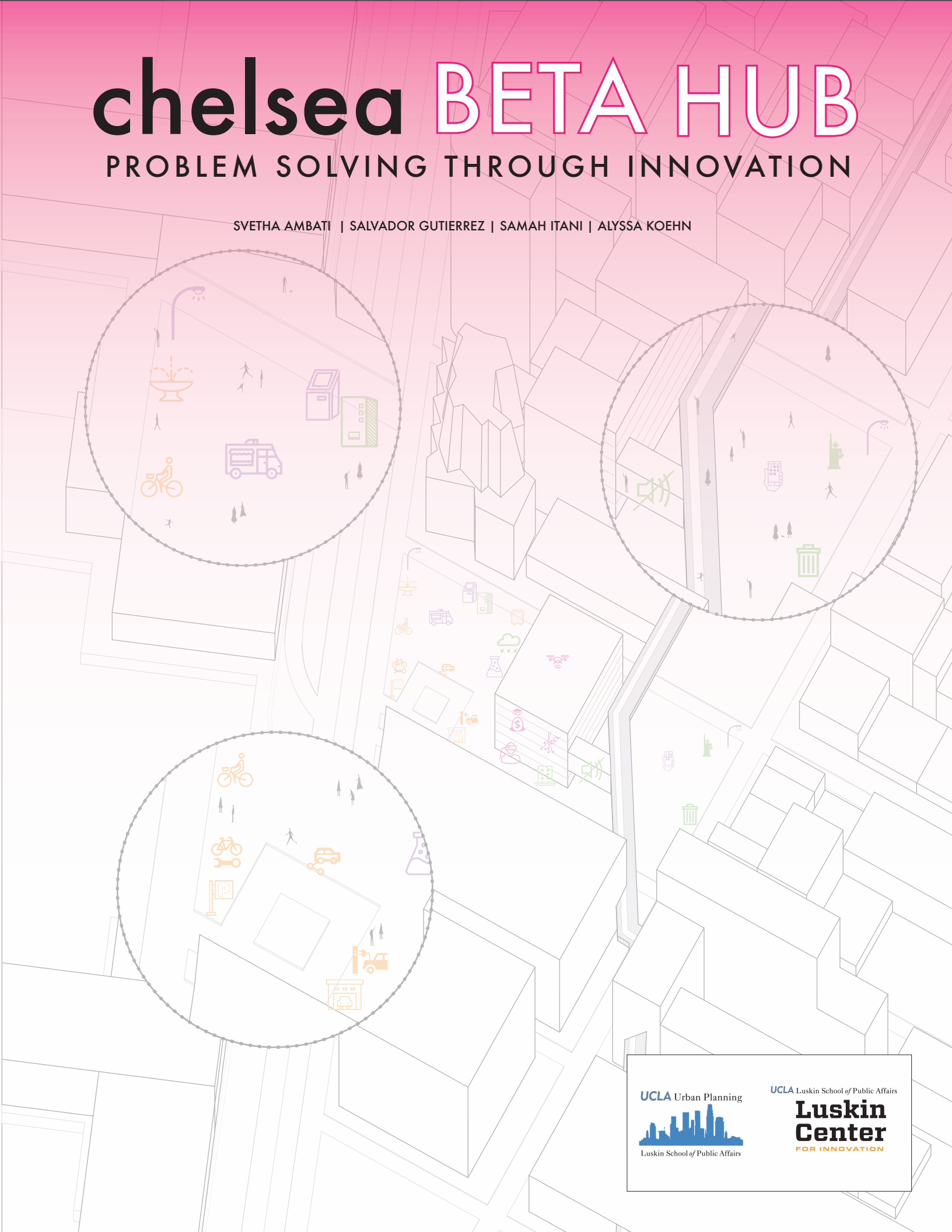
chelsea BETA HUB

PROBLEM SOLVING THROUGH INNOVATION

SVETHA AMBATI | SALVADOR GUTIERREZ | SAMAH ITANI | ALYSSA KOEHN



UCLA Urban Planning
Luskin School of Public Affairs

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Luskin Center
FOR INNOVATION

01 CONTENTS

A big thank you to The Noun Project for the icons used throughout this report.

