

Dalberg

Bridging the Digital Divide in San José

FINAL SYNTHESIS REPORT
JANUARY 2019

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 - Digital inclusion programs in other cities
 - Resident/user research in San Jose

Review of project objectives and phases of work

Project Objectives

Create a plan to close the digital divide San José by articulating a clear strategic roadmap for launching the Digital Inclusion Program Fund focused on increasing digital access and opportunity for underserved San José residents.

1

External benchmarking/internal stocktaking

Synthesize relevant research on digital inclusion by interviewing programs in other cities; conduct inventory of San José's existing digital programs and internal org. structure and provide recommendations.

2

Concept development & workshops

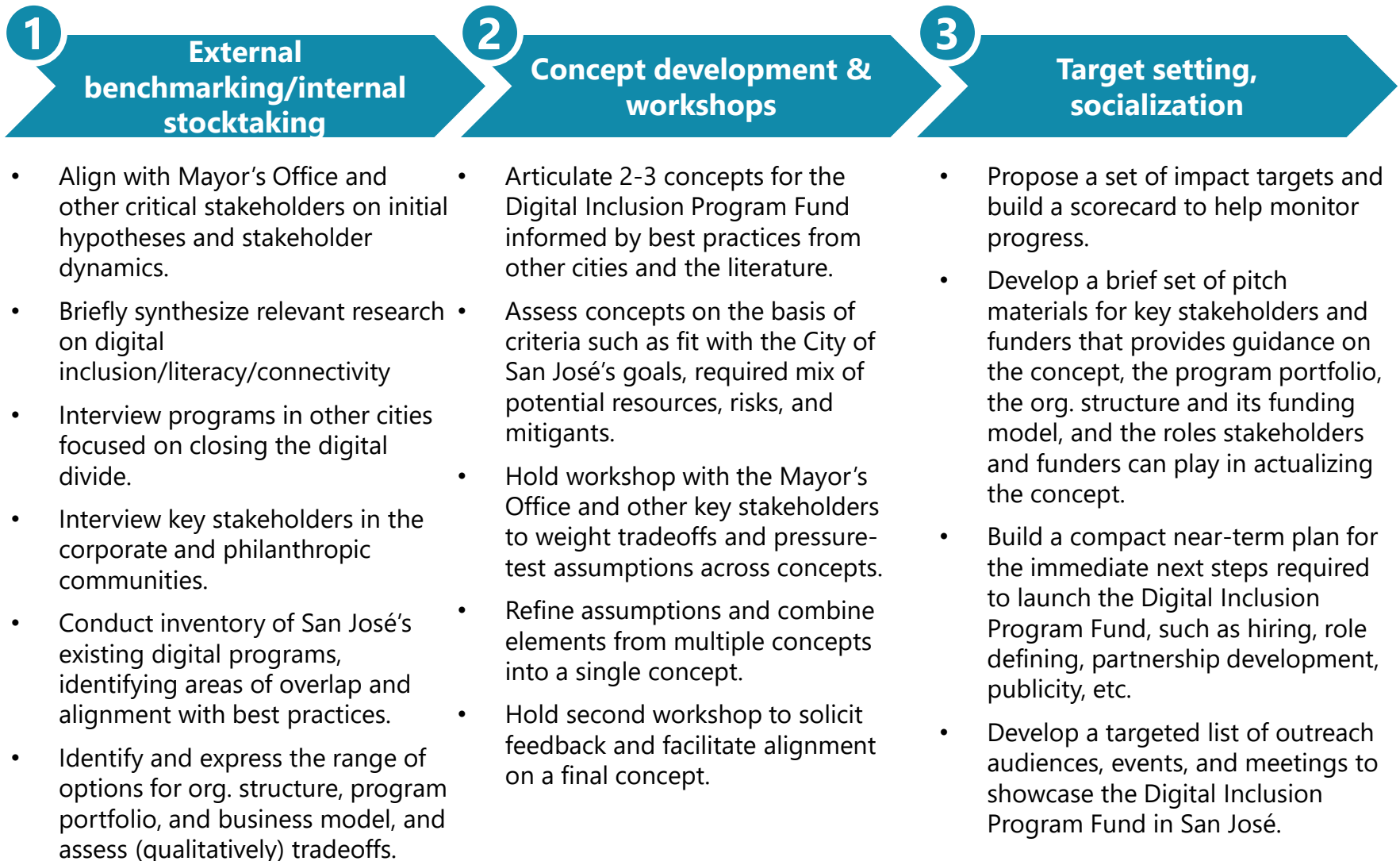
Articulate 2-3 concepts for the Digital Inclusion Program Fund and hold workshops with the Mayor's Office and other key stakeholders to hone into one final concept.

3

Target setting, socialization

Develop a near-term plan to launch the Digital Inclusion Program Fund, complete with impact targets, pitch materials, and a targeted outreach list.

There were three components to the approach: benchmarking, concept development, and refinement



Activities

...and specific outputs for each phase



- Outputs**
- Articulation of organization, program, and business model options
 - Detailed activity set
 - Prioritized list of concepts

- Assessment of 2-3 concepts
- For prioritized concept, recommendations on organizational structure (including scale-up path), programs, budgets (capital & operating), and funding (mix and targets)

- Final concept recommendations
- Theory of Change Workshops
 - *A series of webinars ultimately replaced the Theory of Change Workshops*
- Targeted funder and partner dissemination list

The ultimate objective was to build a clear roadmap for the Digital Inclusion Program Fund

Each concept was to include an articulation of the following:

- 1 Institutional home:** The legal and physical location of the concept
- 2 Mission and vision:** The desired impact and future the concept hopes to contribute to.
- 3 Budget, governance, and operating structure:** The high level budget as well as the requisite governance and oversight measures needed.
- 4 Range of programmatic activities:** The set of key programs the concept will own to achieve its mission and vision.
- 5 Potential partnerships:** The set of potential partnerships (both public and private) required for the concept to maximize its impact.

A number of interviews with internal staff and external experts were completed for this project (1/2)

Interviewee	Organization	Status
San José Digital Inclusion Team		
Shireen Santosham	Mayor's Office	Completed: 7/24
Emy Tseng	U.S. Department of Commerce	Completed: 7/24
Ingrid Holguin	Mayor's Office	Completed: 7/25
Vicki Sun	Mayor's Office	Completed: 8/2
Ann Grabowski	San José Public Library	Completed: 8/14
Dolan Beckel	Mayor's Office	Completed: 8/15
San José Government		
Betty Ramirez	City of San José Youth Commission	Completed: 7/30
Neil Rufino	Parks and Rec	Completed: 7/31
Stephanie Jayne	Office of Immigrant Affairs	Completed: 7/27
San José nonprofits/community orgs.		
Camille Llanes-Fontanilla	Somos Mayfair	Completed: 7/26
Sunne McPeak	CETF	Completed: 7/31
Alicia Orozoco	Chicana/Latina Foundation	Completed: 8/2
Maureen Damrel	Downtown Streets Team	Completed: 8/7

A number of interviews with internal staff and external experts were completed for this project (2/2)

Interviewee	Organization	Status
Foundations		
Daniel Harris	Knight Foundation	Completed: 8/14
Rosemary Kamei	Silicon Valley Education Fund	Completed: 8/13
Jeff Ruster	Work2Future Foundation	Completed: 8/16
City Initiatives		
Jim Loter	Seattle Digital Equity Initiative	Completed: 7/30
John Speirs	City of Austin, Digital Inclusion	Completed: 7/31
Anne Schwieger	City of Boston, Mayor's Office	Completed: 7/31
Kate Hohman	New York City, Broadband Technology Opportunity Program	Completed: 8/1
Vicky Yuki	Seattle Digital Equity Initiative	Completed: 8/1
Rick Usher	KC Digital Drive	Completed: 8/3
Bruce Clark	Digital Charlotte	Completed: 8/3
Kory Scheiber	Digital Inclusion, Ypsilanti	Completed: 8/8
Alex Banh	San Francisco Digital Equity	Completed: 8/10
Danielle DuMerer	Smart Chicago	Completed: 8/20
Jacob Martinez	Digital Nest	Completed: 8/10
Other		
Jessica Weare	Microsoft	Completed: 8/28
Chris Funk	East Side Union High School District	Completed: 8/14
Coralette Hannon	AARP	Completed: 8/9

A wide range of cities are working on digital inclusion and equity and provided a benchmark for DSJ

Sample of cities reviewed in benchmarking review



Seattle's Digital Equity Initiative: Strategy focused on digital skills training, improving connectivity, and ensuring affordable devices and technical support.



Digital Charlotte: Initiative focused on digital literacy skills as a pathway to educational and economic opportunity.



Watsonville's Digital Nest: Program committed to bringing technology to underserved student populations.



Boston's Tech Goes Home: Organization which empowers low-income and underserved residents to access and use digital tools through a community-based training model.



Chicago's Learning Circles: Program which engages adults in online learning by creating face-to-face study groups at public libraries.



Riverside's RIVCOconnect: Initiative to provide computer equipment and improve digital literacy in underserved communities and provide low or no-cost access to internet for all residents in the county.



Raleigh's Digital Connectors: Program which teaches tech skills to youth in the community, who then teach those skills to other community members.



New York's Queensbridge Connected: Program to improve quality of life in Queensbridge houses by providing universal broadband through the installation of Wi-Fi service.



Kansas City's Coalition for Digital Inclusion: A coalition focused on closing the digital divide using a collaborative movement across digital inclusion initiatives



Singapore's SG Digital (for community): Nationwide initiative to grow Singapore into a dynamic global info-comm hub, aimed at building a digitally inclusive society



New Zealand's 20/20 Trust: Nationwide initiative that delivers programs for digital literacy, skills and inclusion through community-based partnerships and programming

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Research into key digital inclusion needs has offered a clear programmatic path for the Digital Inclusion Fund

Need

- The digital divide in San José is characterized by two primary issues: insufficient reach of current services and an under-developed ecosystem of solution providers
- While Library services (computer labs, Wi-Fi, etc.) address a subset of the underserved community, at-home internet and device access remain challenges, and too few low-income and elderly individuals have the training required to fully leverage connectivity
- In addition, the broader ecosystem of actors supporting digital inclusion across the city is under-developed and not well coordinated
- These factors, along with limited data / evidence on impact from rigorous program evaluation, likely reduce the effectiveness of investments today and limit the potential for increased fundraising to address inclusion challenges at scale

Design principles

- Dalberg recommends that the programmatic remit of the Digital Inclusion fund directly targets these gaps, focusing on balancing near-term programmatic reach with catalyzing a robust innovation ecosystem
- Several assets exist in the City today that offer potential platforms for building supporting programming: City departments have initiated efforts in the Digital Inclusion space, a strong tech presence offers a proximate pool of relevant expertise and funding, and local community organizations have built strong relationships with residents
- Execution requires careful consideration of governance design, ensuring:
 - Accountability for tangible results and good stewardship of city funds
 - Leveraging of existing capacity, expertise, and community relationships
 - Facilitation of effective collective action for service delivery and resource mobilization

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Digital Inclusion means everyone can access, afford, and successfully adopt digital services

"...Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs)...."

- National Digital Inclusion Alliance

The “Access, Affordability, Adoption” framework captures key elements of digital inclusion



Access

- Broadband infrastructure, service packages, devices, and / or public internet are readily available to all residents



Affordability

- Broadband access and devices are available at a price and with financing structures that enable low-income groups to participate in the digital economy



Adoption

- Residents are aware of how to connect and are sufficiently digitally literate to benefit from digital connectedness

The “AAA” framework, referenced in prior San José digital inclusion work, will be used throughout our analysis to categorize objectives, programs, activities, and metrics.

