



Ensuring Equitable Access to Career Development through the West San Jose Innovation Zone

Project Final Report

Michael Saunders

Project Summary

1. Analysis of Innovation Zone Opportunity
 - a. Survey of Zones/Districts across the nation
 - i. Characteristics
 - ii. Success factors
 - b. Re-engagement with companies from 2020 announcement
2. Determination of Innovation Hub Components
 - a. Survey of youth technology efforts across the nation
 - b. Survey of technology workforce, career transition programs
 - c. Identification of local programs, potential partners
 - d. Proposed Hub structure
3. Roadshow
4. Identification of Bridge to the Dome Opportunities
 - a. Discussions regarding Dome location
 - b. Possible District One venues
 - c. Wider net of location options
5. Pivot
 - a. Codification of logic model for project
 - b. Definition of Advisory Council objectives and roles
6. Opportunity Atlas
 - a. Visualization of STEM and Workforce programs in the Greater Bay Area
 - i. Nonprofits
 - ii. Corporations
 - iii. School-based
 - iv. Models from across the nation
 - b. Linkages between these efforts
 - c. Opportunities for collaboration/cooperation
 - d. Tool to identify gaps in program delivery
7. Next Steps

Project Detail

Analysis of Innovation Zone Opportunity

From the Project Description

Conduct a landscape analysis and a review of best practices: Develop an in-depth understanding of existing, planned and future efforts relating to tech innovation in San Jose and access to tech education in the area. Highlight current approaches such as similar initiatives around the country. Research best practices developed so far and map all of the public, private and community stakeholders whose interests coincide with the project's successful outcome. Understand and map the cost-benefit analyses and data-collection necessary to help build consensus around priorities when consensus of opinion poses a challenge.

Full Description: <http://socialenterpris.es/1ndl>

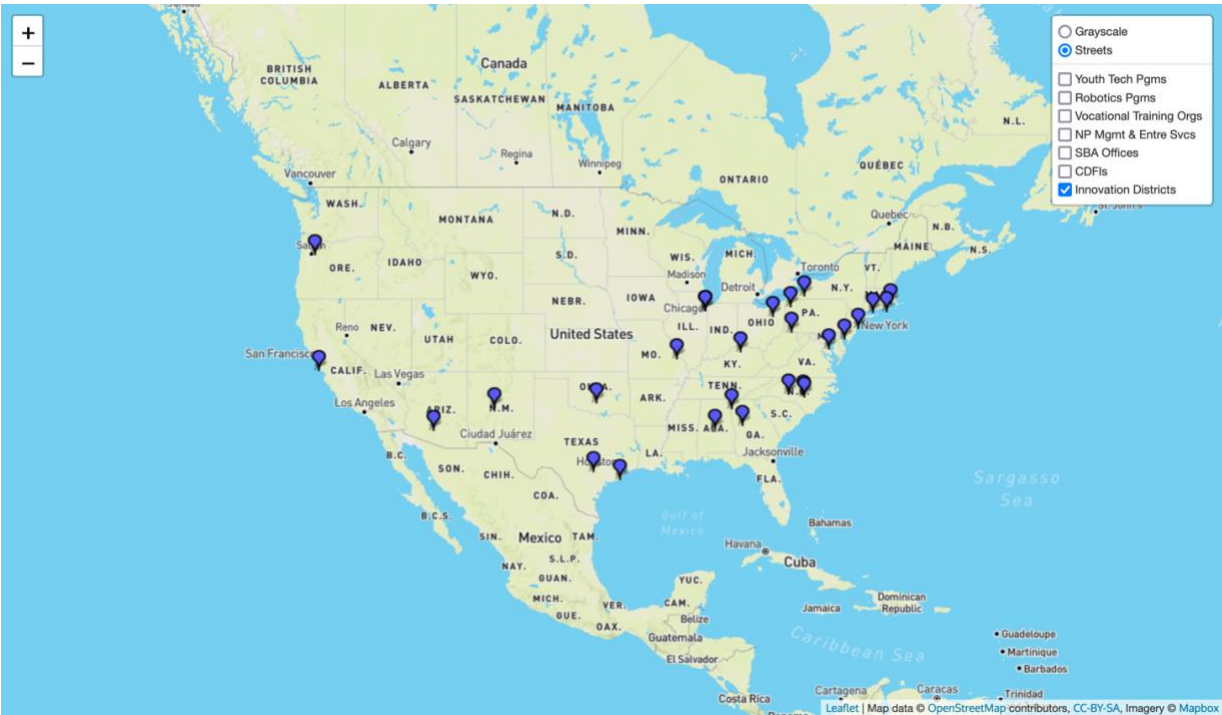
We took broad look at innovation efforts across the country. Starting with Innovation Districts which are predominately found in legacy manufacturing areas near anchor institutions.

