

WEHO
SMART
CITY

An initiative of the City of West Hollywood

STRATEGIC PLAN

2018



City of West Hollywood
California 1984

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

A smart city optimizes systems by using technology and data to improve service delivery and customer satisfaction while creating new opportunities for engagement and problem-solving for better shared outcomes. With that aim, the West Hollywood (WeHo) Smart City Strategic Plan strives to holistically weave technology throughout the urban fabric as a means of improving and enhancing community quality of life.

WeHo Smart City is an initiative that focuses on people first, recognizing that it is civic leadership and the broader community that makes West Hollywood a great place to live, work, and play. As resources and time are limited, WeHo Smart City focuses on empowering data-driven decision making, engaging stakeholders with relevant and timely information, and incorporating user feedback into service and program design for a better experience and outcomes.

WeHo Smart City builds on the strengths of West Hollywood as a city, and concurrently addresses current and future challenges involving the core SMART values of Sustainability, Mobility, Accessibility, Resiliency, and Transparency. These core values are inherent throughout the Strategic Plan, and serve as the guiding north stars based on current and future City priorities. WeHo Smart City capitalizes on the innovative initiatives already underway and seamlessly integrates technology, digital tools, and data to enable a connected citizen experience.

A smart city starts with a smart city hall, so WeHo Smart City is designed to look inward to build an understanding of data analytics and the capacity to adapt to change within City Hall. Therefore, the Strategic Plan details three foundational strategies surrounding this approach:

- 1. Create a culture of data as a smart city hall ready for the future.** WeHo Smart City will lead several efforts to bring data-driven decision making to departments citywide and support the development of capacity to analyze and use data more effectively in daily operations.
- 2. Collaborate and experiment across departments to do more with less.** WeHo Smart City will create new ways for city staff to work together and with external stakeholders to address key priorities for the city – working smarter, not harder.

- 3. Automate processes for an exceptional customer experience.** WeHo Smart City will leverage technology to further improve services and get ready for the future.

These foundational strategies outline the subsequent WeHo Smart City initiatives, each with its own implementation methodology and pilot approach with the goal to execute, measure, and improve over time.

STRATEGIES AT-A-GLANCE

STRATEGY ONE:	
Create a culture of data for a smart city hall that's ready for the future.	
1.1	Build capacity for data analytics.
1.2	Develop dashboards to track progress on key city priorities.
1.3	Establish a mobility data management program for WeHo.
1.4	Expand the curbside management pilot.
1.5	Adopt a Smart City privacy policy.
STRATEGY TWO:	
Collaborate and experiment across departments to do more with less.	
2.1	Create a "pizza tracker" tool for managing workflows for internal processes.
2.2	Develop a testing strategy for new digital engagement and feedback tools.
2.3	Adopt a data sharing policy and tools to make it easier for travelers to access mobility data.
2.4	Explore an on-demand transit pilot.
STRATEGY THREE:	
Automate processes for an exceptional customer experience.	
3.1	Launch a public safety pilot.
3.2	Implement critical connected infrastructure back-ups.
3.3	Develop a smart city sensor (and building) program.
3.4	Upgrade street light infrastructure.
3.5	Adopt an IoT approval process.

Strategy One initiatives support a culture of data by building capacity for data analytics and the development of new tools to transparently track progress on key city priorities and introduce the benefits of big data to manage and adapt to real-time situations.

Strategy Two initiatives support collaboration and experimentation and are designed to make it easier for city staff to work together and get the job done with a continued focus on exceptional customer service.

Strategy Three initiatives focus on automating processes for an exceptional customer experience. Technology as a tool can help make it easier to manage and access information in real-time to expedite processing so that the focus can remain on doing what's best for the community.

The WeHo Smart City Strategic Plan builds on the strengths of the City and its commitment to innovation and customer service while leveraging best practices in civic innovation and technology to improve the overall urban experience. Through pilot and demonstration projects, WeHo Smart City will test policy recommendations and technology applications to ensure that they meet the core values and overarching goals of the City. By building partnerships and supporting collaboration, WeHo Smart City can tap the talent of civic leaders, local organizations and companies to realize the full benefits of a seamlessly connected community.

WEHO SMART CITY

WHY A SMART CITY PLAN?

INTRODUCTION

Urban innovation is evolving at an exponential rate, introducing new services and tools daily. The pace of technological change is often confounding traditional cities as they wrestle with existing challenges and competing priorities while preparing for the uncertain future. But unlike traditional cities, smart cities are seamlessly embedding technology to enhance operations, making efficient use of community resources across all sectors, and creating a connected citizen experience.

While there is technology embedded throughout a smart city, it is critical to consider the public policy framework for innovation, organizational capacity to manage change, and more analog attributes of a city that contribute to a high quality of life. Technology can serve as an enhancement to all three and is by no means a panacea. Therefore, WeHo Smart City ties together much of the great work already underway at City Hall and identifies new opportunities to holistically weave technology throughout the urban fabric.

The City of West Hollywood has already embraced many of the fundamental building blocks of becoming a smart city – including progressive policy, responsive customer service, and a desire to proactively address some of the most complex urban issues ranging from aging in place, to homelessness, and affordable housing. The City has been successful in moving the needle on many of its priorities and as a smart city, West Hollywood will build upon its strengths and resources while finding new data-driven ways to solve problems.

Developing a Strategic Plan

WeHo Smart City defines several short-term opportunities to rapidly advance the core values of Sustainability, Mobility, Accessibility, Resiliency, and Transparency. While this plan outlines a three to five year workplan, with an initial focus on building City Hall's capacity for the future, it will require ongoing stewardship and assessment to ensure it is on track to meeting its objectives. With innovation comes a means to learn and benefit from experimentation so this initiative will also include a dashboard to track the progress of plan implementation and provide opportunities for staff and management to adapt as circumstances evolve. This should be a living document and WeHo Smart City should continue to refine strategies to realize SMART goals moving forward.

Culture of Innovation

With the development of the WeHo Smart City Strategic Plan, the City of West Hollywood continues its commitment to innovation and experimentation. In an era of on-demand services, City Hall is evolving its service delivery and reaching its customers in new ways.

The City has hosted events to engage new stakeholders, launched pilots and run process improvements, and championed to bring technology and good design to the public realm. But it is important to grow more internal champions and external partnerships to lead and support catalytic change in the future.

In addition, the City must foster a culture of data-driven decision making in working towards its Vision2020 (and soon Vision2050) goals. Using data in management of city services and program is a gateway to becoming a true smart city and it empowers staff to understand how their work is helping attain outcomes by tracking measures aligned to key objectives. This can help West Hollywood identify and prioritize initiatives with greater accountability through metrics and evaluation. In addition to building the capacity for data analytics, WeHo must adopt an incremental approach and a sustained commitment to culture building and training.

Culture of Customer Service

West Hollywood is committed to providing personalized, high-quality services to everyone who needs it. With the introduction of new technologies to improve services there is also an opportunity to find more efficient, cost-effective ways to do more. This continued commitment to customer service (both external and internal) helps improve accountability, communication, and collaboration across the organization.

BUILDING ON STRENGTHS

Focusing on existing assets, resources, and talents, this plan offers a pathway forward to further enhance innovation and collaboration across city hall.

SUSTAINABILITY

An early adopter, WeHo has holistically committed to greener practices and community outreach since its inception.

WeHo has made great progress in achieving environmental goals in its General and Climate Action Plan.

In 2017, WeHo welcomed dedicated staff to establish a solid base of in-house champions for all things sustainability.

MOBILITY

Piloting new technologies and innovations has helped WeHo address parking improvement goals identified in Vision2020.

New Smart Bus Shelters will further enhance the transit experience with free WiFi, real-time arrival info and other amenities.

WeHo is a very walkable community, benefiting from several recent improvements to street design.

ACCESSIBILITY

WeHo offers multiple digital and in-person customer service options, ensuring everyone gets answers to their questions.

Aging in Place strategies ensure that the city government and its services are accessible to residents of all ages.

WeHo has introduced high-quality digital channels to get information on local activities and resources to all constituents.

RESILIENCY

Plans are being updated to reflect the priorities of a diverse, inclusive community and prepare for the future.

City leadership is committed to building the capacity and resources to adapt to the future and changing needs of WeHo.

WeHo takes its public safety very seriously and coordinates with various agencies to proactively prepare for emergencies.

TRANSPARENCY

WeHo has launched an Open Data portal making critical city data accessible to everyone.

City staff provide City Council with thorough reports on all major recommendations for public consideration.

All City Council and several Board + Commission meetings are available for viewing through WeHo TV.

ADDRESSING CHALLENGES

Local issues and regional pressures add additional concerns when it comes to realizing the goals for West Hollywood.

SUSTAINABILITY

Issues like air and water quality do not stop at the municipal boundary and require substantial inter-agency cooperation.

Building a truly sustainable community requires regional coordination and collaboration for improved outcomes.

Regional environmental data is not collected or analyzed in a coordinated manner and requires more local detail to be useful.

MOBILITY

Worsening traffic congestion is a regional issue that impacts trips to and through WeHo.

Without a nearby Metro rail stop, WeHo is somewhat disconnected from regional rail transport.

There are a lot of private players in the mobility ecosystem making it challenging to optimize across all platforms.

ACCESSIBILITY

There are aging communities within WeHo that could benefit from new services/tech adapted to them.

Internally, better tools for communication and collaboration across departments will further improve customer service.