The broad benefits of digital inclusion are well documented...

Benefit

Description



Education

- Now more than ever schools assign homework which necessitates access to internet; 70% of teachers assign homework which requires the web.¹



Health

- Digital inclusion helps individuals access information about their health, contact / interact with healthcare providers, and identify available services.



Workforce development

- People with a home internet connection are estimated to be employed 25 percent faster, translating to more than \$5,400 in additional annual income.²



Access to finance

- As financial services move online, connectivity ensures residents retain access to key financial services, and benefit from the improved efficiency and expanded set of services offered through digital financial platforms.



Community

- Access to social media and online forums can help less mobile people connect with family and friends and help others pursue interest groups.



Productivity / income

- It is estimated that by 2020, 77% of jobs will require some degree of technical skill, including familiarity and experience with digital connectivity.³



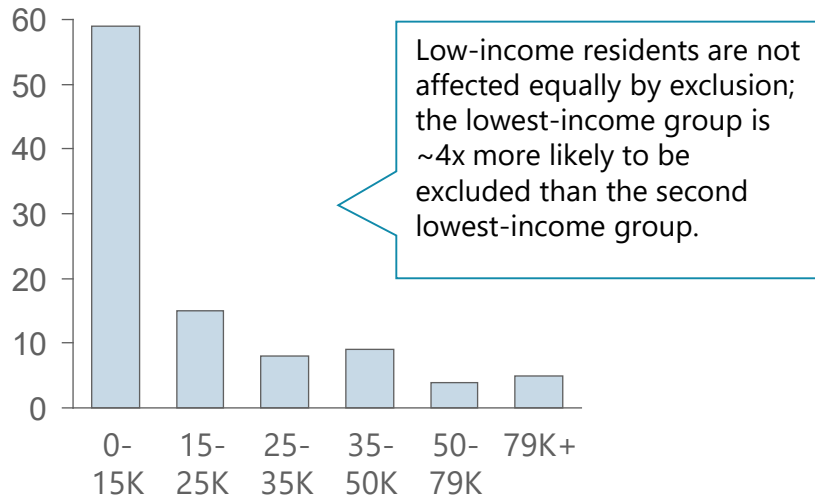
Access to social services

- Digital communication tools provide the poor, elderly, and disabled with access to basic social services and government transfer payments.

...however, digital inclusion remains a challenge for 95,000 residents in San José¹

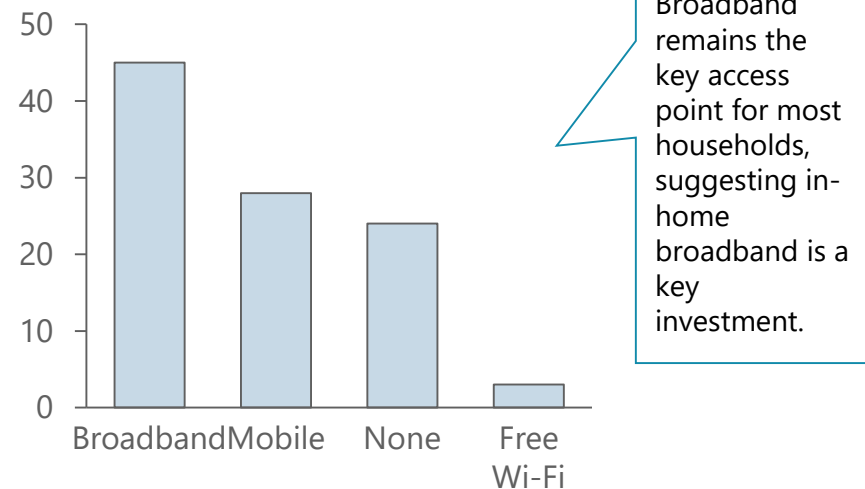
Broadband exclusion by household income²

% of all households without broadband



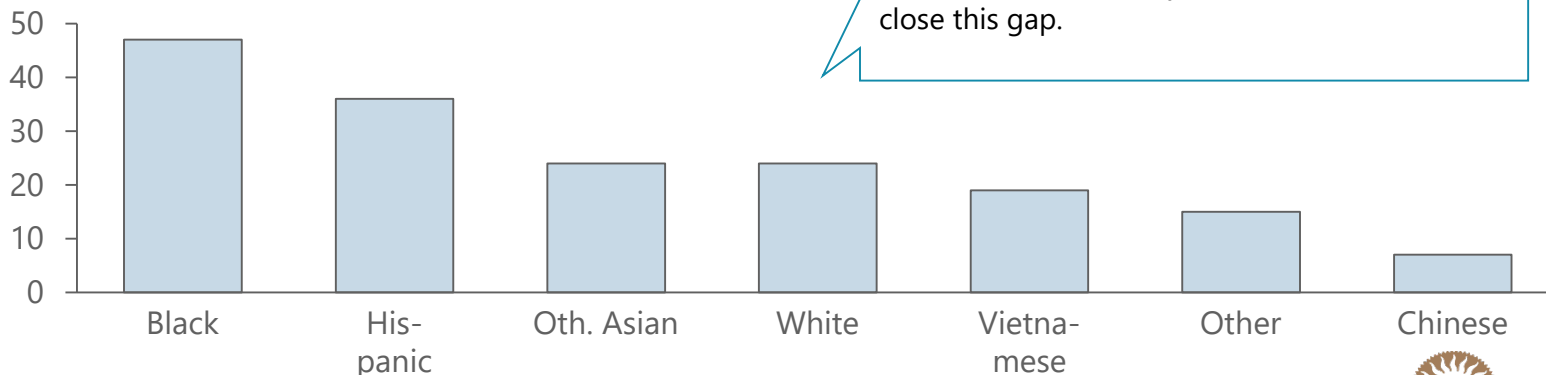
Type of internet access for HH earning <\$35K²

% of all households earning <\$35K

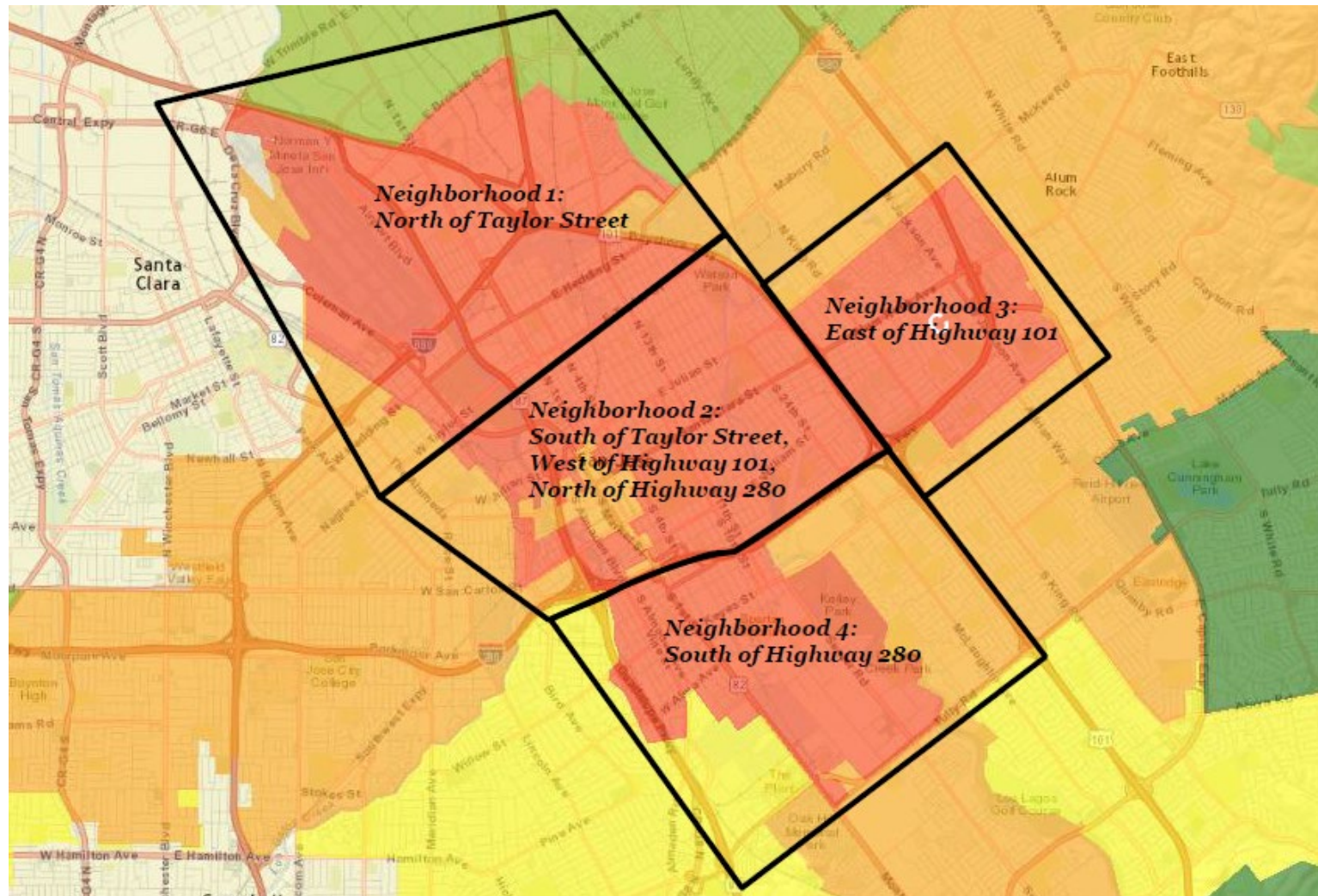


Broadband exclusion by race²

% of households in racial group without broadband



As prior research has shown, the excluded are concentrated in several low-income communities



Sources: City of San José. "Broadband and Digital Inclusion Strategy." June 2017.

Specifically, four demographic groups remain underserved, each with challenges / benefits (1/2)

1



School-age children

Key challenges

- **Cost of service and devices:** cost of hardware and internet service excludes low income students
- **Access to public Wi-Fi:** Public Wi-Fi may have limited hours and / or students may not live near public Wi-Fi
- **Parent concern:** some students' families are suspicious around the value / safety of the internet

Key benefits

- **Education:** research, writing papers, collaborating with peers, studying for exams, etc., rely on internet / device access
- **Community building:** online forums and social media can provide a sense of community / space for peer learning
- **Workforce development:** college / job applications, scholarships, online courses, and other career information require an online connection

2



Low-income adults / parents

- **Cost of service and devices / awareness of low-cost options:** cost of hardware and internet service is a major constraint for low-income parents
- **Suspicion of internet / awareness of benefits:** many low-income parents do not trust the internet is safe for their children, and don't understand the benefits for their children's academics
- **Lack of digital literacy skills:** unable to leverage the internet / devices

- **Education:** improving academic performance for children and/or gaining access to academic material for further education themselves
- **Productivity / income:** learning basic and advanced skills required for entry-level employment and or promotion
- **Access to finance:** ability to quickly save, invest, or withdraw funds as required

Specifically, four demographic groups remain underserved, each with challenges / benefits (1/2)

3



Senior Citizens

Key challenges

- **Fear of internet:** fraud targeted towards elderly is common
- **Lack of digital literacy skills:** elderly folk, especially those who are 90+, are often unable to keep up with the pace of technological change
- **Mobility:** Elderly may have challenges reaching community centers if they do not have computers at home

Key benefits

- **Community building:** provides connection to remote family / friends and reduces social isolation
- **Health:** allows elderly to schedule doctor appointments, order prescriptions, and research symptoms
- **Access to social services:** provides info about senior events / benefits and allows them to check Medicare and social security benefits

