



# City of Chula Vista

## Staff Report

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**File#:** 18-0149, **Item#:** 13.

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### UPDATE ON THE SMART CITIES STRATEGIC ACTION PLAN

- A. RESOLUTION NO. 2018-115 OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ACCEPTING BIDS AND AWARDING A CONTRACT FOR SERVICE TO MAGELLAN ADVISORS
- B. RESOLUTION NO. 2018-116 OF THE CITY COUNCIL OF THE CITY OF CHULA VISTA ADOPTING THE OPEN DATA POLICY

### RECOMMENDED ACTION

Council adopt the resolutions.

### SUMMARY

The City of Chula Vista adopted a Smart City Strategic Action Plan (Action Plan) in September 2017 establishing itself as a leader in the growing “smart city” movement, earning recognition locally, nationally and internationally for its innovative planned approach to using technology to create a more efficient and effective government. As a smart city, Chula Vista will leverage innovative technology and data tools to better serve and engage citizens, enhance sustainability, improve public safety and promote local economic development. The Smart City Strategic Action Plan aims to help the City of Chula Vista:

- Become more responsive by working with our communities, residents and businesses to improve city operations and services, including public safety and citizen engagement
- Become more transparent by using data and analytics to improve city services and operations, and ensuring public access to city performance indicators
- Lay the ground work for economic development to attract new businesses, but also help grow and support current Chula Vista businesses

This staff report highlights initiatives currently underway and progress to date. This staff report also outlines details on the Citywide Telecommunications Master Plan contract award and the Open Data Policy that are being brought forward to the City Council for action.

### ENVIRONMENTAL REVIEW

#### Environmental Notice

The activity is not a “Project” as defined under Section 15378 of the California Environmental Quality Act State Guidelines; therefore, pursuant to State Guidelines Section 15060(c)(3) no environmental

review is required.

### **Environmental Determination**

The Director of Development Services has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that the activity is not a "Project" as defined under Section 15378 of the State CEQA Guidelines because it will not result in a physical change in the environment; therefore, pursuant to Section 15060(c)(3) of the State CEQA Guidelines, the activity is not subject to CEQA. Thus, no environmental review is required.

### **BOARD/COMMISSION RECOMMENDATION**

Not Applicable

### **DISCUSSION**

The City of Chula Vista's Smart Cities Strategic Action Plan was adopted to serve as a roadmap and outline goals, objectives and initiatives that will help the City achieve its smart city vision. The Smart City Strategic Action Plan is built around ten primary objectives that are organized into four overarching goals. Each objective is supported by a number of initiatives and action steps. City staff continues to work with department heads and key stakeholders on progress towards implementation of the various initiatives. Since the Council adopted the Action Plan in September 2017, department heads and their teams across the City have accomplished the following key milestones:

- The City implemented a new Computer Aided Dispatch (CAD) system in the Police Department that provides law enforcement personnel with advanced data and analytics capabilities. The new CAD system allows real-time tracking of all patrol vehicles and their associated active and ending calls for service, provides more automation, ensures less repetitive data entry, and increases officer dispatch efficiency.
- The City developed and adopted its first ever Traffic Signal Communications Master Plan to help guide the City's toward effective modernization of a comprehensive traffic signal communications network which will support cutting-edge transportation systems.
- City staff also established a Master License Agreement (MLA) for Wireless Facilities on City Poles in the Right-of-Way between the City and various public communications companies for the installation of small cell wireless communication facilities on City-owned poles (light and traffic). The MLA includes mutually beneficial and agreed upon terms that are consistent with those provided to other wireless carriers that are subject to the City's review and approval.
- The City was selected as one of the 100 Cities to participate in the What Works Cities (WWC) initiative sponsored by the Bloomberg Initiative. The focus was on the creation of an Open Data Governance Standards for Public Safety.
- City staff has drafted the City's first ever Open Data Policy to be presented before City Council in June 2018.
- The City, through collaboration with San Diego Gas & Electric and the Chula Vista Elementary School district, launched a Smart City Education center at the Central Library focusing on teaching our children the importance of energy efficiency and renewable energy, by making

learning of science, technology and engineering fun and engaging.

