

**INNOVATION AND TECHNOLOGY COUNCIL COMMITTEE
MEETING MINUTES
TUESDAY, DECEMBER 8, 2020
2:00 PM
VIDEOCONFERENCE**

Members Present:	Councilmember Manny Pelaez, <i>Chair, District 8</i> Councilmember Roberto Treviño, <i>District 1</i> Councilmember Jada Andrews-Sullivan, <i>District 2</i> Deanne Cuellar, <i>Citizen Committee Member</i> Dirk Elmendorf, <i>Citizen Committee Member</i> Will Garrett, <i>Citizen Committee Member</i>
Members Absent:	Councilmember John Courage, <i>District 9</i>
Staff Present:	Jennifer Guerrero, <i>Assistant City Attorney</i> ; John Peterek, <i>Assistant to the City Manager</i> ; Brian Dillard, <i>Chief Innovation Officer, Office of Innovation</i> ; Craig Hopkins, <i>Chief Information Officer, Information Technology Services Department (ITSD)</i> ; Razi Hosseini, <i>Director, Public Works</i> ; John Rodriguez, <i>Assistant Director, ITSD</i> ; Marc Jacobson, <i>Transportation Systems Management & Operations Manager, Public Works</i> ; Candelaria Mendoza, <i>Smart City Coordinator, Office of Innovation</i> ; Emily Royall, <i>Smart City Coordinator, Office of Innovation</i> ; Nancy Cano, <i>Office of the City Clerk</i>
Others Present:	Richard Medina, <i>Vice President, Grid Transformation & Engineering, CPS Energy</i> ; Simon Castillo, <i>Business & Economic Development Manager, CPS Energy</i> ; David Gibbens, <i>Senior Management Control Systems, CPS Energy</i> ; Jaime Garza, <i>Manager, Standards and Specifications, CPS Energy</i> ; Jason Castillo, <i>Regional Director of Sales, Broadband Hospitality</i>

Call to Order

1. Approval of the October 27, 2020 Innovation and Technology Committee Meeting Minutes.

Citizen Member Will Garrett moved to approve the Minutes from the October 27, 2020 Innovation and Technology Committee Meeting. Councilmember Andrews-Sullivan seconded the motion. The motion carried unanimously by those present.

2. Briefing on the City of San Antonio's / CPS Energy's SmartSA Streetlight Pilot Program [John Peterek, Assistant to the City Manager; Brian Dillard, Chief Innovation Officer, Office of Innovation]

Richard Medina reported that CPS Energy operated and maintained more than 128,000 streetlights throughout the City and noted that responding to streetlight outages and maintenance was an intensive process that relied on streetlight patrols, customers, and staff reporting streetlight issues. He stated that smart streetlight sensors would provide near real-time operational performance of the lighting assets while enhancing service levels for the community

and customers. He noted that the technology would ensure that streetlights were operating as designed, alerts would be activated when devices were not operating as expected, and for preventative maintenance, and advance features would enable dimming/brightening schedules for enhanced safety.

Mr. Medina reported that CPS Energy and the Office of Innovation Smart Cities (OISC) collaborated on the SmartSA Streetlight Pilot Program that utilized five Smart City areas of technology: Air quality sensing, acoustic noise detection, temperature sensing, automated parking solutions, and automated water level detection. He stated that a Request for Competitive Sealed Proposal (RFCSP) process was conducted and an Evaluation Team made up of CPS Energy and City subject matter experts evaluated bid submissions, identified four vendors for onsite interviews, and ultimately selected AT&T and Itron to participate in the six-month pilot program.

Brian Dillard reported that AT&T and Itron would test their technology within Innovation Zones established in areas reflective of the top five responses received from a 2018 community survey. He noted that a pilot solution was deployed on Market Street that provided signage to inform drivers of available parking slots. He added that sensors could monitor floods, provide predictive flooding analytics, and facilitate the Edward Aquifer Protection Program. He added that the City's enterprise data-sharing platform would be leveraged to share with partnering public agencies, provide training across agencies, and make non-sensitive data publicly accessible.