4

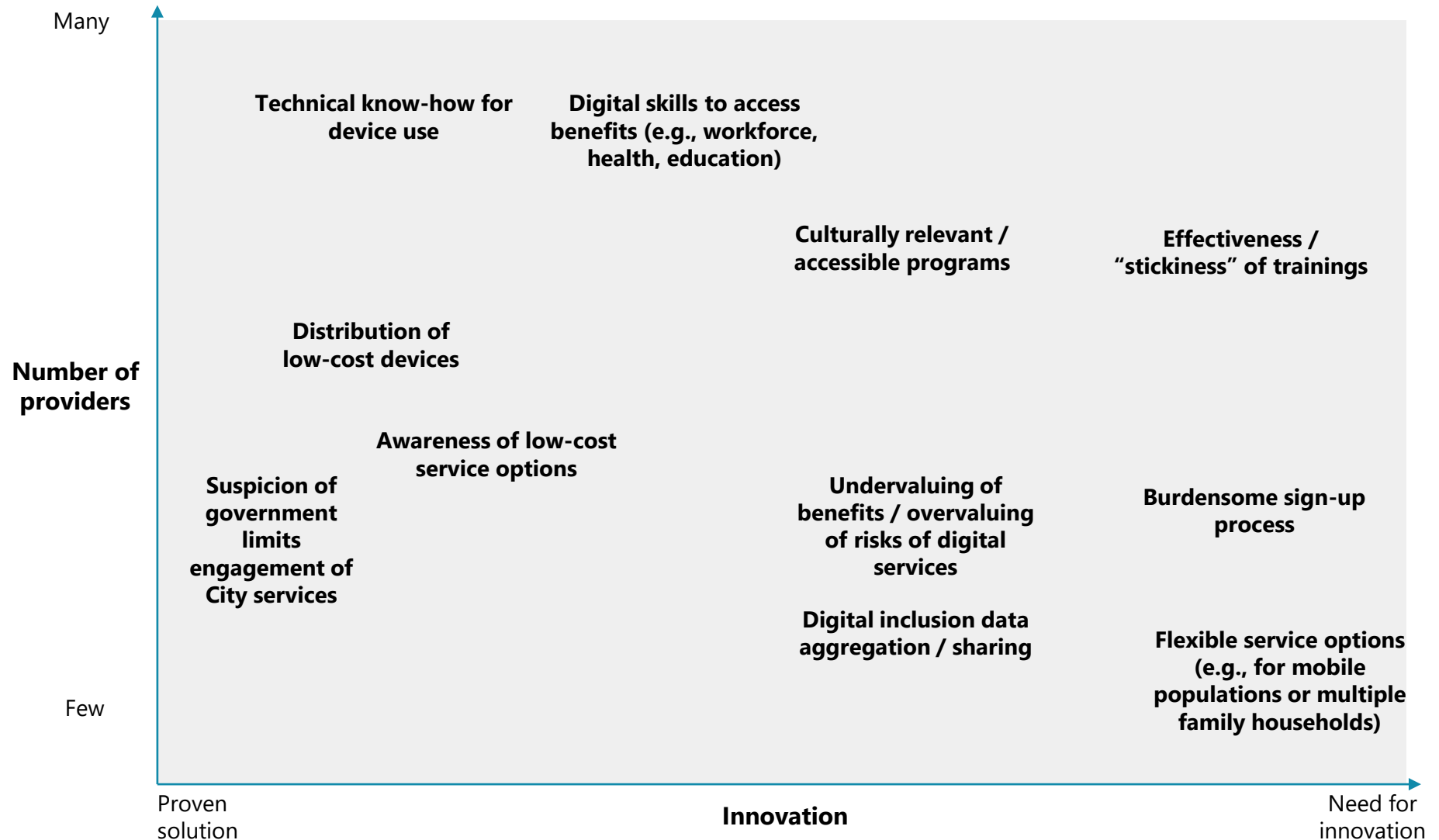


Un-housed residents

- **Cost of devices / awareness of public options:** cost of smartphones / computers prevents access
- **Awareness of public options:** many are not aware of options beyond Library
- **Familiarity / literacy skills:** skepticism around safety of internet, and many lack digital literacy skills required to make use of digital services

- **Access to social services:** can better access shelter, welfare benefits, food stamps, etc.
- **Health:** scheduling doctor appointments, ordering prescriptions, getting advice on diet
- **Workforce development:** learning basic literacy skills required for employment

Key challenges to digital inclusion can be mapped across a provider and innovation grid



An effective DI strategy will expand successful models and drive innovation where solutions are missing

Digital inclusion challenges faced today

Many

Technical know-how for device use
Digital skills to access benefits (e.g., workforce, health, education)

EXPAND PROGRAMS

Distribution of low-cost devices

Culturally relevant / accessible programs

Effectiveness / "stickiness" of trainings

INNOVATE

Awareness of low-cost service options

Suspicion of government limits engagement of City services

DEVELOP PROGRAMS

Undervaluing of benefits / overvaluing of risks of digital services

Burdensome sign-up process

Digital inclusion data aggregation / sharing

Flexible service options (e.g., for mobile populations or multiple family households)

Number of providers

Few

Proven solution

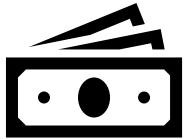
Innovation

Need for innovation

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Several execution constraints should be kept in mind as the city formulates an effective and durable plan



Capital constraints

- While ~\$24M is as sizeable pool of capital, it is insufficient to directly finance all needed programming; alternative sources of capital will be required and budget must be spent thoughtfully



Team capacity

- While additional personnel can be brought in, new programming, even if light touch, will place incremental demands on current staff



Beneficiary trust & engagement

- While the City has multiple touchpoints with residents, it may not have sufficiently deep connections with underserved demographics to effectively implement programs without leveraging existing organizations' networks



Political priorities

- Programming and associated metrics / outcomes must be designed to attract sustainable political backing in order to ensure sustainable financing and communications support

Four high-level functional roles provide the building blocks for any potential utilization of funds

Description

- 1**
Direct service provision
The City directly designs, implements, and evaluates digital inclusion programs targeted at high need areas currently lacking programming, hiring new staff and contracting other services out as required.
- 2**
Architect and convener
The funds are used to convene ecosystem players, supporting establishment of a *Coalition for Digital Inclusion* and creating a city-wide strategy for digital inclusion, communicating that vision to all relevant digital inclusion stakeholders.
- 3**
Grantmaker and capacity builder
Funds support grants to organizations working in areas of highest programmatic need. Capital serves to build capacity of grantees by pairing them with digital inclusion experts, and eventually enables successful grantees to build capacity of other CBOs.
- 4**
Innovation lab and advocate
Funds are used to pilot and profile a few innovative programs in digital inclusion and share and elevate key lessons and best practices to the national stage.

The City considered creating a new organization, or partnering with an existing organization

The City is working to secure a partnership with an existing organization

Partner with existing organization

Overview:

- Over the next 3-6 months the City vets potential partners (NGOs, Foundations, etc.) to identify suitable partner to own and operate grant making and project management responsibilities for the Digital Inclusion program

Benefits:

- Leverages established grantmaking and fundraising infrastructure and expertise
- Expedites near term program initiation
- Limits expansion of systemwide overhead

Considerations:

- Partner may not be singularly invested in Digital Inclusion Program and/or San Jose's success
- Contract / charter stipulations must be clear and comprehensive given partner's independence

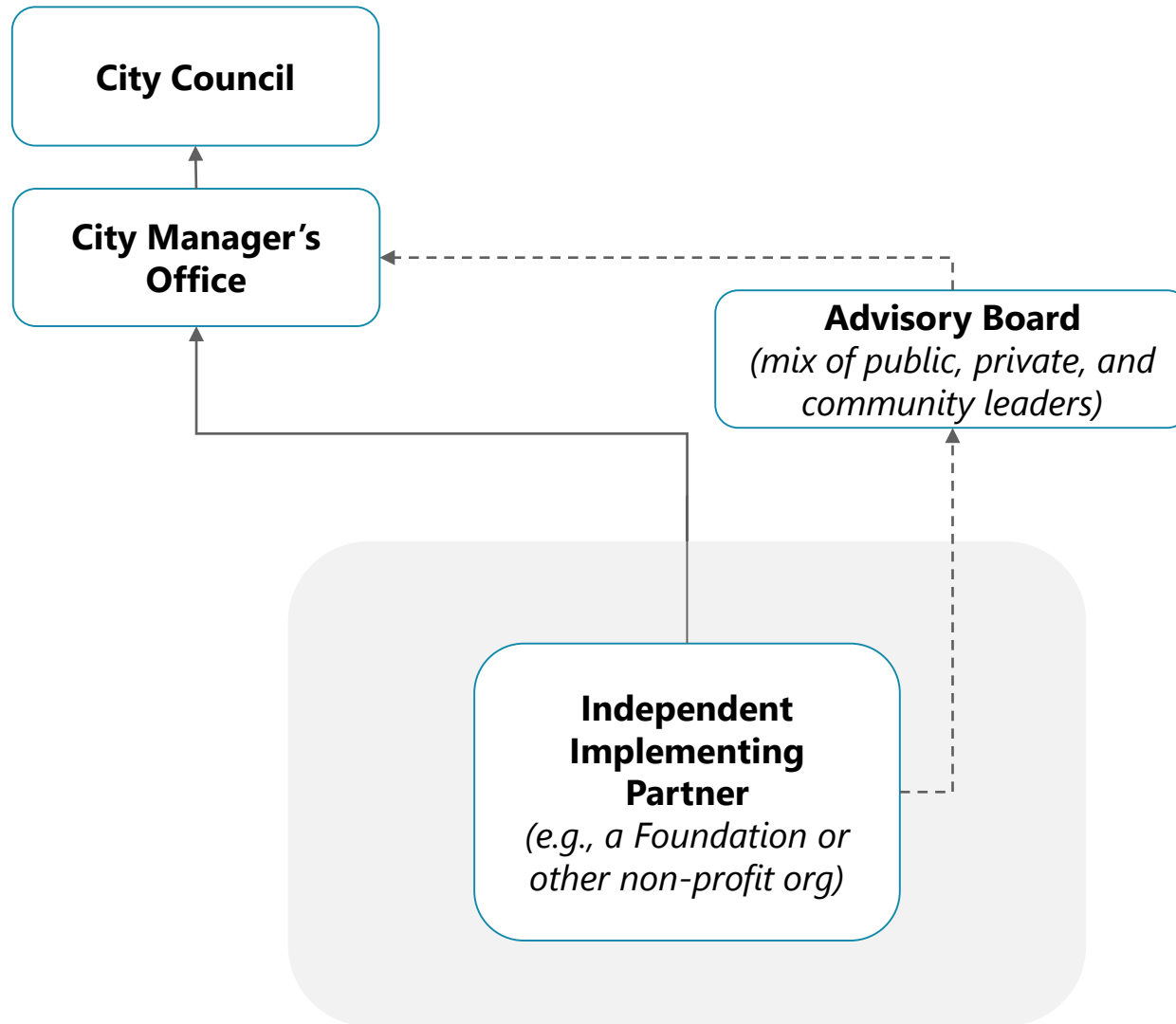
Build from ground up (new 501c3)

- Over the next 6 months to a year, the city invest in resources to legally structure, staff, and house a new, independent Digital Inclusion organization to own and operate grant making and project management responsibilities

- Purpose-built institution focuses resources directly on digital inclusion mandate
- Talent acquisition is tailored to specific programmatic mandate of the Digital Inclusion Strategy

- Costly and time-intensive to design, structure, and build
- Limited scale economies and less institutional experience in fundraising and grant making

The Digital Inclusion Fund will have City oversight, but will be managed by an external partner



The Advisory Board should include a mix of City, community, and private sector leaders

Chair

Chair (or Co-Chairs) may include:

- Senior staff from the CMO or Mayor's Office

Board members

Representatives may include:

- Representation from across the CMO (2 or 3 seats)
- Representation from the Mayor's Office (1 seat)
- CEO/Executive Director of the independent implementer
- Representation from Community leadership (2 or 3 seats)
- Representation from the School District (1 seat)
- Representation from Academics (1 seat)
- Representation from Telecom providers (TBD)
- Representation from other technology leaders
- *Seats for large funders (TBD)*

Note: Considering conflicts of interest: Community leaders can be identified by consulting local CBOs, who may not be able to be directly represented on the board if they are competing for funding. Similar conflicts may exist for technology and telecom providers.