Innovation zones have emerged as a popular strategy for driving economic growth and promoting innovation in the United States. One type of innovation zone that has gained traction in recent years is the "Innovation District." These districts are typically located in urban areas and are characterized by a concentration of businesses, research institutions, and other organizations that are focused on innovation and entrepreneurship.

Innovation Districts across the country are often found in legacy manufacturing areas that have experienced economic decline, with anchor institutions such as universities or hospitals serving as a catalyst for the development of the district. These anchor institutions provide resources, expertise, and networks that help to attract and support entrepreneurs and innovative companies.

We found that in addition to Innovation Districts, there are several other types of innovation zones that are prevalent in the U.S. For example, there are Innovation Hubs, which are designed to promote innovation and collaboration among businesses, universities, and other organizations. There are also Innovation Accelerators, which are typically focused on helping early-stage startups to grow and scale quickly.

Overall, innovation zones have become an important tool for driving economic growth and promoting innovation in the U.S. By bringing together businesses, universities, research institutions, and other organizations in a collaborative and supportive environment, these zones are helping to create new jobs, spur economic development, and drive innovation across a wide range of industries.



An interactive map can be found at - https://sjopportunityatlas.org/maps/us_map_youth_tech.php

With this perspective in hand, we sought to re-engage the corporate partners that expressed interest in participating in Innovation Zone projects in February 2020 at launch. We endeavored to reach out to the original participants:

AWS	Cisco
Verizon	Mercedes Benz
Federal Realty	Siemens
Bird Scooters	

The contacts for these pioneer organizations can be found at - <http://socialenterpris.es/1ndi>

All the original contacts were no longer in their positions that they held at launch. Of those that were reachable it was found that there were not defined project plans for participation in the Innovation Zone.

We did explore the opportunity to extend the Via Shuttle program into the Innovation Zone with funding from the Transit and Intercity Rail Capital Program (TIRCP). The Shuttle has been

piloted in Cupertino the original plan for expansion to San Jose would have leapfrogged the Innovation Zone and focused on the Buena Vista area (District 6). New planning includes the Zone, and DOT continues to explore opportunities to find matching funds for the state grant program.

