

STREETSCAPES FOR WELLNESS ILLUSTRATIONS AND INTERACTIVE

In Progress Presentation 7.29.21



GOALS & DELIVERABLES

- ❖ **2d illustration(s)** demonstrating the types of NYC streets and the components and stakeholders that contributes to them
- ❖ **3d interactive piece** featuring a simulation that enable user to navigate through a constructed city model that explores the cityscape and the different view details

AGENDA

- ❖ Understanding components of streetscape
- ❖ Understanding PDC's case study types
- ❖ Understanding & constructing a cityscape
- ❖ Brainstorming views of highlight for illustration and interactive piece
- ❖ Current model views (reference for illustration) in progress
- ❖ Current interactive piece in progress
- ❖ Next Steps
- ❖ Feedback

Streetscapes for Wellness: Components of Streets

Streetscape element + features and NYC specificities



9 Stakeholders - agencies and local organizations

**NYC
DOT**

**NYC
DoB**

**NYC
DCP**

**NYS
DOT**

**Port
Authority**

**LOCAL BIDS
(Business
Improvements
District)**

**NYC
Parks**

MTA

**NYC
DEP**

**FEMA -
Federal
Emergency
Management
Authority**

**Army
Corp of
Engineers**

Conservancies

**NYC
DOE**

**NYC
SBS**

**NYC
HPD**

**NYC
DDC**

**Landowners -
Property
owners and
Business
owners**

NYCHA

DSNY

FDNY

NYPD

**NYC
DEC**

**Green
Thumb**

**Franchises
(Link NYC +
Bus Stops)**

Streetscapes for Wellness: Case Studies

Open Street



Reclaimed Street



Collaborative Spaces



Underways



(Sunset Park, Brooklyn)

Pilot: Before



Pilot: After



Green infrastructure



CityE! (Rendering Credit: Ciochini Design)

Click to add text



Rethinking Roads



Barcelona Poblenou (Superblock)

Streetscapes for Wellness: Understanding Case Studies



We continued our long-standing partnership with NYC Dept. of Transportation to provide programming at community street festivals in all five boroughs.



Collaboration with The Drawing Center to bring a special version of our pop-up art studio to public spaces in West Harlem.



Residences in Chinatown.

Guidelines/Street Conditions to Consider/ Where CAN we Place Them

Enable communities to experience new public spaces and programs that seek to support small businesses and schools. Open Streets is tailored to shaping streets into public spaces for cyclists and pedestrians. The transformation is achieved through partnership with local community organizations.

Can be distinguished between:

- Temporary limited-access: vehicle access limited and must be slowed in this realm (only allow parking, deliveries, emergency, utility)
- Temporary full-closure: car-free zone for public activities (exception to emergency vehicles)

Visual Representation Strategy

Closed streets from vehicular circulation; occupied by pedestrian programs such as outdoor dining, recreational activities and entertainment.

Streetscapes for Wellness: Understanding Case Studies



Guidelines/Street Conditions to Consider/ Where CAN we Place Them

Reclaiming Sites Beneath Elevated Transportation Infrastructure - apply enhanced lighting, green infrastructure, reflective paint, and seating in response to the various conditions that exist in El-Space (furnishings in the "El-kit" will enhance the streetscape experience).

Visual Representation Strategy

Elevated transportation infrastructure, potentially also representing an element of the El-kit designs as furnishings.



Pedestrians cross Grand Concourse with new crosswalks and wider, protected medians with new trees and plantings

Guidelines/Street Conditions to Consider/ Where CAN we Place Them

Provide a safer streets from traffic, more inviting, and accessible space for pedestrians as well as a separated and protected bicycle path to allow for safe cyclist travel. Public realm can be enhanced with trees, pedestrian lighting, benches, wayfinding, and other design elements reclaiming public space from private vehicles and making it available for public transport, bicycles and pedestrians.

Visual Representation Strategy

Large/main street with bike lanes, wide customized medians with trees and activities, crosswalk.



Guidelines/Street Conditions to Consider/ Where CAN we Place Them

Focused on redesigning entrances, edges, and park-adjacent spaces in parks and improving neighborhoods by extending the beauty of parks out into communities.

- Make entrances easier to find, the edges of our parks greener, add furnishing, programming, and amenities, and improve sight lines to make our parks safer
- New York City is finding park space in areas not conventionally thought of as parkland

Visual Representation Strategy

Open park (not fenced), potentially with seating + other public amenities?

Streetscapes for Wellness: Understanding City Scope

SUSTAINABILITY + RESILIENCE:

Consider local context regarding climate, plantings + trees, materials, air quality and storm water management.

SAFETY:

Ensure sidewalks are designed with adequate lighting, gradients, and materials, to enable safe use 24 hours a day.

HUMAN SCALE + COMPLEXITY:

Use architectural detailing, entries, transparency, landscaping and so on to increase the complexity at the lower floors, helping to complement the human scale and break down the rhythm of length of the sidewalk.

