

# **Smart Cities and Service Improvements Committee Introductions and Agenda June 6, 2019, 1:30pm**

Dolan Beckel, Civic Innovation Director  
Kip Harkness, Deputy City Manager

# AGENDA

- Smart City Roadmap Update
- Small Cell Permitting, Deployment and Process Improvement Update
- Privacy Policy Update
- Access East Side Update

# **(d) 1. Smart City Roadmap Update**

Rajani Nair, Smart City Manager

Kelli Parmley, Human Resources Assistant Director

# PRIORITIZED SMART CITY ROADMAP 2.0

## MARCH 2019

THEMES ALPHABETIZED

<b>User-Friendly Government</b>	Integrated Permitting System	Privacy Strategy	City Website	My San Jose	Digital Services Strategy	Data Strategy	Start Up in Residence (STiR) program	Master Address Database Integration		
<b>Smart Mobility</b>	Autonomous Vehicle – First and Last Mile	Transportation Events Tracking (E-tracker)								
<b>Smart Infrastructure</b>	Small Cell permitting and deployment	Small Cell Permitting and Process Improvements	Facebook Terragraph Wi-Fi	IoT Reference Architecture						
<b>Safe City</b>	Safe City Strategy	FirstNet Evaluation and Migration	Silicon Valley Regional Communication System	Fire Station Alerting System	Fire Department Business Intelligence					
<b>IT Roadmap</b>	Cybersecurity Work Plan	IT Infrastructure Modernization	City Open Data Environment	Business Tax	Products Management-Projects Execution	Business Tax Amnesty Solution	Advanced Cybersecurity Products and Service RFP	Cybersecurity Policy	Community Engagement through Data	IT Staff Skill-Up and Engagement
<b>Equity</b>	Digital Inclusion Program Fund	Community Wi-Fi Strategy	Rent Registry (Apartment Rent Ordinance)	Access Eastside	Joint/School Issued Library Cards	Data Migration Tool				
<b>Climate Smart</b>	EV Strategy	Greenhouse Gas Emissions Report and Dashboard	Residential Housing Natural Gas Elimination Roadmap							

HIGHEST  RELATIVE PRIORITY OF PROJECTS FROM HIGH TO LOW  LOWEST

LEGEND – PROJECT STATUS

- ON TRACK
- ISSUES WITH SCHEDULE, BUDGET OR SCOPE
- AT RISK, CORRECTIVE ACTIONS NEEDED

# INITIATING HIGH PRIORITY PROJECTS

<b>User-Friendly Government</b>	Development Services Transformation							
<b>Smart Mobility</b>	Autonomous Vehicle – Network Safety	Emerging Mobility Strategy	Micro-Mobility Sidewalk and Data Pilots	Verizon Traffic Data Services Pilot	Access and Mobility Plan -			
<b>Smart Infrastructure</b>	Vehicle Fleet Telematics – Verizon Connect	AT&T Community Wi-Fi at Community Centers/Parks	Macro Site Deployment	Building Energy Usage Monitoring	Irrigation Sensor Connectivity - CalSense	LED Smart Controllers		
<b>Safe City</b>	Smart Digital Infrastructure Nodes – AT&T pilot	Fusion/Data Collection Center	Dual Network Connectivity of Fire Apparatus (Coverage)	Verizon Intersection Safety Analytics	Police Department Business Intelligence	Text to 911 (sub project to Next Gen 911)	EOC Damage Assessment GIS tools and capabilities	One Concern
<b>IT Roadmap</b>								
<b>Equity</b>	DAHLIA Affordable Housing Portal	AT&T Tech for Good Pilot	Verizon STEM					
<b>Climate Smart</b>	Climate Smart Engagement	Climate Smart Dashboard						

Requirements for Executing High Priority Projects:

- ✓ Approved budget
- ✓ Dedicated team of staff
- ✓ Signed contract

 Moving to Active on Roadmap next committee meeting

# PRIORITIZED SMART CITY ROADMAP 2.0 SEPTEMBER 2019

<b>User-Friendly Government</b>	Integrated Permitting/ Development Transformation	Privacy Strategy	City Website	My San Jose	Digital Services Strategy	Data Strategy	Start Up in Residence (STIR) program	Spatial Data Integration (SDI)	
<b>Smart Mobility</b>	Autonomous Vehicle – First and Last Mile	Transportation Events Tracking (E-tracker)	Verizon Traffic Data Services Pilot	Access and Mobility Plan	Micro-mobility sidewalk and data pilots				
<b>Smart Infrastructure</b>	Small Cell Permitting Deployment and Process Improvements	LED Smart Controllers	IoT Reference Architecture	Irrigation Sensor Connectivity - CalSense	Facebook Terragraph Wi-Fi	AT&T Community Wi-Fi at Community Centers/Parks			
<b>Safe City</b>	Safe City Strategy	FirstNet Evaluation and Migration	Silicon Valley Regional Communication System	Text to 911 (sub project to Next Gen 911)	Fire Station Alerting System	Fire Department Business Intelligence	EOC Damage Assessment GIS tools and capabilities	Verizon Intersection Safety Analytics	Smart Digital Infrastructure Nodes – AT&T pilot
<b>IT Roadmap</b>	Cybersecurity Work Plan	IT Infrastructure Modernization	City Open Data Environment	Business Tax System	Products Management-Projects Execution	Business Tax Amnesty Solution	Advanced Cybersecurity Products and Service RFP	IT Staff Skill-Up and Engagement	
<b>Equity</b>	Digital Inclusion Program Fund	Community Wi-Fi Strategy	Rent Registry (Apartment Rent Ordinance)	Access Eastside	Joint/School Issued Library Cards	DAHLIA Affordable Housing Portal	AT&T Tech for Good Pilot	Verizon STEM	
<b>Climate Smart</b>	EV Strategy	Greenhouse Climate Smart Engagement	Gas Emissions Report and Dashboard	Climate Smart Dashboard	Residential Housing Natural Gas Elimination Roadmap				