The constant balancing act between privacy and cybersecurity can make it hard to evolve technology systems efficiently.

RESILIENCY

Recent events locally and nationally have raised public safety concerns during special events and routine operations.

The epidemic of homelessness is putting considerable pressure on the region to find workable solutions.

WeHo is a small geographic area within a huge region and there are many services and resources beyond local control.

TRANSPARENCY

There are no standards around the availability of real-time data and imagery in communities balancing privacy with safety.

The volume of data anticipated with smart sensors and autonomous vehicles will overwhelm today's capacity.

With so much going on, it is very difficult to provide the most relevant information to each audience and stakeholder.

CORE VALUES

WeHo Smart City is an initiative that holistically weaves technology into the fabric of the city.

Sustainability
Mobility
Accessibility
Resiliency
Transparency

SMART VALUES

These are the “north stars” for all that WeHo Smart City outlines herein. Setting core values now provides clarity in navigating uncertainty in the future.

OUR VISION

For community members who want to enhance their quality of life, WeHo Smart City is an initiative that holistically weaves technology into the fabric of the city. WeHo Smart City turns bold, progressive ideas into lasting innovations. WeHo Smart City will create a human-centered smart city that is connected, welcoming, and innovative.

To guide the strategies outlined herein (and as they are amended over the implementation phase), it is important for West Hollywood to define core values to guide decision-making and provide a way to prioritize opportunities. As a dynamic city, West Hollywood will continue to be approached with new technologies and innovations to test, explore, and deploy. Understanding core values can be a valuable tool in assessing what makes sense for the city and its stakeholders. Defined below are the five core values for WeHo Smart City: Sustainability; Mobility; Accessibility; Resiliency; and Transparency.

Sustainability

WeHo Smart City is committed to sustainable practices in all that we do. We optimize resources for the quality of life for our residents, businesses and visitors through a holistic approach to service delivery across the full spectrum of human lifetime and experience. We serve WeHo’s dynamic community, unique environment, and growing economy through a “right-size” approach to services and programs.

Our goal is to establish a data baseline to better understand the impact of current, planned and future initiatives while improving our overall stewardship of resources, in support of the City’s efforts to reduce climate impact.

Mobility

WeHo Smart City is multi-modal for local trips and well-connected to regional networks. WeHo seamlessly gets residents where they need to go, regardless of ability, by providing a quality range of mobility options – from active transportation to public transport.

Our goal is to support a frictionless travel experience for the entire community through better data and responsive public services in preparation for a shared, electric, and autonomous future.

SMART VALUES

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Accessibility

WeHo Smart City ensures access for everyone through user-friendly and reliable services and programs. We welcome community stakeholders and partners to the table to help us address our greatest challenges and empower city staff to continue in their commitment to world-class customer service.

Starting with how we work at city hall, our goal is to optimize systems that are ubiquitous, reliable, and inter-operable so we all can get the most out of our livable, affordable, and vibrant city.

Resiliency

WeHo Smart City is resilient. WeHo remains a strong city that is flexible to ever-changing needs and demands. We are ready for the uncertainty of technological innovation by adopting systems that are open and agile. We are prepared for potential disasters, public emergencies, “graceful failure,” and other sometimes imperceptible forces of change by incorporating cybersecurity, redundancy and analog back-ups into our systems and public spaces.

Our goal is to establish a solid foundation that will give us the flexibility to change as needed while creating a safe, connected, and comfortable city.

Transparency

As a Smart City, West Hollywood is universally transparent. WeHo communicates and welcomes feedback openly to optimize our operations and provide the best customer service. We prepare our staff through training and skill-building to prepare us for technological change while building capacity as a data-driven organization. We are champions of civic engagement and open governance in all of our work and leverage cost-saving, time-saving technologies to make it easier to be part of the positive change we desire.

Our goal is to continue to focus on government reinvention and capacity-building for the future — a “smart city hall” — and improving upon excellent customer service both within government and with the general public.

SMART STRATEGIES

The focus is to build capacity for the future by focusing on how city hall operates, experiments, collaborates, and automates processes for a better experience.

OUR APPROACH

The primary focus for the West Hollywood Smart City Strategic Plan is to build capacity and build upon a solid foundation for the future. WeHo Smart City focuses on building a culture that enables a smart city hall. WeHo Smart City develops the skills and resources necessary to take on larger, more systemic initiatives. WeHo Smart City will launch a data-driven approach to effecting significant change now and in the future.

In many ways, West Hollywood is already a smart city and well-prepared for the challenges and opportunities of the digital age. This plan defines three foundational strategies and 14 initiatives to help meet WeHo's most ambitious goals as an inclusive, accessible, innovative, and livable city. Our focus is on the development of this capacity while opening up future potential as the citywide strategic planning process begins in 2018 with more external, community-facing opportunities and goal setting.

The three foundational strategies for WeHo Smart City include:

- 1. Create a culture of data as a smart city hall ready for the future.** WeHo Smart City will lead several efforts to bring data-driven decision making to departments citywide and support the development of capacity to analyze and use data more effectively in daily operations.
- 2. Collaborate and experiment across departments to do more with less.** WeHo Smart City will create new ways for city staff to work together and with external stakeholders to address key priorities for the city – working smarter, not harder.
- 3. Automate processes for an exceptional customer experience.** WeHo Smart City will leverage technology to further improve services and get ready for the future.

HOW TO READ THIS DOCUMENT

This strategic plan starts with a visualization of possible scenarios of the City of the Future from the perspective of the user in a smart city. Then, within each foundational strategy there are several actions defined as potential next steps to move forward and help realize this vision. This document includes a chart summarizing how these recommendations work together and how the entire plan implementation might be sequenced to create a Smart City Hall, support Smart Streetscape (+ Buildings) and continue to advance Smart Mobility.

STRATEGIES AT-A-GLANCE

PROJECTS DEFINED

Smart City Hall

Smart City Hall uses data to help manage programs and services; empowers staff to make a positive, measurable difference daily; and effectively engages the community to solve problems together.

Smart Streetscape (+ Buildings)

Smart Streetscape (+ Buildings) are places where community can convene; support economic vitality; and combine good policy, design and technology for a great experience. They are a place for experimentation and exploration.

Smart Mobility

Smart Mobility helps connect the community safely and sustainably, no matter how you travel. Smart Mobility makes it easier to get around by accessible, convenient choices.

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CITY OF THE FUTURE

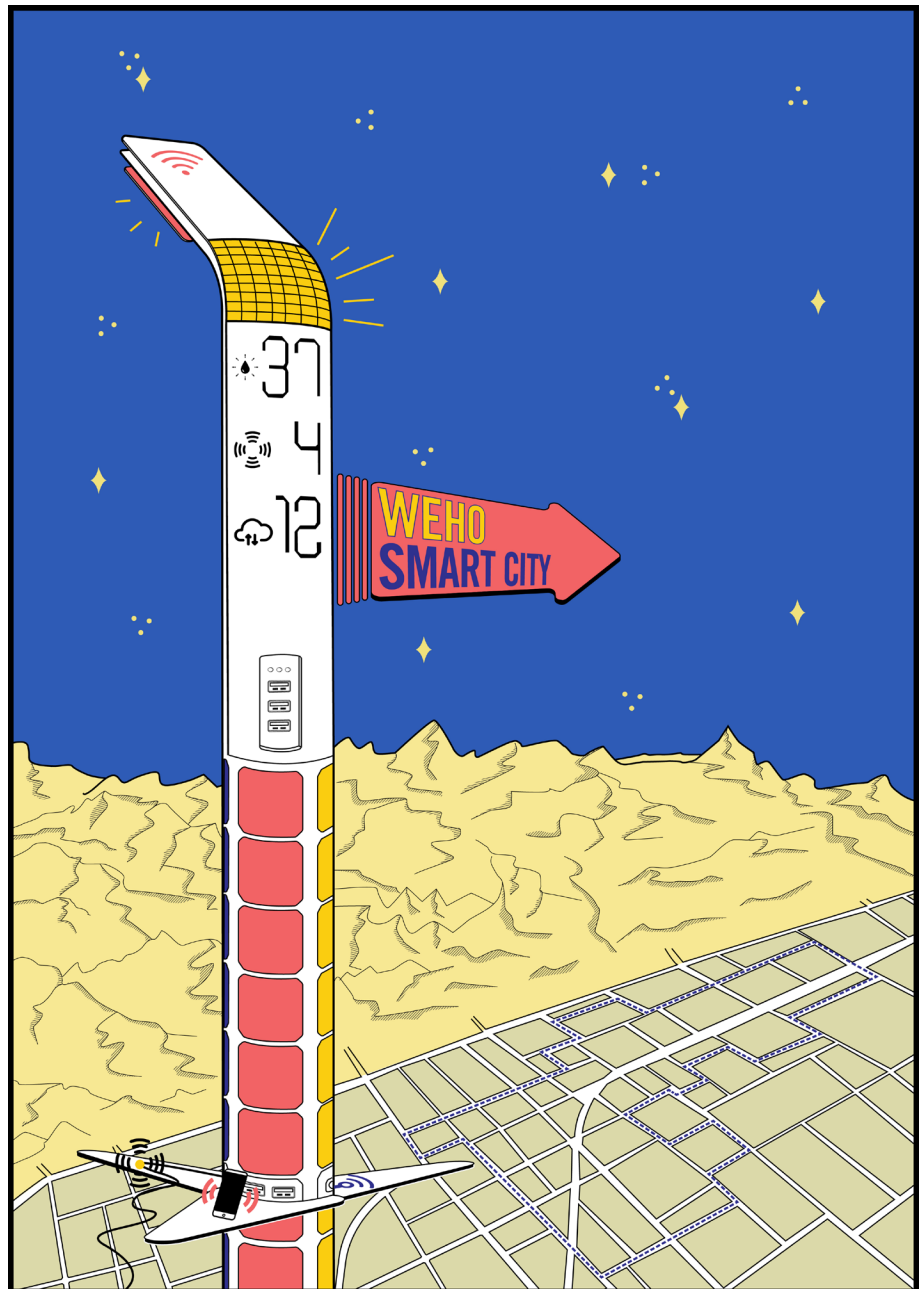
WeHo Smart City is human-centered, designed with a deep understanding of its user to provide the best experience possible for residents, visitors, and local businesses.