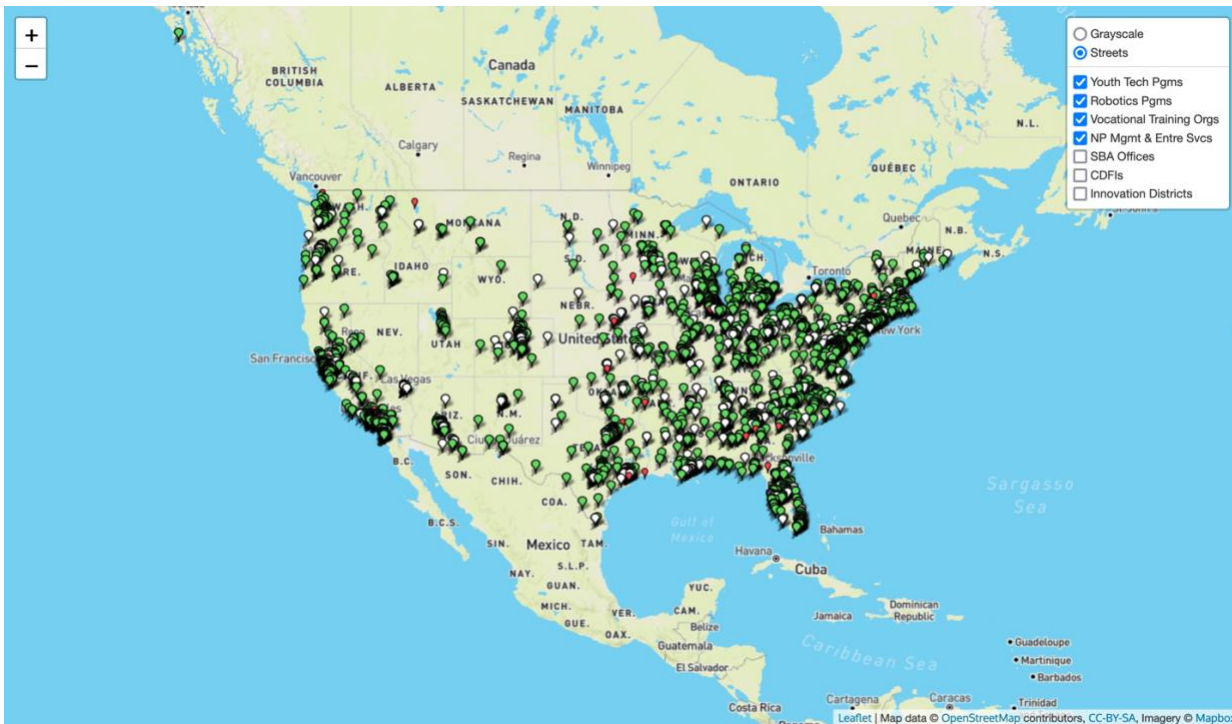
We also engaged several possible partners for pilot projects: Cruise (driverless cars), Ring (residential camera systems), Bay Wheels (shared bicycles) and Nuro (driver-less delivery systems). For the most part all these companies were not at the point in their product cycle to pilot in the Innovation Zone.

Several innovative projects were already in the works for other areas of San Jose, including “Shot Spot” detection in six target areas and advanced traffic detection devices at the intersection of Tully and Monterey Road.

The lack of a centralized catalyst and lack of resources to lend to the projects made implementation at the pilot stage difficult.

Determination of Innovation Hub Components

We then looked more in depth at innovative programs focused on youth technology, workforce development and small business support.