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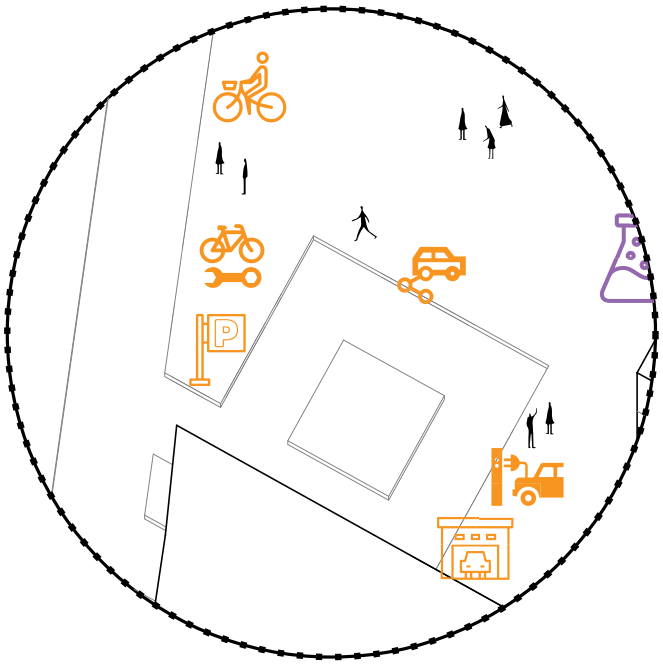
02 INTRODUCTION

WHY A "BETA" HUB?

Smart City designs are large-scale, innovative attempts to use current technologies to solve urban problems. As we began to design our site, we wondered how just a single block in Manhattan could make a meaningful contribution to such extensive goals. We soon discovered that all these projects must start somewhere, usually on a small scale, and realized how exponential improvements could be made collaboratively if these technologies were tested together. By clustering Smart Cities projects in a single urban space, innovators can work together and benefit from shared knowledge, resources, and audience.

We've titled our site "Chelsea beta hub" because this block is the perfect laboratory. Beta testing is the early release for the highly in-tune customer. It is when a sample of the intended audience tries out a product to allow time to rework errors before a full roll out. The Beta is the presale version- things need to be worked out in the real world to solve bugs. The Chelsea beta hub is a beta test for the City of New York and how it can solve urban problems through smart solutions.



HOW DID WE APPROACH DESIGN?

Now that we had a plan to group innovative technologies with a focus on start-ups and trial projects, how would we decide what types of projects to explore? Smart City goals are all about using technology to solve problems and our group thus began by identifying the problems that surrounding this site.

The demographics of Chelsea are rapidly changing. There is a large aging population of seniors that are under-serviced, and this population is growing every year. The environment of Chelsea is also a challenge. Recent weather events have shown how climate change can have catastrophic effects on the neighborhood through large scale flooding.

We grouped our learning from this site research under 4 subcategories of problems: data, mobility, environment, and economic development. For each category we explore solutions to the neighborhoods problems.

KEY CHELSEA DEMOGRAPHICS

Population
38, 242

Land Area
0.774 sq mi

Population Density
Chelsea: 49,11 people/sq mi
New York: 27, 183 people/sq mi

Percentage of Family Households
21.4%

Number of Schools
45

Landmarks
Chelsea Market
Irish Repertory Theatre
Rubin Museum of Art
The High Line
Chelsea Piers

Part

03 DATA

Visibility of data and access to data create avenues for innovative solutions to urban problems. As cities grow smarter and gain more information, the ability to share and assess this data becomes more important. Access to data often involves access to technology capable of processing and visualizing data. The following smart methods proposed on our site help create more accessibility to data and begin to visualize data in a way that engages the community and visitors to the city. In order to make data more approachable and encourage the analysis of information for data-driven decisions, we propose that the site offers the following:

DATA QUALITY

As government agencies continue to collect information, we encourage the use of consistent and thorough data collection. Therefore, the site will contain and collect information for use by both the city government and other interested entities.

Data Collection Through On-site Services

The Northeast plaza of the site houses a mobile "City Hall" station that will offer services such as parking ticket payments, library fee payments, complaint filing, information and materials, and other important city services. The mobile station will gather information on most popular uses of the station, as well as requests for uses, and will evolve over time to house the most popular services for New York residents and visitors. The use of data collection proves useful in this situation to not only bring City Hall services to areas frequented by New York residents, but also to provide information on popular services to the City of New York in order to create a successful mobile model.