The following describes scenarios in the city of the future from the perspective of the WeHo community.

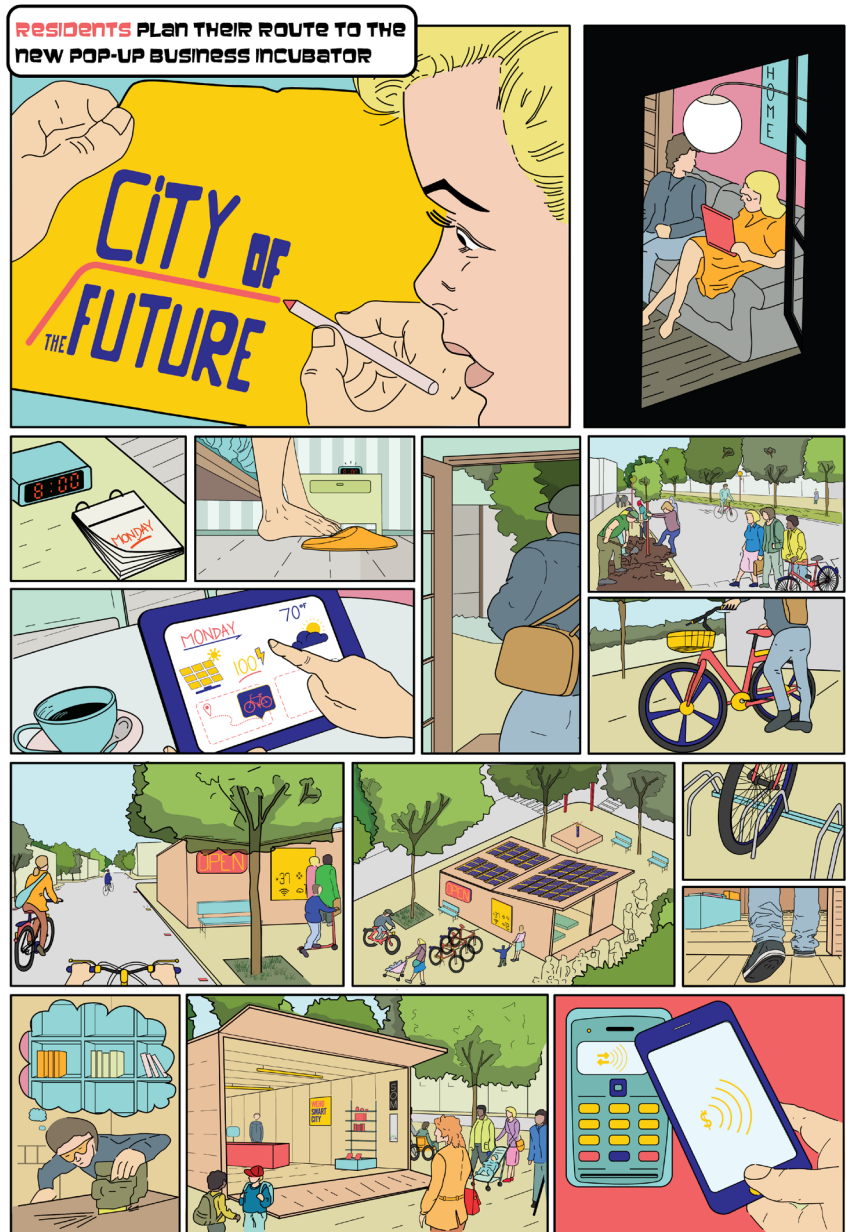
CITY OF THE FUTURE

Why a graphic novel?

WeHo Smart City focuses on using technology to enhance the user experience so it is essential to consider how the future will be shaped by an increasingly data-driven city hall, smart streetscape and buildings, and smart mobility solutions. Included are several short vignettes of possible experiences for West Hollywood residents, visitors, and businesses powered by smart technology.



CITY OF THE FUTURE



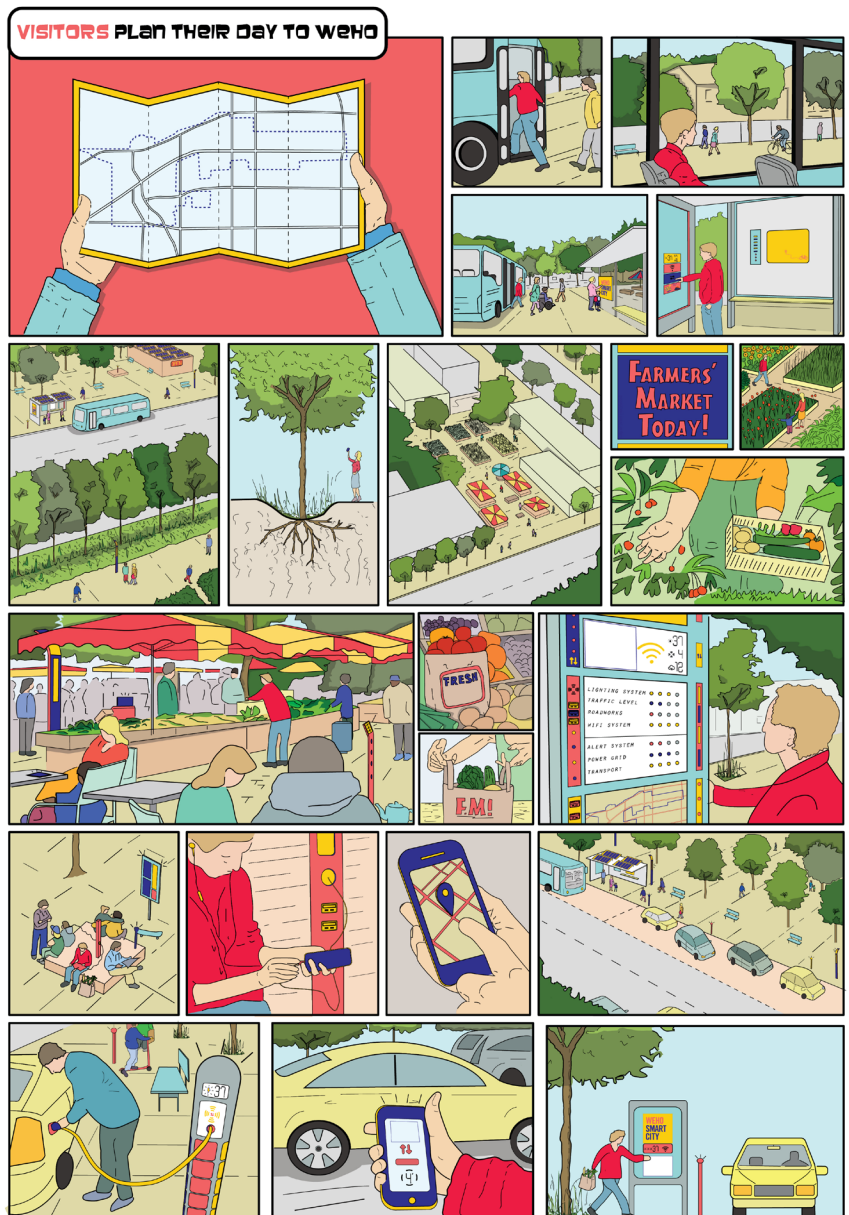
Resident Experience

One possible scenario considers how technology can facilitate a seamless mobility experience in West Hollywood through better information, connectivity between public and private transport modes, and payment options. The overall experience is further enhanced by smart urban design and safer streets as well as a pop-up business incubator space for entrepreneurs. As WeHo Smart City integrates better data management and decision-making in a smart city hall, there is greater potential to introduce these services for a “right-sized” experience tailored to the individual needs.

CITY OF THE FUTURE

Visitor Experience

Building on the future of better mobility data management and information sharing, the visitor experience can be improved by being better connected to all of the great things that West Hollywood has to offer — in real-time. WeHo Smart City introduces a foundation for better data-sharing today to improve and enhance communications and make it possible to discover what's special about West Hollywood through various media — from smart bus shelters and wayfinding to smart phone applications.



SMART CITY STRATEGY

STRATEGY ONE

CREATE A CULTURE OF DATA FOR A SMART CITY HALL THAT'S READY FOR THE FUTURE.

Smart cities evolved from the idea that real-time data can make it easier to manage resources and services efficiently by understanding at any given moment how cities are working. Yet, all the data in the world cannot help city government work better if the processes, tools, and skills to interpret the data are not in place. By adopting a performance management system, WeHo Smart City can begin by putting its existing data resources, mainly static data collected through forms, inspections, and other functions of government, to understand how its programs and services are working throughout the year. It is important to understand this data before investing heavily in adding to the pool of available information through environmental sensors and “big data” generation.