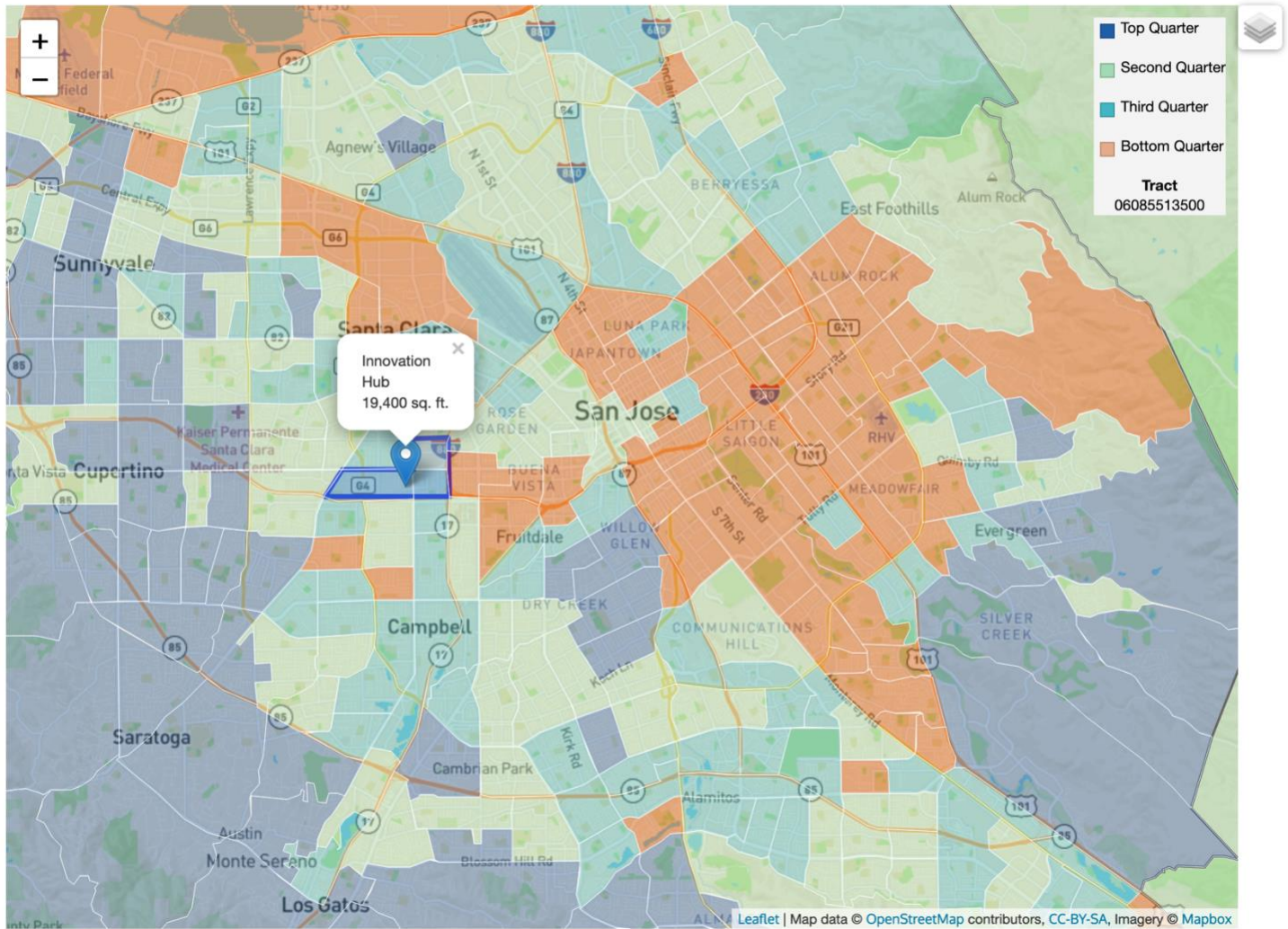


An interactive map can be found at - https://sjopportunityatlas.org/maps/us_map_youth_tech.php

Finally, we put specific focus on local San José efforts and innovative programs focused on youth technology, workforce development and small business support. These are potential allies, partners, and supporters of the San José Community Innovation Hub in the Century Dome Theatre location.

San Jose Innovation Zone and Community Vital Signs by Census Tracts in Santa Clara County

Community Vital Signs



An interactive map can be found at -

https://siopportunityatlas.org/innovation_zone/san_jose_innovation_zone.php

The output of this survey served as the basis to the preliminary elements of the San José Community Innovation Hub in the Century Dome Theatre location.

From Project Description

*Engage and align stakeholders, identifying opportunities to harmonize existing opportunities:
Establish ongoing channels of communications with stakeholders to ensure that all viewpoints are incorporated in the implementation plan which will govern the initiative's execution.
Ensure that commercial viewpoints are considered alongside community viewpoints in an equitable way that serve the best outcomes of the city, particularly underserved communities.
Ensure that relevant existing initiatives are brought into the Innovation Zone implementation plan.*

Full Description: <http://socialenterpris.es/1ndl>

This list of potential partners developed from many of the analysis and investigation provide to basis for pilot development for the Innovation Zone and further refinement and implementation of the Innovation Hub.

Based on the landscape analysis we developed a proposed Innovation Hub Showcase to be in the legacy Century Dome theater.



When it opened the Century Dome was the most innovative theater in the country. The San José Innovation Hub will ensure that all residents will have access to resources to fully participate in the most innovative economy in the nation.

A Robotics Lab Based on “For Inspiration and Recognition of Science and Technology” Principles

The mission of *FIRST*® is to inspire young people to be science and technology leaders and innovators, by engaging them in exciting mentor-based programs that build science, engineering, and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

Focus will be on increasing participation of girls and non-traditional groups in *FIRST*® and other technology programs.

Training Based on “Network for Teaching Entrepreneurship” Principles

Through the process of creating their own business idea, NFTE students build the skills needed to plan and launch a startup. They also learn about the full range of jobs and occupations available to them and are introduced to new career paths.

This training will be intimately linked to the FIRST program and software and Web development curriculum.