Smart City Method 1: Mobile City Hall
Smart City Method 2: Evolving Suite of City Services

Hub for Innovative Data Collection

The site also opens itself to innovators interested in gathering information on urban data, such as noise, air or water quality, foot traffic, and other important data indicators. By serving as an area where registered entities can place sensors or test mobile applications, the site can foster innovation in finding solutions to urban problems. The availability and transparency of this data collection also contributes to the next section of this report: improving data literacy and its approachability.

Smart City Method 3: Beta Testing Site for Sensors
Smart City Method 4: Beta Testing Site for Mobile Applications

"Cities have the capability of providing something for everybody, only because and only when, they are created by everyone" *- Jane Jacobs*

DATA LITERACY

Data, especially big data, can be intimidating to people who may be afraid of its true purpose. In a politically charged environment, data can serve as both the truth or manipulation of the truth. In order to make data more approachable, the site will contain visualizations of data that appeal to New York residents and visitors, thus providing insight into how data can be helpful and meaningful.

Data Visualization on Site Structures

The main site building contains a large wall facing the High Line which can be utilized for projections. Based on the site's weekly or monthly theme for activities or exhibits, the projects will utilize data in proximity to showcase information. For example, if the week's theme is the High Line, the constantly running projection can showcase popular Instagram posts utilizing certain hashtags such as "#highline" or "#bigdatahighline" depending on the algorithm used to find posts. Showcasing the use of data in such a way will create more approachable methods of viewing data and help engage citizens.

Interactive digital kiosks will also be available on-site for visitors and residents to explore information on the site, such as which mobile applications or sensors are currently being tested on-site and how to access the data gathered by the beta tests. Companies utilizing the site for beta testing can also provide information on their projects, thus breaking down the barriers between private technology interests and people. These kiosks will also provide information on how to get to popular attractions within the area, and other concurrent projects or exhibits related to the weekly or monthly theme of the site's activities or exhibits.

Smart City Method 5: Access to Streetlight Sensors for Cities and Developers
Smart City Method 6: Using Data for Wayfinding
Smart City Method 7: Interactive Digital Kiosks

Visualizing Environmental Indicators

The site will have smart sensors on highly visible structures such as light poles in order to visualize interpreted data. For example, since the site is in close proximity to water and has access to air, the streetlights will

change color to indicate adequate quality of air and water. Additionally, the super-efficient LEDs used on the street lights also include sensors for light, weather, video, and noise in order to provide data to cities and developers who can build relevant applications based on the data generated.

Smart City Method 8: Air and Water Quality Sensors and Indicators on Streetlights

EMPOWERING CITIZENS

When access to data and approachability of data is improved, citizens can feel empowered by the opportunities that data can offer. In order to help data feel more tangible to people, the site will offer a multitude of interactive experiences.

Engaging and Interactive Data Experiences

The site serves as a center for testing new innovations and to showcase those innovations. Every week or month, the site's exhibits or activities will center on a specific topic that will provide an engaging experience for the site's visitors. By opening up the floor to citizens on what the site's weekly or monthly theme should be, the site utilizes crowdsourcing methods to ensure that community participation and insight remains a big part of site's purpose and intent.

One way the site gathers information on what the community wants to see or learn about is through data collection on the interactive digital kiosks. The visitor to the site can fill out a simple survey on the kiosk, or can fill out comments to be reviewed by the site or exhibit managers. Another method of community participation is through an interactive voting system available to subscribers of a mobile application designed for the site.

Smart City Method 9: Crowdsourcing Monthly Themes or Exhibit Topics
Smart City Method 10: Mobile Application Designed for Site Themes or Exhibits

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04 MOBILITY

With the increase in aging adults, Chelsea can set an example for other boroughs in New York City by planning for all ages. Smart City technologies are critical to provide residents, employees, and visitors with an array of mobility options for day to day travel, for both work and for leisure. Our proposal aims to use technology to enhance the West Chelsea District by improving community engagement amongst residents, strengthening partnerships with other city departments (like the Department of Transportation) and community based organizations, and by providing equitable transit accessibility.