The right implementing partner is visionary, innovative, and committed to underserved communities

Desired Partner Qualities

- ✓ Strong mission alignment; commitment and urgency to advancing digital inclusion and addressing the needs of underserved communities
- ✓ Strong organizational leadership
- ✓ Ability to drive innovation in programs, funding, and partnerships
- ✓ Transparent and effective (and low-cost) financial management practices and processes, including experience managing grants and other funding to partners
- ✓ Ability to secure additional (large-scale) funding

Potential Partners Considered



The external partner will focus on addressing challenges for which effective solutions are limited

Examples of existing challenges

- *Existing training is not always culturally relevant / led by actors who are not trusted*
- *No existing contract options for people who do not have permanent residence and / or have multiple families in one home*
- *Limited willingness to pay (WTP) for internet even among low-income families who can afford service because of misconceptions re: benefits / risks of internet*
- *Lack of devices available to donate / refurbish to low-income residents*
- *Lack of adoption for literacy trainings among adults / senior citizens who face steep learning curves*
- *Limited data available to rigorously evaluate digital inclusion programs*

Example solution areas to explore

- "Train-the-trainer" community-led training models, using students to train community members for a stipend (e.g., IT support, basic digital literacy skills)
- Low-cost options for mobile residents (e.g., homeless individuals) and multiple family households (e.g., immigrant populations) to acquire internet without long-term contracts, potentially using housing authorities as a key partner and mobile hotspots as an alternative to in-home connection
- Behavioral economics interventions to draw a clearer link to the financial, health, and educational benefits of digital inclusion and increase WTP; door-to-door campaigns to create quality face-time with underserved populations rather than exclusively using traditional outreach events
- "Train-the-trainer" approach to train students on how to refurbish devices donated from tech companies (potentially in partnership with the Library or local CBOs)
- Rollout "learning circles" to engage adults in online learning via face-to-face study groups (potentially in partnership with the Library or local CBOs)
- Leverage untapped community / government partners (e.g., Santa Clara Housing Authority) with preexisting baseline data; use that data as the basis to run pilot programs

The digital inclusion fund will prioritize the following fundamental design principles

- **Reach / needs:** offers a viable mechanism for reaching and meeting the needs of a sizeable portion of the underserved community
- **Leverage / impact:** leverages current assets, expertise, or networks to amplify the impact of fund resources and crowd-in further funding
- **Community knowledge / investment:** actively draws in community wisdom and drives investment to local community groups and institutions
- **Innovation / knowledge sharing:** pursues innovative ideas and facilitates sharing of learnings and encourages collaborative solutions
- **Equity:** facilitates inclusion and reflects cultural sensitivity
- **Resilience:** remains financially and politically stable, ensuring a reliable source of services for underserved communities
- **Rigor / attributable outcomes:** leads to measurable impact which is reliably communicated to relevant stakeholders
- **Leadership:** Positions San José to become a national leader and agenda setter for DI

Theory of Change:

Critical outcomes for the Digital Inclusion Fund

Direct service outcomes to be achieved

Universal device access

Universal connectivity

**Increase in community /
individual welfare**

Ecosystem outcomes to be achieved

**Robust data and learning
ecosystem**

**Increased funding and
attention to reducing the
digital divide**

**Coordinated ecosystem
of providers**

Robust measurement will be critical for success; several metrics offer critical data (1/2)

Direct service impact outcomes, indicators, and metrics

Long-term
outcomes

Indicators

Metrics

Universal device access

- Number of families buying / receiving donations of devices
- Awareness of low-cost device / free options of low-income families (pre / post intervention)
- Number/diversity of access points for residents to acquire devices

Universal connectivity

- Lower priced service plans
- Low-cost options for mobile populations / households with multiple families
- Increased trust in providers
- Increased awareness of low-cost options and benefits of connectivity
- Change in willingness to pay for digital services (pre/post outreach/awareness events)

Increase in community / individual welfare

- Number of people who are hired for jobs with living wages from digital inclusion trainings
- Self-reported increases in health
- Increases in feelings of community for senior citizens (e.g., via surveys to caretakers re: social activity)
- Increases in academic performance for students (e.g., via surveys to teachers to measure homework completion)

- Number of devices donated, refurbished, and distributed
- Change in number of people with access to devices

- Number of outreach events held / number of people who sign up
- Number of door-to-door outreach campaigns and people spoken with
- Number of information sessions held with low-income residents

- Total number of train-the-trainer program participants and trainers
- Number of basic / advanced skills trainings / learning circles
- Number of topic specific skills trainings (e.g., health, education, employment, etc.)

The digital inclusion fund is directly accountable for metrics; indicators and outcomes are the result of digital inclusion metrics *and* other factors outside the City's purview.

Sources: GuideStar, 2018, Dalberg Analysis.

Robust measurement will be critical for success; several metrics offer critical data (2/2)

Ecosystem impact outcomes, indicators, and metrics

Long-term outcomes	Robust data and learning ecosystem	Increased funding and attention to reducing the digital divide	Coordinated ecosystem of providers
Indicators	<ul style="list-style-type: none">• Data capture and aggregation across the DI ecosystem for key metrics• Number of CBOs/nonprofits adopting best practices• Increased commitment to evaluation across DI actors	<ul style="list-style-type: none">• Total dollars disbursed to digital inclusion in San José• Number of new orgs conducting DI programs• Number of long-term commitments (5+ years) from funders to DI work	<ul style="list-style-type: none">• Degree of representation across diverse DI stakeholders• Lack of duplicity among DI programs• Number of joint-programs run by two or more actors
Metrics	<ul style="list-style-type: none">• Presence of open and transparent online data sharing portals• Baseline data collected for all programs• Number of new pilots and innovative approaches tested• Number of articles/events sharing best practices	<ul style="list-style-type: none">• Number of fundraising events led by the City• Number of roadshows held at top tech companies and foundations• Number of “digital inclusion champions” selected who are active advocates at major tech companies	<ul style="list-style-type: none">• Number of working sessions involving a mix of CBOs, nonprofits, and funders• Amount of resources spent on digital inclusion work in each City department

The digital inclusion fund is directly accountable for metrics; indicators and outcomes are the result of digital inclusion metrics *and* other factors outside the City’s purview.

Sources: GuideStar, 2018, Dalberg Analysis.

Theory of Change:

Grant-making to local partners in San Jose

The partner will consider DI program proposals from, and issues grants / contracts to:

- **Trusted CBOs** with the ability to provide culturally relevant, community-centric DI programming for underserved populations (low-income students, elderly, etc.)
- **Nonprofits / private sector orgs** with existing innovative programming infrastructure, staff, and expertise in order to pilot new approaches to DI challenges
- **City departments** with existing DI programs that can quickly and efficiently expand current programming to reach additional underserved residents
- **City housing authorities and schools** to leverage their proximity to user data to systematically collect baseline data and determine how DI programs change participant outcomes in education, health, and employment
- **Foundations** to integrate DI as an element of their broader program portfolio (e.g., STEM focused programming)

Various partners can be engaged to support program delivery, innovation initiatives, and/or new funding

Stakeholder type

Value add

Community based organizations



- **Program delivery:** Deep community relationships, experience, and trust to enable participation in programs
- **Program delivery:** Ability to offer culturally appropriate and community-centric programming

Nonprofits



- **Program delivery:** Technical and content expertise (e.g., device refurbishment)
- **Innovation:** Ability to lead innovation pilots using existing infrastructure (including staff and programs)

City departments/schools



- **Program delivery:** Established presence and relationships, especially with low-income families and students
- **Program delivery:** Existing program experience and an ability to quickly scale programming and collect data

Corporations (Tech and Telecomm)



- **Fundraising:** Ability to provide catalytic funding or in-kind donations for programs and innovation pilots
- **Innovation:** Established private sector expertise which allows for innovation on program delivery approaches

Foundations/Universities



- **Fundraising:** Ability to provide catalytic funding or in-kind donations for programs and innovation pilots
- **Program delivery:** Evaluation expertise to rigorously measure the results of digital inclusion programs

The independent implementer can use innovative grantmaking techniques to amplify funding

Description

Example

Challenge / matching grants

Grants disbursed only after the grantee has raised / contributed a certain amount of funds (in-kind or monetary)



Seattle's "Technology Matching Fund" matches grantee contributions (either in-kind or monetary) to digital equity work up to 50K USD

Civic crowd-funding

Projects and initiatives hosted on an online platform to raise attention and funding from individual contributors



Austin Community Foundation crowdfunded 1.5M USD for criminal justice reform in Travis County

Social impact Bond

Funding mechanism used to attract new sources of capital where payment depends on clearly-defined and rigorously-measured outcomes



Salt Lake City County issued a social impact bond to fund early childhood education against set metrics (e.g., ~90% of at-risk students needed to avoid remedial education for payment)

Social success note

Outcome-based financing mechanism which provides concessionary loans with social impact targets. If targets are met, the investor receives an outcome payment from the donor



Yunus Social Business piloted the social success note to increase funding for Impact Water, a social business which required additional capital to sell and maintains water filtration in Uganda

These funding mechanisms will help the City amplify funding resources, raise attention, and incentivize new and innovative programs and partnerships

Given its independence, grant guidelines must be clearly stipulated in the partner's founding contract