The NFTE Start It Up program post-secondary young adults and those seeking career transitions with the knowledge and tools to act entrepreneurially in a market where innovation and problem solving are key.

Coworking Space for Neighborhood Businesses

Leveraging the resources available for SJPL, SBDC, SCORE and the [Renaissance Entrepreneurship Center](#) the Hub will help launch and maximize new and existing neighborhood small businesses, delivering a range of services from training and consulting, access to capital, networking and special programs for women.

The Hub will provide low cost coworking space and support for new or existing neighborhood businesses and social entrepreneurs to incubate or accelerate their operations.

Community Engagement and Outreach

The Hub will act as a clearinghouse for STEM and workforce retraining activities across San José. By providing hands-on activities for youth and adults and acting as an Innovation Showcase, the Hub will strengthen the existing array of programs. Many programs will benefit from the shared resources available in the Hub increasing their sustainability.

The Hub will solicit and recruit corporate mentors, promote NFTE Training encourage broader participation and highlight volunteer opportunities. Bringing them together in one location will make it easier for families to participate in the unique Hub offerings. One facility that provides fun low-cost or free educational activities

San José Community Innovation Hub

We are building a Community Innovation Hub with a dedicated youth-oriented informal STEM learning center and neighborhood business incubator and accelerator in the historic Century 21 dome theater in West San Jose. The Hub will be a space with more than 20,000 sq ft of classrooms, meeting rooms, workspaces, tools & equipment ready for STEM projects. The initial focus of the Hub will be five program domains: virtual reality, robotics, game design, web design, and mobile app development. In addition, the Hub will provide low-cost co-working space and support for new and existing neighborhood businesses and social entrepreneurs to incubate or accelerate their operations.

The Hub will use project-based learning and informal STEM activities to foster an entrepreneurial mindset and provide youth and young adults with broader perspectives on their future pursuits. The Hub will use hackathons, pitch competitions, and global contests to inspire and engage youth and young adults to build interest in STEM and entrepreneurship.

The Hub will look to partner with and amplify existing STEM and business support efforts in San José. In addition, the Hub will actively solicit San José nonprofit youth STEM hobby groups that often must scramble for space to use the Hub's resources.

Entrepreneurial Skills Building

The Hub will partner with the [Network for Teaching in Entrepreneurship](#) (NFTE) to ensure that the entrepreneurial mindset is a part of all training. In addition, providing hands-on projects in a group environment allows youth to learn and practice soft skills needed for real-world success.

The Hub will use Intuit's [Design for Delight](#) approach and NFTE's [Start It Up!](#) Program to prepare young adults and those seeking career transitions for the new, more dynamic economic environment.

A Place to Grow

San José already has innovative programs for youth STEM activities. The new Hub will augment in-school learning with various hands-on, informal STEM learning opportunities out-of-school and outside of regular class hours - after school, evenings, weekends, holidays & summer vacations. As a result, youth will have a whole new range of activities available to them.

A Place for Neighborhood Business

Leveraging the resources available for SJPL, SBDC, SCORE, and the [Renaissance Entrepreneurship Center](#), the Hub will help launch and maximize new and existing neighborhood small businesses, delivering a range of services from training and consulting, access to capital, networking, and special programs for women.

The Hub will supply low-cost co-working space and support for new or existing neighborhood businesses and social entrepreneurs to incubate or accelerate their operations.

A New Home for STEM/Business Competitions

The Hub will allow teams to meet outside school. It will make it easier for parents & mentors to find needed resources and help teams to learn & thrive. In addition to the robotics competitions above, the Hub will prepare teams for:

- Business pitch competitions
- Hackathons
- App competitions - [International Technovation Challenge](#), [nationwide Congressional App Challenge](#).
- [NFTE World Series of Innovation](#)

Hands-On Robotics Lab

The Hub will provide access to project-based, hands-on [FIRST®](#) (For Inspiration and Recognition of Science and Technology) programs to introduce students to engineering and coding in an engaging, inclusive, and creative out-of-school or in-class learning environment where young people work collaboratively to solve robotics challenges.