An effective performance management system will not only provide City leadership with an objective tool for understanding how the city is working (and help with making adjustments as the year progresses) but provide staff with the knowledge they need to assess if programs and services are falling short of targets. A transparent approach to tracking city resources and services further supports trust in City Hall, laying the groundwork for a virtuous circle of collaboration and willingness to participate in the betterment of the community.

SMART CITY HALL

CREATE A CULTURE OF DATA FOR A MORE RESPONSIVE GOVERNMENT AND ENHANCED CUSTOMER SERVICE.

Benefits

WeHo Smart City enables City Hall staff to use data to make better, more timely decisions; improve services; and create a better user experience.

Core Values

S	M	A	R	T
✓			✓	✓

Implementation Actions

1. Assess internal capacity for data analytics through a skills assessment survey.
2. Identify department-level data champions and convene a monthly citywide data working group, supported by a data intern.
3. Hire a citywide data analytics lead.
4. Launch a data training program, possibly through an external partnership (e.g. local university or technology training platform).
5. Focus training activities on working through practical solutions to be with departments for more “quick wins.”
6. Update training policies to include training for data analytics and visualization.
7. Establish a bench of on-call analytics consultants
8. Develop data sharing standards for procurement processes to support a data-driven City Hall.

1.1 Build capacity for data analytics.

Cities are inundated with data like never before. As WeHo Smart City introduces new real-time “vital signs” to track how the city is functioning and serving the community, it is important to merge the lessons from historical data with the cascade of new data from social media, instrumented physical spaces, engagement tools, etc., to identify patterns and high-return points of intervention for service optimization, cost-savings, and cross-departmental collaboration. Local governments do not typically have data scientists on staff to lead this information revolution so it will be important for WeHo Smart City to support training and capacity-building within city hall.

WeHo Smart City should identify data champions across each city department as part of a data working group. These individuals can provide insight as to how their respective department is generating, storing, and using data and, in return, serve as an internal champion for citywide data initiatives. Then, WeHo Smart City should survey staff to understand the current capacity for data analytics. It is important to understand not just the skills available but the tools they are regularly using and have access to. This will help with building a skill development workplan to introduce new, targeted training opportunities. WeHo Smart City should identify a specific project to focus initial training as a way to help ground the exercise in reality and demonstrate value to all in the organization.

There are several cities that have forged models worth replicating such as the Data Academy model between the **City of Kansas City, Missouri and Code for America**, or the **Denver Peak Academy’s Data Lab and Mayor’s Data Fellow Program** which offers training on a specific business intelligence platform. West Hollywood should leverage the lessons learned from these organizations to better enhance the City’s capacity for data analytics.

These actions should complement and run concurrently with the next initiative, **1.2: Develop dashboards to track progress on key city priorities**, as WeHo Smart City will help build an integrated approach to using data to manage and track outcomes across services, programs, and functions and is essential to equip staff with the skills they need to be most effective and successful.

SMART CITY HALL

CREATE A CULTURE OF DATA FOR A MORE RESPONSIVE GOVERNMENT AND ENHANCED CUSTOMER SERVICE.

Benefits

WeHo Smart City helps facilitate civic engagement and general understanding by openly sharing the ongoing progress in meeting key policies and goals for West Hollywood.

Core Values

S	M	A	R	T
✓			✓	✓

Implementation Actions

1. Create a WeHo Smart City dashboard and develop other organization-critical dashboards.
2. Identify key performance indicators (KPIs) for all departments.
3. Develop public-facing dashboards to track these metrics.
4. Track lessons learned and develop a standard operating procedure for replicating dashboards across city departments.
5. Identify other “early adopters” who are willing to get engaged as a way to launch a citywide performance management system.
6. Maintain and regularly share standards, assumptions, and best practices across the organization.

1.2 Develop dashboards to track progress on key city priorities.

This is a two-step initiative that should help build momentum for a future citywide/comprehensive data-driven management system which would include training, analytics, visualization, and an online, shared dashboard for reporting. The dashboard provides staff and management with an at-a-glance tool by displaying the progress on key metrics (either real-time or scheduled). This not only enhances accountability and transparency for the general public but provides directors, managers and staff with a practical tool for overseeing and troubleshooting city services and programs in between budget cycles.

It can take time to introduce this data-driven management style and it is important to work closely with staff to illustrate how it can empower them in their work. To start, WeHo Smart City should launch a dashboard to track the various strategies herein, either through the City’s Open Data Portal or a standalone application. It will be important to document the process and key lessons learned and then host an internal best practice exchange with other city departments. It can be challenging to identify the right metrics (and associated data) if they are not clearly defined already but this exercise can benefit staff who are unfamiliar with this process by giving them an opportunity to participate in their development.

WeHo Smart City should then build on this initial effort by developing a dashboard to track mission-critical efforts by the City. For example, the City of West Hollywood has defined housing affordability as a primary goal and work is ongoing to address this priority. Diving deep into tracking metrics on this essential goal and other essential services will also prepare the city as it begins planning for its next strategic plan (Vision 2050). The ultimate objective is for WeHo Smart City to evolve these dashboards into a citywide performance management system. In the meantime, there is considerable value in the exercise of establishing metrics and identifying what data is being pulled; understanding the quality of data; and organizing it for sharing that can reveal inadequacies in available data and opportunities for future data collection.

SMART CITY HALL

CREATE A CULTURE OF DATA
FOR A MORE RESPONSIVE
GOVERNMENT AND ENHANCED
CUSTOMER SERVICE.

Benefits

WeHo Smart City is about using the data it has more efficiently to improve planning and operational decisions and for a more connected mobility experience for all.

Core Values

S	M	A	R	T
✓	✓	✓	✓	✓

Implementation Actions

1. Inventory all of the potential programs that generate mobility-related data including real-time data or otherwise to understand interoperability across systems.
2. Establish a working policy for how data will be used and shared internally. Test this framework and formalize the standard operating procedures.
3. Procure a technology that will enable the City of West Hollywood to integrate all of this data into one federated platform.
4. Consider developing an analytics challenge and partner with a local university to identify use cases.
5. Collaborate with the data working group to establish other business cases for mobility data analysis.

1.3 Establish a mobility data management program for WeHo.

The City has developed several “smart” mobility programs and pilots to address Vision2020 goals. For examples, the City has been actively evaluating and implementing new technology to manage parking enforcement and to improve transit ridership. For instance, 80 percent of parking enforcement vehicles currently have license plate reader technology onboard already and transit services offer riders real-time schedule and route data. Other mobility-related programs and initiatives – such as electric vehicle readiness, bikeshare and public transit services; better coordination with private mobility providers such as Uber and Lyft; and updated transportation demand management (TDM) policies and practices (underway) – introduce new potential data sets that can help the City holistically support a better mobility experience. With the data collected from these efforts, WeHo Smart City should prioritize the integration or “federation” of these different data sources into a single platform to allow for further analysis and evaluation. Understanding how different mobility services are performing in relation to each other can inform future policy (e.g. pricing of parking), ongoing planning efforts (e.g. preparing for the future of autonomous vehicles) and existing processes (e.g. permitting for filming).

With an initial focus on these valuable data sets and thinking inclusively about all travel modes and services, WeHo Smart City can begin to understand the challenges and potential of better data integration in analysis. The City should evaluate data security and privacy while it develops a more comprehensive view of how the City is operating. Furthermore, WeHo Smart City can support awareness-building efforts to give West Hollywood stakeholders better access to its mobility options, regardless of ability or need.

An internal, cross-departmental data working group could support this effort by convening regular conversations about lessons learned and shaping standard operating processes for data management as other services would benefit from this approach in the future. In addition, the recommended citywide data analytics lead should be the primary convener and project manager for this initiative with the support of a data internship program.

SMART CITY HALL

CREATE A CULTURE OF DATA FOR A MORE RESPONSIVE GOVERNMENT AND ENHANCED CUSTOMER SERVICE.

Benefits

WeHo Smart City is planning now for more changes in how we move as a city by adapting our infrastructure to serve new shared mobility and app-based services; improve public safety; and reduce congestion.

Core Values

S	M	A	R	T
	✓	✓	✓	

Implementation Actions

1. Convene the data working group and key staff to set metrics for a citywide curbside management program.
2. Expand the initial pilot by focusing on key corridors and contiguous paths throughout the city so it is more clear to drivers where these improvements are likely to be.
3. Routinely measure KPIs to understand how these re-purposed curbs are meeting demand.
4. Explore a pilot to test real-time data sharing for loading zone availability.

1.4 Expand the curbside management pilot.

The City has already begun testing strategies for better managing drop-offs by transportation network companies (TNCs) such as Uber and Lyft by converting street parking spots into passenger loading zones in the densest WeHo entertainment districts. Vehicles stopped in drive lanes, crowding bicycle lanes, or blocking turns when crowding intersections, make it dangerous to both passengers and drivers. Using the most frequent destinations for TNCs, WeHo started strategically and, by focusing on the greatest need, introduced the greatest potential return on investment.