HIGHEST

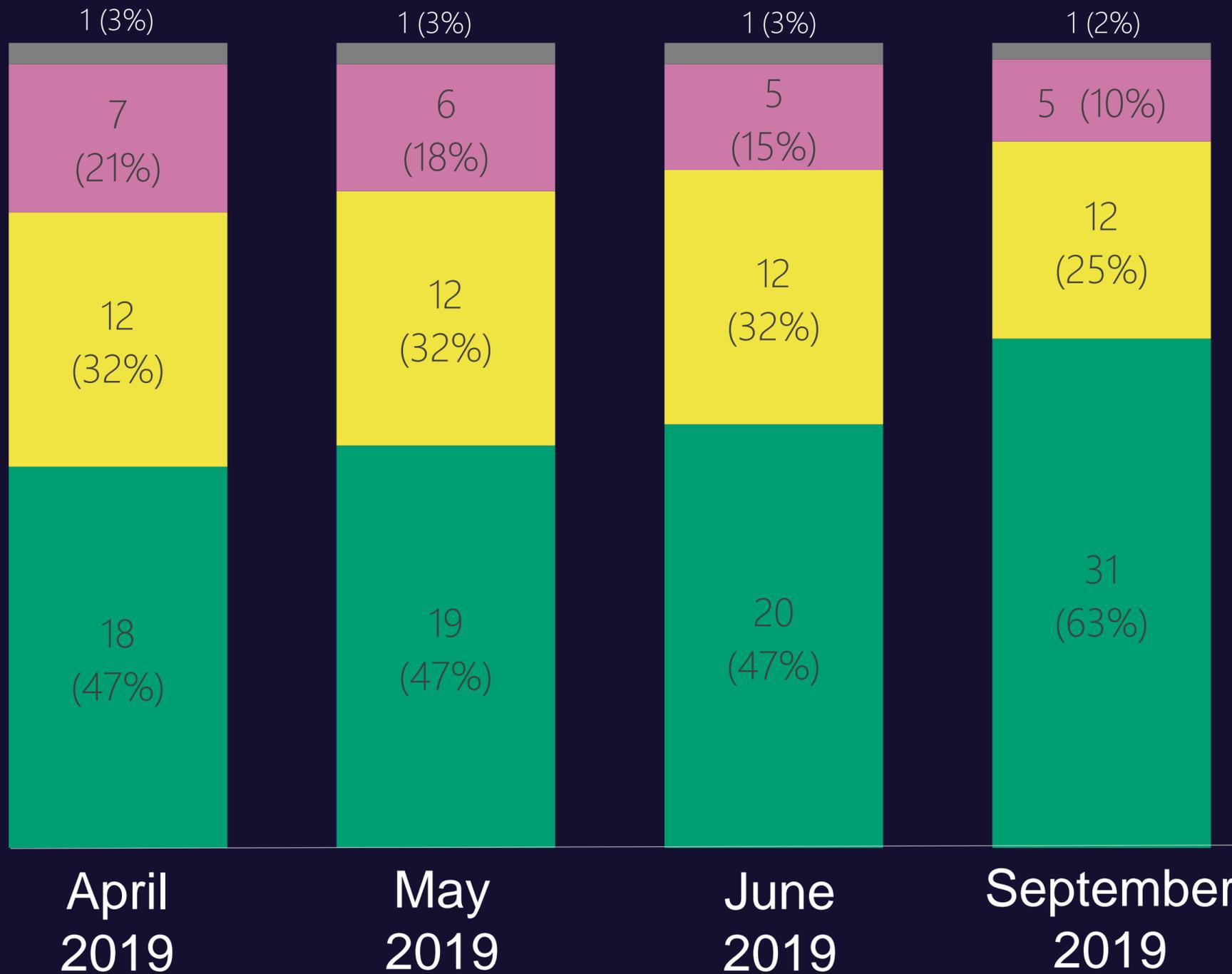
RELATIVE PRIORITY OF PROJECTS FROM HIGH TO LOW

LOWEST

LEGEND – PROJECT STATUS

- ON TRACK
- ISSUES WITH SCHEDULE, BUDGET OR SCOPE
- AT RISK, CORRECTIVE ACTIONS NEEDED
- ON HOLD

# SMART CITY ROADMAP 2.0 STATUS SEPTEMBER 2019



## MONTHLY SUMMARY OF STATUS CHANGES

- Development Services Transformation – Red to Yellow
- Data Strategy – Green to Red
- Cybersecurity Work Plan – Green to Yellow
- Community Wi-Fi Strategy – Yellow to Green

## PROJECTS COMPLETED

- Cybersecurity Policy
- Community Engagement through Data

## LEGEND – PROJECT STATUS

- ON TRACK
- ISSUES WITH SCHEDULE, BUDGET OR SCOPE
- AT RISK, CORRECTIVE ACTIONS NEEDED
- ON HOLD

# SMART CITY ROADMAP 2.0 - RED STATUS DETAIL

**LEGEND**

 Indicates changes from last SCSIC meeting

My San Jose		
Issues	Resolution Approach	Team Action Items – Sept.
<ul style="list-style-type: none"> <li>▪ Ramping up the My San Jose (MSJ) 2.0 effort required several months to establish governance, team structure, and shared vision</li> <li>▪ Request for Proposal (RFP) was in procurement backlog for 6 months due to staffing challenges and increased workload</li> <li>▪ Key personnel departed from the City in March 2019</li> </ul>	<ul style="list-style-type: none"> <li>▪ Onboarded replacement IT Product-Project Manager by June 2019</li> <li>▪ Explore interim solution for language translation in My San Jose 1.X platform</li> <li>▪ RFP is now actively in queue with Purchasing and is currently being reviewed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prepare staff recommendation on interim language translation for My San Jose 1.X</li> <li>▪ Collaborating with Finance to proceed with RFP</li> </ul>
		<b>Council Action Items</b>
		NONE
		Look ahead: TBD

