



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kip Harkness
Julia H. Cooper
Rob Lloyd
Jim Shannon

SUBJECT: SEE BELOW

DATE: June 18, 2020

Approved

Date

6/19/2020

SUBJECT: ACTIONS RELATED TO THE AGREEMENTS BETWEEN THE CITY OF SAN JOSE AND THE EAST SIDE UNION HIGH SCHOOL DISTRICT AND SMARTWAVE TECHNOLOGIES LLC FOR A COMMUNITY WIRELESS NETWORK

RECOMMENDATION

Adopt a resolution authorizing the City Manager to:

- (a) Execute the Second Amendment to the Funding Agreement between the City of San José and East Side Union High School District Relating to Installation of a Community Wireless Network in the District to provide \$1,398,442 in additional funds for a total amount of \$4,098,442 to support expansion to the Yerba Buena High School attendance area.
- (b) Execute the Second Amendment to the Agreement for East Side Union High School District Community Wi-Fi Deployment between the City of San José and SmartWAVE Technologies LLC (“SmartWAVE”) (Alpharetta, GA) to expand the East Side Union High School District Community Wireless Network to the Yerba Buena High School attendance area, including all required hardware, software, materials, professional services, maintenance and support, and applicable sales tax, by increasing the compensation by \$1,048,442 for a revised maximum compensation amount not to exceed \$3,306,990 for the initial term ending December 31, 2021, subject to the appropriation of funds.
- (c) Adopt the following 2020-2021 Appropriation Ordinance and Funding Source Resolution amendments in the General Fund:
 - (1) Increase the East Side Union High School District Community Wireless Network Project appropriation to the Public Works Department in the amount of \$1,398,442; and
 - (2) Increase the estimate for Revenue from Local Agencies by \$1,398,442.

OUTCOME

Provide greater internet access to underserved students in the East Side Union High School District (“District” or “ESUHSD”) to facilitate advancing students’ academic achievement through internet-based learning technologies and instruction and provide access for households within the attendance areas to help ensure that all residents, businesses, and organizations can have critical access to connectivity and essential online services.

BACKGROUND

Across the United States, school districts are investing in laptops and digital learning platforms using funding mechanisms such as federal E-Rate funds to deliver broadband to the classroom. Those investments make a huge difference—but only on school grounds. Students who do not have home broadband are left behind in the digital learning environment as having internet access at home advances educational, career, medical, and financial outcomes including:

- Teenagers with home broadband are 6-8% more likely to graduate from high school according to the Chicago Public School System;
- Over 38% fewer hospital admissions occurred in a telemedicine trial according to the Journal of Managed Care; and
- A 0.3% employment increase occurs for every +1% of digital inclusion according to the Brookings Institute.

At three of the District’s high schools, James Lick, William C. Overfelt (“Overfelt”), and Yerba Buena, it is estimated that the majority of the students lack broadband at home. Schools are aware of this “digital inequity,” but with no control over the broadband infrastructure in their surrounding communities, most districts struggle to find solutions.

On June 28, 2016,¹ City Council adopted a resolution authorizing the City Manager to negotiate and execute an Agreement between the City and the District to access District funds for the installation and maintenance of a Community Wireless Network for a period of five years in an amount not to exceed \$2,700,000. These network services are an extension of the City’s public Wi-Fi network that is maintained by the City’s Information Technology Department. The Agreement, executed in October 2016, provides the City with \$2.7 million in funding from the District to implement the network within two service areas (James Lick and Overfelt) and to maintain service in the James Lick attendance area for one year and the Overfelt attendance area for three years, subject to the appropriation of funds. Further, the Agreement identified an estimated \$1.6 million in additional funding necessary to implement the third attendance area (Yerba Buena) and maintain service for all three attendance areas for the five-year period. The construction of the network is managed by the Public Works Department with SmartWAVE as the contractor.

¹ Council Memo 6/28/16: http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=2142&meta_id=583300

On September 20, 2016,² the City Council authorized the City Manager to execute an Agreement with SmartWAVE for Wi-Fi deployment for the James Lick attendance area. “Access East Side” went live for James Lick students on October 31, 2017 and was later extended to the public in April 2019 after a successful evaluation of the network’s technical and educational performance. This project provides approximately 1,700 James Lick students with free Wi-Fi internet access in their homes to further their educational and quality of life outcomes. In addition, approximately 6,000 public households in the James Lick coverage area now have free internet access available in their neighborhood. A District-approved video about the project can be viewed at <https://www.youtube.com/watch?v=7x91oo1nD3g>. The student access Wi-Fi is administered by the District, and non-student, community access Wi-Fi is administered by the City.