Hands-on activities are available for ages 4 – 18:

FIRST® Robotics Competition: Grades 9-12 (ages 14-18)

FIRST® Tech Challenge: Grades 7-12 (ages 12-18)

FIRST® LEGO® League Challenge: Grades 4-8 (ages 9-16)

FIRST® LEGO® League Explore: Grades 2-4 (ages 6-10)

FIRST® LEGO® League Explore & Discover: Grades PreK-1 (ages 4-6)

The PreK-12 programs inspire innovation and help young people build a better future.

More on FIRST - https://youtu.be/hT4H4F_s-jA

It is expected the older youth in the robotics teams will take a leadership role in guiding the younger groups. In addition, participants in the robotics program will cross-pollinate with other Hub programs.

A San José Innovation Showcase

The Hub will act as a showcase for STEM activities and other innovation programs across San José. While providing hands-on activities for youth and young adults, a wide array of programs would be more robust with broader exposure. In addition, many small programs will benefit from the shared resources available in the Hub, increasing their sustainability.

The Hub will also facilitate recruitment of corporate mentors, NFTE Training, FIRST team building, and highlight volunteer opportunities at the Hub and across the city. Bringing them together in one location will make it easier for families to take part in the Hub's unique programs.

A Collaborative Environment

The Hub brings together dozens of different nonprofit youth, STEM, hobby, small businesses, and social entrepreneurs, working together sharing space, tools, resources, skill sets, and expertise. This catalytic ecosystem is how new opportunities are born!

Programming In STEM Out-of-School Curriculum

Through project-based learning (PBL), students gain knowledge, learn elements of the core curriculum, and apply what they learn to solve authentic problems in real projects. In addition, PBL gives students the advantage of building their own projects. Sessions are for kids from 6-18. This curriculum is modeled on a program out of Harvard, MIT, and Stanford - <https://www.ivy-seed.com/afterschoolprograms>

A Safe Space for Girls

The Hub is determined to be an inclusive space to ensure that all children and youth can learn in a welcoming environment. The Hub will partner with [Technovation Girls](#), a program that equips young women (ages 8-18) to become tech entrepreneurs and leaders. With the support of volunteer mentors and parents, girls work in teams to code mobile apps that address real-world problems. Find more model girls/women-focused organizations at - <http://socialenterpris.es/1nak>.

The Hub will host a San Jose chapter of [Girls in Tech](#), a nonprofit organization dedicated to eliminating the gender gap in tech.

The San José Innovation Hub focuses primarily on hands-on activities and provides both introductory and advanced learning opportunities that participants can revisit daily/weekly/monthly throughout the year. It will be a space where business and social enterprise ideas are incubated and accelerated, fostering innovation throughout the community.

Roadshow

With description in hand, we decided that it was time to have discussions on the Innovation Hub vision and engaged several potential partners or collaborators in meetings with Vice Mayor Jones.

A listing of the visits can be found at - <http://socialenterpris.es/1ndj>

The vision for the Innovation Hub was enthusiastically received in all the discussions in which we participated. The fundamental question, however, was what would be the management structure of the Hub and where would the financial resources come to maintain a facility.

Identification of Bridge to the Dome Opportunities

During our Roadshow phase we had several discussions about location on the Innovation Hub. Meetings with Federal Realty, developers of Santana West and owners of the Century Dome were less than enthusiastic about our plans for the Hub and reticent to provide temporary space while the discussions concerning the Hub continued.

With the feasibility of our prime location imperiled we sought to broaden the search to other locations outside of the Innovation Zone and potential outside of District One.

We had discussions with Google and the Sobrato Foundation about other locations for the Innovation Hub. Neither of those organizations could provide a home. We entertained the thought of investigating space opportunities with San Jose Community Centers but did not strongly pursue that path.

The realization that acquiring a physical location (even temporary) was a longer-term process than anticipated a new approach needed to be considered.

Pivot

To assess the best approach to proceeding we when back to first principles and constructed a logic model to clearly visualize what we were trying to accomplish.



We also agreed that it would be good to convene an advisory council to develop a cadre of stakeholders to continue momentum for the project after the FUSE project concluded.

One of the biggest challenges was how to engage council participants and the specific actions we would want then to take. In furtherance of that goal, we fleshed out a draft Council manifesto with associated personas of target participants.