# SMART CITY ROADMAP 2.0 - RED STATUS DETAIL

**LEGEND**

 Indicates changes from last SCSIC meeting

Data Strategy		
Issues	Resolution Approach	Team Action Items – Sept.
<ul style="list-style-type: none"> <li>Two unsuccessful recruitments due to competitive market challenges</li> <li>Fuse Fellow program was unable to provide successful resources</li> </ul>	<ul style="list-style-type: none"> <li>Based on previous challenges on external recruitments, currently identifying internal candidates to lead and grow a centralized data analytics team.</li> </ul>	<ul style="list-style-type: none"> <li>Currently in discovery phase with focus on Bloomberg Certification</li> </ul>
		<b>Council Action Items</b>
		NONE
		<u>Look ahead:</u> Report to Smart Cities and Service Improvements Committee April 2020

# SMART CITY ROADMAP 2.0 - RED STATUS DETAIL

**LEGEND**

■ Indicates changes from last SCSIC meeting

Information Technology Infrastructure Modernization		
Issues	Resolution Approach	Team Action Items – Sept
<ul style="list-style-type: none"> <li>■ Original goal: Award and execution of contract by October 2018 and completion of implementation by June 2019</li> <li>■ Protest was received</li> <li>■ Awarded by City Council in late-December 2018</li> <li>■ Contract remains in-process with Purchasing (4-5 agreements)</li> </ul>	<ul style="list-style-type: none"> <li>■ Finance is working to complete all four contracts for City Open Data Environment project by September 2019</li> </ul>	<ul style="list-style-type: none"> <li>■ Currently contract in review with Finance and CAO</li> </ul>
		Council Action Items
		NONE
		Look ahead: TBD

# SMART CITY ROADMAP 2.0 - RED STATUS DETAIL

**LEGEND**

 Indicates changes from last SCSIC meeting

## City Open Data Environment

Issues	Resolution Approach	Team Action Items – Sept
<ul style="list-style-type: none"> <li>▪ Original goal: Award and execute contract in December 2018; Data environment open for use and populated by core foundation sets by departments by May 31, 2019</li> <li>▪ Awarded in January 2019;</li> <li>▪ Contract remains in-process</li> </ul>	<ul style="list-style-type: none"> <li>▪ Finance finalized the terms and conditions for the contract</li> </ul>	<ul style="list-style-type: none"> <li>▪ Currently in contract negotiations with vendor to finalize contract</li> </ul> <p><b>Council Action Items</b></p> <ul style="list-style-type: none"> <li>▪ NONE</li> </ul> <p><u>Look ahead:</u> TBD</p>

# SMART CITY ROADMAP 2.0 - RED STATUS DETAIL

LEGEND

 Indicates changes from last SCSIC meeting

Access Eastside			
Issues	Resolution Approach	Team Action Items – Sept.	
<ul style="list-style-type: none"> <li>Over 2 years behind schedule for Wi-Fi activation for Overfelt and Yerba Buena high school attendance areas</li> </ul>	<ul style="list-style-type: none"> <li>Community Wi-Fi activated for James Lick attendance area in March 2019</li> <li>City and ESHUSD met on May 15, 2019 and agreed to proceed with next phase – Overfelt High School (funded by ESUHSD for design, installation and 3-year maintenance)</li> <li>ESUHSD completed educational performance evaluation in Spring 2019</li> <li>Technical assessment to be completed by Fall 2019</li> </ul>	<ul style="list-style-type: none"> <li>SVTP/PayPal/SmartWave collaborating to prepare technical capabilities report for James Lick</li> </ul>	
		<b>Council Action Items</b>	
		Seek Council’s approval in October 2019 for SmartWAVE to install Wi-Fi at Overfelt HS attendance area	
		<u>Look ahead:</u>	

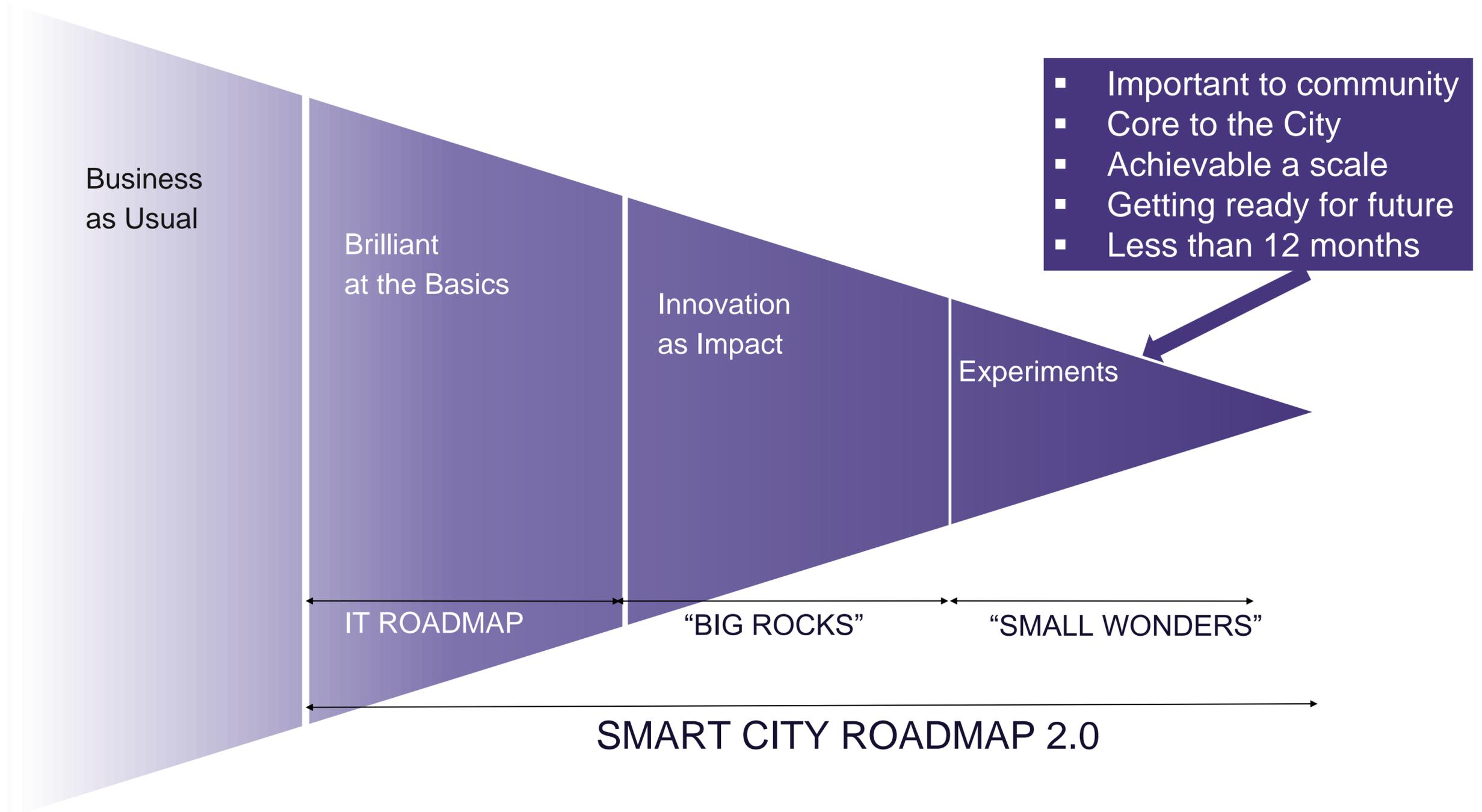
# SMART CITY ROADMAP 2.0 - YELLOW STATUS DETAIL