Having the ability to manage curbsides will reap a variety of short and long-term benefits. In the short-term, understanding curbside utilization (e.g. duration of parking periods; peak hours; vacancy rates; etc.) can help WeHo right-size the pricing of parking and regulations. WeHo may want to consider, for instance, converting parking fees to loading fees as more people adopt TNCs and other shared modes. Understanding these activities could further inform future development and plans, since for example, it is anticipated that parking demand in dense cities will go down with the introduction of connected and autonomous vehicles but they may contribute to overall congestion. Planning now will help WeHo prepare for this future by having the data available for a broadened policy discussion regarding potential impacts of these new services.

A second phase of this initiative would introduce real-time availability data for loading zones as a way to manage both pedestrian and commercial deliveries. Video-as-a-sensor is usually integrated into a street light and can anonymously detect if something is occupying a parking spot. Other sensors can be embedded into other street furniture, infrastructure, or the parking spot itself, which offers an opportunity to provide drivers with up-to-the-minute information for a better trip.

SMART CITY HALL

CREATE A CULTURE OF DATA FOR A MORE RESPONSIVE GOVERNMENT AND ENHANCED CUSTOMER SERVICE.

Benefits

WeHo Smart City will use data responsibly and will establish clear procedures to protect personal privacy.

Core Values

S	M	A	R	T
			✓	✓

Implementation Actions

1. Review existing city policies and best practices.
2. Adopt an updated privacy policy that incorporates smart city technology along with staff training on the subject.
3. Integrate the privacy policy into the procurement process by adding the language to all future contracts requiring data sharing between parties.
4. Consider designating privacy stewards to work within city departments to help manage the policy, train on best practices, and support a culture of data.
5. Create a schedule for routine reviews of the adopted policy to ensure it is meeting the needs of the City and community.

1.5 Adopt a Smart City privacy policy.

WeHo Smart City should include advancing the citywide policy to define key principles for privacy and data sharing for the Internet of Things, networked devices and other data-exchanging smart city technologies. The City of West Hollywood has already adopted a digital media privacy policy but smart city technology introduces new considerations to be added. The privacy policy should clearly articulate how all WeHo Smart City projects will meet a minimum disclosure and data sharing agreement as a “public good.” This should include what data is wanted, why it’s wanted, how it will be used, and recourse for the public to verify compliance.

Cities such as Seattle, New York, and Chicago have smart city privacy policies that can serve as best practices. In these cities, any personally identifiable data that is collected through smart city projects is not available to the public although the rest of the data is generally available through the City’s public open data portal. As WeHo Smart City launches more sensors and applications in the public realm, it will be important to have well-established privacy practices so the community understands what is being done and how the data will be used.

STRATEGY TWO

COLLABORATE & EXPERIMENT ACROSS DEPARTMENTS TO DO MORE WITH LESS.

Government plays a critical role as a convener, bringing together many different interests and working towards shared outcomes for communities. WeHo Smart City should facilitate the development of new partnerships and collaborations that are multi-disciplinary and measurable to continue moving forward in meeting its vision and strategic goals. Technology is a tool in the toolkit, however, and not a panacea. Therefore, WeHo Smart City should consider what policies and processes are necessary to complement new technologies and solutions.

Technology should help make it easier to work together, both within city hall, with other agencies and jurisdictions, and with the general public. With such a strong culture of customer service, WeHo Smart City should continue to raise the bar for a great user experience while ensuring that technology does not take away from the “personal touch” of great service. These strategies focus on enhancing existing workflow, connecting more effectively with each other, and exploring new alternatives to service delivery through experimentation.

COLLABORATE & EXPERIMENT

WORK MORE EFFECTIVELY
ACROSS DEPARTMENTS AND WITH
EXTERNAL STAKEHOLDERS TO DO
MORE FOR WEST HOLLYWOOD.

Benefits

WeHo Smart City is using technology to enhance internal collaboration and make workflows more streamlined to ensure it will continue to deliver the highest quality services possible.

Core Values

S	M	A	R	T
		✓		✓

Implementation Actions

1. Starting with the City Clerk, convene a multi-department working group to map and “lean” the existing FOIA/open records response process.
2. Explore what technology is currently available at the City and determine if there are existing resources for a “pizza tracker” dashboard. If so, create a dashboard. If not, consider partnering with local entrepreneurs to pilot solutions.
3. Document the approach, share widely within City Hall, and launch a nomination process for the next processes to be improved and tracked.
4. Inventory existing processes and map them to the technologies used today to identify additional opportunities to improve outcomes through better, more efficient solutions.

2.1 Create a “pizza tracker” tool for managing workflows for internal processes.

Customer service between departments is important in enhancing the City’s culture of collaboration. During one of the early planning workshops, staff were excited about the possibility of improving internal workflows and accountability through new technology. In general, the feedback included issues of communicating progress in work and deadlines.

When Domino’s launched its “pizza tracker,” it was a way for customers to watch the progress of the several actions that follow an order: the making of the pizza; the baking of the pizza; the packaging of the pizza; and the delivery of the pizza. To some extent, there was little done to change the process of making a pizza but the customer still appreciated having access to the information and progress in real-time. In fact, the pizza tracker eliminated the need for the customer to call Domino’s to check-in on the status of the order which actually saved the company time and resources. Why not provide similar real-time information for internal government processes?

WeHo Smart City should take a phased approach to this implementation as there are benefits to focusing on necessary process improvements to make workflows more seamless. For example, the City Clerk has already expressed interest in exploring how this might work for Freedom of Information Act requests. With more than 900 requests a year, there are both statutory requirements and best practices in the time it should take to deliver a response to requests but these often require multiple people and departments to provide the actual information. Establishing a better mechanism for tracking these requests can help the City Clerk manage customer expectations while ensuring that requirements are met.

By taking a look at how better transparency can improve communication and coordination internally, WeHo Smart City can begin to identify what processes would also benefit from better technology and help eliminate ineffective and frustrating paper-based processes which make it harder to get work done in City Hall. Ultimately, this pizza tracker approach could work for many different processes and should be expanded over time to include timekeeping, contracts, etc.

COLLABORATE & EXPERIMENT

WORK MORE EFFECTIVELY
ACROSS DEPARTMENTS AND WITH
EXTERNAL STAKEHOLDERS TO DO
MORE FOR WEST HOLLYWOOD.

Benefits

WeHo Smart City will make it easy to find the information and services that empowers people to get involved and participate in new ways to make West Hollywood an exceptional place to live.

Core Values

S	M	A	R	T
		✓	✓	✓

Implementation Actions

1. Inventory the existing tools used for communications, collecting feedback, and connecting to City Hall. Catalog the strengths and limitations; publish for staff. Update routinely.
2. Select a pilot project and test with a diverse audience.
3. Document this process and track engagement sentiment through focus groups. Provide training resources for replication; track the metrics. Create a bigger pool of best practices and channels to cost effectively engage more people.

2.2 Develop a testing strategy for new digital engagement and feedback tools.

The City has introduced a variety of new channels for communicating to the general public. From social media, television, events calendars and websites, there are several different ways for the community to connect to what is happening in West Hollywood. These are useful and effective tools for messaging to the community. For true civic engagement, however, WeHo Smart City should adopt new technologies to create a vibrant discourse, create opportunities to get involved within the city, and connect more people to their local government. There are a multitude of new tools and channels being tested nationally to grow engagement and not every tool works for all purposes. With no one-size-fits-all solution, weeding through the options and procurement are challenging; the need for a well-understood set of tools is even more critical. WeHo Smart City should test what works best for its unique community and provide a toolkit for departments (and their consultant teams) to guide digital engagement.

WeHo Smart City should start by engaging targeted audiences to help test and pilot new tools. This past summer, for example, the City's Innovation Division reached out to younger constituents (NextGen) who are not typically involved with City Hall but are important members of the community. WeHo Smart City should host a series of focus group sessions to understand the user perspective and effectiveness of engagement tools – and these young community members may be the perfect audience. Are the current functions useful and seamless? How do people use it? Are there services that are not included that would make the application more useful? Taking a user-centered approach to understanding how a tool is effective is essential. WeHo Smart City should serve as a convener for the testing of new products and tools and help vet these options for other departments by establishing best practices for data sharing, procurement, and piloting.

COLLABORATE & EXPERIMENT

WORK MORE EFFECTIVELY
ACROSS DEPARTMENTS AND WITH
EXTERNAL STAKEHOLDERS TO DO
MORE FOR WEST HOLLYWOOD.

Benefits

Whether its for a daily commute, a visit to the doctor's office, or a spontaneous outing, WeHo Smart City will partner with mobile apps and other tech companies to give users the information they need to make it easier to get around.

Core Values

S	M	A	R	T
✓	✓	✓	✓	✓

Implementation Actions

1. Adopt a standard data sharing agreement and updated terms and conditions to enable potential no-cost partnerships.
2. Identify critical data and launch APIs as appropriate to expedite data sharing.
3. Consider how the proposed Transportation Management Organization (TMO) as part of the updated City's Transportation Demand Management (TDM) ordinance can help test the effectiveness of this sharing approach.
4. Explore the Google Waze Connected Community Program (CCP) opportunity and designate a representative (perhaps from the data working group) to participate.
5. Identify the resources to support data-sharing for big events, road construction, and other service disruptions.