He indicated that the City would monitor the performance and operations of the technologies and once the pilot program was completed, a project evaluation would be prepared; thereafter, CPS Energy and the City would continue collaborative efforts for city-wide deployment of the smart streetlight and sensor technologies.

Councilmember Treviño asked if CPS Energy and OISC collaborated with the Center City Development Operations Department on the Urban Lighting Plan and noted the opportunity to partner with commercial and private lighting system providers. Mr. Medina confirmed that the Pilot Program aligned with the Urban Lighting Plan.

Councilmember Andrews-Sullivan asked of additional built-in security features regarding digital protection. Mr. Dillard reported that data sharing agreements were in place for the protection of residential data to ensure that only non-sensitive data was shared. He emphasized that the sensors would not capture surveillance information.

Citizen Member Dirk Elmendorf asked if the sensors used noise level detection for activation and noted that the use of low bandwidth levels could not be enabled for the transmission of any personal identifiable data, nor for surveillance. Emily Royall reported that decibel sound levels would trigger the sensors and transmit the information. She added that different vendors were offering different solutions, such as infrasonic sensor systems for the detection of water levels and ozone, and carbon monoxide and carbon dioxide detection sensors for air quality.

Citizen Member Will Garrett asked if the timeline was too fast or if it was fast enough and if decision points were in place. Jaime Garza reported that the six months of the pilot program

would focus on solutions and the examination of any issues regarding ease of installation with hardware and software installations, and functionality.

3. Briefing on the City of San Antonio's Adaptive Signal Control Pilot [Roderick Sanchez, Assistant City Manager; Razi Hosseini, Director, Public Works]

Marc Jacobson reported that the Adaptive Traffic Signal Pilot Project (ATSPP) was installed on La Cantera Parkway, between Fiesta Texas and The Rim Shopping Center in Council District 8. He stated that four signalized intersections were deployed from September 2018 – March 2019 and collected data before and after implementation on random traffic patterns. He reviewed traditional traffic signal timing and noted that the traditional fixed timing approach was unable to respond and adjust to real time unpredictable traffic patterns and delays.

Mr. Jacobson reported that the Pilot Project was located near a large amusement park and a large movie theater that created large flows of random traffic patterns throughout the day and on weekends. He stated that by operating the adaptive pattern, average travel times in the area were reduced by no less than 12%. He added that next steps would be to expand the system into the Medical Center Innovation Zone to solve for identified traffic issues. He noted that the Medical Center experienced random peaks of traffic in and outside of traditional peak times due to varying hospital shift changes and medical appointment settings. He added that many commuters to the Medical Center were not familiar with the area and the non-familiar focus would provide more of a testbed for crossing roadways than at the Pilot Project location.

Mr. Jacobson reported that the estimated cost for the Medical Center pilot would be \$25,000 and project development would begin in January 2021, a testing phase would begin in April 2021, and the pilot would go live in May 2021. He noted that the impact COVID-19 had on traffic was unknown and decreases in traffic volumes and peak times was attributable to residents working remotely from their homes.

Citizen Member Garrett noted that a 12% reduction in traffic wait times accomplished through the implementation of a program with a cost of \$25,000 was a great achievement and asked what the vehicle upgrades consisted of. Mr. Jacobson reported that vehicle protection upgrades would be installed to the signal control sensors as needed.

Citizen Member Elmendorf asked if the sensors were autonomous or if their intelligence and feedback would increase with more sensor communication. Mr. Jacobson explained that all sensors at an intersection provided feedback to a dedicated server that recognized which sensors were geographically related to each other which enabled the server to formulate better decisions to that area.

Councilmember Andrews-Sullivan asked how the ATSPP would interact with the school zones and their seasonal activity. Mr. Jacobson stated that the system had the ability to detect seasonal changes and would better adapt for school holidays.