LEGEND

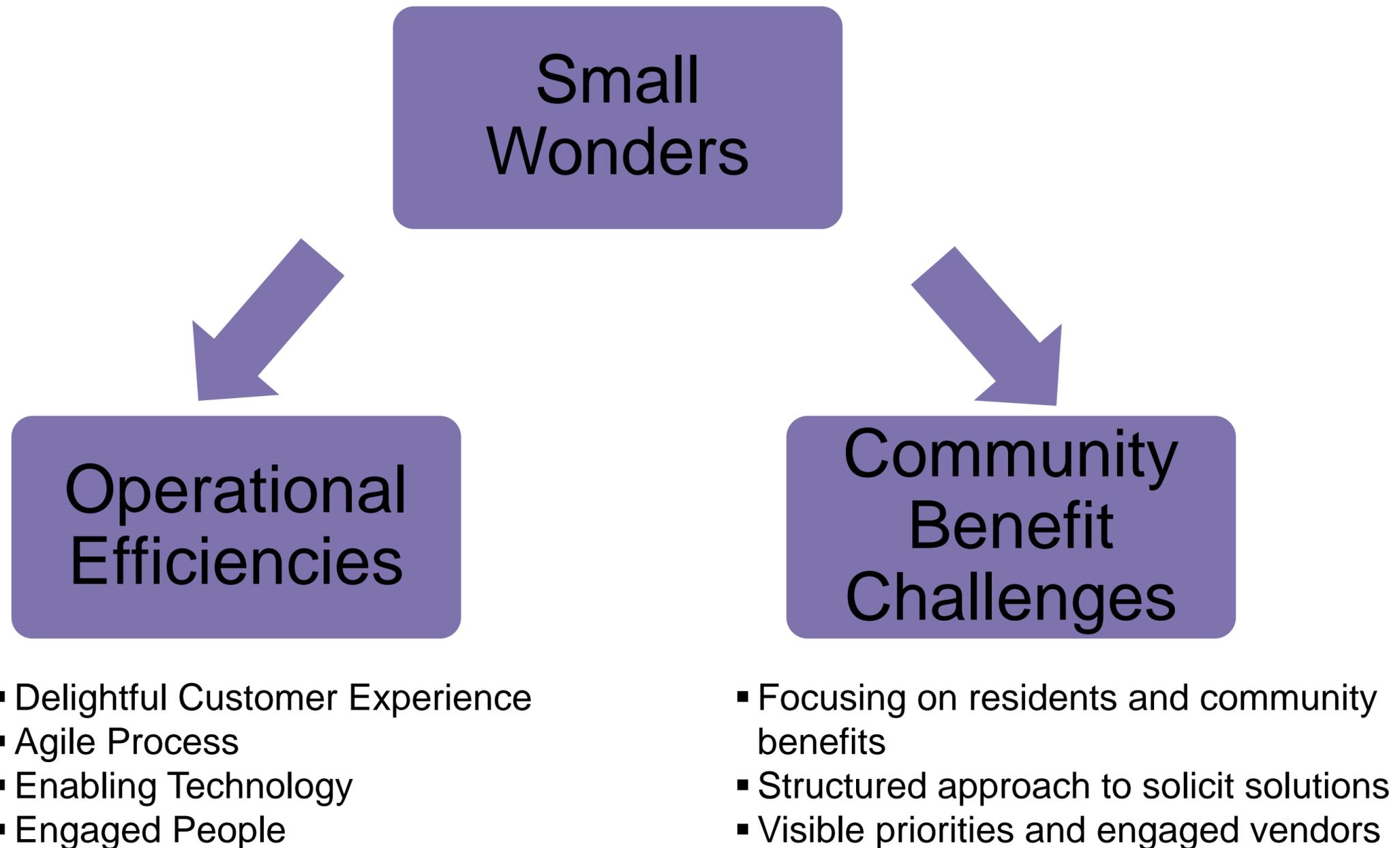
Indicates changes from last SCSIC meeting

Integrated Permitting System		
Issues	Resolution Approach	Team Action Items – Sept.
<ul style="list-style-type: none"> <li>▪ Delayed by over three years:                             <ul style="list-style-type: none"> <li>▪ Lack of coordination across several siloed teams (internal and external) for implementation</li> <li>▪ Lack of technology infrastructure readiness</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Re-scoped &amp; Prioritized Contract Approved by Council June 2019 include the same comment about the team and governance reset.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Implement Amended contract items (Amanda 7 upgrade on track)</li> </ul>
		Council Action Items
		NONE
		<p><u>Look ahead:</u> Report to Smart Cities and Service Improvements Committee April 2020</p>