- In partnership with San Diego Gas & Electric through the Power Your Drive Program, the City has installed 73 electric vehicle charging stations with a goal of deploying 123 citywide.
- The City adopted the 2017 Climate Action Plan developed through a “bottom up” approach by engaging the community, businesses and residents. The CAP has a 100% clean energy commitment by 2035. Because a ‘smart city’ is a ‘sustainable city’, there are a number of opportunities to use sensors and data analytic tools to track and manage progress on reducing greenhouse gases, reducing water waste. These include smart irrigation controllers, remote management of building systems, leak detection sensors, air pollution monitoring devices, and energy management tools.
- The City has upgraded irrigation systems at multiple city parks and facilities with smart irrigation technology that allows remote operation and flow sensor leak detection to help achieve our water conservation goals.
- The City completed a waste management pilot project which used sensors on bus stop trash cans to track waste generation patterns and optimize collection.
- The City was recognized with the Smart50 Awards by the 2018 Smart Cities Connect Conference & Expo hosted by Kansas City. The awards annually recognize global smart cities projects, honoring the most innovative and influential work.
- The City received an award from the American Planning Association (APA) Technology Division for its Smart City Strategic Action Plan announced at the 2018 APA National Conference.
- The City continues to be involved as a leader in the advancement of the Autonomous Vehicle Proving Grounds (AVPG) as part of the joint proposal with Caltrans and SANDAG, designated by the USDOT as one of 10 Autonomous Vehicle Proving Grounds (AVPG) across the United States.
- The City has continued to implement multiple exciting Smart City pilot programs to serve as a model for municipalities across the country. This includes exploring smart street lighting technology to improve public safety, mobility and transit across the city.
- The City is currently implementing an entirely new core network which will allow significantly improved data transfer and security not only for current hardware/software platforms, but will be robust enough for any projects imagined over the next 10 years.
- The City successfully completed a comprehensive RFP process to identify a consultant to assist with the development and adoption of a Citywide Telecommunications Master Plan.
- Chula Vista, the Port District and RIDA successfully executed a Development Agreement for the multi-billion dollar Chula Vista Bayfront Master Plan – one of the largest fully-entitled waterfront developments on the West Coast. The Bayfront is one of the City’s biggest opportunities to showcase leadership in smart cities. The vision is to use the Bayfront as a test

bed where smart city applications can be deployed and then scaled up to other parts of the city to enhance sustainability, improve public safety and promote local economic development.

City staff is excited about the progress we continue to make and the impacts our smart cities efforts will have towards improving city operations and services, saving of tax payer's dollars, improving public safety and promoting economic development by encouraging business growth and jobs in our city. Chula Vista continues to work with our regional partners, including the Port of San Diego, SDG&E, SANDAG, Caltrans, City of San Diego and Cleantech San Diego to identify opportunities for successful deployment of smart city technologies across our region. The City will continue to ensure that our smart city initiatives are sustained by long-term stakeholder engagement across our region.

The City is proud and honored to have received numerous invitations to present at national conferences since the adoption of the Action Plan in September 2017. This is a testament to the fact that Chula Vista is being recognized as leader in innovation, sustainability and smart cities across the nation. The following is a list of key conferences the City of Chula Vista has been invited to give a presentation and/or participate on a panel in the past 9 months:

- **Smart City InFocus Forum, Yinchuan, China:** The City was invited to present on a smart cities panel together with the City of San Diego. Chula Vista was also nominated for the City Leadership & Adoption Award.
- **San Diego Smart Tech Summit, Coleman University:** The City was invited to present on a smart cities panel together with the Deputy COO, City of San Diego, and the CEO, Cleantech San Diego.
- **2018 DistribuTECH Conference and Summit, San Antonio:** The City was invited to present on a smart cities panel together with the Director of Sustainability, City of Charlotte, NC and Director of Civic Investment, City of Newport.
- **National Association of Women in Construction (NAWIC), San Diego:** The City was invited to present on our smart city efforts, transformation and smart cities strategic action plan initiatives
- **National Telecomm & Information Admin, US Department of Commerce:** The City was invited to present on a national webinar on our regional collaboration efforts and smart cities strategic action plan initiatives.
- **2018 Smart Cities Connect Conference & Expo, Kansas City:** The City won the 2018 Smart 50 Award and was also invited to present on a panel on energy, resiliency and smart infrastructure together with the Director of Sustainability Denver, CO, Charlotte, NC and Director of Sustainability, Orlando, FL.
- **Harvard Smart Cities Innovation Accelerator Forum, San Diego:** The City was invited to present on a panel on our local government partnerships and smart cities efforts together with SDG&E, Cleantech and the Deputy COO, City of San Diego.
- **2018 Smart Cities Week, Silicon Valley, San Jose:** The City was invited to present on a panel on sustainable and resilient smart cities together with the Environment Director for City of San Francisco and the Director of Sustainability, City of Oakland.