CITY OF WEST HOLLYWOOD

2.3 Adopt a data sharing policy and tools to make it easier for travelers to access mobility data.

It can be difficult to communicate critical information in a world with information overload. WeHo Smart City should focus on enabling the sharing of data to existing applications of services rather than develop its own technology. This initiative focuses on the automation of that data sharing, wherever possible. In the short-term, this is building on the previous strategy to federate mobility data for better data analysis and insight by looking at what data is valuable to external stakeholders (in the mobility space, this data is generally valuable to multiple users). As appropriate, WeHo Smart City should support the development of APIs (application programming interfaces) for the automation of data sharing from the source to the end user which can significantly reduce the time and resource demand of future partnerships. Furthermore, this is complementary to the 2017 **West Hollywood Transit Services Evaluation and Plan** goals to improve access to information (Goal 1) and encourage the use of non-automobile alternatives by making transit more convenient (Goal 2).

Transport for London offers a solid case study – when it created an API for ticketing, schedule, and arrival data, new transit apps were built by the private sector to serve this data to the traveling public (e.g. CityMapper). Now, with the potential to share real-time data with connected vehicles and other app-enabled shared mobility services, WeHo Smart City should begin exploring automation of real-time data such as transit and parking availability, traffic signal timing, and even pedestrian traffic at intersections. There are impacts on internal systems with the provision of “real-time” data which should be explored and understood. In the long-run, there may be opportunities to monetize the provision of this real-time data but WeHo Smart City should first explore the implications of offering such a service.

The **Google Waze Connected Citizen Program** is a network of cities that have sharing agreements with the wayfinding app. Cities share information about road closures, special events, and any activities that might impact traffic conditions. In turn, Google Waze provides a real-time, anonymized feed of traffic conditions and the incident reports it collects from its users. Many cities have integrated this live feed into traffic operations and other applications but does require some technical savvy to make it useful. WeHo should explore joining this free program and begin the data exchange.

COLLABORATE & EXPERIMENT

WORK MORE EFFECTIVELY
ACROSS DEPARTMENTS AND WITH
EXTERNAL STAKEHOLDERS TO DO
MORE FOR WEST HOLLYWOOD.

Benefits

WeHo Smart City is planning now for more changes in how we move as a city by adapting our infrastructure to serve new shared mobility and app-based services; improve public safety; and reduce congestion.

Core Values

S	M	A	R	T
✓	✓	✓		✓

Implementation Actions

1. Assess rider satisfaction with CityLine and identify potential opportunities for improvement.
2. Engage and track the ongoing progress of the upcoming microtransit pilot(s) by Metro to understand lessons learned.
3. Study the feasibility of either adapting an on-demand platform to CityLine or testing a new service to complement local and regional connectivity.
4. Partner with local organizations, employers, or residential buildings to identify need and educate the public on these services.
5. If appropriate, launch a microtransit pilot.

2.4 Explore an on-demand transit pilot.

The CityLine and CityLineX transit services are free shuttle services, operating Monday through Saturday, 9:00 am to 6:00 pm. This service is wholly operated by the City of West Hollywood and currently operates on a fixed route and schedule. While West Hollywood is a very walkable city, it is just beyond the comfortable distance of the major regional rail transit lines. And, there is already demand now for better mobility services as regional cut-through traffic, big events, and local traffic cause more congestion and safety issues in West Hollywood.

Microtransit, dynamically routed shared shuttle service that connects the first-last mile to transit networks and other major destinations, could potentially close that gap for residents, workers, and visitors to the City while enhancing the overall public transit experience. West Hollywood has already launched a transit Request For Proposals (RFP) which includes an on-demand request for seniors. It is a relatively open procurement strategy that offers a long timeline (7-10 years) and is seeking a variety of innovations to replace the existing Taxi Subsidy program.

Currently, both Metro and the City of Los Angeles Department of Transportation (LADOT) have been working to identify new partnerships and platforms to enable the deployment of these shuttles with a recently announced **planned pilot**. If deemed a solid pursuit, WeHo Smart City should either partner with these agencies or explore creating its own complementary pilot to better connect West Hollywood (CityLine and/or CityLineX) to the Hollywood/Highland Metro Rail station and potentially expedite the on-demand request for senior services.

In addition to partnering with the organizers of large events in West Hollywood, WeHo Smart City could partner with specific residential buildings, business organizations, and large employers to provide the much-needed community outreach and education to support a successful pilot project around a new shared mobility option.

STRATEGY THREE

AUTOMATE PROCESSES FOR AN EXCEPTIONAL CUSTOMER EXPERIENCE.

Integrating technology into existing processes and workflows (while streamlining these processes) will allow staff to continue delivering the highest standard of care to the community. This can also make it easier to collaborate across departments and drive future innovations. In addition, leveraging technology can allow for better management of the public right-of-way for a safer, more sustainable and resilient West Hollywood.

Technology can help make it easier to manage work across and within departments. But, as with any technology, WeHo Smart City must plan for the inevitable. We want to know that if power goes out or servers go down that the city does not grind to a halt. It is important to think through how back-up systems and alternative means of delivery will support the occasional technology failure. Understanding how a system works and breaks can better prepare the city for adapting to change and responding to catastrophes.

EXCEPTIONAL EXPERIENCE

FOCUS ON USER EXPERIENCE ENHANCED BY TECHNOLOGY WHEN DESIGNING CITY PROCESSES, PROGRAMS, AND PHYSICAL AMENITIES.

Benefits

WeHo Smart City is broadly engaging the community in a conversation about public safety and testing new tools that can make our public right-of-way safer for all users.

Core Values

S	M	A	R	T
		✓	✓	✓

Implementation Actions

1. Identify available budget and launch a request for proposals to identify public safety technologies for a pilot deployment.
2. Host community conversations about public safety and personal privacy to educate stakeholders and solicit feedback. Demonstrate the pilot technologies as part of the pilot evaluation.
3. Explore with the County of Los Angeles Sheriff's Department engaging private security camera owners in data sharing (per the Boston model) to enhance public safety.

3.1 Launch a public safety pilot.

Public safety technology raises a plethora of issues for the public sector – from privacy and “big brother” concerns to what data is being collected, who has access to it and how it will be used. Additionally, there are costs associated with widespread implementation. WeHo Smart City should pilot public safety technologies and data analytics on a temporary basis before a full-scale procurement. It is important to couple this demonstration project with continued public dialogue about the benefits and trade-offs of public safety technology deployment.

One issue to be explored by WeHo Smart City should be how different types of crime can inform the tools being used by the City and its partner agencies to address public safety. How might other data provide insights to the issues facing West Hollywood? In addition to launching a demonstration project, WeHo Smart City could do a deep-dive analysis of existing data to see if there is any further insight as to where crime is occurring and what factors are influencing the recent up-tick in incidents. This could be facilitated through a partnership with a local university and there are already similar partnerships underway across the region; the University of Southern California, for instance, has been doing something similar with the **City of Los Angeles Data Science Federation**.

While West Hollywood works with the County of Los Angeles to understand what data is necessary to effect better outcomes for public safety, it is important to understand how this infrastructure – including video-as-a-sensor – may offer multiple services and the implications of this data collection. In **Washington, DC**, for instance, traffic and pedestrian movement analytics are used in key economic development corridors and public event spaces to better understand city operations and economic opportunity as well as supporting public safety activities. Since these are very different business cases, it is important to consider the consequences of capturing personally identifiable information (versus anonymized meta data) and how it will be shared with multiple users. Concurrently, similar to an approach by the City of Boston for the Seaport neighborhood, WeHo Smart City and the County of Los Angeles Sheriff Department should explore data-sharing agreements with owners of privately-operated cameras that define how data may be shared with the City in case of emergency or during a large public event.

CASE STUDY: BOSTON, MA

The City of Boston, MA is collaborating with the private sector to address public safety in the up-and-coming Seaport neighborhood. As new residential buildings come online and the neighborhood attracts new businesses and visitors, private camera owners have offered to share their video surveillance data with Boston Police through a Memoranda of Understanding (MOU) to help make large public events safer. These MOUs clearly outline the terms for how and why this data may be shared with Boston Police through a mutual privacy code of conduct.

This program incorporates a third party web portal which offers integration for several camera software providers, enables remote operation (e.g. change the camera view), and allows for recording. All of these uses are regulated by the camera owner and defined in the terms of the MOU. In some cases, the City of Boston has purchased licenses for private sector program participants who are eager to participate. When a big event is planned, Boston Police may request advance access for specific dates/times or retroactively request access to recorded data in the case of an incident.

This approach allows the City of Boston to extend its capacity for surveillance but also complements a series of other strategies that are in place to improve public safety.

SEAPORT, BOSTON, MA

PHOTO: MASSACHUSETTS OFFICE
OF TRAVEL & TOURISM

EXCEPTIONAL EXPERIENCE

FOCUS ON USER EXPERIENCE ENHANCED BY TECHNOLOGY WHEN DESIGNING CITY PROCESSES, PROGRAMS, AND PHYSICAL AMENITIES.

Benefits

WeHo Smart City is prepared for an uncertain future by creating and maintaining back-up systems that work during emergencies and other outages.

Core Values

S	M	A	R	T
✓		✓	✓	

Implementation Actions

1. Inventory existing back-up systems and the status of updates or technology upgrades. Included in this are system stewards – identify key staff that are responsible for these systems for future training.
2. Prioritize updates and upgrades for those systems that are out of date. Incorporate these plans into budgeting process.
3. Establish a procurement and maintenance standard for all new systems that codifies a resiliency strategy.