# SMART CITY ROADMAP 2.0



## Path Forward - Two Categories Of Small Wonders



# **Small Wonders - Operational Efficiencies**

## **2018-2019 Start up in Residence (STIR) Cohort**

# City Teams



Housing and Office of Emergency Management  
Project: Disaster Response tool



Office of Economic Development  
Project: Street banner online reservation system



Housing  
Project: Affordable Housing Compliance Tool



Public Works Project: Contractor Labor Compliance Tool

## Small Wonders – Operational Efficiencies Lessons Learned 2018-2019 Start up in Residence (STIR) Cohort

- Upfront RFP, bid and award works well vs. “demonstration policy” and “typical pilot RFP”
- Agile approach made these projects successful – Alvina Nishimoto, Agile Coach
- Solutions may be expanded for other civic issues (e.g. combine street banner and small cell invoicing processes)
- Team leads and executive leadership need to be engaged
- Need to hire a Small Wonders Manager to coordinate and execute all small wonder projects

# Small Wonders - Community Benefit Challenges

## SMALL WONDERS COMMUNITY BENEFIT CHALLENGES – LONG LIST APPROVED BY SMART CITIES AND SERVICE IMPROVEMENTS COMMITTEE AND COLLABORATED WITH DEPARTMENTS

User-Friendly Government	<input type="checkbox"/> What are solutions that fight against misinformation in census and/or voting?
	<input type="checkbox"/> What are translation tools to improve communication with non English speaking residents (e.g. at live community meetings)?
	<input type="checkbox"/> What are social media and texting tools to provide critical information to non English speaking and low income residents for emergency management?
	<input type="checkbox"/> How to use chatbots to increase civic engagement and transparency?
Smart Mobility	<input type="checkbox"/> How can delivery robots deliver food and products to the vulnerable groups and deliver from local SMEs at a reasonable price?
	<input type="checkbox"/> What are the UAV/UAS solution for disaster monitoring and search and rescue response (e.g. Alum Rock, fire incidents)?
Smart Infrastructure	<input type="checkbox"/> What IoT devices can make parks safer?
	<input type="checkbox"/> How can IoT devices make traffic management more efficient?
Safe City	<input type="checkbox"/> How can the city monitor and enforce e-scooter speed to ensure sidewalk safety?
	<input type="checkbox"/> How to crowd source the unbiased collection of potential evidence for crime and safety events in neighborhoods?
Equity	<input type="checkbox"/> What is a mobile application/mobile-friendly website application that helps homeless individuals locate and apply to shelter and other social services?
	<input type="checkbox"/> How to design a employee (homeless) – employer matching program?
	<input type="checkbox"/> What is an application that builds empathy between non-homeless and homeless individuals?
Climate Smart	<input type="checkbox"/> How to turn hard-to-recycle plastics into other reusable sources?
	<input type="checkbox"/> How to change the behavior to encourage sorting of recyclables?
	<input type="checkbox"/> How to provide real-time energy consumption data to residents?

# INITIAL PROPOSED STACK RANKINGS FOR SMALL WONDERS CHALLENGES

## THREE CRITERIA USED FOR PRIORITIZATION

### Impact

- Community benefit
- Operations improvement
- Efficiency/effectiveness

### Risk

- Opportunity cost
- Scalability

### Implementation

- Complexity
- Uniqueness

## FINAL PRIORITIZED LIST OF SMALL WONDERS COMMUNITY BENEFIT CHALLENGES

Smart Mobility	1 (tied)	<input type="checkbox"/> What are the UAV/UAS solution for disaster monitoring and search and rescue response (e.g. Alum Rock, fire incidents)?
User-Friendly Government	1 (tied)	<input type="checkbox"/> What are social media and texting tools to provide critical information to non English speaking and low income residents for emergency management?
User-Friendly Government	2	<input type="checkbox"/> What are translation tools to improve communication with non English speaking residents (e.g. at live community meetings)?
Climate Smart	3	<input type="checkbox"/> How to change the behavior to encourage sorting of cleaned recyclables?
Equity	UYG	<input type="checkbox"/> What is a mobile application/mobile-friendly website application that helps homeless individuals locate other social services?
Climate Smart	Deferred to future	<input type="checkbox"/> How to provide real-time energy consumption data to residents?
Safe City	Deferred to future	<input type="checkbox"/> How to crowd source the unbiased collection of potential evidence for crime and safety events in neighborhoods?
User-Friendly Government	Deferred to future	<input type="checkbox"/> What are solutions that fight against misinformation in census and/or voting?
Climate Smart	Deferred to future	<input type="checkbox"/> How to turn hard-to-recycle plastics into other reusable sources?
Smart Mobility	Deferred to future	<input type="checkbox"/> How can delivery robots deliver food and products to the vulnerable groups and deliver from local SMEs at a reasonable price?
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Smart Infrastructure	Deferred to future	<input type="checkbox"/> How can IoT devices make traffic management more efficient?
Safe City	Deferred to future	<input type="checkbox"/> How can the city monitor and enforce e-scooter speed to ensure sidewalk safety?
Equity	Inflight UYG	<input type="checkbox"/> How to design an employee (homeless) – employer matching program?
Equity	Inflight UYG	<input type="checkbox"/> What is an application that builds empathy between non-homeless and homeless individuals?
User-Friendly Government	In flight – Comms/MOTI	<input type="checkbox"/> How to use chatbots to increase civic engagement and transparency?