Proposed San José STEM/Workforce Innovation Advisory Council

Silicon Valley is, in many respects, the center of the technology Universe. Yet, unfortunately, many residents cannot take advantage of the opportunities the economic benefits of these technology changes. San José has established an Innovation Zone on the city's west side to begin to address this disparity.

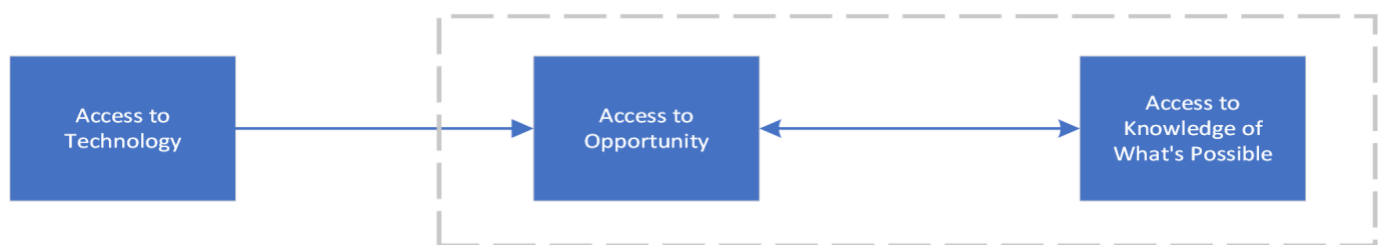
The Innovation Zone will highlight the technologies that will improve the lives of the city's residents through piloting innovative projects. The Zone will also host a Community Innovation Hub, which will house youth and career transition programs, showcasing innovative technology and ensuring that all residents have the resources to participate fully in the innovation economy. It will also amplify the STEM and workforce development programs currently operating in the city.

The Council will coordinate the various stakeholders to ensure that both the Innovation Zone and Community Innovation Hub are serving the needs of residents disconnected from the innovation economy ecosystem. The Council will be made up of representatives of residents, nonprofits, corporations, and San José City staff.

The primary focus of the Council will be:

- It will identify the existing STEM and workforce development programs in San José and Santa Clara County and the target markets they seek to reach.
- To publicize and amplify the identified programs – ensure that ALL possible stakeholders know about the available programs
- Identify gaps in the existing offerings.
- Encourage corporations to support STEM and Workforce efforts
- Ensure pipeline efforts are fully supported (k-12, community colleges and beyond)

There has been significant and continuing progress of identifying and addressing the digital divide issues in San José related to access to technology and broadband. The Council will focus on how these tools result in access to opportunity.



One of the Council's key initial deliverables will be the creation of an "Opportunity Atlas" highlighting existing STEM/Workforce Development Programs, particularly those scattered across corporations, nonprofits, and municipalities across Silicon Valley. This atlas will serve two primary purposes:

1. highlight and direct residents to the opportunities available to most effectively participate in the innovation economy
2. Identify the gaps that need to be addressed to facilitate comprehensive programs for residents.

Once those gaps are identified the Council will identify the resources and best approaches to addressing the deficiencies.

San José STEM/Workforce Innovation Advisory Council - Personas

The [Opportunity Atlas Resource Map](#) goes back to first principles. How are STEM and Workforce needs being addressed today and what if any gaps in service delivery need to be addressed.

The personas identified below will lend their expertise in answering those questions. Each representative will enter the map from their unique perspective and lend insights into how to meet the needs of the constituents most effectively they represent.

1. Corporate Workforce Planner

Target participants from: Nuro, Alphabet/Google...

- Questions that need to be answered
- What services/programs are we missing?
- How can you partner/collaborate with existing opportunities?

2. Teacher/Counsellor

Target participants from: Silicon Valley Education Foundation...

- Questions that need to be answered
- What services/programs are we missing?
- How can you partner/collaborate with existing opportunities?

3. Nonprofit Leader/Philanthropy

Target participants from: Greene Scholars, USTEC, Renaissance Entrepreneur Centers, Silicon Valley Community Foundation, Sobrato Foundation...

- Questions that need to be answered
- What services/programs are we missing?
- How can you partner/collaborate with existing opportunities?

