Smart City Roadmap 2.0 Approach

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Smart Cities and Service Improvement Committee
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Overview: Smart City Roadmap 2.0
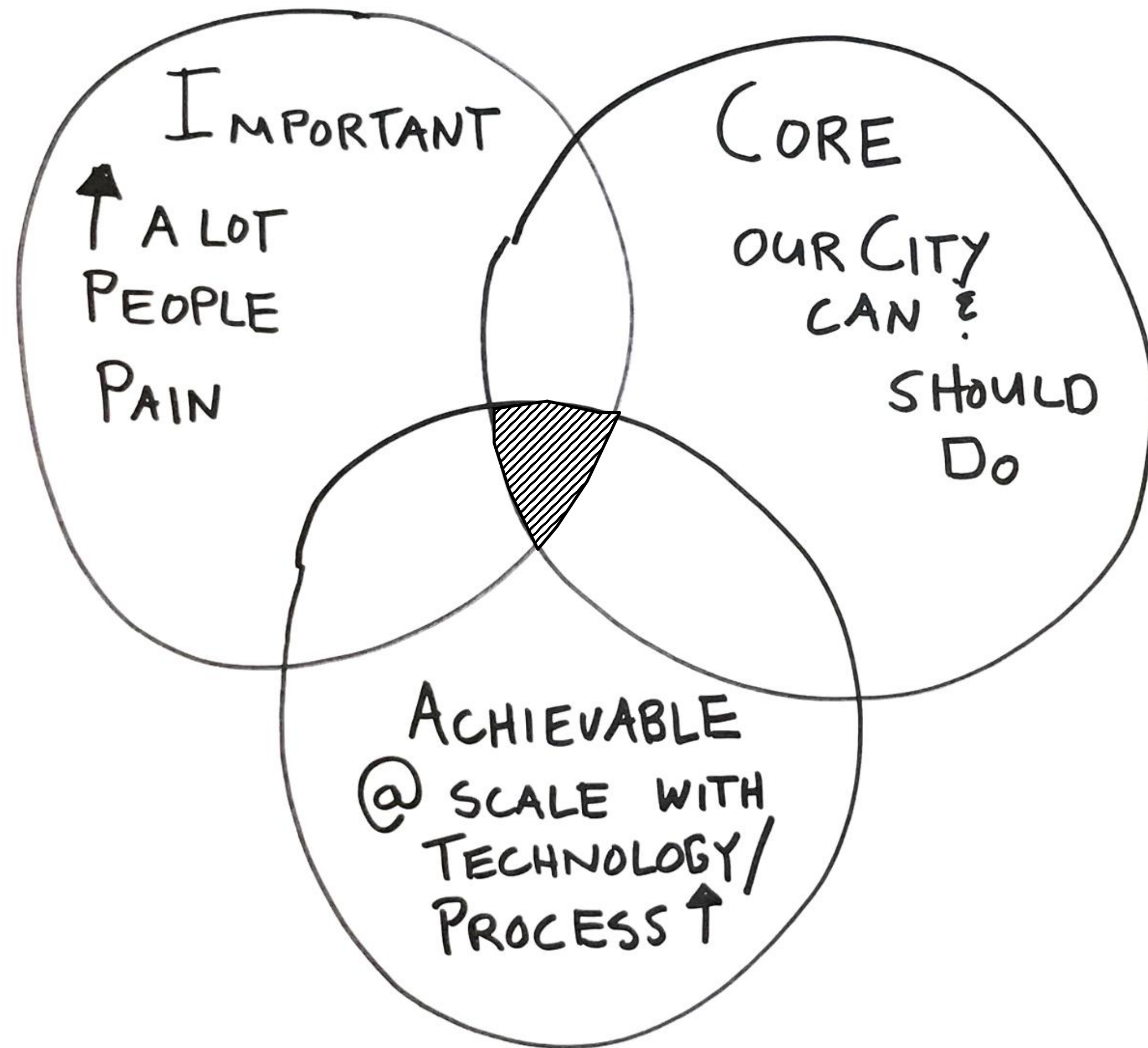
Innovation Roadmap 1.0 (2017)