# SMALL WONDERS – SEPTEMBER 2019

Theme	2018 Operational Efficiency	2019 Operational Efficiency	2019 Community Benefit/Unleash Your Geek
User-Friendly Government			Multilingual and Accessible Social Media/Texting Tools Emergency Management
Smart Mobility			Translation Tools to Improve Communication with Non English Speaking Residents
Smart Infrastructure	STIR Wage Compliance Management Tool		UAV/UAS Solution for Disaster Monitoring and Search and Rescue Response
Safe City	STIR Disaster Response Platform		
Equity	STIR Affordable Housing Compliance System		Mobile Application/Mobile-Friendly Website Application that Helps Homeless Individuals Locate other Social Services
		Use Technology to Scan Websites that Discriminate Section 8 or Voucher Tenants and Create Reporting Tool	
		Use Technology to Search County records for Filed Evictions and Establish a Nexus with Notices Filed with Rent Stabilization Program	
		Automation of Affordable Housing Pricing and Household Income Qualification Process	
Climate Smart			Change Behavior to Encourage Sorting of Cleaned Recyclables

## LEGEND – PROJECT STATUS



ON TRACK

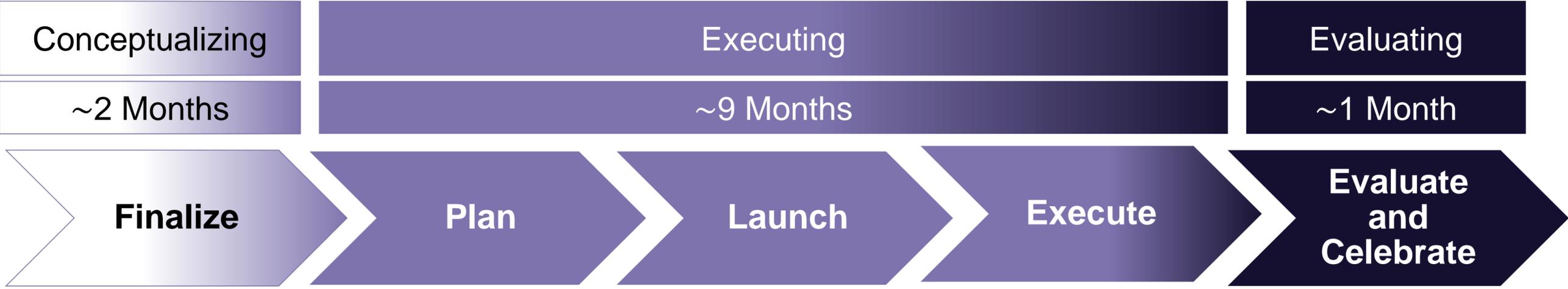


ISSUES WITH SCHEDULE, BUDGET OR SCOPE



AT RISK, CORRECTIVE ACTIONS NEEDED

# Small Wonders Challenges - Implementation Plan



- Hire Small Wonders Pipeline Manager
- Select 3-5 challenges in collaboration with departments
- Define value proposition for City and vendor for scaling
- Define funding strategy
- Finalize draft Innovators Academy workplan
- Update Committee

- Finalize sourcing strategies
  - Utilize STIR process or similar
  - RFP issued upfront; others as appropriate
- Finalize scope of work for challenges
- Enter contract with STIR or similar
- Finalize Communications and Media Plan
- Finalize Innovators Academy workplan
- Finalize staffing
- Finalize RFP

- Launch Communications and Media Plan (City Website, Press Release, STIR, etc.)
- Issue RFP and advertise
- Evaluate and select leading proposal
- Negotiate contract
- Finalize project charter with project team and vendor

- Develop minimum viable product (MVP) solution
- Evaluate MVP
- Enter into contract for scale (if MVP deemed successful)

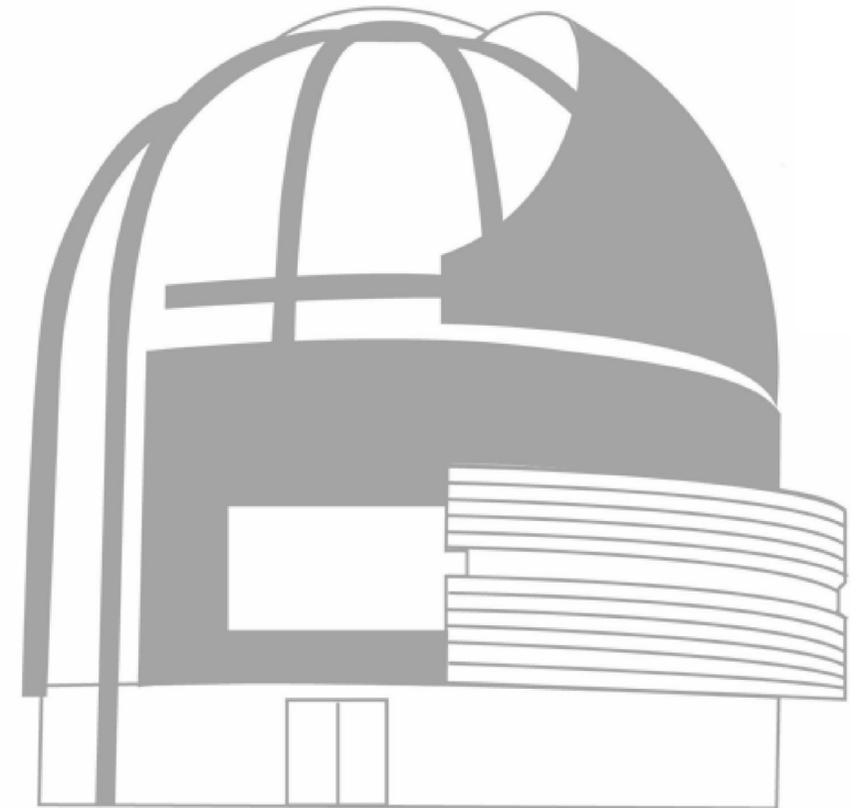
- Update Committee
- Celebrate success
- Communicate success
- Seek award opportunities

# Innovators Learning Labs

# Building Our Capacity

## Powered by People

We recognize that our employees power the City of San Jose and our success as a City is dependent on our ability to create a diverse, talented, and engaged workforce. Managing our talent means that we will continue to accelerate and improve upon our successes in our strategic hiring, develop partnerships to create a long-term recruiting pipeline, and to support employee retention engagement, and advancement through training and development programs.