On October 22, 2019,³ Council authorized the City Manager to: (1) execute the First Amendment with the District to revise costs for James Lick, William C. Overfelt, and Yerba Buena High School attendance areas; (2) execute the First Amendment between the City and SmartWAVE to increase compensation by \$1,006,633 to expand community Wi-Fi in William C. Overfelt High School attendance area; and (3) negotiate and execute amendments and change orders for a total contingency not to exceed \$200,000. The community Wi-Fi deployment at William C. Overfelt attendance area went live on June 16, 2020, and testing is expected to be completed by June 30, 2020.

ANALYSIS

The District’s Community Wireless Network project is having a positive impact on the lives of their students. The network supports thousands of high-speed connections and movement of terabytes of data every month, with most of the data coming from research and other education-based web sites. Low-income students who did not have online access to do their schoolwork at home now have access to digital curricula and school-provided laptops. At the same time, the District is realizing more value from its digital learning investments, knowing that more students are using these tools to learn more effectively.

Since November 2017, use of the Access East Side student network has averaged over 1.5 terabytes (TB) of data per month. Since April 2019, the total data transfer for community public access Wi-Fi has been over 5 TB per month. An evaluation conducted by the Silicon Valley Talent Partnership and PayPal rated the network as 99.4% reliable.

Based on the positive performance of the James Lick attendance area Community Wireless Network (“Network”), the District asked the City to pursue expansion of the Network to the Overfelt High School attendance area. Since approved by Council in October 2019, implementation of community Wi-Fi at Overfelt has been in progress, and final testing is expected to be completed by June 30, 2020.

² Council Memo 9/20/16: http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=2154&meta_id=592460

³ Council Memo 10/22/2019: <https://sanjose.legistar.com/View.ashx?M=F&ID=7780092&GUID=6882BFB9-D343-4808-A2C7-50F9012A99F9>

In the Fall of 2019, staff sought additional funding to complete the build out of the Yerba Buena attendance area through the federal Community Development Block Grant (CDBG) Program administered through the City's Housing Department. The total funding amount to be awarded and distributed for this Program between FY 2020-2021 and FY 2021-2022 will be \$1,999,835. However, the use of CDBG funds requires the City to adhere to specific Federal procurement guidelines which will require new procurements and result in a delay of several months.

In March 2020, the COVID pandemic necessitated both school closures and shelter in place mandates throughout Santa Clara County. School districts were suddenly challenged to mobilize distance learning. The lack of reliable connectivity in many homes emerged as a critical access and equity gap, effectively preventing students from receiving or participating in their education. In response, City staff recommended, and the District agreed, that the existing agreements with the District and SmartWAVE be leveraged to accelerate deployment of community Wi-Fi to the Yerba Buena attendance area.

Staff has confirmed that the CDBG funding can be used in other attendance areas within the District that meet the HUD criteria. While the Mt. Pleasant High School attendance area includes the highest percentage of low/moderate income neighborhoods (80% or less of the San José median), there is no existing fiber that can be leveraged to provide both community and student households with Wi-Fi access. The cost to lay additional fiber would be approximately \$10 million at a minimum. Independence and Oak Grove attendance areas, however, also meet HUD's criteria and do not require additional fiber. Therefore, staff has concluded that these two attendance areas are candidates for utilization of the CDBG funds. The funding strategy to expand the project and install Community Wireless Network in new attendance areas such as Oak Grove and Independence will be brought forward to the City Council on June 23, 2020. The procurements that will be conducted and leveraged for these and other future implementations will require that the awarded vendor(s) have the capacity to implement multiple projects in parallel to help expand at a faster rate.

Office of Equality Assurance:

The Agreement with SmartWAVE is subject to the City's Prevailing Wage Policy, and SmartWAVE is contractually required to pay current, applicable prevailing wage rates. SmartWAVE is further required, in accordance with the Agreement, to provide verified and certified payroll records for all employees and subcontractor employees at the time of invoicing.