Knowledge sharing is a critical component of the successful implementation of the Smart Cities Strategic Action Plan. We hope to continue receiving invitations to participate in various national and

international forums to discuss best practices and share critical knowledge.

As next steps, the City will continue with the implementation efforts, including refining the Smart City Strategic Action Plan through marketing and outreach, as well as the creation of website content on smart city initiatives for city website and social media pages. City staff will work to promote unmanned aerial vehicles (UAV) and autonomous vehicle (AV) opportunity areas in Chula Vista, including identifying target audiences, potential business/industry partners and interagency government representatives. City staff will also be working to draft a Request for Expressions of Interest (RFEI) for the city's release to solicit expressed interest from businesses and agencies in developing partnerships to implement the city's smart city strategy and initiatives for unmanned aerial vehicles (UAV) and autonomous vehicle (AV). We are excited about the opportunities that exist to encourage economic development and the creation of jobs in Chula Vista.

### **Citywide Telecommunications Master Plan**

The most critical element of all smart city efforts is the existence of reliable and secure broadband connectivity. The Smart City Strategic Action Plan identifies improving the City's network as a top priority and since the adoption of the Action Plan; City staff have been working towards accomplishing this goal. In August 2017, the City released a Request for Proposals (RFP) for a consultant to help City staff develop a Telecommunications Master Plan. The City of Chula Vista wishes to have a robust telecommunications infrastructure platform in order to further its goals of being a "Smart City", whereby significant cost savings, system availability, and increased customer service can be achieved through the use of connective technologies to reduce power/water consumption, provide early warning for systems which are experiencing technical issues, enhance monitoring capabilities, remote sensing, providing public access to meaningful data (budget, public works projects, etc.) and deploy new and possibly unknown technologies in the future to further the City's Smart City endeavors.

The goals of the Smart Cities vision are to:

- 1) Connect all City facilities, providing a secure, cost effective, redundant and flexible network infrastructure to meet current and future data/video/voice communication needs.
- 2) Provide a network infrastructure to enable the City to meet aggressive energy savings requirements for new expansive Bayfront development (see below for further information).
- 3) Provide a network infrastructure which facilitates innovation and economic development within the City.
- 4) Provide timely and accurate data to centralized location(s) from a myriad of sources including IoT devices, mobile units (Police, Fire, Public Works, etc), and other infrastructure in order to be able to maximize efficiency and make timely and accurate business management decisions.
- 5) Connect citizens to City services and provide access to data which will allow citizens to be more connected to their government. Further, the City envisions significantly reducing the "digital divide" providing access to the internet and City digital services to underserved communities.

- 6) To the extent practical, develop Public/Private partnerships to further the Smart Cities vision to utilize existing and future resources which will provide a Smart Cities framework which provides benefits to all partners involved in the Smart City vision.

Because of the size, scope and complexity of the Smart City project, staff conducted a Request for Proposal seeking qualified firms to develop a Telecommunications Master Plan. The Telecommunications Master Plan will create the template for the City to move forward in meeting the Smart City visions and goals. The City received three responses to the Request for Proposal and all three vendors were interviewed by a cross-departmental team of employees who possess the appropriate technical and policy backgrounds to make the selection.

#### Telecommunications Master Plan Team

- Edward Chew - Director of Information and Technology Services
- Iracsema Quilantan - Assistant Director, Public Works
- Eric Wood - Police Department Technology Manager
- Eddie Flores - City Traffic Engineer
- Dennis Gakunga - Chief Sustainability Officer

The three respondents were:

- Century Link
- Client First
- Magellan Advisors

The Telecommunications Master Plan team selected Magellan Advisors to develop the Telecommunications Master Plan. Their presentation and answers to questions from the team best met the requirements to conduct the project for the City. They also demonstrated their extensive experience working with municipal and other governmental agencies on similar projects. The amount for the consultant services performed shall not exceed \$132,000.