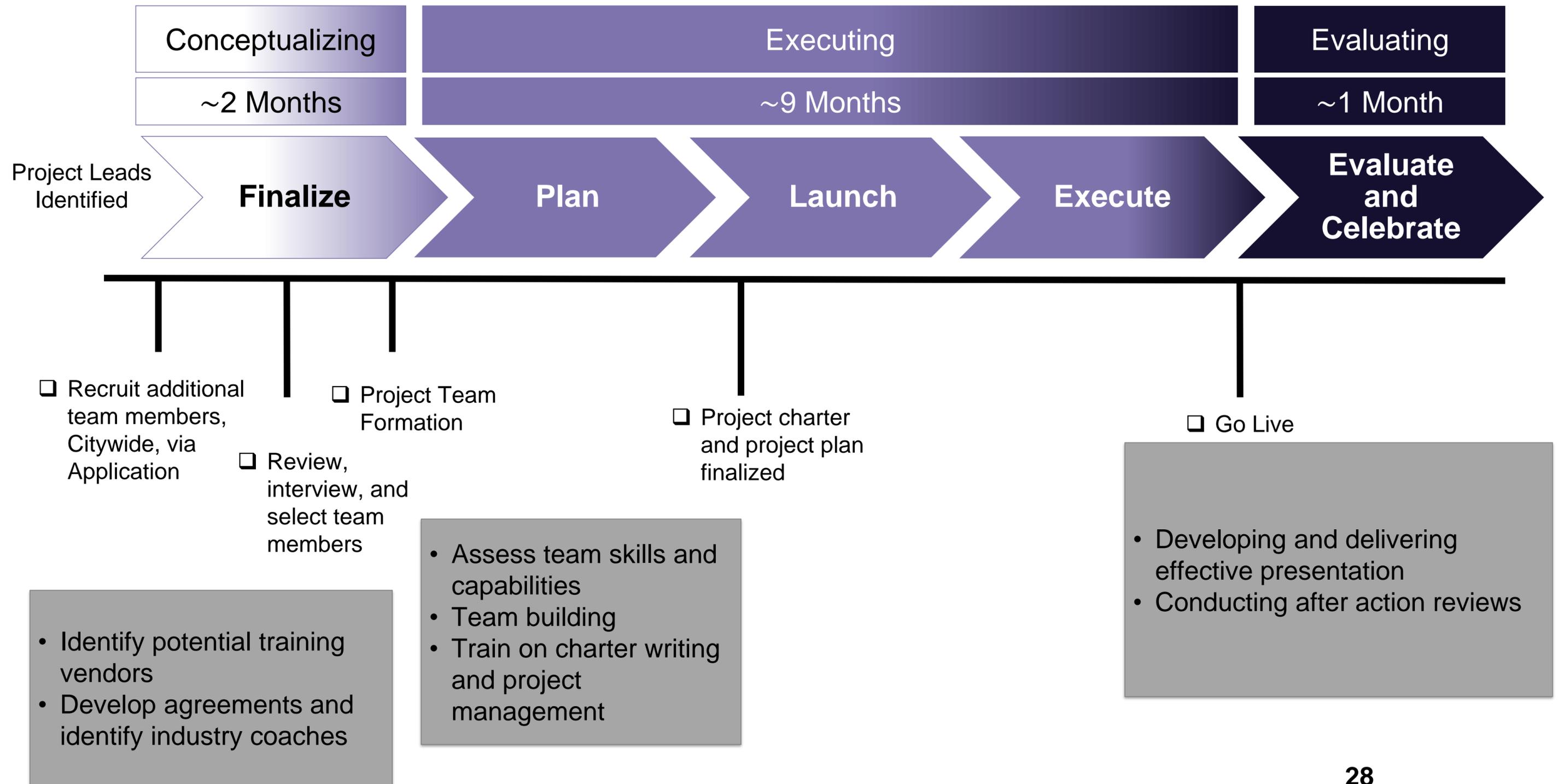


## Goals of the Pilot Innovator's Learning Lab

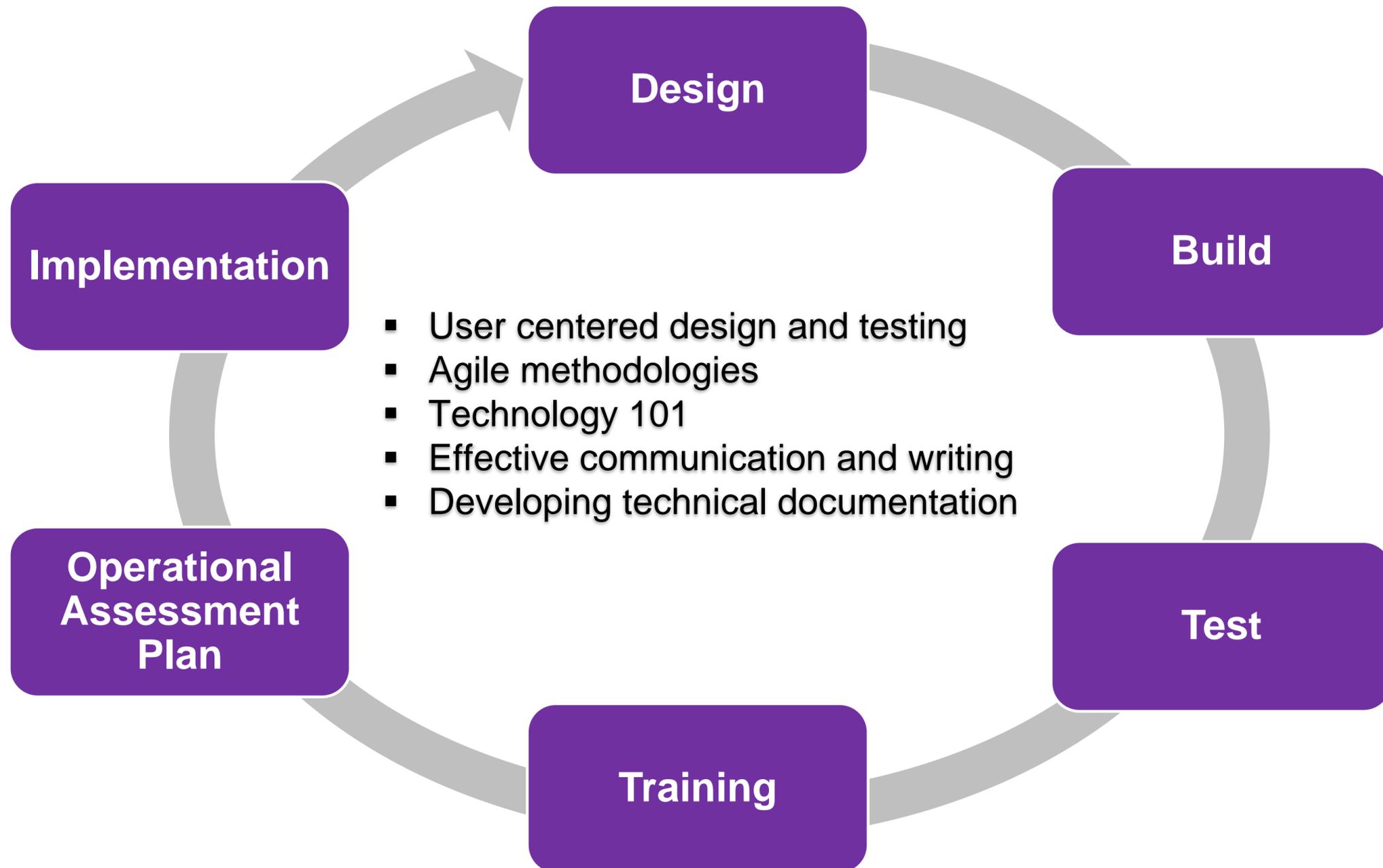
1. **DEVELOP** a new generation of leaders with an innovation mindset and the knowledge, skills, and abilities to implement smart city solutions
2. **FOSTER** a cultural change that will help embrace new innovation projects
3. **STRENGTHEN** the City's partnership with tech industry to develop small experiments within the City's urban environment



# Aligning Innovation Learning Lab With Small Wonders Projects



# PROJECT EXECUTION



# Small Wonders - Wage Compliance Management Tool

Office of Equality Assurance

Startup In Residence 2019 Cohort – City of San José

Steven De La O, Compliance Specialist, Public Works

Sean Wahidi, CEO, InnoActive Group

# Background

- March 2017 Auditor report recommended a software solution to automate payroll review process
- March 2019 City Council Priorities
  - #1 Local Hire and Apprenticeship Utilization
  - #3 Disadvantage Business Enterprise
  - #16 Wage Theft Ordinance Update

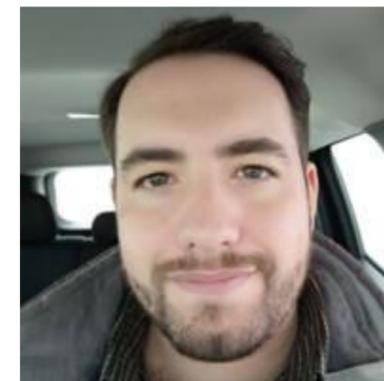
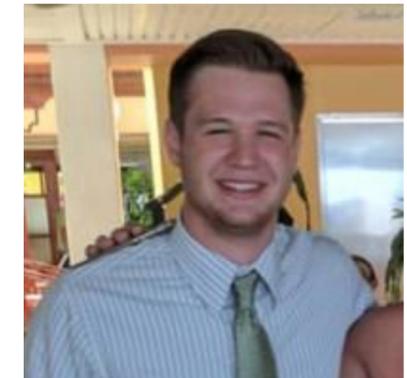
# Our story

- Monitoring prevailing wage on City contracts for over 30 years
- Prevailing wage is the rate of pay contractors must pay their workers on public works projects.
- Prevailing wage requirements level the playing field when bidding



# The Team

- Office of Equality Assurance (OEA)
  - Christopher Hickey (Division Manager)
  - Steven De La O (Compliance Specialist)
  - Alphonse Le-Duc (Compliance Specialist)
- InnoActive Group
  - Sean Wahidi (CEO)