Approval of the recommendations in this Memorandum allows staff to execute amendments with the District and SmartWAVE to (1) update estimated costs for Yerba Buena and (2) revise the estimated funding gap for ongoing maintenance and support for all attendance areas to reflect the additional funds being provided by the District.

Potential Technologies:

The James Lick attendance area is using two different technologies to help close the access barrier of the digital divide: (1) outdoor Wi-Fi through the Community Wireless Network project and (2) 4G/LTE hotspots provided by the Sprint 1 Million Project Grant. Alternative technologies that have been evaluated for the Overfelt and Yerba Buena attendance areas include

wired options, fixed wireless options, and other telecommunications discount plans. The District and City jointly agreed to continue to provide outdoor community Wi-Fi for the non-student households that reside within the Overfelt and Yerba Buena attendance areas.

CONCLUSION

Funded by resources provided by ESUHSD, the City will oversee the contract with SmartWAVE to expand community Wi-Fi to students (especially underserved) and the community within the Yerba Buena High School attendance area. The expanded wireless service is expected to be available by December 2020.

EVALUATION AND FOLLOW-UP

To ensure that the District's Wi-Fi projects support student academic outcomes, the City's Library Department and the District will evaluate educational outcomes data tracked for the James Lick and Overfelt attendance areas on an annual basis. These data will create a baseline against which before and after academic performance will be measured for the Yerba Buena attendance area. In addition, overall maintenance and replacement costs will be evaluated and addressed to meet long-term community Wi-Fi needs.

CLIMATE SMART SAN JOSE

The recommendation in this memo has no effect on Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the June 30, 2020 City Council meeting.

COORDINATION

This Memorandum was coordinated with the City Attorney's Office, the Public Works and Library Departments, the East Side Union High School District, and the Santa Clara Office of Education.

COMMISSION RECOMMENDATION/INPUT

No commission recommendation or input is associated with this action.

FISCAL/POLICY ALIGNMENT

This action aligns with the City's Broadband and Digital Inclusion Strategy⁴ approved by City Council in November 2017.⁵ This strategy focuses on helping to ensure that all residents, businesses, and organizations can participate in and benefit from the prosperity and culture of innovation in Silicon Valley by broadening access to basic digital infrastructure to all residents, especially the community's youth. This will help enable free or low cost, high-speed broadband service in several low-income communities and increase access to hardware, including tablets and laptops, for low-income students.

COST SUMMARY/IMPLICATIONS

For each attendance area implementation, there are costs associated with the SmartWAVE contract to plan, design, and install the equipment, access City fiber, and provide ongoing maintenance and support for a five-year term (the first year is included with the installation). There are also costs for City staff to administer and deliver the project.

Table 1 below summarizes committed funding sources and costs for implementation at the James Lick, Overfelt, and Yerba Buena attendance areas. The District previously committed \$2.7 million to implement community wireless networks and ongoing maintenance for the James Lick and Overfelt attendance areas. The District will contribute an additional \$1,398,442, upon approval of this Council action and execution of the Second Amendment to the Funding Agreement, to fund the Yerba Buena implementation.

Following execution of the amendments in this recommendation, ongoing maintenance for James Lick is fully funded until 9/30/2021, Overfelt is fully funded until 6/11/2022, and Yerba Buena will be fully funded until 11/26/2022. Ongoing funding will need to be identified for maintenance, support, and technology refresh costs for all three attendance areas. As shown in Table 1, there is not enough project funding to fully pay for operations and maintenance costs in all option years. However, if some or all of the contingencies established for Overfelt and Yerba Buena are not needed, project savings could potentially be applied towards the unfunded operations and maintenance costs. ESUSHD and East Side Alliance (which includes Alum Rock Union School District, Berryessa Union School District, Evergreen Elementary School District, Franklin-McKinley School District, Mount Pleasant Elementary School District, Oak Grove School District, and Orchard School District) are developing a cost sharing agreement that could potentially fund the ongoing operations and maintenance and technology refresh needs for the community network. As the project continues, staff and the District will evaluate options for the currently unfunded operations and maintenance and technology refresh needs for potential inclusion as part of a future budget process, which would also take into consideration the City's

⁴ Digital Inclusion and Broadband Strategy: <https://www.sanjoseca.gov/index.aspx?NID=5557>

⁵ November 17 Council Special Meeting:

http://sanjose.granicus.com/GeneratedAgendaViewer.php?event_id=113bec85-c328-4a67-95d6-d05b81f36249

resource constraints and potential funding provided by the ESUSHD and East Side Alliance partnership.