	Non-Negotiable Citywide Implementation	Highly Desirable Strategic Investments	Desirable Dept Investments	Demonstration Projects	Emerging Projects
Process Improvement	Talent Recruitment Initiative	Development Services			
Digital Front Door	My San Jose	Website Redesign			
Smart City Infrastructure	Digital Inclusion & Broadband Strategy	LED streetlights/ anyCOMM pilot	IoT Strategy		
Demo Projects	Facebook Terragraph WiFi	Access Eastside	Silver Spring Networks	Demonstration Policy	
IT Brilliant at the Basics	Citywide Data Architecture	Business Process Automation	Business Tax System	Integrated Permitting System	
Transportation	Autonomous Vehicle RFI	Transportation Events Tracking	Radar Sensor Module Strategy	Vehicle Fleet Telematics	
Safe City	Safe City Strategy	Emergency Mgmt Tech/Data			
Innovation Support	Innovators Network				

PRIORITIZATION

How we are evolving the Roadmap

1. Connecting the Vision to Implementation

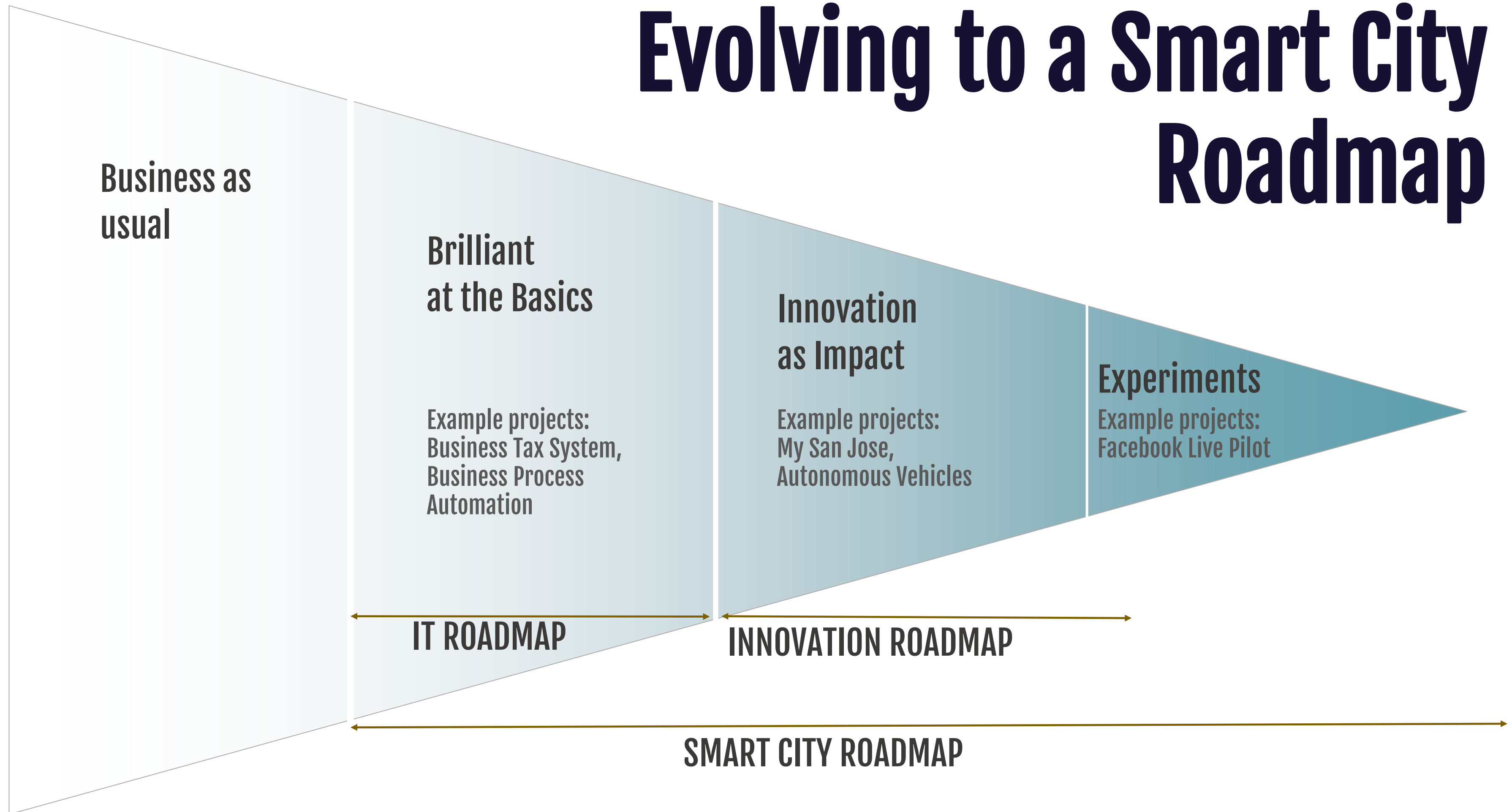2. Big Rocks vs Small Wonders pipeline

WHAT we work on

Evolving to a Smart City Roadmap

Business as usual

Brilliant at the Basics

Example projects:
Business Tax System,
Business Process Automation

Innovation as Impact

Example projects:
My San Jose,
Autonomous Vehicles

Experiments

Example projects:
Facebook Live Pilot

IT ROADMAP

INNOVATION ROADMAP

SMART CITY ROADMAP

1 **Connecting the Vision to Implementation**

Smart City Vision (2016)

- Safe
- Inclusive
- User-Friendly
- Sustainable
- Demonstration

KEY: Developed   In Process   Future

Themes for Smart City Roadmap Implementation (2018)

Smart Infrastructure

Broadband Strategy
IoT Strategy
Drone & Robotics Strategy

User-Friendly Government

Digital Service Strategy
Privacy Strategy
Data Strategy
Procurement Strategy
Open Data Environment strategy

Smart Mobility

EV strategy
Autonomous Vehicles Strategy

Equity

Digital Inclusion Strategy
Community Wi-fi strategy
Incubator Strategy
Homelessness