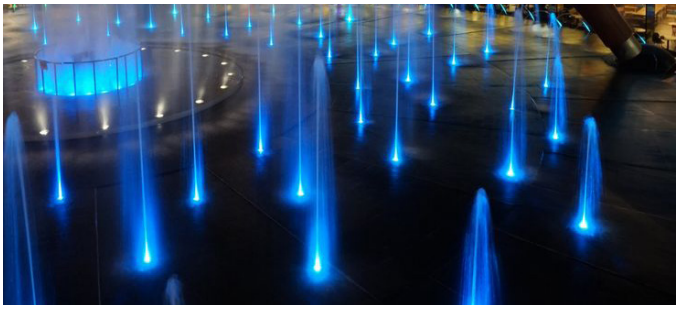
CONNECTIVITY

Our Smart City beta hub aims to create a healthy and vibrant city by testing ways to provide accessibility to all residents, employees, and visitors. Chelsea is in close proximity to attractions, like the High Line, and community assets, such as the New York City Housing Authority Fulton Senior Center on 9th Street. Our site explores ways to use technology to create better mobility, increase traveling options, decrease isolation, and encourage social cohesion.

Visually Indicating Traffic Density

Our site is adjacent to 11lth Avenue, which is a prime location for transportation access with multi-modal options. We are proposing to install a water fountain that rises depending on traffic volume. As automobile traffic along 11th increases the water rises. This serves as a traffic calming measure to improve the visibility of nearby pedestrians and cyclists during peak travel times. The water fountain will serve as landmark as well for tourists to navigate the Special West Chelsea District. The water will use the stored grey water from our Smart Rain Gardens feature.

Smart City Method 11: Traffic Indicator Water Fountain



Jet streams would increase in height relative to the traffic density indicated on 11th ave. via Google Maps.

Live Signage for Bus Transit

Our beta site will help to increase reliability on transit and provide a better user experience for all who live, work, and visit Chelsea. Our location has two main transit stops, the M12 and the M14A, along 11th Avenue and West 18th Street. This feature will help increase transit ridership and connect people to nearby destinations, such as Dr. Gertrude B. Kelly Playground and the New York City Lab School for Collaborative Studies. Better transit reliability will increase economic development for the Special West Chelsea District.

Smart City Method 12: Real Time Bus Schedule

Solving The Parking Problem

Parking apps and kiosks will save individual's time instead of cruising and causing congestion looking for a parking spot. Our parking app will be convenient for residents, employees, and visitors in Chelsea, especially the Special West Chelsea District. These tools help provide more time for traveling to destinations and reduce traffic, which minimizes pollutants releases that would harm individual's health and quality of life.

Smart City Method 13: Parking Apps & Kiosks

FIRST AND LAST MILE CONNECTIONS

Taking Care of Your Ride

In order to accommodate cyclists enjoying the bike path along the Hudson River Greenway, and users from the nearby Citi Bike Stations, our repair stations will assist with flat tires, tire replacement, handlebar and seat adjustments, and chain repairs. Our repair hub will host classes on bicycle maintenance for youth and new cyclists, as well as bicycle awareness classes for drivers and cyclists alike. Our classes will be a catalyst to increase community engagement with Chelsea residents and our program will work with youth from the Chelsea Piers youth programing services. We will have several bike parking facilities for individuals who want to lock their bike up and explore the High Line and nearby restaurants, like Artichoke Basille's Pizza on 10th Avenue and West 17th Avenue. All these bike amenities will be integrated into our parking app, and provide the ability to lock and unlock bike lockers via your phone.

Smart City Method 14: Mobile Bike Repair Station

Accommodating Ride Share

With the increase interest in the autonomous vehicles and transportation network companies (TNC's), like Lyft, our site will have a drop off lane for these modes of transport. Currently, there is no infrastructure to accommodate individuals using TNC's to get to their destinations. Our site is interested in piloting a program providing TNC's for seniors and

low-income households in the nearby Elliot-Chelsea Affordable Housing Units. Our pilot program will use technology to connect less resourceful residents to medical appointments and errands, such as grocery shopping, and to improve their quality of life. The City can partner with organizations, like the Hudson Guild, to assist with community outreach and promotion of services. Vehicles will be able to enter the dedicated lane off of 17th Street and 11th Avenue to provide access to the Westside Highway. Lastly, these technologies and the dedicated lane will assist to reduce the cost of traveling for residents, visitors, and employees.