Table 1. ESUHSD Community Wireless Network Project Funding

	Prior Years						
	Actuals	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Source of Funds							
Carryover from Prior Year		(37,472)	99,200	99,200	-	(99,200)	(198,400)
East Side Union High School District	1,350,000	1,350,000	1,398,442				
City Funds	94,326	49,551	49,551				
Total Source	1,444,326	1,362,079	1,547,193	99,200	-	(99,200)	(198,400)
Use of Funds							
James Lick							
SmartWave	1,072,756	-	-	-	-	-	-
Project Delivery	233,806	-	-	-	-	-	-
Operations & Maintenance	94,326	49,551	49,551	-	-	-	-
Overfelt							
SmartWave	80,910	861,854	-	-	-	-	-
Project Delivery	-	245,075	-	-	-	-	-
Operations & Maintenance	-	-	49,600	49,600	49,600	49,600	-
Contingency	-	106,399	-	-	-	-	-
Yerba Buena							
SmartWave	-	-	998,842	-	-	-	-
Project Delivery	-	-	245,075	-	-	-	-
Operations & Maintenance	-	-	-	49,600	49,600	49,600	49,600
Contingency	-	-	104,925	-	-	-	-
Remaining Funding to Carryover	(37,472)	99,200	99,200	-	(99,200)	(198,400)	(248,000)
Total Use	1,444,326	1,362,079	1,547,193	99,200	-	(99,200)	(198,400)

The City and District have identified additional sites that need community Wi-Fi availability and are working together to identify increased funding for both capital and ongoing operational costs. Though a separate memorandum on the June 23, 2020 City Council agenda identifies a potential funding strategy for additional sites, staff continues to evaluate a number of strategies that include, but are not limited to, the following:

- Assess other technology options which may be less expensive or may leverage technologies such as street light smart controller Wi-Fi funded from other sources;
- Identify grants and/or other school districts contributions;
- Seek to use other sources of funding such as the Community Development Block Grants Entitlement program;
- Pursue private sector opportunities including broadband provider negotiations;
- Pursue opportunities as part of a larger Citywide Community Wi-Fi strategy that seeks to fund a sustainable revenue source for the installation, maintenance, and associated replacement costs of all Community Wi-Fi services;
- Pursue community benefit partnerships;
- Approach other feeder school districts within the District service area about cooperatively funding Wi-fi and pursue agreements with these districts to access the network; and

- Pursue additional funding from the District and East Side Alliance.

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contract costs recommended as part of this memorandum.

Fund #	Appn #	Appn. Name	Total Appn	Amt. of Increase	2020-2021 Proposed Operating Budget Page*	Last Budget Action (Date, Ord. No.)
001	7860	East Side Union High School District Community Wireless Network Project	\$245,000	\$1,398,442	N/A	N/A
001	R090	Revenue from Local Agencies	\$13,095,000	\$1,398,442	V-2	N/A

* The 2020-2021 Proposed Operating Budget was approved by City Council on June 16, 2020 and is scheduled for adoption on June 23, 2020.

CEQA

Statutorily Exempt, File No. PP19-024, CEQA Guidelines Section 15303(d), New Construction of Small Structures.

/s/
KIP HARKNESS
Deputy City Manager

/s/
JULIA H. COOPER
Director of Finance

/s/
ROB LLOYD
Chief Information Officer


JIM SHANNON
Budget Director

HONORABLE MAYOR AND CITY COUNCIL

June 18, 2020

Subject: Agreements for ESUHSD Community Wireless Network

Page 9

I hereby certify that there will be available for appropriation in the General Fund in the Fiscal Year 2020-2021 moneys in excess of those heretofore appropriated there from, said excess being at least \$1,398,442.



JIM SHANNON
Budget Director

For questions regarding the Access East Side Project, please contact Rajani Nair, Assistant to the City Manager, Office of Civic Innovation and Digital Strategy, at (408) 799-7462.

For questions regarding the SmartWAVE Agreement, please contact Jennifer Cheng, Deputy Director of Finance, at (408) 535-7059.