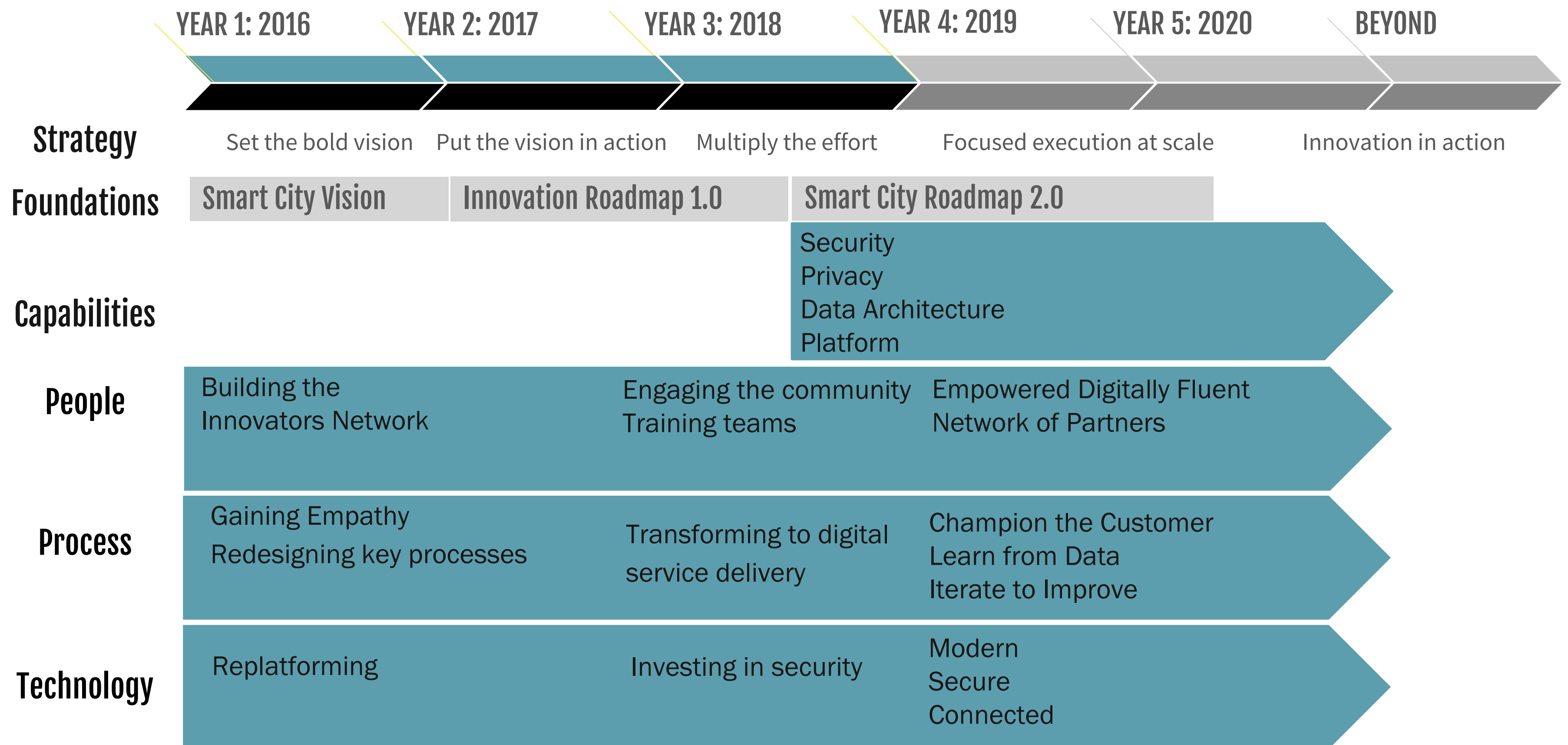**Safe City**

Safe City Strategy
Emergency Management Roadmap

Clean City

My San Jose 2.0

Brilliant at the Basics

Cybersecurity strategy
IT Strategic Plan
IT infrastructure strategy
Business process automation

❶ Connecting the Vision to Implementation

	YEAR 1: 2016	YEAR 2: 2017	YEAR 3: 2018	YEAR 4: 2019	YEAR 5: 2020	BEYOND
Strategy	Set the bold vision	Put the vision in action	Multiply the effort	Focused execution at scale		Innovation in action
Foundations	Smart City Vision	Innovation Roadmap 1.0	Smart City Roadmap 2.0			
Capabilities			Security Privacy Data Architecture Platform			
People	Building the Innovators Network	Engaging the community Training teams	Empowered Digitally Fluent Network of Partners			
Process	Gaining Empathy Redesigning key processes	Transforming to digital service delivery	Champion the Customer Learn from Data Iterate to Improve			
Technology	Replatforming	Investing in security	Modern Secure Connected			

Big Rocks vs. Small Wonders pipelines

"Big Rocks"

IT Brilliant at the Basics

Innovation at scale

CMO Innovation team oversees execution and collaborates with MOTI team, City departments and external partners

MOTI collects ideas from mayor & council, community and external partners & collaborates with CMO Innovation Team

Planning:
Evaluate staffing and funding needs for projects.