Smart City Method 15: AV/Rideshare Pickup and Drop Off Lane

Providing Light for Alternative Modes

We will improve walkability around and into our site by installing motion-responsive LED lights on major thoroughfares around the block. The infrastructure will be deployed along West 17th Street, West 18th Street, 10th Avenue, and 11th Avenue. Smart lighting will assist pedestrians in navigation and enhancing street lighting to LED lights has multiple benefits. It will reduce energy consumption and improve public safety. We will be partnering with the NYC Lab School for Collaborative Studies on West 18th Street and Community Board 4 for public input and to hold ongoing workshops to keep community members involved in our efforts to make Chelsea healthier and safer.

Smart City Method 16: Smart Bicyclist and Pedestrian Lighting

Well-designed LED posts would activate to movement from nearby pedestrians or cyclists after the sun has set. These would minimize standard street light needs, improving efficiency.

(Image Credit: City of Chicago)

Electric Vehicles

Our hub is encouraging the reduction of greenhouse gases by promoting electric vehicles and providing electric vehicle users with charging stations. Providing a charging station will increase electric vehicle usage. Additionally, our hub will use advanced information and communications technology (ICT) infrastructure through data collection and testing of the interaction of autonomous electric vehicles. One of the features includes

vehicle to infrastructure technology (V2I) technology. V2I technology will allow autonomous vehicles to communicate with traffic signals and lamp posts. Lastly, our charging stations would advance the implementation of the New York City Vision Zero 2014 Action Plan goals, specifically the reduction of pedestrian collisions and fatalities.

Additionally, the mobility area of the Chelsea beta hub would assist the Department of Citywide Administrative Services to test technologies for City fleet electric vehicles, such as ways to prevent dangerous driving behaviors.

Smart City Method 17: Electric Vehicle Charging Stations & Beta Test Site

"You can't understand a city without using its public transportation system." *- Erol Ozan*

Automated Parking

Our beta hub maximizes space by increasing livable space for all our technology plazas by constructing an automated underground parking structure. This structure will be linked to an app for phones, or a special key ring for community based organizations who transport disadvantaged populations, especially those without a stable income or credit card. The automated structure increases the efficiency of parking, allowing many more cars to fit in comparison to traditional parking structures.

Smart City Method 18: Automated Underground Parking Structures

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05 ENVIRONMENT

In order to apply Smart City technology justly, we must improve life for current citizens without doing harm to future generations. All our implemented technologies must be focused on sustainable sourcing and have an awareness of their potential contribution to climate change. The site as a whole has a responsibility to use new technologies to better the health and environment of New York.

While such a small site won't eliminate these concerns citywide, the site can act as a testing ground for sustainability and resiliency technologies, as well as a station from which to deploy mobile solutions to the rest of the city. The following smart methods proposed on the site foster innovation for sustainability and help bring these technologies to a space where they are easily accessible to the community:

CLIMATE CHANGE & STORM SURGES

The Chelsea neighborhood, especially those areas nearest the Hudson River, faces an increasing frequency and intensity of storm surges. During Hurricane Sandy in 2013, the Hudson River rose 3.3m, flooding the businesses and art galleries around our site with upwards of 5 feet of water. Our site can test resiliency technology and act as a warning beacon for the neighborhood in times of climate crisis.

Storm Surge Notification

Sitting on the edge of the high-risk flood zone, our site is a point of first-warning for the rest of the Chelsea neighborhood. By embedding sensors in the light posts and in the interior and exterior walls of our building, we can track water breeches into the site and provide this data live to the public, accessible via an automatically updated website. This data will also allow news media to provide accurate assessments of flood conditions in real time, allowing businesses and residents to monitor their properties. Sensors can be programmed to increase the rate of data provision once a certain threshold of water has been met. Using our data visualization wall, once the water has breached the Hudson onto the site, our projection can switch to a warning signal, visible to the surrounding area about the height of the impending flood waters. This could help to notify the surrounding area about evacuation needs and threat level.