#### Open Data Policy

A key goal of Chula Vista's Smart City Strategic Action Plan approved by Council in September 2017, is to continue efforts to become a more open and transparent City. In order to support this goal, the City has set an objective to maximize the use of data and analytics to improve city services and increase public access to city information. The development of an Open Data Policy is an effective way for the city to improve public access to information about what the city is doing and how public money is spent. Chula Vista's Open Data Policy is the first step in the realization of a citywide set of policies, processes, and technologies for maximizing City data and information. The Policy will also help to advance the City Council priorities of improving the city's practice of adopting more data driven decision making across the city.

#### **Background:**

In October 2017, The City of Chula Vista was selected as one of five new cities to participate in Bloomberg Philanthropies' national What Works Cities initiative - one of the largest-ever philanthropic efforts to enhance the use of data and evidence in the public sector. Chula Vista received technical assistance from world-class experts to help build our capacity to address local issues using data and evidence. The consortium of expert organizations assembled by Bloomberg Philanthropies to deliver support to cities comprises the Center for Gov. Excellence at Johns Hopkins University, the Government Performance Lab at Harvard Kennedy School, Results for America and the Sunlight Foundation. The following is a key objective of the What Works Cities initiative as stated by the Chula Vista Mayor:

*"This partnership is another great opportunity to continue our efforts to improving transparency, building trust, and engaging community members around public safety and well-being," said Mayor Casillas Salas. "We are improving our ability to make public safety data more consumable and readily available for residents and departmental stakeholders to help with solving pressing community challenges."*

The What Works Cities initiative will partner with 100 cities across the country, that are home to more than 29 million people in 37 states, on a rolling basis through 2018. With support from the consortium of expert partners, What Works cities are identifying more effective ways to evaluate programs and improve performance; best use resources to serve their communities; and address a range of social challenges - from public safety to affordable housing. By being selected as a What Works Cities participant, Chula Vista also joined the initiative's extensive learning network of local leaders and global experts actively sharing best practices for outcomes-focused government.

### **Why is important for Chula Vista to adopt an Open Data Policy?**

As the second largest city in San Diego County, Chula Vista is committed to ensuring more public access to key public safety data and increasing transparency with our residents and communities. The long-term vision is to scale up this effort for all departments across the city. The Open Data Policy will support transparency by:

- Increasing public access and community engagement by making City data easily accessible to taxpayers and City residents so they can better understand what the city is doing.
- Allowing the City departments, including Police and Fire departments, as well as other city staff access to city data, including public safety data to improve City services and performance.
- Helping to break down silos and allow more seamless integration of data and knowledge sharing across city departments.
- Improving the dialogue between residents and the City by allowing for a better understanding of services the City provides, while at the same time gathering input on what matters most to the residents.
- The Open Data Policy will also set forth mechanisms to protect, when applicable the privacy,

confidentiality and security within data and information under the city's control. This includes soliciting input from city staff and key stakeholders about the necessary "checks & balances" before the release of any public safety data.

City staff is recommending Council to adopt a resolution establishing an open data policy and directing the city manager to establish an open data program and administrative guide to support implementation of the open data policy.

### **On-going Efforts:**

**Geographic Information System (GIS):** Much of the data generated and used by local government has a geospatial, or locational, component. A Geographic Information System, or GIS, is a computer-based mapping and information system which enables the City to link information about places, events and facilities to their correct location on a map, thereby providing a better understanding of that information. The City of Chula Vista maintains a modern, enterprise-wide GIS, including Web-based viewer applications, accessed and utilized by nearly all City departments. The GIS Group maintains or warehouses over 100 layers of data including streets, facilities, zoning, addresses and numerous layers of infrastructure. As a multi-departmental resource, GIS includes common citywide base maps and related data, as well as specialized departmental thematic maps and data. The system is compatible with other systems for integration and to promote the sharing of data - Both within the City and to external stakeholders and citizens. In support of data sharing, transparency, and the City's Smart City initiatives, the GIS Group maintains a searchable Data Portal where many geospatial datasets are available for download by interested parties. Much of this same data may be viewed via web mapping applications hosted in the City's on-line map gallery. By making this data available for download, and by hosting Web-based mapping applications, we promote interagency collaboration and data transparency. In addition, the maps themselves are an intuitive way to both share and contextualize City data. Going forward, software and infrastructure upgrades planned for the upcoming year will significantly enhance the City's capabilities to visualize and present geospatial data. City staff is pleased with the significant progress made to date towards becoming a more open and transparent city. Leading this charge is the Chula Vista Police Department through their community engagement and dashboard initiative.