Managing:
Provide regularly progress updates

Prioritize new opportunities and existing projects

Delivering:
Champion the customer, learn through data, iterate to improve

Operating:
Assign roles and responsibilities
Evaluate goals achieved

"Small Wonders"

Emerging opportunities

Receive partnership opportunities from leading tech companies
·
Staff in city departments generate new ideas

Conceptualizing:
Define the problem and discover potential solutions

Executing:
Prioritize and allocate resources
Formalize partnership

Evaluating:
Evaluate & decide whether to move to main pipeline
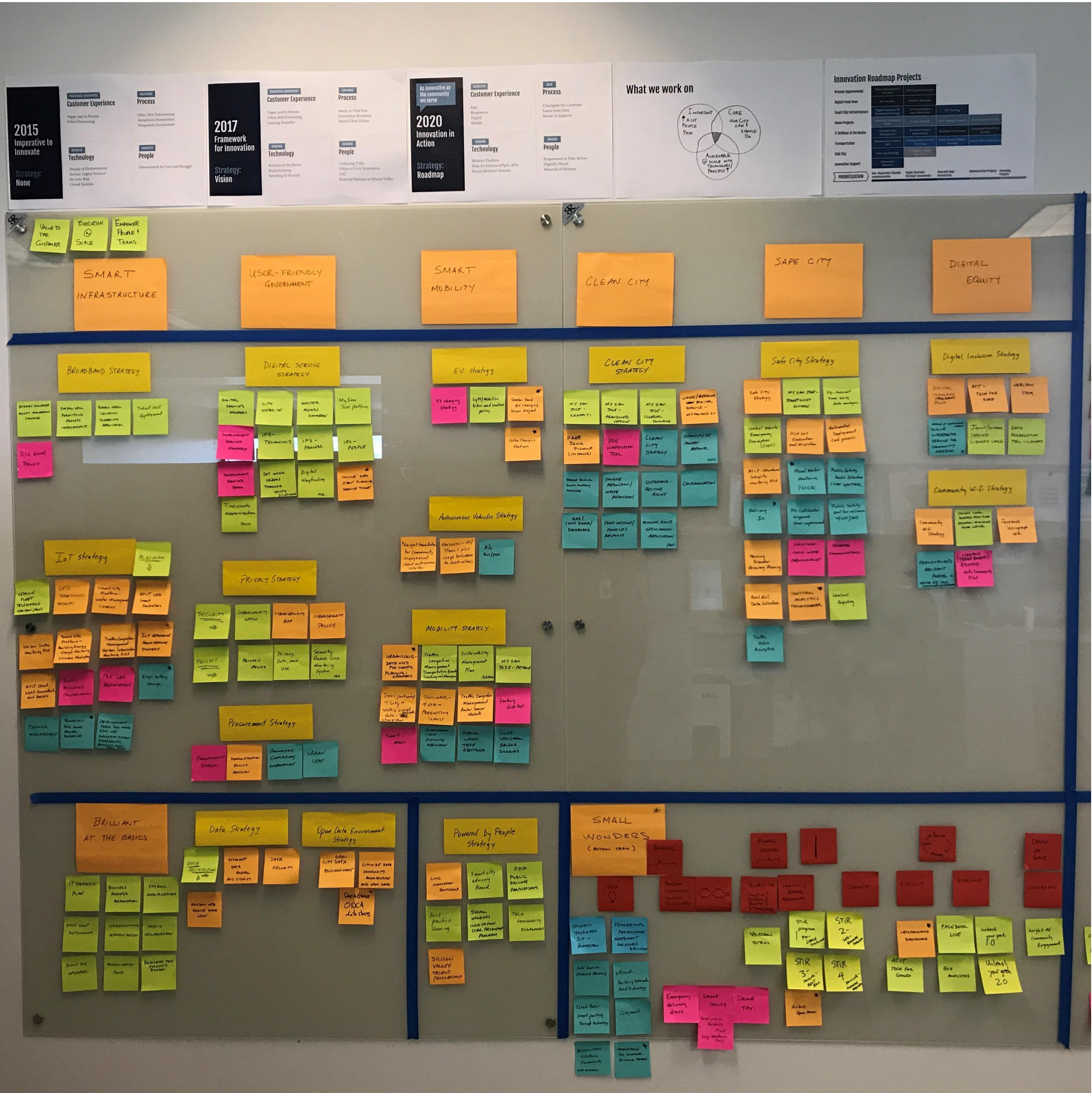Celebrate success/learning