Smart City Method 19: Live Monitoring River Breeches
Smart City Method 20: Mobile Alert System - Site Art as Beacon

Smart Landscaping

By utilizing rain gardens with cisterns throughout the landscaping in the site, we create a physical landscape that can mitigate storm water while also providing a robust data set. Long before the threat of a storm surge, there is the risk of flooding from overwhelmed sewer systems in storm conditions. By landscaping our site with deep rain gardens, using plants with deep root systems and a bermed edge, we can help mitigate our site's impact on the sewer system. By embedding water meters within this rain garden, we will be able to track rainfall closely and better map out the potential for flood conditions in the area. By tracking this data on our site alongside physical floodwater solutions, we can develop solutions to better protect the entire Chelsea neighborhood.

Smart City Method 21: Smart Rain Gardens

RESOURCE MANAGEMENT

Smart Garbage Cans

The amount of street traffic in Chelsea can vary wildly depending on the time of year. This can lead to insufficient public waste bins and unnecessary collection. Drawing on a solution from Seoul, our site would be fitted with Clean Cube technologies. These bins are placed in pairs and feature a dual garbage-recycling system. They report their occupancy status hourly, and auto-generate an optimized waste-collection route. In Seoul, they have been reported to reduce waste collection costs by 83% and reduce collection frequency needs by 66%. While our site is small, the implementation of these receptacles on our site is a great beta-test for a future expansion into the neighborhood. Waste removal efficiency for the neighborhood could be more efficiently and sustainably managed through the interpolation of this site's data to the larger community.

Smart City Method 22: CleanCubes

Cans to (Metro)Cards

As part of the waste removal strategy for the site, one of the kiosks in our innovation area will be equipped to collect plastic drink bottles and, in exchange, add value to MetroCards. LED signage on the back of the kiosk will display the number of bottles saved from the landfill. In order to manage the high density of bottles collected, this bin will also feed into the CleanCube system and feature a solar compactor to maximize space. This reverse vending machine could also act as one of the Interactive Digital Kiosks discussed in the last section, producing interactive data about site recycling for the public to engage with!

Smart City Method 23: Reverse Vending Machines

Reverse vending machines accept sustainable waste such as plastic or glass bottles in return for credit on public transportation. The vending machines provide an incentive for recycling.

(Image Credit: Thaitechno.net)

QUALITY OF LIFE

Noise

Big cities have noise problems: traffic noise, nightlife noise, and the multitude of other noises that arise from having a high density of population on a small land mass. To provide a space of sanctuary away from city noise, the bridge area between the High Line and our on-site innovation building will be insulated and equipped with noise monitors. Actively measuring the ambient outdoor noise, the bridge will use white noise cancellation to counter the exterior noises and ensure the bridge is maintained at a constant decibel level. Positioned below the datascape, the peaceful atmosphere of the bridge will allow guests to focus on the engagement with our data visualization as they enter our site.

Smart City Method 24: Sound Sanctuary Spaces

Quality of Life Surveying

Tieing into our Mobile City Hall and data collection initiatives, our site would allow for an opportunity to expand on New York's existing quality of life surveying through an art installation. A digital sculpture equipped with 100s of super-efficient LED lights will serve as a heat map for New Yorkers opinions on their city. Site users within a certain geofence will be able to engage with the sculpture by visiting a website and quickly rating from 1 to 5 their satisfaction with various aspects of the city and it's services. At the end of the survey, they will be shown a color indicating their level of satisfaction, and in real time they will be able to watch for one of the LED lights on the sculpture to blink and change colors to match the one displayed on their phone. All the lights on the sculpture will then adjust themselves to be in color range from most satisfied to least satisfied around the sculpture, providing a live visualization of recent users quality of life.

Smart City Method 25: Quality of Life Data Collection Through Interactive Art

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06 ECONOMIC DEVELOPMENT

Cities can thrive and improve residents' quality of life by maximizing their resources, economic assets and services. Cities must garner and embrace emerging technologies that will create opportunities and accelerate innovative problem solving. Positioned in entrepreneurial West Chelsea, our site provides one of the best locations in New York for the City to connect with startups and creatives working on exactly these problems. In order to identify economic opportunities and challenges to pave the path for innovation and entrepreneurship, we propose that the site offers the following:

LEVERAGING PARTNERSHIPS

Public-Private Partnerships are critical to gain valuable insights and identify promising technologies to improve the economic environment. These insights can be achieved through citizen groups, industry cluster initiatives and educational institutions. We have integrated all 3 of these user groups in the core building on our site.