  - Jordan Guardamagni (Analyst)
- FormVerse
  - Andrew Gautron (Director Customer Success)
  - Oscar Velez (Customer Success)



# The challenge

- Approximately 130 active projects today
- No unified standard operating procedures for monitoring
- No reporting capabilities
- No access to project compliance status
- Printing and filing docs is antiquated



# The process

- InnoActive interviewed Specialists
- Initial roadmap for tool developed
- City IT, Capital Project Mgmt. System (CPMS) Team & IT Security teams engaged
- Internal testing started on minimal viable product release (Raven)
- Met construction apprentice committees to discuss/demo new tool
- Certified payroll report process testing started
- Training and support model development
- Rollout to beta test contractors by end of summer

# The benefit

- For OEA: At our core we are advocates for workers
- For Contractors: Greater insight of the compliance process
- For City: Environmental impact reduced & stronger community relationships

# Our lessons learned

- Variations among Specialists' review process
- Sharing best practices and refocus of efforts
- Technology addresses pain points but also identifies potential for new processes

# Next steps

- Rollout to all contractors starting new projects in Fall
- Feedback collection and process refinements
- Build out certified payroll report functionality
- Reporting design and scheduling

# Demo Video

- <https://vimeo.com/formversevideos/review/357683030/fca88a84b1>

# Questions?

# **(d) 1. Smart City Roadmap Update**

Rajani Nair, Smart City Manager

Kelli Parmley, Human Resources Assistant Director