2 "Small Wonders" Pipeline Process

Conceptualizing			Executing			Evaluating
Idea	**Discovery Review**	**Discovery Solution**	**Prioritize**	**Resources and Commit**	**Execution**	**Evaluate and Celebrate**
Educational Performance for Access Eastside	Balcony Io	Footfall Analytics		STEM pilot	Volta Charging Stations	Facebook Live
Battery Storage				Tech for Good pilot	Urban Logiq	Box Analytics
Unleash Your Geek 3.0 – Blockchain				STIR – emergency response tool	Senter Yard EV Charging	Unleash Your Geek 1.0
Block chain for Solar Power Exchange				STIR – labor compliance tool	Neighborhood Dashboard	Unleash Your Geek 2.0
				STIR – rent stabilized database		
				STIR – streetlight banner program tool		
				AirBnB Open House		

Examples

Smart City
Roadmap 2.0 is a work
in progress.

At last count, the
portfolio is over 600%
larger (133 projects)
than the
Innovation Roadmap
1.0 (22 projects)

80% Big Rocks
20% Small Wonders

Prioritization: Big Rocks vs. Small Wonders

	Criteria	Questions
"Big Rocks" — IT Brilliant at the Basics / Innovation at scale	**Important to our community**	How many residents will the project impact? How much change the project will create to each resident?
	Core to what the City does	How much resource (fund, staff capacity) is needed? Is there redundancy?
	Achievable at scale	Is the problem solvable at scale using technology or process improvements?
"Small Wonders" — Emerging opportunities	**Get ready for the future**	Will this help the City be forward thinking for the future? Why should the City have it? • How will this new technology improve quality of life for future residents? • How scalable is the project?

Resources: Expand the Innovators Network

Fellows programs, Private Public Partnerships, Non-profits

+

Expand the Innovators Network

= **Building capacity for executing Smart City projects**

Explore Innovation Fellowship program for City employees

- Receive innovation/ leadership/ strategy development training
- Get recognition from Department leadership through performance evaluation and promotion consideration
- Expand network with cross-dept. colleagues who share the same innovative mindset

Enhance existing programs such as Employee Suggestion Pilot Program

Future Citywide leaders with innovation mindset and experience in project management