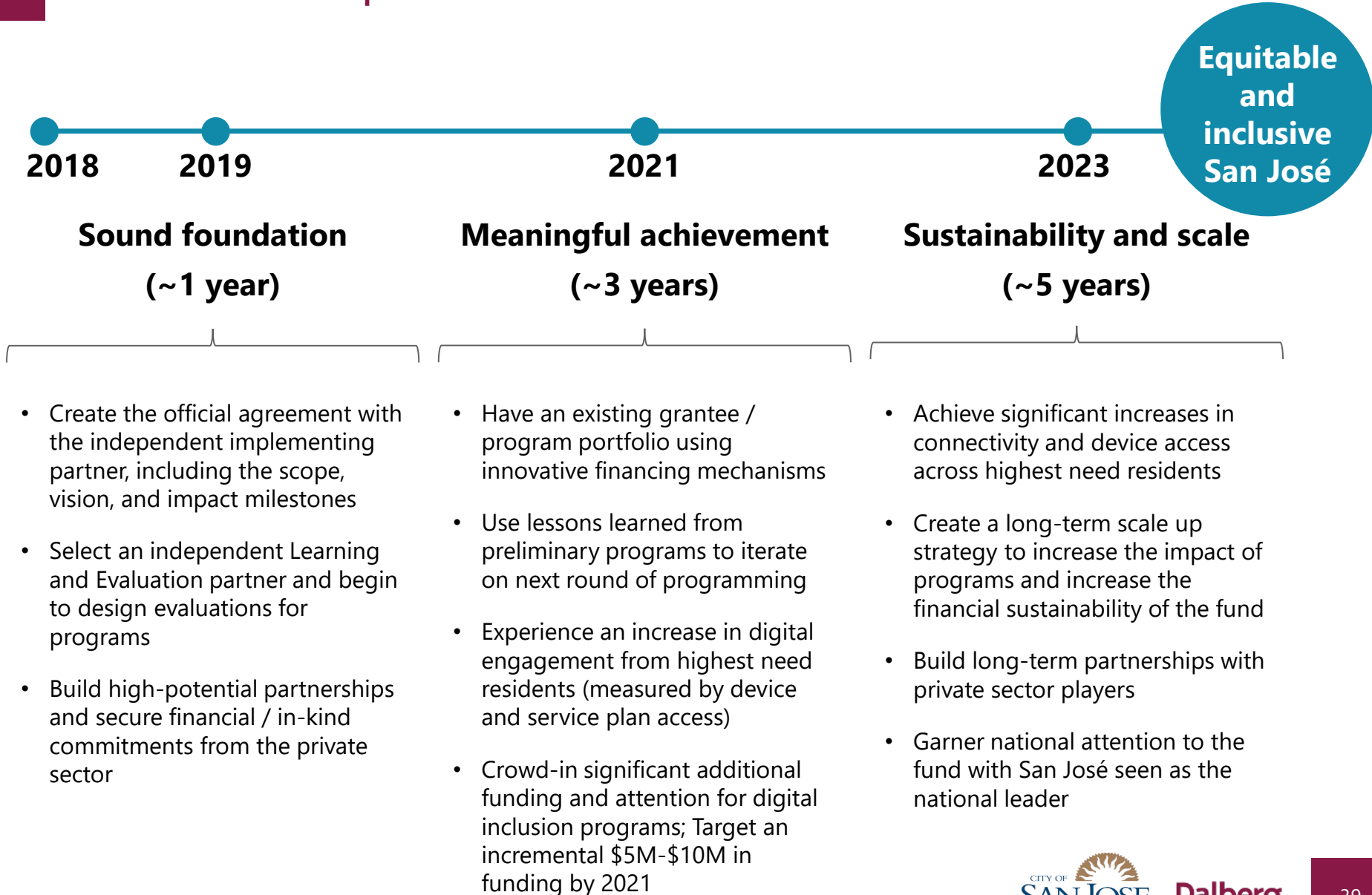
The partner will vet grantees in line with its strategic objectives, including consideration of:

- **Financial viability / resilience** to ensure grantees are financially stable enough to effectively rollout programs
- **Cultural understanding** to provide programming that is relevant and helpful for the diverse populations of underserved people in San José
- **Community expertise and trust** to provide community-centric, trusted programming to increase adoption and provide effective programming
- **Diverse networks** containing private sector, public, and community stakeholders in order to leverage the requisite input and resources for programming
- **Ability to advocate** to broadcast findings, share learnings, and influence other relevant digital inclusion actors
- **Evaluation experience** to collect data in a rigorous, systematic way, including the ability to comply with the evaluation framework of the external evaluation partner

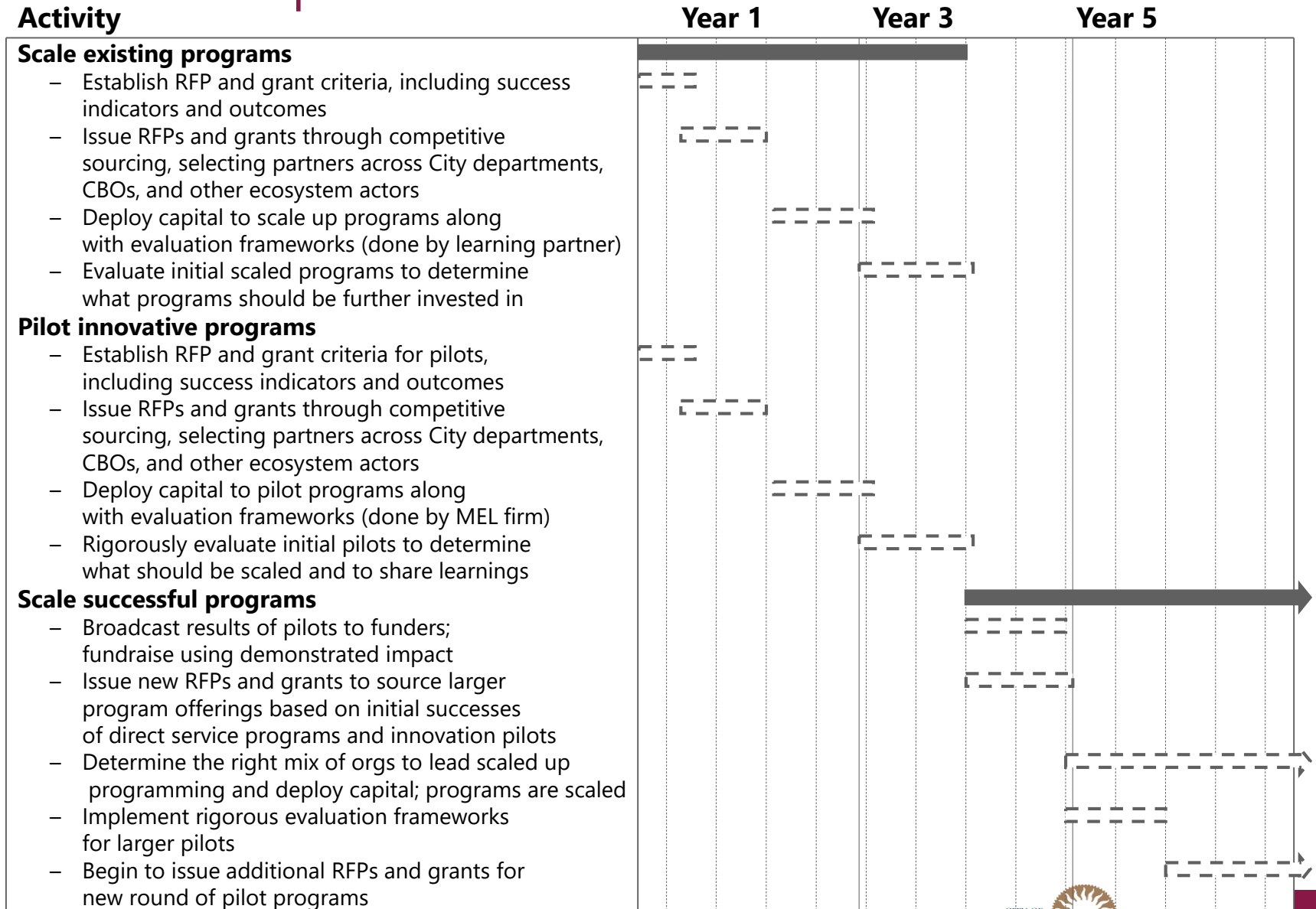
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Bold but achievable goals throughout the duration of the fund will help define success



Detailed program rollout: direct service provision and innovation pilots



Detailed program rollout: convening and fundraising

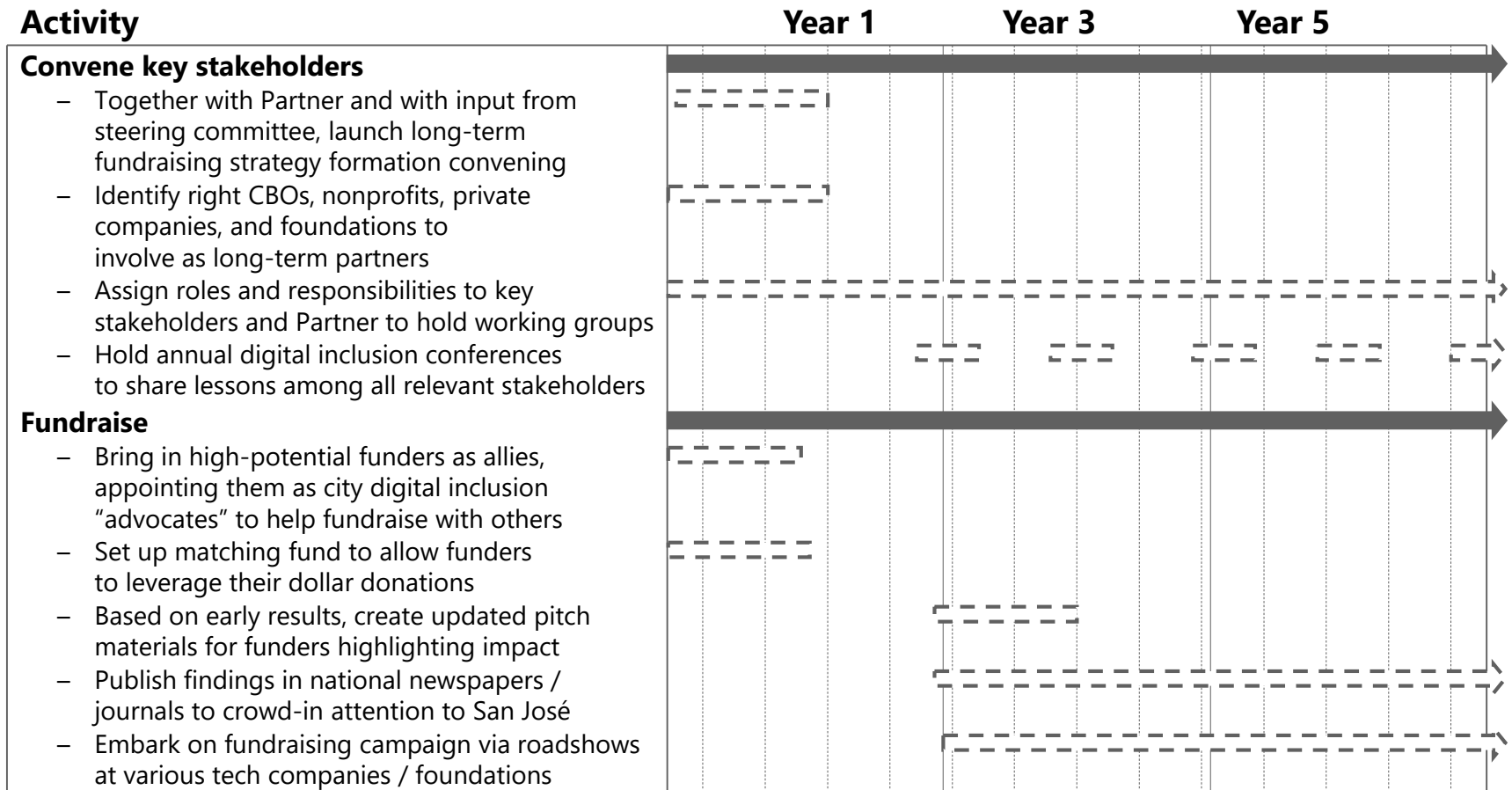


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Various partners can be engaged to support program delivery and innovation initiatives or provide funding

Stakeholder type

Value add

Community based organizations



- **Program delivery:** Deep community relationships, experience, and trust to enable participation in programs
- **Program delivery:** Ability to offer culturally appropriate and community-centric programming

Nonprofits



- **Program delivery:** Technical and content expertise (e.g., device refurbishment)
- **Innovation:** Ability to lead innovation pilots using existing infrastructure (including staff and programs)

City departments/schools



- **Program delivery:** Established presence and relationships, especially with low-income families and students
- **Program delivery:** Existing program experience and an ability to quickly scale programming and collect data

Corporations (Tech and Telecomm)