3.2 Implement critical connected infrastructure back-ups.

In an increasingly digital age, we have become very dependent on technology so we must ask ourselves the question, what happens when the power goes out? When the technology doesn't work? Do we have the back-up systems we need to make sure our city does not come to a standstill. WeHo Smart City should begin with an inventory and testing of existing infrastructure and operational back-up systems to ensure that all services have the latest technology and support. Newer technology is being introduced regularly to help better manage power demand, locally generate solar power, and store back-up power closer to where it is needed. Once the inventory process is complete, it will be important to plan for how updates to vulnerable infrastructure are prioritized and incorporated into future replacement. Additionally, it is important to design processes that work around a technology failure so that the City can remain responsive when a disaster or outage strikes. For instance, all standard operating procedures should include process descriptions for when technology is available and when it is not. Most importantly, this planning process should culminate into a rigorous maintenance plan that includes these back-up systems.

Another critical consideration when thinking about back-up systems, is how to ensure access to people who do not have access to a smartphone or the Internet when services are increasingly more dependent on digital access. When looking at applications for the Smart Bus Shelters program, smart street furniture, and other connected infrastructure, it is important to consider how WeHo Smart City will address the digital divide and provide alternative means of access. This may include the adoption of on-street access points, leveraging community facilities such as libraries and recreation centers as potential locations for computer access, and training staff on how to help community members when the usual tools are not functioning.

EXCEPTIONAL EXPERIENCE

FOCUS ON USER EXPERIENCE ENHANCED BY TECHNOLOGY WHEN DESIGNING CITY PROCESSES, PROGRAMS, AND PHYSICAL AMENITIES.

Benefits

WeHo Smart City can collect data to provide a hyper-local understanding of how the city is working and better inform decision-making about how to solve issues in the public realm.

Core Values

S	M	A	R	T
✓	✓	✓	✓	✓

Implementation Actions

1. Identify potential partners for an IoT program and potential use cases.
2. Incorporate building performance (“vital signs”) measures and tracking into the green building program update to be kicked off in 2018.
3. Create a portal for the data collected and initiate staff training and experimentation (e.g. hackathons) with this information.
4. Track how this data is used.
5. Consider creating a design competition to adapt IoT sensors to existing infrastructure or create new smart city hubs.

3.3 Develop a smart city sensor (and building) program.

Recent and planned investments in public right-of-way infrastructure, including Smart Bus Shelters, fiber and WiFi, as well as other street furniture and improved wayfinding offer a great opportunity to understand how real-time data might work for WeHo Smart City. Although a geographically small city, West Hollywood is a hotspot for activity. WeHo Smart City should launch multi-purpose Internet of Things (IoT) sensors as part of a pilot to explore how local environment data, the vital signs of the city, can better inform operations, services, and overall experience.

It is important to consider outside partners as part of the initial pilots as this can offer a potential funding source through grants, offers valuable data analytics capacity, and can work with WeHo Smart City to develop the most impactful use cases for a smart sensor deployment. Multi-function sensors can help WeHo Smart City benchmark and track air quality, local temperature, traffic noise and congestion, parking availability, pedestrian and cyclist activity, and other “vital signs” of the city. This data can be helpful in planning decision, future developments, and ongoing service delivery by identifying hyper-local trends and conditions – empowering WeHo to address issues in a specific, responsive way (rather than the one-size-fits-all approach).

In addition to sensors in the public right-of-way, WeHo Smart City should pilot smart building technology at City Hall and other public buildings as a way to understand and monitor system controls and utilization as well as support an environment of experimentation. A digital display or dashboard showing real-time data could be prominently featured in the front lobby, giving the general public and City Hall visitors an opportunity to see what the program is monitoring and an opportunity to provide their feedback. Both of these initiatives can offer WeHo Smart City with a valuable starting point to understand and assess the trade-offs of more data insights with cyber security and privacy while preparing for a future with even more data available than ever before.

EXCEPTIONAL EXPERIENCE

FOCUS ON USER EXPERIENCE ENHANCED BY TECHNOLOGY WHEN DESIGNING CITY PROCESSES, PROGRAMS, AND PHYSICAL AMENITIES.

Benefits

WeHo Smart City will define the impact of technology in the public right-of-way in lieu of having the technology “happen” to the city by planning for how its infrastructure will be used.

Core Values

S	M	A	R	T
✓		✓	✓	✓

Implementation Actions

1. Consider potential business cases for IoT infrastructure in the public right-of-way.
2. Inventory existing pole attachments and “readiness” for future attachments (e.g. physical space, load bearing potential, available power and fiber, etc.) or capacity available for replacement technology.
3. Define the desired future use and determine what the set-aside for future uses may be.

3.4 Upgrade street light infrastructure.

WeHo Smart City should launch an initiative to explore ideas around the future use of its street light infrastructure from both a policy and design perspective, particularly as the City prepares to takeover this infrastructure in the near future. As more technology proliferates, there will be a tipping point when there is not enough physical space or structural support for more pole attachments – and eventually it just becomes an eyesore. With more companies competing for access to this valuable real estate, West Hollywood should be prepared to be inundated by requests for access. As part of the inventory per **Initiative 3.2: Implement Critical Infrastructure Back-Ups**, WeHo Smart City should include an updated inventory of existing pole attachments and begin planning for mapping out other usage. The goal will be to have more poles be adaptable to future technologies and capable of two-way communications.

Fiber is not necessary at every or even most poles as WiMAX, mesh WiFi, and cellular tech can do the job. Also, outside of video, 2.5G is often enough for data-collecting sensors. The key here is to envision pole-based technology not simply as sensors but as part of a distributed computer where calculation/tabulation operations occur in situ for transmission of only the best data back to a central place. Using street infrastructure as a distributed supercomputer also has resiliency implications: why not use the processing power on these poles to offload city computing tasks?

Street lights should be designated for future modular accommodation of whatever sensor package is needed. The city has put a strong value on how the public realm is designed and experienced and it is important to consider that these sensors do not need to be “hidden” but should be deployed in a way that is sensitive to the other urban design elements the city is implementing.

EXCEPTIONAL EXPERIENCE

FOCUS ON USER EXPERIENCE ENHANCED BY TECHNOLOGY WHEN DESIGNING CITY PROCESSES, PROGRAMS, AND PHYSICAL AMENITIES.

Benefits

WeHo Smart City will proactively set a higher design standard for technology in the public right-of-way.

Core Values

S	M	A	R	T
✓			✓	✓

Implementation Actions

1. Launch a working group to develop an IoT approval process to set a design standard for technology to be installed in the public realm.
2. Adopt process and review routinely to ensure desired outcomes are being realized.

3.5 Adopt an IoT approval process.

West Hollywood is a creative and cultural center for the region and design plays an important part in its cityscape. As a smart city, it is anticipated that the City of West Hollywood and its partners may install more communications infrastructure and sensors in the public realm. This smart infrastructure should reflect not only a sense of place but the good design that the community values. In the future, the State of California and or the federal government may limit the ability for the City to determine what can be installed in the public right-of-way so it will be essential to adopt design standards to address this sooner than later.

While there is little one city might do to push for a higher design standard from Silicon Valley (and the technology industry as a whole), it is important for there to be preliminary conversations among stakeholders about how the future of the Internet of Things (IoT) will work in the overall urban fabric. Key considerations should include: how will multiple providers work together in the same public space? Where will new technologies be located and will the City design its own sensor or adopt existing technologies? Are there any minimum design guidelines around what these attachments look like? How will new technologies meet the City’s goals for security and privacy? WeHo Smart City should create an approval process for IoT in the city and work on identifying the initial use cases to test the framework.

GETTING STARTED

WEST HOLLYWOOD
CITY HALL

CITY OF WEST HOLLYWOOD



GETTING STARTED

*FOCUS ON IMPLEMENTATION THAT
BUILDS ON CURRENT PRIORITIES
AND MOMENTUM AT CITY HALL*

NEXT STEPS

West Hollywood should kick-off implementation of this strategy by continuing to engage both internal and external stakeholders through training and outreach on the WeHo Smart City Strategic Plan. A “roadshow” presentation by the Innovation Division can help inform, inspire and engage staff and civic leaders and build support through a better understanding of what it means to be a Smart City Hall. Since this strategy is designed to build capacity and prepare for a more data-driven future, the roadshow is an important opportunity to answer questions about the strategy, brainstorm ways to move forward together, share best practices and case studies, and cultivate support for the overall initiative.

This strategy includes several recommendations that require no new resources to start. For instance, there are several policy recommendations that require additional vetting and research as well as internal processes that would benefit from lean process improvement before any new technologies are applied. Planning for the other recommendations that do require additional funding, technology, or even personnel can also begin sooner than later. All of the recommendations have been provided in a suggested order for implementation as outlined on the following pages.

PARTNERSHIPS

WeHo Smart City is a catalytic initiative that should bring new stakeholders to the table, empower staff and civic leaders to effect positive change, introduce new technologies and opportunities, and support the realization of not just local but regional goals. Partnerships should be considered as inclusive of all city departments, external stakeholders (private, nonprofit, academic), and the general public (or any combination herein) that supports implementation through collaboration. There are multiple opportunities for partnerships throughout this strategy. West Hollywood should continue to identify new and existing partners in support of the recommendations contained within this strategy.