Technological Partners

Our site is across the street from IAC, a leading media and Internet company that is comprised of over 150 brands and products. It has been a pioneer of e-commerce, media and the Internet. It is the home of a family of companies like Match, Vimeo, About.com and HomeAdvisor. By establishing a technology incubator that accepts their beta projects and integrates them with independent local start ups, we can bring together the talents from IAC and the passions of aspiring young professionals and entrepreneurs. This will foster an environments of idea sharing that will generate value and social benefit and will help accelerate job creation and economic growth.

Smart City Method 26: Entrepreneurship Incubator
Smart City Method 27: Crowdsourcing with Technology Partner - IAC

Institutional Partners
Education and skill building is important, particularly with low income residents in the community that may not have access to resources. Our site is located a few blocks away from General Assembly, a pioneer in education that specializes in today's most in-demand skills. We will develop a city-sponsored public technology lab on our site that will help bridge the technological gap and offer dynamic training to close the skills gap. These courses will be opened to members of the community while also catering to individuals who are underrepresented in the tech sector.

Smart City Method 28: Institutional Tech Lab

BUSINESS REVITALIZATION

To ensure a sustainable business model, one of the most critical components is location. Due to our highly desirable, pedestrian friendly area, we will have innovative retail on the ground floor of our building. The close proximity to the High Line means there are thousands of tourists passing by our building each day, pausing to look at both our data visualization wall and down onto the storefronts. The following proposed ideas will help residents and visitors better explore our site:

Real-Time Content & Information
A site app will actively engage users with information about what to see both on site and in surrounding Chelsea. Users will be able to use geotagging and augmented reality to get a customizable recommendation by simply pointing their smart device in the direction they wish to go. This will include both on-site amenities and local partnerships.

Virtual Teleportation
To entice visitors, the retail shops will have the opportunity to virtually share their space with potential visitors via the app (so High Line guests can visit the store from above). This will boost business activity and create a connection between the visitor and the shop before their arrival.

Drone Delivery
In order to make logistical processes more efficient, our site will have a drone landing station on the top of our building. This station will be accessible to all of the tenants and businesses housed on our site. This will make deliveries for projects under testing at our site and ventures much more efficient, as well as support drone technologies beta testing. This method has been successful by companies like Amazon and UPS, and we'll give them space to practice in a dense urban city.

Smart City Method 29: Real-Time Content with Virtual Reality
Smart City Method 30: Virtual Teleportation with Business
Smart City Method 31: Drone Delivery

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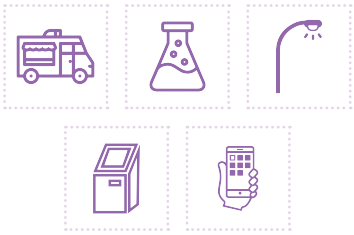
08 SITE PLAN

SITE TECHNOLOGIES

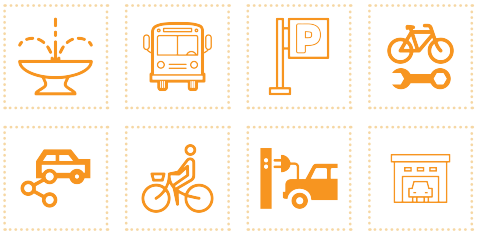
DATA

01. Mobile City Hall
02. Evolving Suite of City Services
03. Beta Testing Site for Sensors
04. Beta Testing Site for Mobile Applications
05. Access to Streetlight Sensors for Cities and Developers
06. Using Data for Wayfinding
07. Interactive Digital Kiosks
08. Air and Water Quality Sensors and Indicators on Streetlights
09. Crowdsourcing Monthly Themes or Exhibit Topics
10. Mobile Application Designed for Site Themes or Exhibits



MOBILITY

11. Traffic Indicator Water Fountain
12. Real Time Bus Schedule
13. Parking Apps & Kiosks
14. Mobile Bike Repair Station
15. AV/Rideshare Pickup and Drop Off Lane
16. Smart Bicyclist and Pedestrian Lighting
17. Electric Vehicle Charging Stations & Beta Test Site
18. Automated Underground Parking Structures



