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 a single block in Manhattan could make a meaningful contribution to solving city-wide problems. After brainstorming potential solutions, we decided that the most beneficial course of action would be to create a small, scale, and relate how experimental improvements could be made collaboratively if these technologies were tested together. By steering Smart City projects in a single urban space, innovation can work together and benefit from shared knowledge, resources, and audience.

We’ve labeled our site “Chelsea Beta Hub” because this block is the perfect laboratory. Betas 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 what’s before a full roll out. The Beta is the beta 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 startups and the local context, how would we decide what types of projects would be premiered on this small site? We developed a clear list of all Smart City projects and filtered the list down to the projects that would be able to address a specific urban problem. This list included problems that would be able to be tested on the site and also have an impact on exactly these problems. Our goals were to identify economic opportunities and challenges to pave the way for innovation and entrepreneurship.

SITE TECHNOLOGIES

MOBILITY

26. Entrepreneurship Incubator
27. Crowdsourcing with Technology Partner
28. Institutional Tech Lab
29. Real-Time Context with Virtual Reality
30. Virtual Teleportation with Business
31. Drone Delivery

ECONOMIC DEVELOPMENT

26. Entrepreneurship Incubator
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DATA

01. Mobile City Hall
02. Evolving Site of City Services
03. Beta Testing Site for Sensors
04. Beta Testing Site for Mobile Applications
05. Access to Streetlight Sensors for Cities and Development
06. Using Data for Wayfinding
07. Interactive Digital Kiosks
08. Air and Water Quality Sensors and Indicators on Streetlights.
09. Crowdsourcing Monthly Themes or Exhibits 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. All-BikeShare Public & Drop-Off Line
16. Electric Bicycle and Pedestrian Lighting
17. Electric Vehicle Charging Stations & Bike Share
18. Automated Underground Parking Structure

ENRONOMY

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

DATA

Visibility of data and access to data creates avenues for innovative solutions to urban problems. As cities grow smarter and gain more information, the ability to share and access this data becomes more important. Access to data often involves access to technology capable of processing and visualizing data. Our smart methods proposed on this site help create more accessibility to data and begin to visualize data in a way that engages the community and innovators to the city.

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 technology can be used 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.

ENVIRONMENT

In order to apply Smart City technology globally, we must improve the life for current citizens without doing harm to future generations. Chelsea’s demographics are rapidly changing. There is a large aging population of seniors that are underserviced and this population is growing every year. The environment of Chelsea is also a challenge, recent events from hurricane climate change can have catastrophic effects on the neighborhood through large scale flooding.

ECONOMIC DEVELOPMENT

Citizens 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 City to help catalyze innovation and create partnerships around exactly these problems. Our goals were to identify economic opportunities and challenges to pave the way for innovation and entrepreneurship.