PILOTS

Testing new ideas and demonstrating new technologies is an important part of WeHo Smart City. Pilots provide an opportunity for the community to engage and provide feedback for the City to learn the implications of new technology. In addition to City Hall being located on Santa Monica Boulevard, this major east-west corridor connects the entire city as both a major regional thoroughfare and “main street” for the city. West Hollywood has been making significant investments in improving roadway design and public amenities along the street which makes it a natural fit for testing and deploying new digital infrastructure and services. Pilots are a great way to get feedback on new ideas and see if there is support for further exploration/deployment. As appropriate, WeHo Smart City should focus the pilots and the strategies outlined herein along Santa Monica Boulevard as the City builds capacity, develops learnings, and plans for scaling (as needed) citywide.

Pilots will range in size and audiences. It is important to define metrics for success and track outcomes from the onset of any pilot. This strategy will serve as a pilot, for instance, for one of the recommendations: **1.2: Develop dashboards to track progress on key city priorities**. A dashboard will be created to track the implementation progress of this strategy as a template for future dashboards as a citywide program is considered. Sharing lessons learned from these pilots can be educational and engaging for staff, supports the City’s reputation as an innovator, and provides meaningful context for policy makers and the general public to weigh in on WeHo Smart City.

CONTINUOUS IMPROVEMENT

As a data-driven smart city, West Hollywood should approach this strategy as a living document that evolves as implementation is underway. It is important to evaluate the impact of the recommendations over the next three years and prepare future next steps as objectives are met. Without waiting until the end of this strategy period, West Hollywood should continue to update and evolve its goals as a smart city so that the policy, programs, and pilots reflect the needs and desires of the residents, visitors, and local businesses and support staff in getting the work done.

PRIORITIES & DEPENDENCIES

STRATEGY ONE: Create a culture of data for a smart city hall that's ready for the future.				LEAD PARTNERS	INITIATIVE DEPENDENCIES
1.1	Build capacity for data analytics.	Policy + Program	Innovation Division + New Data Lead		
1.2	Develop dashboards to track progress on key city priorities.	Program	Innovation Division + New Data Lead	1.1	
1.3	Establish a mobility data management program for WeHo.	Program	Dept. of Public Works + Long Range & Mobility Planning	1.1	
1.4	Expand the curbside management pilot.	Program	Dept. of Public Works		
1.5	Adopt a Smart City privacy policy.	Policy	Innovation Division		
STRATEGY TWO: Collaborate and experiment across departments to do more with less.				LEAD PARTNERS	INITIATIVE DEPENDENCIES
2.1	Create a "pizza tracker" tool for managing workflows for internal processes.	Pilot	Innovation Division		
2.2	Develop a testing strategy for new digital engagement and feedback tools.	Policy + Program	Innovation Division		
2.3	Adopt a data sharing policy and tools to make it easier for travelers to access mobility data.	Program	Long Range & Mobility Planning + Transit		
2.4	Explore an on-demand transit pilot.	Pilot	Long Range & Mobility Planning + Transit		
STRATEGY THREE: Automate processes for an exceptional customer experience.				LEAD PARTNERS	INITIATIVE DEPENDENCIES
3.1	Launch a public safety pilot.	Policy + Pilot	Dept. of Public Safety	1.5, 2.2	
3.2	Implement critical connected infrastructure back-ups.	Program	Information Technology Division		
3.3	Develop a smart city sensor (and building) program.	Policy + Pilot	Innovation Division + Long Range & Mobility Planning	1.5	
3.4	Upgrade street light infrastructure.	Program	Dept. of Public Works	3.2, 3.5	
3.5	Adopt and IoT approval process.	Policy	Innovation Division	3.2	

PROJECT FOCUS & SEQUENCE

Smart City Hall Initiatives		RECOMMENDED SEQUENCE*
1.1	Build capacity for data analytics.	1
2.2	Develop a testing strategy for new digital engagement and feedback tools.	2
1.2	Develop dashboards to track progress on key city priorities.	3
2.1	Create a “pizza tracker” tool for managing workflows for internal processes.	4
3.5	Adopt and IoT approval process.	5
Smart Streetscape (+ Buildings) Initiatives		RECOMMENDED SEQUENCE*
3.1	Launch a public safety pilot.	1
1.5	Adopt a Smart City privacy policy.	2
3.2	Implement critical connected infrastructure back-ups.	3
3.3	Develop a smart city sensor (and building) program.	4
3.4	Upgrade street light infrastructure.	5
Smart Mobility Initiatives		RECOMMENDED SEQUENCE*
1.3	Establish a mobility data management program for WeHo.	1
1.4	Expand the curbside management pilot.	2
2.3	Adopt a data sharing policy and tools to make it easier for travelers to access mobility data.	3
2.4	Explore an on-demand transit pilot.	4

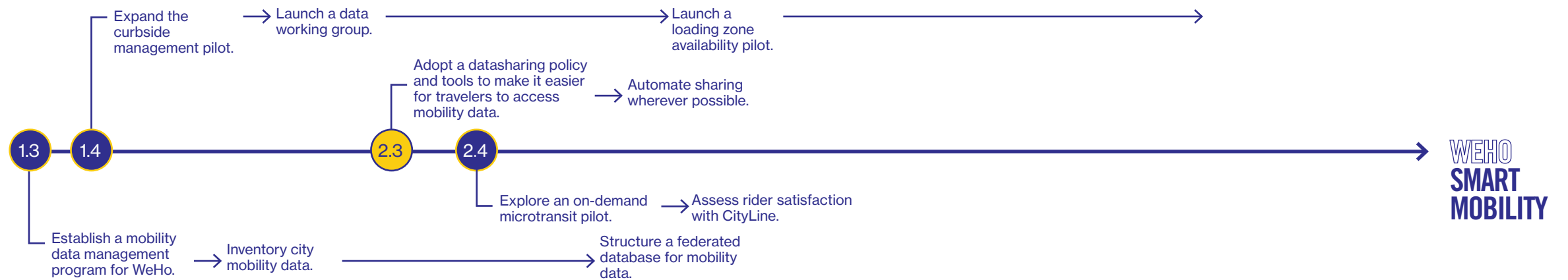
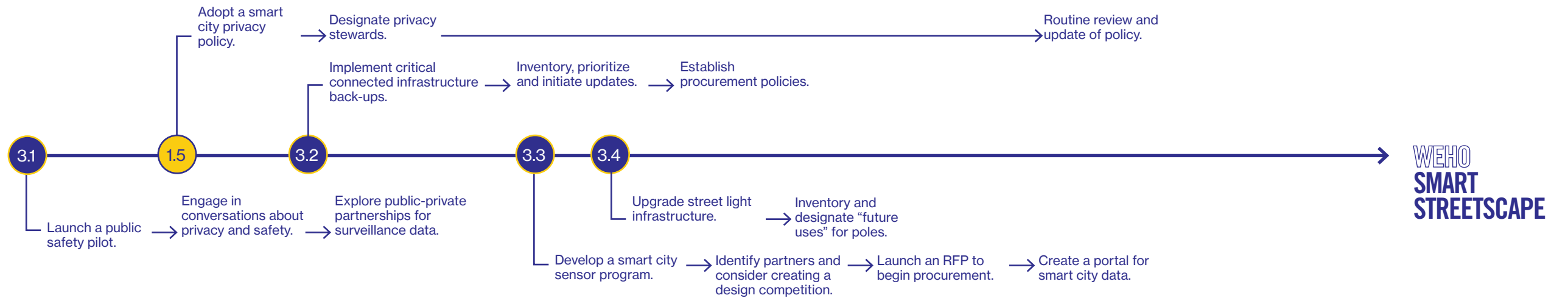
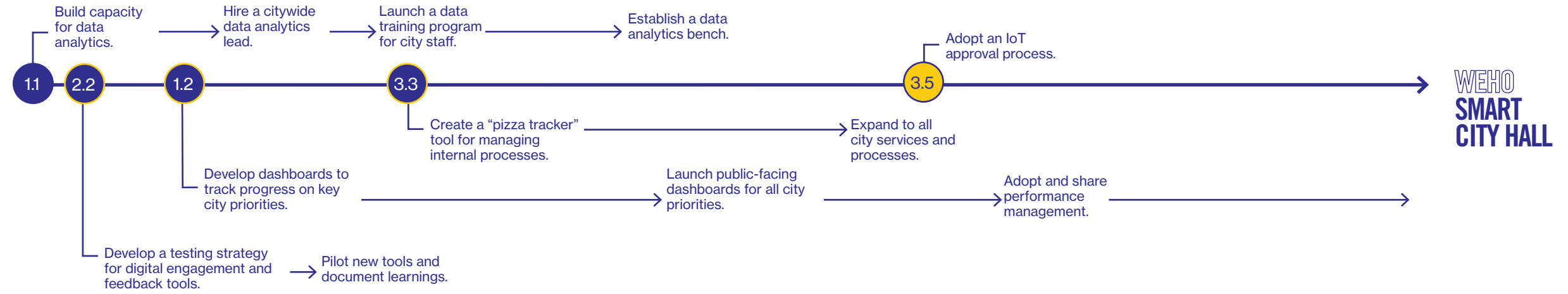
CITY OF WEST HOLLYWOOD

* Many of these initiatives should be considered concurrently but this recommended sequence provides further prioritization based on the goals and the objectives of the overall WeHo Smart City strategy.

RECOMMENDED PLAN WORKFLOW

FOCUS ON USER EXPERIENCE ENHANCED BY TECHNOLOGY WHEN DESIGNING CITY PROCESSES, PROGRAMS, AND PHYSICAL AMENITIES.

2018 2019 2020 2021 2022



WEHO SMART CITY

weho.org/smartcity

City of West Hollywood
Economic Development Department
Innovation Division

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