4. Government Official - Economic Development

- Questions that need to be answered
- What services/programs are we missing?
- How can you partner/collaborate with existing opportunities?

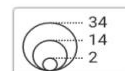
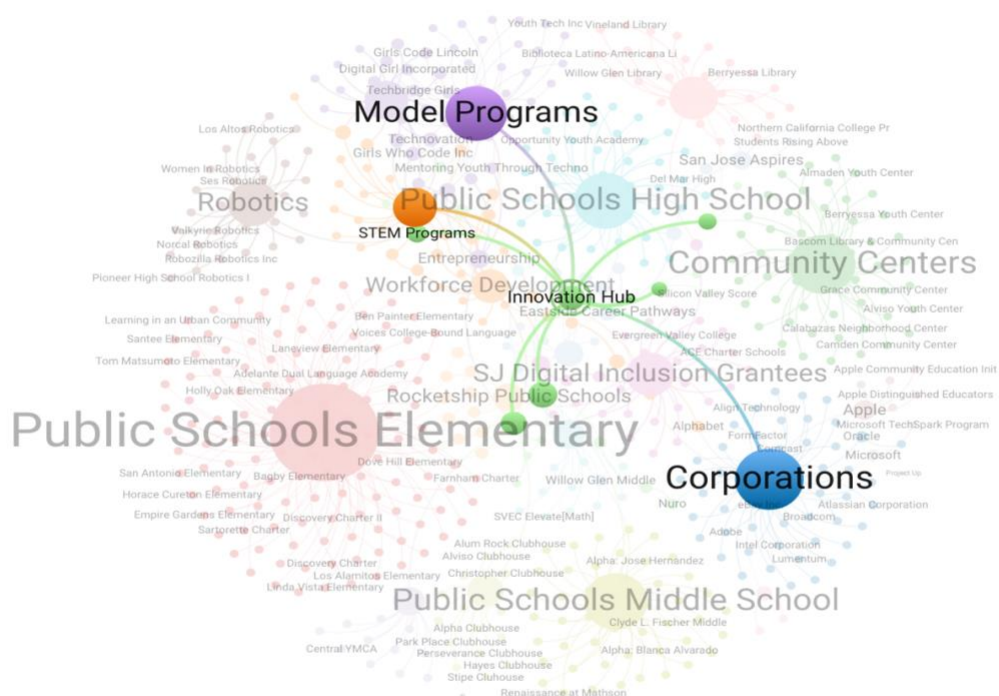
5. Residents

- Parent
 - Questions that need to be answered
 - What services/programs are we missing?
 - How can we raise visibility of existing opportunities and make them more accessible?
- Child
 - Questions that need to be answered
 - What services/programs are we missing?
 - How can we encourage participation in existing opportunities?
- Career Transitioning Adult
 - Questions that need to be answered
 - What services/programs are we missing?
 - How can we raise visibility of existing opportunities and make them more accessible?

Opportunity Atlas

The Opportunity Atlas is a visualization of the STEM and Workforce Development activities in San Jose, the Greater Bay Area and model programs across the United States.

The Atlas highlights STEM and Workforce programs from multiple perspectives. It shows school-based, nonprofit, corporate and government programs with the opportunity to see the linkages between efforts and opportunities for deeper collaborations.



An interactive visualization can be found at - https://sjopportunityatlas.org/Atlas_VOSview.php

A Sampling of Scenarios/How the Atlas Might Be Used

How might School-Based programs like Project Lead the Way and Breakthrough Silicon Valley work more closely with the recipients of grants from SJ Digital Inclusion?

How can Merit America that already works with Grow with Google extend its program to work with other corporate certification programs?

How can the many “points of contact” – libraries, community centers, YMCAs, Boys and Girls Clubs act as navigators to available programs?

How can CA Stem Network be highlighted to extend its reach to constituents that would benefit from this resource?

Next Steps

To find a home for this work going forward we brainstormed on possible fits within current San Jose City departments.

We have reached out to Work to Future in the Office of Economic Development and representatives from the San Jose Public Library to determine if there is any interest in expanding and maintaining the Opportunity Atlas.

If you have any comments, questions, or suggestions on any of the information in this report contact:

Michael Saunders

408-829-3342

michael@infoorganizers.com