**Police Department Dashboard:** The Police Department began working on the new community engagement strategy for the past two years. The initial efforts were focused on integrating and automating the capacity to generate information. After some success with the systems, the focus was placed on the best platform to display the information. During the last quarter of calendar year 2017 the department focused on how to integrate the information with an engagement strategy that would help delivery an accurate perspective of what really goes on in Chula Vista and how the department and the community can work together to make things better. The primary focus is to reach out to Chula Vista's citizens and share data as well as useful information. Part of the vision behind the strategy includes the development of dashboards that display and share different types of useful data such as crime trends, calls for service volumes and response times. Some dashboards are currently being tested with very optimistic results. Other dashboards will be developed as the department becomes more adept at using the new technology and the correct systems infrastructures are developed and tested. The department sees a great opportunity to expand the use of dashboards in the future and include information on homelessness, traffic accident trends and other information which the department feels the community would benefit from based on prior year data requests,



community interests or concerns trending on social media.

Beyond the department's ability to publish the data via a new resource, the Police Department dashboards will provide a complete picture based on facts. Potential new residents will have a better understanding of our neighborhoods. Companies interested in investing in Chula Vista will have new resources to use and study so they can feel more comfortable in choosing our City as their home. Additionally, consistent with the Police Chief's vision, the dashboards will serve as a new way to stay engaged with the community by promoting new reasons for dialogue and giving the community the ability to explore the data themselves using a more effective and efficient process. Users will also have a way to stay connected with the department as they review the data or use the data to ask questions during community forums or other appropriate venues. The process of delivering information using dashboards will also reduce costs to the tax payers since requests that normally would have to go through the Public Records Act (PRA) will now be addressed using the dashboards. This reduces staff time spent on responding to the requests.

As the Police Department efforts began to take shape, it became clear that the process be part of the Open Data Policy efforts and be part of the overall city wide efforts and vision.

#### **DECISION-MAKER CONFLICT**

Staff has reviewed the decision contemplated by this action and has determined that it is not site specific and consequently, the 500-foot rule found in California Code of Regulations section 18704.2 (a)(1), is not applicable to this decision. Staff is not independently aware, and has not been informed by any City Council member, of any other fact that may constitute a basis for a decision maker conflict of interest in this matter.

#### **LINK TO STRATEGIC GOALS**

The City's Strategic Plan has five major goals: Operational Excellence, Economic Vitality, Healthy Community, Strong and Secure Neighborhoods and a Connected Community. These projects will positively affect all five strategic plan focus areas. Through proper planning and execution of the Smart City Strategic Action Plan, and related policies and projects, the City will be able to provide enhanced customer service, share important public access data, provide a more connected workforce, reduce energy usage/costs, improve public safety service delivery, and ultimately improve the quality of lives for the citizens and visitors to Chula Vista.

#### **CURRENT YEAR FISCAL IMPACT**

**ITEM A:** There is no cost to the General Fund for this project. This project is part of the Measure P Network and Telecommunications project. The total costs for this project will not exceed \$132,000.

**ITEM B:** Because this is a policy, its adoption will not have a direct fiscal impact. It is anticipated that when individual implementation strategies or related projects are further developed and presented to City Council for consideration, any specific positive or negative fiscal impacts will be identified.

#### **ONGOING FISCAL IMPACT**

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**ITEM A:** This project is not expected to span several years, nor exceed the current cost as stipulated in the Contract for Service. The cost to implement the results of the plan will not be known until after the plan is completed. City staff will be making a full presentation to the City Council when the Telecommunications Master Plan is completed including anticipated costs/revenues.

**ITEM B:** As mentioned above, the policy does not have an ongoing fiscal impact. Impacts from any specific implementation strategies will be evaluated as they are further developed and considered.

## **ATTACHMENTS**

Attachment 1 - Telecommunications Master Plan Request for Proposals

Attachment 2 - Contract with Magellan Advisors to provide a Telecommunications Master Plan

Attachment 3 - Open Data Policy

*Staff Contact: Dennis Gakunga, Chief Sustainability Officer.*

*Staff Contact: Edward Chew, Director of Information and Technology Services*