ENVIRONMENT

19. Live Monitoring River Breeches
20. Mobile Alert System - Site Art as Beacon
21. Smart Rain Gardens
22. CleanCubes
23. Reverse Vending Machines
24. Sound Sanctuary Spaces
25. Quality of Life Data Collection Through Interactive Art

ECONOMIC DEVELOPMENT

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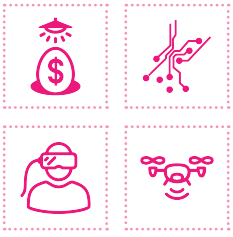


CIVIC
PLAZA
ROTATING
EXHIBIT
PLAZA
MOBILITY
HUB

SITE LAYOUT

The site was laid out with great consideration to traffic flow and natural gathering spaces. There are 5 distinct zones to the site.

Civic Plaza
Across from the IAC, a technology company leader, is where we gathered our most public facing technologies. The Mobile City Hall is parked here when not traveling around the city, acting as the center of this part of the beta hub. It's visual focal point is the traffic indicator water fountain.

Mobility Hub
Providing the clearest connection to major thoroughfares, our parking, bike amenities, and vehicle pull in lane are all accessible from the Southwest corner of the site. This gives easy access for drivers on the Westside highway and cyclists on the Hudson River Greenway.

Open Beta Testing Garden
At the Western entrance to our permanent structure, to the East of the Mobility Hub and Civic Plaza, is the area where innovators in our technology lab and incubator can display their products. This area is landscaped with the smart rain gardens that supply water to the fountain.

Building With Data Visualization Wall
This building is 6 stories in height to allow for 4 stories to rise about the High Line for projections. There are minimal windows on the East side of the building due to the projections and the wall here is painted white to maximize it's capability as a display. Data visualizations can be seen from the High Line, the Sound Sanctuary Bridge, and the Rotating Exhibit Plaza below.

Rotating Exhibit Plaza
In the Northeast corner of the site, which gets a large amount of pedestrian traffic from 10th ave, is where our Rotating Exhibit Plaza lives. There is also a permanent interactive art installation here which collects the quality of life data. Pedestrians can also gather here to watch the drones fly on and off of the roof.

Part

09 PROJECT TEAM

Our project team was excited to come together and take on the APA Smart Cities Student Design Competition! With distinct backgrounds, we were eager to both apply our expertise and cross-collaborate. We organized weekly working meetings to develop our vision for the Chelsea site over a span of 6 weeks. Each team member took on an element based on our curiosity and professional interests. We heavily researched the area and it's challenges, and brainstormed as a group their potential technological solutions. We divided our work into four components: Data, Mobility, Environment, and Economic Development. Each section is color coded and matches the biography of it's producer. The team collectively worked on the design of the poster and report.

SVETHA AMBATI

B.A '11, M.URP '17

Svetha has a professional bag background in data analysis. She is interested in finding a nexus between urban planning and data to help planners make data-driven decisions regarding the built environment. Svetha is currently a Regional Planning Assistant at the County of Los Angeles with a focus on long range planning efforts and sometimes she commutes to UCLA from San Francisco.

SALVADOR GUTIERREZ

B.A '11, M.URP '17

Salvador is currently working with the City of Los Angeles Department of City Planning assisting with long range planning and updating the zoning code. He has extensive experience facilitating cross-sector partnerships to create healthy communities. Sal is interested in the link between health, transportation, and equitable land use practices. He is committed to creating equitable and inclusive communities while watching baseball.

SAMAH ITANI

B.A. '15, M.URP '17

Samah is the City of West Hollywood's Innovation Intern. Her interests are in the intersection of urban design and civic technology. Prior to joining the City of West Hollywood, Samah was a design fellow at Amigos de los Rios, a non-profit organization, designing urban parks and green infrastructure in park deficient neighborhoods in Los Angeles County. Samah aspires to be a cat lady as soon as possible.

ALYSSA KOEHN

B.A. '12, M.URP '17, M.ARCH '17

Alyssa works at the intersection of planning, policy, and design, and enjoys negotiating the conversations between these often very different worlds. Her ideal future involves living in and helping create a walkable, sustainable, vibrant city (where I never need to own a car). She loves urbanism as an equalizer and problem solver. She hopes Tourism Vancouver will eventually employ her for her numerous tweets about it's great transit.