Culturally change to embrace new innovative projects

An innovation-embracing and cooperative city brand to tech companies and the public
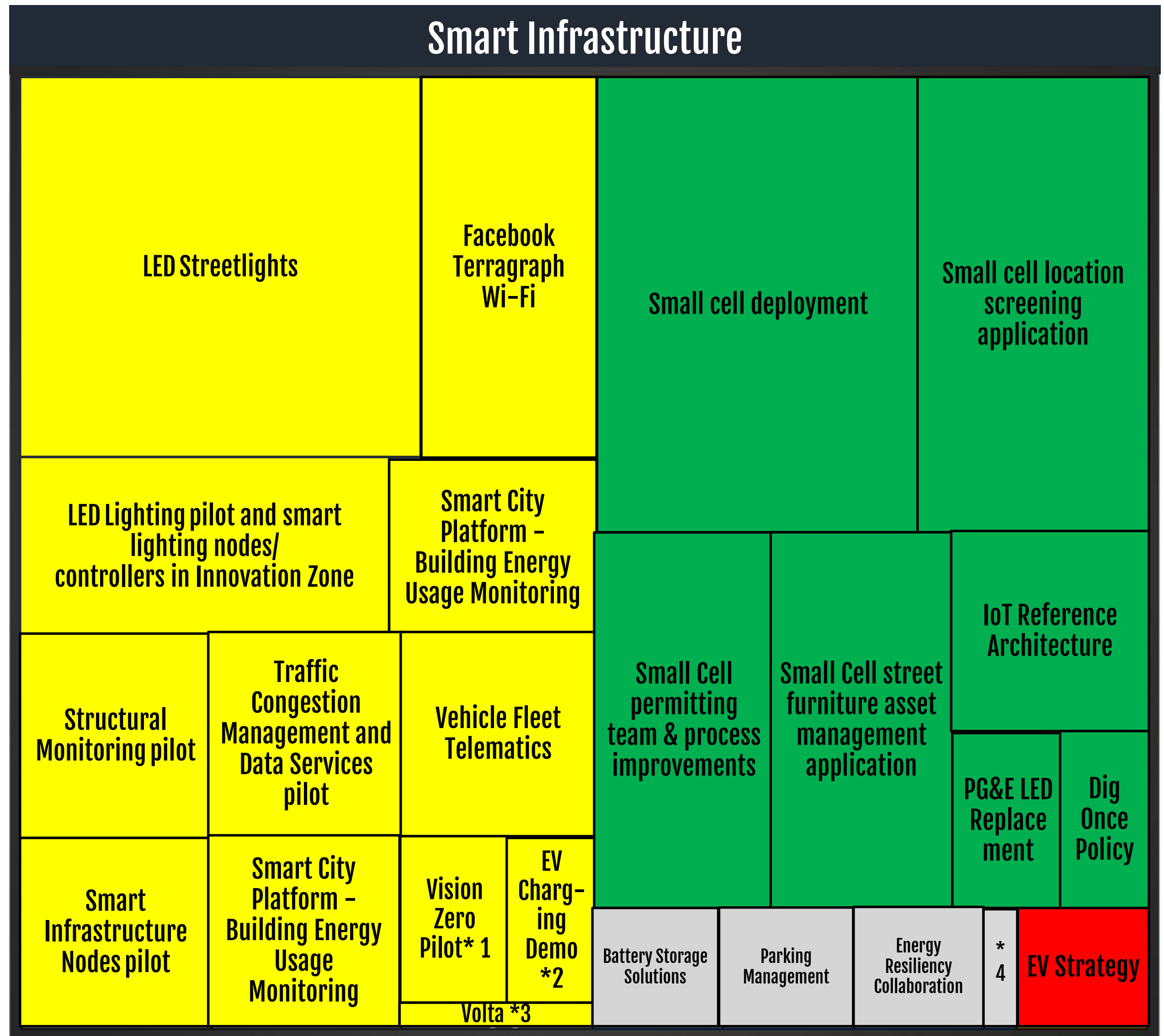
Smart City Roadmap 2.0 Prototype

Color Key

Color	Status
Green	On track
Yellow	Issues with schedule, budge or scope
Red	At risk, corrective actions needed
Gray	Backlog

Smart Infrastructure

- LED Streetlights
- Facebook Terragraph Wi-Fi
- Small cell deployment
- Small cell location screening application
- LED Lighting pilot and smart lighting nodes/controllers in Innovation Zone
- Smart City Platform - Building Energy Usage Monitoring
- Small Cell permitting team & process improvements
- Small Cell street furniture asset management application
- IoT Reference Architecture
- Structural Monitoring pilot
- Traffic Congestion Management and Data Services pilot
- Vehicle Fleet Telematics
- PG&E LED Replacement
- Dig Once Policy
- Smart Infrastructure Nodes pilot
- Smart City Platform - Building Energy Usage Monitoring
- Vision Zero Pilot* 1
- EV Charging Demo *2
- Volta *3
- Battery Storage Solutions
- Parking Management
- Energy Resiliency Collaboration
- *4
- EV Strategy

* 1 –Vision Zero Intersection Monitoring Services Pilot
* 2-Senter Yard EV Charging Demonstration Project
* 3-Volta Charging Stations
* 4-Blockchain for Solar Power

Next Steps

Defining strategic outcomes and program metrics

Developing project prioritization process

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