- **Fundraising:** Ability to provide catalytic funding or in-kind donations for programs and innovation pilots
- **Innovation:** Established private sector expertise which allows for innovation on program delivery approaches

Foundations/ Universities



- **Fundraising:** Ability to provide catalytic funding or in-kind donations for programs and innovation pilots
- **Program delivery:** Evaluation expertise to rigorously measure the results of digital inclusion programs

Each program activity cluster has a unique pathway to engage funders and partners (1/2)

Activity cluster	Funder strategy	Potential funders
<div>Device refurbishment / donation</div>	<ul style="list-style-type: none"> • Tech companies: CMO / Mayor's Office solicits old computers as donations from big tech companies who otherwise recycle their computers, thereby saving the companies the money and time required to safely and securely dispose of old devices. • Nonprofits: Library / City departments partner with device refurbishment experts to handle refurbishment / coordination with tech companies. Ask to refurbish devices for a discounted rate / for free because the City is providing access to more devices via partnerships with tech companies, and a portion of donated devices from tech companies can be kept for the nonprofits to sell to others outside of the digital inclusion strategy. • CBOs: Library / City departments will contract to CBOs to distribute devices, selectively asking for matching in-kind donations of staff time and networks to raise awareness of device refurbishment options and to distribute devices to the right people. 	<ul style="list-style-type: none"> • Tech companies: Microsoft, Facebook, Apple, Google • Nonprofits: Tech Exchange, PCs for People, Tech Soup • CBOs: Somos Mayfair, Streets Team, Chicana / Latina Foundation, Africa American Community Service Agency
<div>Awareness campaigns</div>	<ul style="list-style-type: none"> • Telecom companies: The CMO partners with telecom companies who provide low-cost internet offerings and ask for fiscal sponsorship of "sign-up" days or events. The CMO can pitch "sign up days" to telecoms as a pathway to a larger, untapped consumer base with potential to grow given San José shifting demographics. • Foundations: The Library / City departments will ask foundations for in-kind donations in the form of outreach and publication of "sign up events" by creating a clear case for why digital inclusion would complement their service offerings and improve outcomes for their beneficiaries. • CBOs: Library / City departments contract to CBOs and selectively ask for matching in-kind donations of staff time and networks to make flyers, post information on social media, and create information packets in other languages (e.g., Spanish, Vietnamese). 	<ul style="list-style-type: none"> • Telecoms: Comcast, AT&T • Foundations: Case Foundation, The Tech, Knight Foundation • CBOs: Somos Mayfair, Streets Team, Chicana / Latina Foundation, Africa American Community Service Agency

Each program activity cluster has a unique pathway to engage funders and partners (2/2)

Activity cluster

Funder strategy

Potential funders

Digital literacy skill building

- **Tech / Ed-tech companies:** The CMO / Mayor's Office will ask for fiscal sponsorship and staff time for coding classes and job certification courses (given demonstrated interest from tech companies – e.g., Google, Facebook, and Apple investments in Code.org). To secure longer-term partnerships, the Library / City departments / external innovation partner will create customized volunteer programs, designating "digital inclusion ambassadors" at each major tech partner who will host events and fundraise.
- **State / national interest groups:** Library / City departments offer dollar matches for trainings directed at demographics specific to an interest group (e.g., offer AARP a matching grant for any donation made to digital inclusion activities for the elderly).
- **CBOs:** Library / City departments contract to CBOs and ask for matching in-kind donations of staff time and networks to leverage funding and provide basic training to underserved communities.

- **Tech / Ed-tech companies:** Microsoft, Facebook, Apple, Google, Code.org, Coding Dojo, Adobe, Cisco, PayPal, Twitter
- **State / national interest groups:** AARP, CETF, GSMA, OATS,
- **CBOs:** Somos Mayfair, Streets Team, Chicana / Latina Foundation, Africa American Community Service Agency

Innovation pilots

- **Tech companies:** CMO / Mayor's Office will build relationships / fundraise from tech companies who are known for innovation and who operate in / near San José. The external partner who runs innovation programming will offer dollar matches as incentives for investing other partners' staff time / dollars into innovation pilots.
- **State / national research organizations:** External partner who leads innovation can selectively offer dollar matches to run pilots other organizations are interested in researching / offer co-authorship of research / publications.
- **Nonprofits:** The external innovation partner will selectively offer matching in-kind grants to nonprofits with existing innovative programming / staff / infrastructure to leverage existing assets.
- **Foundations:** The external innovation partner will partner with evidence-driven foundations who can offer in-kind expertise and input into programming and dollar matching of innovation pilots.

- **Tech companies:** Microsoft, Facebook, Apple, Google, Adobe, Cisco
- **State / national research groups:** GSMA, CETF, Academic Institutions
- **Nonprofits:** The Tech, Digital Nest
- **Foundations:** Case Foundation, Knight Foundation

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- **Digital inclusion programs in other cities**
- **Resident/user research in San Jose**

A wide range of cities are working on digital inclusion and equity and provided a benchmark for DSJ

Sample of cities reviewed in benchmarking review



Seattle's Digital Equity Initiative: Strategy focused on digital skills training, improving connectivity, and ensuring affordable devices and technical support.



Digital Charlotte: Initiative focused on digital literacy skills as a pathway to educational and economic opportunity.



Watsonville's Digital Nest: Program committed to bringing technology to underserved student populations.



Boston's Tech Goes Home: Organization which empowers low-income and underserved residents to access and use digital tools through a community-based training model.



Chicago's Learning Circles: Program which engages adults in online learning by creating face-to-face study groups at public libraries.



Riverside's RIVCOconnect: Initiative to provide computer equipment and improve digital literacy in underserved communities and provide low or no-cost access to internet for all residents in the county.



Raleigh's Digital Connectors: Program which teaches tech skills to youth in the community, who then teach those skills to other community members.



New York's Queensbridge Connected: Program to improve quality of life in Queensbridge houses by providing universal broadband through the installation of Wi-Fi service.



Kansas City's Coalition for Digital Inclusion: A coalition focused on closing the digital divide using a collaborative movement across digital inclusion initiatives



Singapore's SG Digital (for community): Nationwide initiative to grow Singapore into a dynamic global info-comm hub, aimed at building a digitally inclusive society



New Zealand's 20/20 Trust: Nationwide initiative that delivers programs for digital literacy, skills and inclusion through community-based partnerships and programming

Emerging lessons from other city initiatives: governance and operating model

Observation

Multiple cities noted establishing nonprofits is useful for flexible funding but **credible community organizations are still usually the most capable direct service providers.**

- Austin established Austin Free-Net to attract state grants the government could not otherwise pursue, but later dealt with political difficulties as the city needed to issue RFPs to satisfy competition requirements.

Several interviewees found **city government, given its brand and credibility, is uniquely positioned to convene** relevant digital inclusion stakeholders and collect comprehensive data on digital inclusion efforts.

- Austin city government noted it brings unique value to digital inclusion efforts by aligning diverse actors in Working Groups of the Digital Empowerment Community of Austin (DECA) and by leading M&E efforts through mail surveys.

Several interviewees stressed **institutionalizing intra-department coordination and advocating for digital inclusion in all City work was critical** to a successful commitment to digital inclusion.

- Seattle's digital inclusion work began with nine departments but had insufficient structure to maintain intra-government coordination, leading to a siloed and less effective commitment. In contrast, Seattle's Race and Social Justice Initiative formalized department coordination through an intra-department committee which proved instrumental in its continued success.

Implication

San José may consider establishing a nonprofit to supplement government funds for digital inclusion and act as a grant-maker and capacity builder for community organizations instead of a nonprofit which is primarily a direct service provider.

San José can leverage its strong Mayoral brand to convene diverse organizations and use its resources and reach to conduct costly and time-consuming evaluations other nonprofits cannot.

San José may explore a steering committee of representatives from the main city departments to ensure a city-wide commitment to digital inclusion and help departments understand how digital inclusion is critical to their work.

Emerging lessons from other city initiatives: financing

Observation

Several cities emphasized the need for flexible and diverse funding sources. Preliminary interviews suggest **income-generating activities as significant revenue streams are rare** because they often do not generate enough revenue to justify the effort and competing with the private sector is difficult and requires significant capacity.

- Seattle's overreliance on cable franchise fee revenue raised concerns around their ability to continue to fund all of their digital inclusion efforts. Now, the city looks to secure funding and investment from other partners, especially private sector industry.

Preliminary interviews suggest instituting **matching or conditional grant programs are an effective way to amplify the impact** of city investments.

- Seattle's Technology Matching Fund requires grantees to match every dollar granted with 50 cents of their own volunteer labor, infrastructure, professional services, or cash. This "venture philanthropy" approach allows Seattle to leverage each dollar it grants and create greater impact.

Implication



Robust digital inclusion models are structured to attract and leverage capital and in-kind contributions from private sector partners, foundations, and federal funding sources to provide insurance against losses of any single income stream.



Given San José's limited budget for digital inclusion, a conditional grant program or a matching model with external partners may prove an attractive means of enhancing city investments in digital inclusion.

Emerging lessons from other city initiatives: partnerships

Observation

City interviewees believe community-based organizations tend to have stronger relationships with target communities than city government; as such, **CBOs are often the right stakeholder to lead outreach and direct service provision.**

- Boston's investment in nonprofit Tech Goes Home is largely successful because of the org's longstanding community ties. TGH's "train-the-trainer" approach allows students to learn customized curricula from community members who know their context and who have their trust.

Interviewees highlight the **importance of building strong corporate partner relationships early and convincing corporate partners to come in as thought partners** instead of one-off donors.

- Seattle mentioned if they had the opportunity to start their process again they would have brought in corporate partners earlier with a focus towards co-creation rather than one-off donations.

Implication

While direct city-resident outreach and engagement will likely prove necessary for many programs, established CBO-resident relationships should be considered a primary means of resident engagement. For example, CBOs may be much better positioned to develop customized curricula to increase adoption and amplify San José's investment through the "train-the-trainer" approach.

San José may identify areas where select corporate stakeholders can engage early on in the program design process, focusing efforts on generating long term commitments to digital inclusion. Committed resources from these partners can expand program scope and diversify revenue / resourcing sources.

Emerging lessons from other city initiatives: evaluation

Observation

Cities noted while education and employment outcomes are important measures of success, levels of civic engagement should also be considered.

- Boston is working to intentionally track digital inclusion's impact on civic engagement as a core metric to understand success.

Cities mentioned qualitative information collected by CBOs can help understand community specific needs and progress that rigorous metrics may miss.

- New York leverages their CBO partners' expertise to better understand community-specific needs and progress against program benchmarks.

Interviews revealed sensitivity to community needs is crucial in data collection to maintain community trust.

- Seattle purposefully does not collect detailed demographic data on digital inclusion surveys to protect the interests of vulnerable populations (undocumented immigrants, refugees).




Implication

As San José works toward developing evaluative criteria, considering metrics such as civic engagement and the ability to self-advocate can be helpful measures of success for any digital inclusion program.




San José may consider a two-pronged approach to monitoring and evaluation, including both a rigorous data evaluation using baselines and post-intervention analysis as well as qualitative narratives to give the data context and ensure communities are represented as complex ecosystems.

San José can use CBO expertise to understand what types of data collection can be harmful to community members and what data/learnings can be published in a community sensitive manner.





