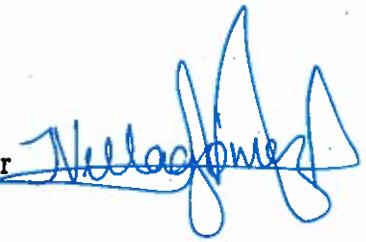


**CITY OF SAN ANTONIO  
OFFICE OF THE CITY MANAGER**

**TO:** Sheryl Sculley, City Manager

**FROM:** María Villagómez, Assistant City Manager 

**COPY:** Mayor and City Council  
Executive Leadership Team  
Smart Cities Readiness Workshop Attendees

**DATE:** April 5, 2017

**SUBJECT:** Smart Cities Readiness Workshop Report

This correspondence transmits a report summarizing the outcomes of the Smart Cities Readiness Workshop held on March 21, 2017.

As part of the City of San Antonio's Smart City initiative, the Office of Innovation hosted a Smart Cities Readiness Workshop on March 21, 2017. The purpose of the workshop was to gather practitioners from various sectors of our city including government, military, transit, tech community, academia, non-profits and private business to develop a shared vision for how San Antonio should deploy Smart City technology to address community issues. The Readiness Workshop was facilitated by the Smart Cities Council which is an internationally recognized organization. They have conducted similar workshops in Boston, Chicago, San Diego, Charlotte and with the state of Illinois. In 2017, as the Smart Cities movement continues to grow they will be conducting workshops in various other cities like Austin, Dallas, Indianapolis, Miami, Atlanta and Philadelphia to roadmap their Smart City futures.

The workshop convened at the Henry B. Gonzalez Convention Center was attended by over 100 key stakeholders, representing 30 organizations. The areas of focus included transportation, e-government and data, water, energy, workforce development, digital inclusion, and sustainability. While goals, opportunities and challenges were identified for each of the areas of focus, three cross-cutting themes surfaced as the road map for a Smart San Antonio: collaboration and partnerships among organizations, data sharing and communication, and more convenient access to public services.

With the input provided at this Readiness Workshop, the City of San Antonio will convene a working group in the next 30 to 60 days to develop an action plan that would address, as a community, the goals, opportunities, and challenges identified at the workshop.

**ATTACHMENT**



# SMARTSA



## Readiness Workshop Summary Report

April 5, 2017



CITY OF SAN ANTONIO  
OFFICE OF INNOVATION



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# Executive Summary

As part of the City of San Antonio's Smart City initiative, the Office of Innovation hosted a Smart Cities Readiness Workshop on March 21, 2017. The purpose of the workshop was to gather practitioners from various sectors of our city including government, private business, academia, non-profits and the tech community to develop a shared vision for how San Antonio should deploy Smart City technology to address community issues.

As cities have begun deploying smart city technology, the importance of having a shared vision and common understanding of what being a Smart City means, has become a focal point. A Readiness Workshop is designed to help break down silos and begin the development of partnerships and collaborations to more efficiently and effectively leverage the use technology and data.

The March 21 Readiness Workshop was designed to demonstrate that a smart city strategy is not static, but rather continually seeks to explore how technology can make municipal government more effective, sustainable, and responsive to residents. Second, a successful smart city strategy recognizes community needs as the driver for technology innovation, and the importance of collaborations between government, military, academic institutions, economic development organizations, transit agencies, tech community, and businesses. The goal of the Readiness Workshop was to develop a road map to a future that would transform San Antonio to a Smart City leader.

To begin the process of developing a roadmap, the City of San Antonio engaged the Smart Cities Council to facilitate the event. The Smart Cities Council is an internationally recognized organization with over 120 partners that have contributed to over 10,000 smart city projects worldwide. They have conducted similar workshops in Boston, Chicago, San Diego, Charlotte and with the state of Illinois. In 2017, as the Smart Cities movement continues to grow they will be conducting workshops in various other cities like Austin, Dallas, Indianapolis, Miami, Atlanta and Philadelphia to roadmap their Smart City futures.



The workshop convened at the Henry B. Gonzalez Convention Center was attended by over 100 key stakeholders, representing over 30 organizations. The areas of focus included transportation, e-government and data, water, energy, workforce development, digital inclusion, and sustainability. While goals, opportunities and challenges were identified for each of the areas of focus, three cross-cutting themes surfaced as the road map for a Smart San Antonio: collaboration and partnerships among organizations, data sharing and communication, and more convenient access to public services.

There are many opportunities for cutting across jurisdictional and agency silos, meaning that collaborations and partnerships are essential to successfully implementing smart cities strategies. Workshop participants identified collaborations already in existence and the desire to build on that foundation.

Data sharing and communication are key in making municipal services more efficient and easier to access. Workshop participants agreed that San Antonio should focus on its data ecosystem to take advantage of data being collected by different entities and utilize it for predictive analytics. The need for data sharing presents some interesting challenges including keeping data safe and making it accessible to everyone. Workshop participants identified that San Antonio has a significant advantage in the area of cyber-security due to the long-time military presence and one of the best university cyber-security programs in the nation.