4. Briefing on updates of the City of San Antonio's Digital Inclusion Pillar of the Recovery and Resiliency Plan "Connected Beyond the Classroom." [John Peterek, Assistant to the City Manager; Brian Dillard, Chief Innovation Officer, Office of Innovation]

Chief Innovation Officer Dillard reported that the SAFreeWiFi program expansion was completed and all 29 San Antonio Public Libraries and their parking lots provided free WiFi to the community. He stated that the Hot Spot Distribution program was completed with 1,000 hotspots installed in the Northeast Independent School District (NEISD), 500 hotspots installed in the Edgewood Independent School District (EISD), and 90 hotspots installed at PreK4SA locations. He noted that 72 hotspots were installed at Parks & Recreation facilities and that three remaining installations to the Copernicus, Millers Pond, and Frank Ramirez Community Centers would be completed by December 11, 2020. He added that \$420,000 in Digital Inclusion (DI) funding support from the Texas Education Agency (TEA) was expended to leverage long-term DI infrastructure projects within the following school districts: San Antonio ISD, South San Antonio ISD, Northside ISD, Harlandale ISD, Southwest ISD, and Judson ISD. He indicated that the Digital Connectivity Request for Competitive Sealed Bids (RFCSP) for Telecoms/ISPs was now in the Blackout Period of the proposal process.

John Rodriguez reported that the Connected Beyond the Classroom (CBTC) Program provided in-home school system access for up to 20,000 students in the top 50 prioritized neighborhoods and eight independent school districts (ISD), as follows: SAISD, Edgewood, Harlandale, South San Antonio, Southwest, Judson, Northeast, and Northside.

Mr. Rodriguez provided an updated CBTC project timeline and noted that the Phase I (October 2020 through December 2020) equipment installation rollout plan was in progress. He highlighted a 16 square mile proof of concept space that was designated for the expansion of Phase II (January 2021 through May 2021) and reported that construction of a 500 foot tower and the installation of small cell devices on tower sites was underway in the West End Aarea of downtown.

Mr. Rodriguez reported that students would be provided Google Chrome notebooks by their schools and would connect to their school networks through an authenticated user ID and password access system through the City's WiFi smarthub. He noted that the City took many precautions to provide a triple-layered, safe internet experience for the students by ensuring that the internet service conformed to the Children's Internet Protection Act (CIPA) Federal standards, the deployment of Google Safe Search browser that would direct redirect students away from any malicious material on the internet, and additional protections integrated on Google Chromebooks provided by the schools.

Councilmember Treviño asked if staff could prioritize DI efforts by census tracts or by zip codes to target areas with the largest number of evictions filed. Mr. Dillard noted that one of the benefits of the Connected Beyond The Classroom (CBTC) Plan was that it would not impact a student's socioeconomic mobility, as students were not required to keep their Customer Premise Equipment (CPE) in a specific home, and could take their equipment with them when relocating within any of the eight local School Districts and the self-installation equipment would operate seamlessly.

Councilmember Andrews-Sullivan noted that CTBC was funded by the CARES Act and asked how long the funding would last. She asked of the life expectancy of the CPE. John Peterek

reported that CTBC was a long-term project and the extended phase work would be subsidized through the City's General Fund. He noted that careful consideration was given in the selection of long-term, durable equipment and with the City's strong partnerships with the local School Districts. Mr. Rodriguez reported that the CPE issued to each student had a five-year warranty and an anticipated eight-year service life. He added that the CPE was a higher-end, ruggedized product than what was typically used for households.

Citizen Member Deanne Cuellar asked about technical support for the project. She recommended that parent focus groups be pooled from different school districts to conduct the CPE self-installation process. Mr. Rodriguez reported that two technical support lines were provided within the installation instructions, with one phone line dedicated to connectivity issues and the second line dedicated to the schools for issues connecting to the school networks. He added that standard support hours and the levels of interaction were established by the school districts. He noted that the purpose of the pilot program was to identify issues for correction.

Adjourn

There being no further discussion, the meeting was adjourned at 3:30 p.m.

Manny Pelaez, Chair

Respectfully Submitted,

Nancy Cano
Office of the City Clerk