Attachments

- City of Oakley Smart City Program Concept Plan

City of Oakley Smart City Program
Concept Plan
Third Level Title



Prepared for:
City of Oakley

Prepared by:
Arya Rohani, PE

August 31, 2016

Background

The City of Oakley is interested in the application of smart city technologies to enhance service delivery, lower operational costs, improve residents' quality of life and serve as a catalyst for accelerating city's growth ambitions. This City of Oakley Smart City Program (OSCP) concept plan is designed to define the steps necessary to achieve its objectives – which is to provide the city with a blueprint to implement smart city services over time as funding becomes available.

What is a Smart City?

Most cities today aren't that different compared to 50 or even 100 years ago. Except for newer building designs, the roads, water infrastructure, power lines and other urban services are essentially as they were last century. However, this is about to change in a significant way. Recent advances in information technologies have created a unique opportunity to integrate various city services in ways unimaginable just a few years ago.



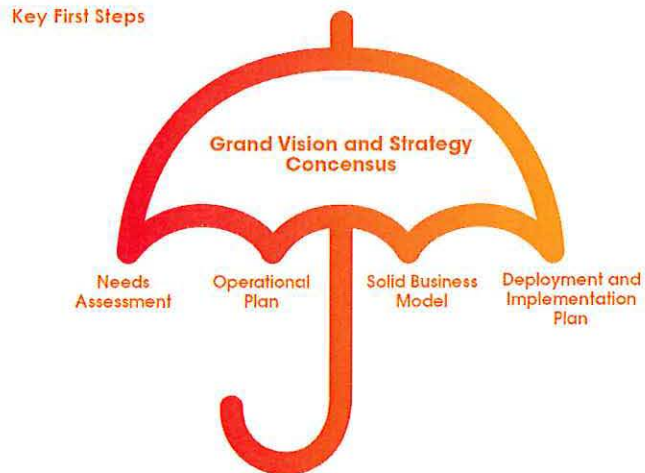
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City of Oakley Smart City Program

It's important to take the long-term view in development of the OSCP. This is because each city has unique needs and objectives which should drive the number, types, and timing of smart city services that will be deployed over time. The graphic to the right represents the initial key steps.



Grand Vision and Strategy:

During the concept development phase of OSCP (September to December 2016), Stantec will share information on current trends in smart city services and benefits in order to shape your future vision and strategy. A key to this process is understanding Oakley's priorities and helping the City align them with relevant smart city services.

This will allow us to focus on what's most important for Oakley's future while at the same time help the city prioritize funding and implementation activities. From a project planning perspective the following tasks are proposed:

Tasks	Objectives
Smart city primer	Smart city definition and initial list of potential services (Please advise on appropriate forum/timing. I can do the presentation in person or via a conference call with slides)
City of Oakley opportunities and challenges	Alignment with the City's General Plan policies and development challenges and opportunities
City Council Presentation	Presentation on project status and objectives (Sept. 27)
Review of infrastructure investment requirements	Seek input on initial list of smart city services and high level discussion of infrastructure investment requirements
Selection of priority smart city services and implementation strategy	Define desired smart city services and order of priority
Review OSCP Draft Report	Review draft report and seek stakeholder feedback
Present Final OSCP Report	Present final report and seek stakeholder consensus