More convenient access to public services through the use technology is a priority. Workshop participants identified that the use of technology and digital communication makes government more transparent and accessible; however some sectors of the San Antonio community including very low-income families and the elderly may not have internet access at home. The challenge for San Antonio is to provide the opportunity to the public to participate fully in a tech-based government and local economy.



With the input provided at this readiness workshop, the City of San Antonio will convene a working group representing the agencies attending the workshop to develop an action plan that would address the opportunities and challenges referenced in this report. This report summarizes the outcome of the Readiness Workshop and outlines suggested next steps in developing and implementing a Smart City roadmap specific to San Antonio community's needs.



# Workshop Overview and Format

## Overview

The San Antonio Smart Cities Readiness Workshop identified opportunities associated with developing Smart City solutions.

The event focused on the areas of:

- Transportation
- E-government and Data
- Water
- Energy
- Workforce Development and Digital Inclusion
- Sustainability

A Smart City leverages **data & technology** to improve the **quality of life** for our residents

## Workshop Format

The workshop convened at the Henry B. Gonzalez Convention Center, was attended by over 100 key stakeholders, representing over 30 organizations in the areas of government, private business, military, non-profit agencies, and academia.

The workshop included a general session that provided a foundation for building successful Smart City initiatives, followed by individual break-out sessions that allowed participants the opportunity to identify and explore challenges and opportunities related to specific topics in more detail. After the break-out sessions were completed, participants reconvened in general sessions to share findings with the entire group.

The following sections summarize these findings and provide next steps for developing a Smart City roadmap.



# Break-out Session Summaries

The workshop's six (6) break-out sessions were structured around capturing goals and challenges specific to the areas mentioned in the workshop overview. The following sections summarize the information gathered in each break-out session:

## Transportation:

Transportation is every system that moves people around a city. This includes our city's streets, sidewalks, vehicles, buses, barges, bicycles, and highways. Experts estimate that traffic congestion could be reduced 20-30% with smart transportation solutions. With these aspects in mind, the transportation break-out group identified the following goals and challenges.

### Goals:

1. Enable open communication between stakeholder information systems
2. Develop collaboration between public and private organizations to drive innovation and share ideas and data
3. Create conformity and shared standards of policies between local and state institutions

### Challenges:

1. Addressing a geographic divide in our local infrastructure
2. Providing more transportation choices
3. Working with our existing road network
4. Land use patterns
5. Breaking down silos between and within entities regarding infrastructure and data
6. Providing communication for non-residents
7. Planning for alternative modes of transportation

### Key Opportunity:

Build  
**interconnected**  
**solutions** that share  
communication and  
**enhance travel**  
experiences



## E-government and Data:

In every break out session, access to open data was identified as a critical need. Providing communities the ability to access and interact with data is a core component to building successful Smart City solutions. As presented by Smart Cities Council leadership, data is the common link amongst the 3 activities that define a Smart City (collect, communicate, and compute). The E-government and Data break-out session specifically highlighted the following components that should be considered in our future planning.

### Goals:

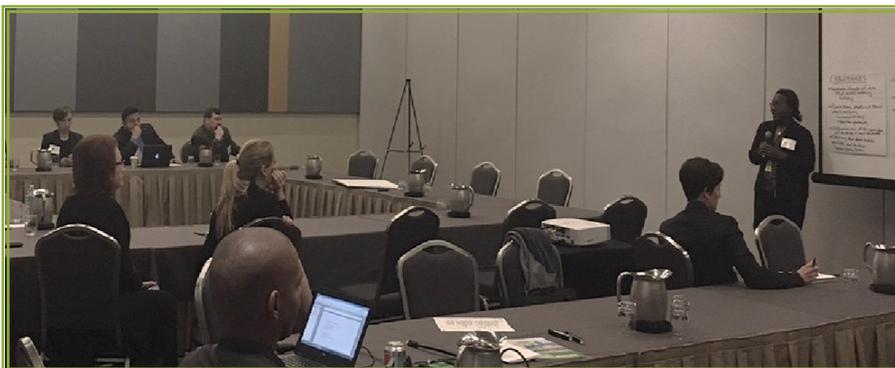
1. Improve quality of life by making data accessible to our entire community
2. Provide education on the type and nature of data available
3. Increase public awareness of the open data available

### Challenges:

1. Managing widely dispersed data sets
2. Providing a governance structure for management and access to data
3. Having multiple uses and sources of data
4. Determining ownership of our community data
5. Identifying how the data should be shared amongst interested stakeholders
6. Coordinating amongst participating agencies

### Key Opportunity:

Cultivate an  
**innovative**  
**ecosystem** that  
provides  
**meaningful data** for  
creative solution



## Water:

Cities across the world recognize the critical need to improve management of water as populations in our urban centers increase. Along with rising city populations, communities are also facing issues with water quality, floods, droughts, and aging infrastructures. With these aspects in mind, our break-out session participants determined that the following goals and challenges deemed crucial to guiding the development of our City's future initiatives.