Benchmark programs and initiatives were assessed across each model dimension (1/4)

Initiative	Description	Structure			Mandate		
		Governance / operating structure	Financing model	Partnerships	Target population	Range of programs	Objectives
Seattle: Digital Equity Initiative 	Strategy focused on digital skills training, connectivity, and affordable devices and technical support	Hybrid (City Office of IT and CTAB Digital Equity Committee)	City budget (cable franchise fees)	City offices (libraries, schools), community orgs, nonprofits	Prioritizes seniors, youth, low-income residents, non-English speaking, immigrants and refugees	Affordability and adoption	Ensure sufficient options for affordable and available: internet connectivity, devices and technical support, & digital skills training
Charlotte: Digital Charlotte 	Initiative empowering orgs to deliver digital inclusion resources instrumental in creating educational and economic opportunities for all	Hybrid (Dept. of Transportation and Digital Charlotte)	Donations (private and nonprofit)	University comms school, Google Fiber, a nonprofit, community orgs, schools	Prioritizes seniors, low-income residents, adults with no college degree	Access and affordability	Provide affordable broadband service, devices, digital literacy training, and quality technical support; enable self-sufficiency
Watsonville Digital NEST 	Organization bringing growth and stability to struggling communities by giving low-income youth the tools and training for futures in tech	Nonprofit-led	Income-generating activities (e.g., "Bizznest" has youth create websites and videos for small businesses); Donations (private, angel, and nonprofit)	Nonprofits, City offices, ag / health / tech firms	Prioritizes low-income youth (high school to age 24)	Access and affordability	Focus on tools and training for low-income youth; free and equal access to connectivity and devices, mentoring and career development

Benchmark programs and initiatives were assessed across each model dimension (2/4)

Initiative	Description	Structure			Mandate		
		Governance / operating structure	Financing model	Partnerships	Target population	Range of programs	Objectives
Kansas City: Coalition for Digital Inclusion 	Collaborative group of KC area nonprofits, individuals, government entities and business focused on fostering internet access and digital readiness in the City	Hybrid (nonprofits, individuals, and City offices centered at KC Public Library)	Donations and partners	City offices and community orgs (health, library, schools), nonprofits, service providers	Prioritizes seniors, individuals with disabilities, low-income residents, adults with no college degree, school-age youth	Adoption	Promote the value of a connected life, provide access to computers and devices, provide convenient access to a stable and robust Internet connection, teach digital literacy skills
Austin: Digital Inclusion Strategy 	Strategy to utilize community assets to overcome barriers to digital inclusion, ensuring all residents have access to the skills and devices necessary to engage in our digital society	City-led (Telecommunications and Regulatory Affairs Office)	City budget and donations	Google Fiber, university, community orgs	Prioritizes low-income, working age, adults with no college degree, youth, individuals with disabilities, non-English speaking	Access and adoption	Serve as many people as possible; every resident has opportunity to be fully engaged in digital society; understand and address barriers to and need for digital inclusion; close the Digital Divide
Boston: Tech Goes Home 	TGH empowers low-income and underserved residents to access and use digital tools to address their most pressing needs	Nonprofit-led, but the City helped found the program	City budget and donations	Community orgs (libraries, community centers, etc.) and schools	Prioritizes challenged neighborhoods, those without technology at home, the unemployed and underemployed, non-English speaking, and individuals with disabilities.	Access and adoption	Serve as many people as possible; increasing education, literacy, and awareness of digital services and involvement of parents in their children's schools

Benchmark programs and initiatives were assessed across each model dimension (3/4)

Initiative	Description	Structure			Mandate		
		Governance / operating structure	Financing model	Partnerships	Target population	Range of programs	Objectives
Chicago: Learning Circles 	Learning Circles engage adults in online learning by creating face-to-face study groups at public libraries	City-led (Chicago Public Library)	City budget	Peer to Peer University, a nonprofit	Prioritizes low-income, seniors, unemployed, female heads of households, non-English, adults with no college degree	Access and adoption	Focus on number of people served, especially those who have not engaged with online courses before; values retention and willingness to take another Circle
Raleigh: Digital Connectors 	Program teaches valuable technical skills to youth in the community who then teach family members and other community members	City-led (Parks, Recreation and Cultural Resources)	City budget	Nonprofits, community orgs, individuals	Prioritizes youth who then teach families, friends, and neighbors; low-income families	Adoption	Spread digital literacy by training youth and community members; provide community service; refurbish computers
Riverside: RIVCO-connect 	Program to close the digital divide within the County through device provision, affordable broadband connectivity, and literacy training	City-led (Riverside County Information Technology)	City budget	City governments, tribal nations, industry partners, service providers	Countywide	Access	Serves as many people as possible by inviting private sector delivery of Broadband services Countywide at speeds of 1 Gbps and above
East Michigan: Digital Inclusion 	Organization training youth in IT skills, providing affordable technology to the community	Nonprofit-led	Income-generating activities (e.g. tech support and repair); Donations	Universities/ colleges, nonprofits, government entities	Prioritizes low-income and at-risk youth and young adults	Affordability	Sustainably spread digital inclusion; build tech career pathways for youth; provide affordable IT services to the community

Benchmark programs and initiatives were assessed across each model dimension (4/4)



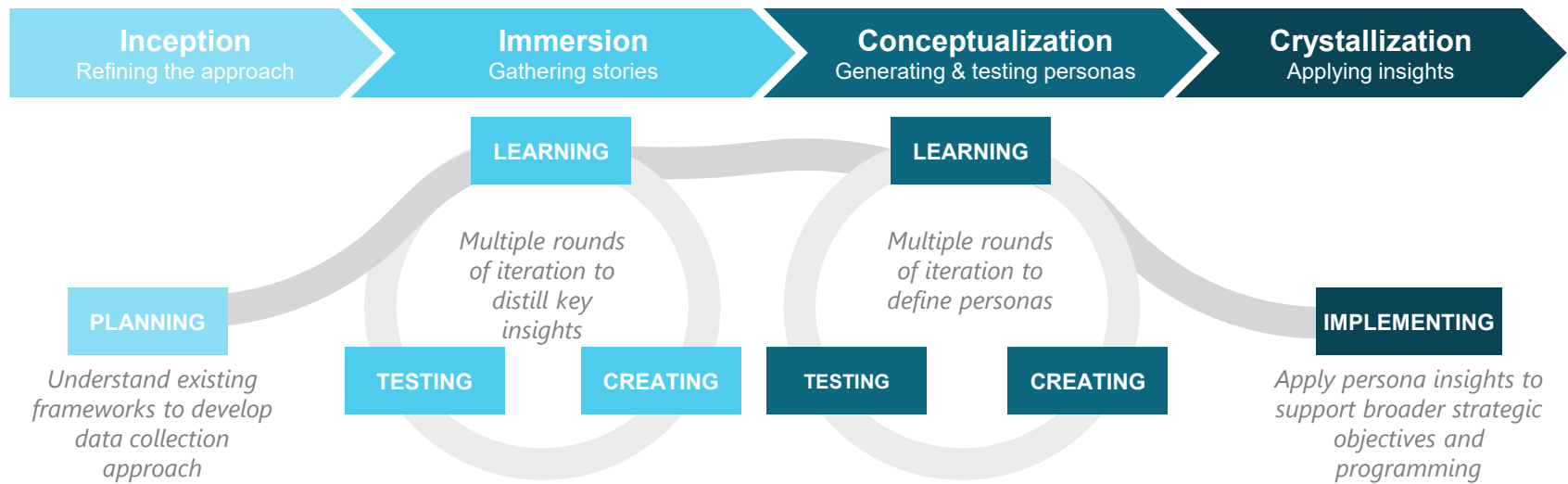
Initiative	Description	Structure			Mandate		
		Governance / operating structure	Financing model	Partnerships	Target population	Range of programs	Objectives
New Zealand: 20/20 Trust 	NZ's nationwide initiative that delivers programs for digital literacy, skills and inclusion through community-based solutions	Nonprofit with a delivery partner network (especially libraries)	Nonprofit (NZ charitable trust)	Independent 'digital' trusts (NGOs), public libraries, schools, Rural Education Activities Programme (REAP), training organizations	Low-income, disabled, refugees /immigrants	Access and adoption	Ensures New Zealanders are fully participating in the digital world to attain affordable access to digital society, digital skills for all, digital Inclusion for disadvantaged groups, personal attitudes to digital competence, and active application of digital competence
Singapore: SG Digital 	Nationwide initiative to grow Singapore into a dynamic global infocomm hub, aimed at building a digitally inclusive society that brings infocomm to people from all walks of life	Country-led (Infocomm Media Development Authority, a statutory board)	Country budget (IMDA)	Infocomm	Seniors, needy students, low-income households, people with disabilities	Affordability and adoption	Enables Singaporeans to possess basic skills and confidence to use digital tech in all areas of their daily lives, coupled with infrastructure that is accessible

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- **Digital inclusion programs in other cities**
- **Resident/user research in San Jose**

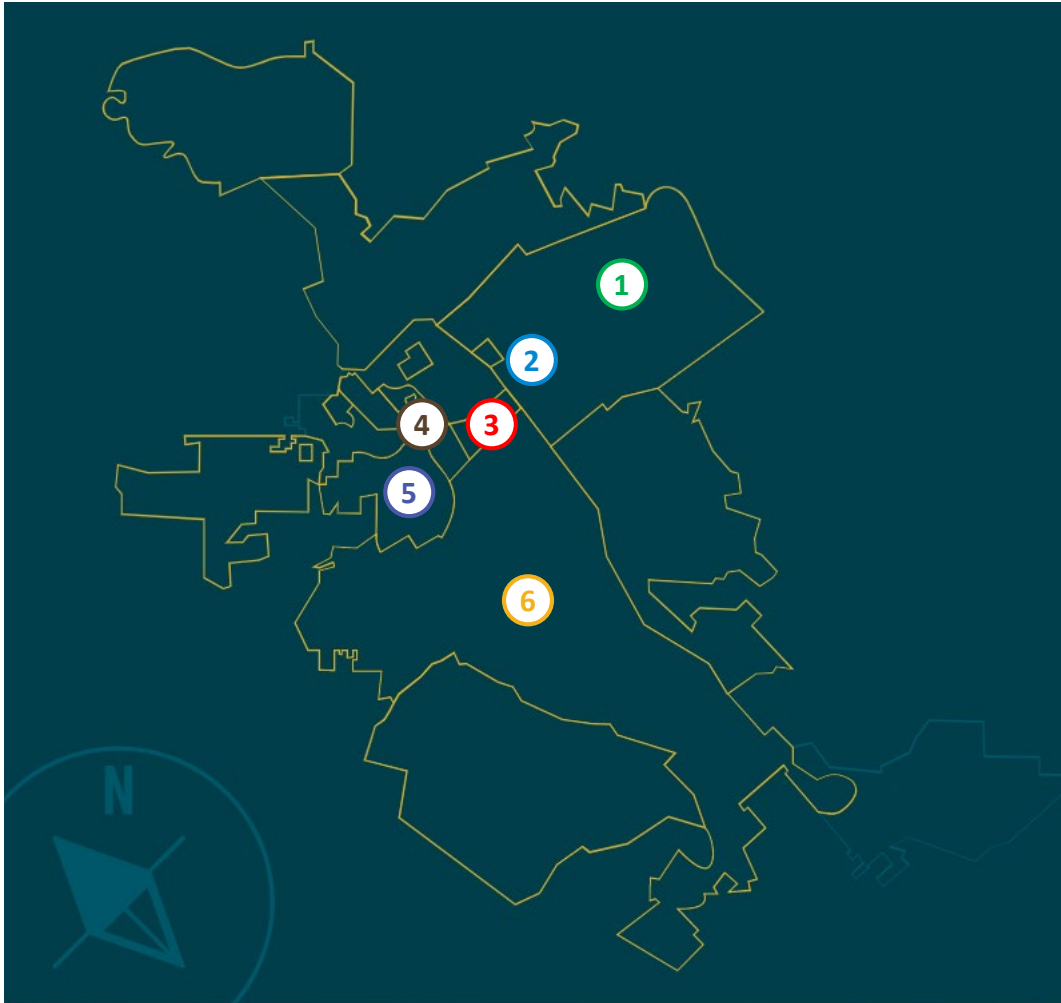
Our efforts to define resident personas followed human-centered design principles