### Goals:

1. Reduce water lost through leakage in our systems (non-revenue water)
2. Enhance customer service
3. Provide data on our water resources

### Challenges:

1. Managing droughts and floods
2. Creating civic awareness on methods to protect our aquifer
3. Managing silos around data
4. Operating within constraints defined by polices and regulatory demands
5. Dealing with our aging infrastructure

### Key Opportunity:

Create a **responsive infrastructure** that protects and secures sources of **clean and usable water**

## Energy:

In conjunction with managing our water resources, discovering improved conservation and usage of energy resources lay at the core of developing sustainable solutions that are both economically and ecologically viable. The energy break-out group identified the following specific areas that will need to be considered in designing and implementing future advancements.

### Goals:

1. Enhance energy conservation and promote sustainability
2. Build new business models around energy
3. Improve usable data
4. Develop customer engagement options
5. Drive local innovation



## Energy (continued):

### Challenges:

1. Managing regulatory control
2. Financing infrastructure costs
3. Discovering the optimal tools for collecting, managing, mining data in order to make informed decisions
4. Guiding diverse customer engagement

### **Key Opportunity:**

Integrating **energy** usage data into **solutions** that promote **sustainability** and **conservation**

## Workforce Development and Digital Inclusion:

Developing and enhancing San Antonio's workforce through inclusive tools, technology, and interconnected resources was considered by the session's participants as critical to future growth and success in our community. To further strengthen the foundation for future development, the group identified the following areas for consideration.

### Goals:

1. Ensure people have access to devices, connectivity, and digital literacy training
2. Connect resources and people to target industry jobs

### Challenges:

1. Providing access to equipment and infrastructure within a secure environment
2. Managing inventory of needed skills
3. Improving collaboration with continuing educational resources
4. Retaining our existing workforce
5. Leveraging data in a workforce strategy

### **Key Opportunity:**

Enabling **residents** to **develop skills** and **connect with employers**



## Sustainability:

Underlying all the areas explored in the workshop, sustainability and resiliency of future solutions was determined to be vital for our community's growth. The break-out group determined that the considerations outlined below would be vital to development plans.

### Goals:

1. Compile data to integrate into decision support tools
2. Create user stories around data
3. Educate community about SA Tomorrow and keep community informed of progress made

### Challenges:

1. Basing decisions on the triple bottom line (social, environmental, and financial structures)
2. Improving resident engagement
3. Sharing data amongst municipalities, regions, and cities
4. Identifying data gaps

## Key Opportunity:

Create vibrant **user stories** that drive greater **civic engagement** and develop **durable solutions**



# Next Steps

As part of the Readiness Workshop, information was gathered from the general and breakout sessions to inform the next steps in the process.

During the course of the workshop, it was identified that several agencies including the City of San Antonio, CPS Energy, the San Antonio Water System and VIA Transit are all undertaking Smart City projects, but doing so in an individual manner. Partnerships between local governments, academic institutions, economic development organizations, transit agencies, military bases, advocacy groups, and businesses are critical to develop a focus on Smart City approaches.

While this report has focused on opportunities and challenges related to specific sectors, several cross-cutting themes emerged including: collaboration and partnerships among organizations, data sharing and communication, and more convenient access to public services.

The City of San Antonio will convene a working group, made up of the various organizations in attendance, to begin working through the opportunities and challenges referenced in this report. Outlined below are the next steps for developing a more comprehensive vision for a Smarter San Antonio:

1. Develop and convene a working group that is comprised of public and private stakeholders.
2. Develop and implement sub-committees specific to targeted domains.
3. Establish a communication schedule that will provide a venue for Smart City updates.
4. Identify key performance indicators to track progress.



# Workshop Participants

## **Government:**

- City of San Antonio
- Alamo Area Council of Governments
- Alamo Area Metropolitan Planning Organization
- Bexar County
- CPS Energy
- San Antonio Housing Authority
- San Antonio River Authority
- San Antonio Water System
- Texas Department of Transportation
- VIA Metropolitan Transit

## **Universities:**

- Texas A&M — San Antonio
- University of Texas at San Antonio
- University of Texas Health Science Center — San Antonio

## **Business and Non-profits:**

- Build San Antonio Green
- CyberSecurity San Antonio
- Economic Development Foundation
- EPIcenter
- Greater San Antonio Chamber of Commerce
- Port San Antonio
- San Antonio Hispanic Chamber of Commerce
- SA Works
- Southwest Research Institute



### **Technology Industry:**

- Geekdom
- James Brehm & Associates
- Rackspace

### **Military:**

- Joint Base San Antonio

### **Smart Cities Council Partners:**

- AT&T
- Cisco
- Civic Connect
- Deloitte
- IBM
- IES
- Microsoft
- Miovision
- Ruckus
- SAP
- Schneider