- We developed a human-centered design-focused insight collection methodology, designed to gather rich stories on the opportunities, challenges, and benefits of digital inclusion
- We have conducted 70+ interviews with San Jose residents to understand their lived experiences with digital inclusion
- Drawing from these stories, we identified common themes around the use, opportunities, and challenges to digital inclusion
- After we completed all of our interviews, we outlined resident personas, drawing on the most relevant patterns from the immersion analysis
- We then assessed both the potential demographic and behavioral characteristics that influence giving
- These personas help the City customize interventions to meet the diverse, evolving, and specific needs across various demographic segments

We conducted 70+ interviews across diverse neighborhoods and organizations across the City

Neighborhoods and organizations



- 1 **Alum Rock** (Alum Rock and Hillview Libraries, James Lick High School)
- 2 **Mayfair** (Mayfair Community Center)
- 3 **Little Saigon** (Ace Laundromat, Streets Team)
- 4 **Downtown San Jose** (Grace Baptist Church)
- 5 **Willow Glen** (San Jose City College, Gardner Community Center)
- 6 **South San José** (Tully and Seven Trees Libraries, Đức Viên Buddhist Pagoda, Seven Trees Community Center, Lee Laundromat)

8 archetypes emerged from the user design research

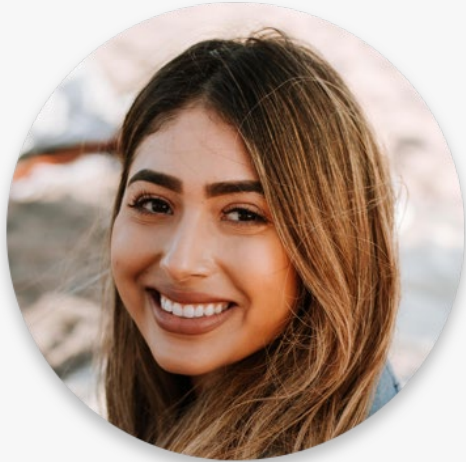
Conducted short **interviews with 70 residents** spanning diverse profiles



Developed **eight composite 'archetypes'** through identification of common needs, behaviors, and digital profiles



Identified **insights** from each interview and synthesized key themes



Maria

"I've missed family reunions and birthdays because I needed to be in places with Wi-Fi."

ABOUT

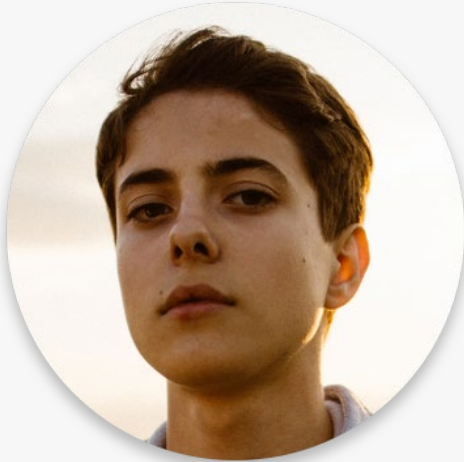
Maria is a junior at James Lick High School. She lives with eight family members in the Alum Rock neighborhood of San Jose. Her household has Wi-Fi, but she doesn't have a computer. She owns a broken laptop which she can't afford to repair or replace. She uses a phone and 3GB data plan given to her as part of her school's digital inclusion program. When she needs to do schoolwork, she borrows a Chromebook from her school or completes it on her phone.

KEY CHALLENGES

- **Access to hardware**
 - If she can't rent a laptop, she occasionally stays on campus until 8 pm to complete homework.
- **Cost of hardware**
 - If she could afford to, she would fix laptop and use it.
- **Data limits**
 - Runs out of data on monthly 3GB plan provided by school.
- **Mobile compatibility**
 - School's learning management system (LMS) doesn't always work on her phone.

KEY BENEFITS

- **Education**
 - Writing papers, studying for exams, working with peers rely on Internet/device access.
- **Timing**
 - "Doing all of my college applications at school can be overwhelming and stressful. I have to bring important financial documents to school."
- **Family relations**
 - "I always tell my mom that we need Internet, but we can't afford it, and she becomes stressed."



Tomas

"I have a laptop but I do
all of my homework on
the phone."

ABOUT

Tomas is a middle school student. He lives with his parents and brother in the Seven Trees neighborhood of San Jose. He uses Wi-Fi at the community center where he stays from 4-7 pm. He has Wi-Fi at home, but his parents restrict his hours online. He has a laptop, but he uses his phone for everything. He uses his phone 10 hours a day. He does his homework and even writes essay on his phone.

KEY CHALLENGES

- **Parent concern**
 - Parents are suspicious of the value/safety of the Internet.
 - Sometimes he can't connect with friends because parents turn off Internet at home.
- **Bandwidth/devices**
 - "Often I fight with my brother over use of the iPad or when he slows down the connection."
- **Mobile compatibility**
 - School's learning management system (LMS) doesn't always work on his phone.

KEY BENEFITS

- **Education**
 - Writing papers, studying for exams, collaborating with peers rely on Internet/device access.
- **Community building**
 - Online forums and social media can provide a sense of community/space for peer learning.



Rachel

"I didn't have Internet,
but had to install it
because my son needed
it for school."

ABOUT

Rachel, 32, lives with her husband and two children (5 & 3) in the Gardner neighborhood of San Jose. Her and her husband both have access to Internet on their phones. They have access to Wi-Fi at home, but they do not own computers due to their high cost. Her older son's school has started sending homework online, so she's seriously considering buying a computer. Rachel's workaround for not having a computer at home is taking her children to the library.

KEY CHALLENGES

- **Cost of hardware**
 - Cost is a major constraint for low-income parents
- **Scheduling**
 - Can't always go to the public library but she makes an effort so her kids don't fall behind.
 - Taking children to library is inconvenient because they have to wait for a turn on the computers (30 minutes max).

KEY BENEFITS

- **Education**
 - Her children rely on Internet/device access for schoolwork.
- **Time management**
 - Freedom from time constraints caused by frequent trips to the public library.
- **Productivity and income**
 - Ability to learn and improve technical skills.
- **Financial services**
 - Retain access to key financial services.



Larry

"I'm concerned about the amount of time my children spend online."

ABOUT

Larry, 45, lives with his wife and three children (15, 13, 11) in the Stonegate neighborhood of San Jose. He has Internet at home, but he is concerned about the amount of time his children spend online. He knows that they need it for schoolwork, but he doesn't like that his kids spend time on non-productive activities (e.g., social media, games). Each day, after his kids are done with schoolwork, he takes away their devices.

KEY CHALLENGES

- **Parent concern**
 - Does not like the amount of time his kids spend on non-productive activities.
- **Value conflict**
 - Sees tension between what is online and their family values.
- **Health concern**
 - Sees daughter gaining weight and wants her to exercise instead of using Internet.

KEY BENEFITS

- **Community building**
 - Uses Internet to organize community events involving his children.
- **Education**
 - His children rely on Internet/device access for schoolwork.



Tuân

"We will have to budget
by buying less meat,
more fish and
vegetables."

ABOUT

Tuân, 83, lives in the Little Saigon neighborhood of San Jose with his wife and their grandson (17) who recently immigrated from Vietnam. He and his wife receive Supplemental Security Income (SSI) benefits. Tuân does not know how to use the Internet, but he has Wi-Fi at home so that his grandson can do schoolwork. He pays \$30/month as part of a first-year promotion, but next year the cost will double. He will have to cut back on grocery shopping.

KEY CHALLENGES

- **Cost of service**
 - Tuân's fixed income means that he'll have to budget to afford Internet service.
- **Digital literacy skills**
 - Tuân has no prior education or training in digital literacy.
- **Mobility**
 - Elderly people may have challenges reaching community centers or public libraries.
- **Dependency**
 - Depending on relatives to fix his devices reduces agency.

KEY BENEFITS

- **Income**
 - Frees up more money for daily expenses.
- **Agency and self-reliance**
 - Learning to troubleshoot Internet or device issues would make Tuân more independent.
- **Community involvement**
 - Ability to read/watch news and learn about local issues in his community.



Hanh

"I'm too old to learn the Internet. I need to keep moving to stay healthy."

ABOUT

Hanh, 89, lives with her husband in the Little Saigon neighborhood of San Jose. Her priorities are exercise and healthy eating. She does not use the Internet because she does not want to sit for long periods. She had a laptop but gave it away. She feels that she is too old to acquire digital literacy skills. Her kids and grandkids are always on their phones and she doesn't understand why they spend so much time online.

KEY CHALLENGES

- **Interest**
 - Hanh does not see a benefit in digital services.
- **Digital literacy skills**
 - Hanh has no prior education or training in digital literacy.
- **Fear of Internet**
 - Fraud targeted toward elderly is common.
- **Mobility**
 - Elderly people may have challenges reaching community centers or public libraries.

KEY BENEFITS

- **Social connection**
 - Reduces feelings of social isolation.
- **Access to social services**
 - Provides information about senior events and benefits.
- **Health services**
 - Allows elderly to schedule doctors appointments, order prescriptions and research symptoms.



Clara

"I used to make fun of smartphones, but now I think it's something beautiful that helps us all."

ABOUT

Clara, 76, lives in the Los Arboles neighborhood of San Jose. She does not have Wi-Fi at home because she can't afford it on assistance income. She connects her phone to Wi-Fi at the community center. Clara considers herself a lifelong learner. She likes to read articles, keep up with local politics, and communicate with her friends and relatives on Facebook. She was diagnosed with early-stage Alzheimer's. A month ago, she forgot how to subtract. She downloaded an app on basic math that helped her learn how to subtract again..

KEY CHALLENGES

- **Cost of service and hardware**
 - Cost of service and devices is a major constraint for low-income residents.
- **Education/training**
 - Clara lacks information about digital services or training that may benefit her.

KEY BENEFITS

- **Mental health**
 - Reading online articles helps Clara fight Alzheimer's.
- **Online learning**
 - Learning new skills online.
- **Community involvement**
 - Staying informed on local news and elections.
- **Health services**
 - Scheduling doctors appointments, order prescriptions and research symptoms.



James

"I feel 'less than' when I'm always at Starbucks for Wi-Fi and I can't buy anything."

ABOUT

James, 65, lives in his car in a parking lot in the Creek-Senter neighborhood of San Jose. He has a phone and an iPad, which were donated to him from social programs. He uses Wi-Fi at the public library and Starbucks. He has started working with Downtown Streets Team and he's hopeful that it will help him find housing and a stable job.

KEY CHALLENGES

- **Housing**
 - Unhoused, therefore reliant on public Wi-Fi.
- **Timing**
 - Can't always go to the public library because he works with Streets Team during the day.
- **Charging devices**
 - Difficulty finding places to charge his devices
- **Scheduling**
 - "I lost two jobs because I missed my appointments."

KEY BENEFITS

- **Productivity**
 - "Giving homeless people down time is dangerous. We will drink, so it's good to keep busy."
- **Mental health**
 - "It gets depressing without it."
- **Access to resources**
 - Ability to submit job applications, apply for food stamps, learn about housing and shelters, maintain Driver's License
- **Workforce development**
 - Learning basic literacy skills for employment