CONTINUOUS VARIETY:

Ensure an experience of continuous variety. Consider the different speeds that people move at, and a variety of activities that can occur within the sidewalk room.

CONNECTIVITY:

Ensure sidewalks provide clear wayfinding and are continuous, connecting people to destinations and not resulting in dead ends.

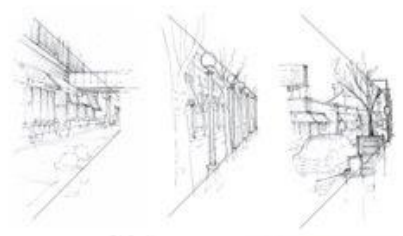
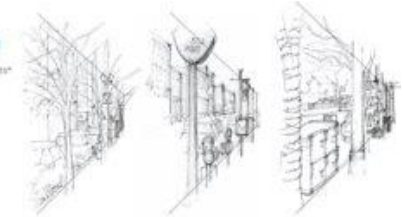
ACCESSIBILITY:

Ensure accessibility for multiple users, considering different ages and abilities.



PHYSICAL ELEMENTS OF THE ROADSIDE PLANE

Green strip/planters/ tree pits*
Street trees*
Lighting/signage poles
Street vendors
Parked cars
Bike racks
Bike racks
Street furniture
Waste receptacles
Newsstands
Fire hydrants

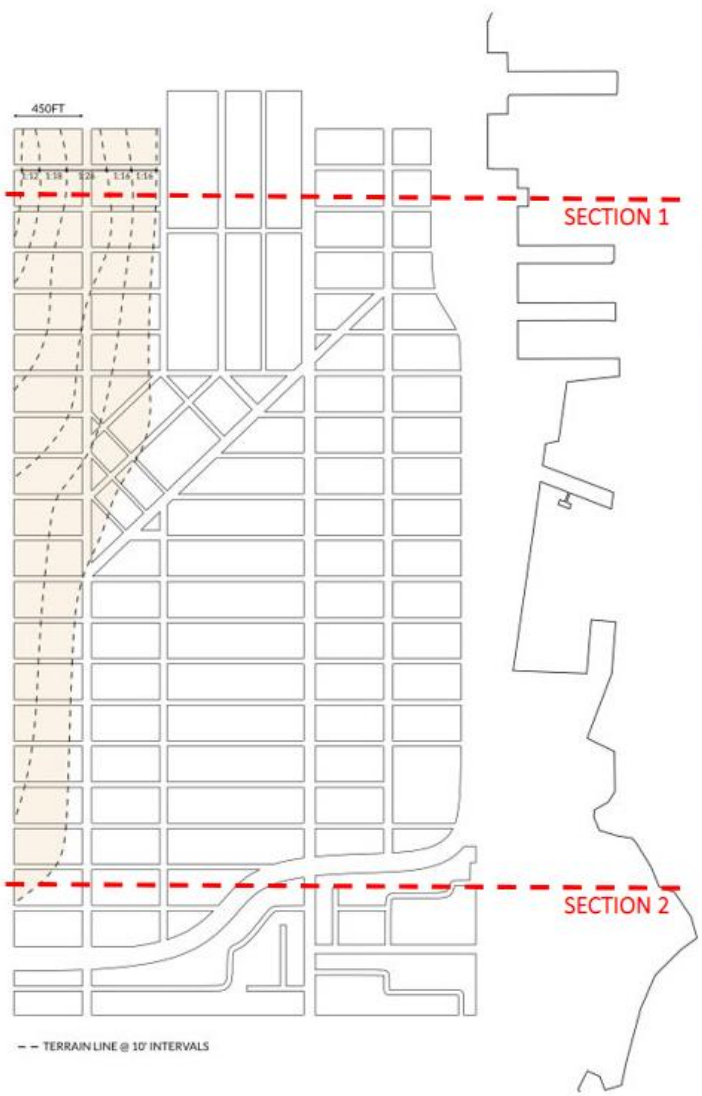


PHYSICAL ELEMENTS OF GROUND PLANE

Width / clearances*
Green strips/planters*
Street trees (tree pits)*
Curb cuts*
Slope
Subway grates
Service access
Lighting/signage poles
Pavement material/texture/pattern
Street furniture
Waste receptacles
Newsstands
Fire hydrants



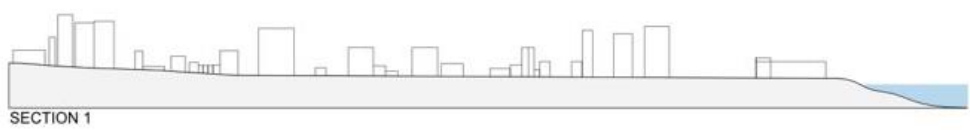
Streetscapes for Wellness: Construction Composition_Terrain



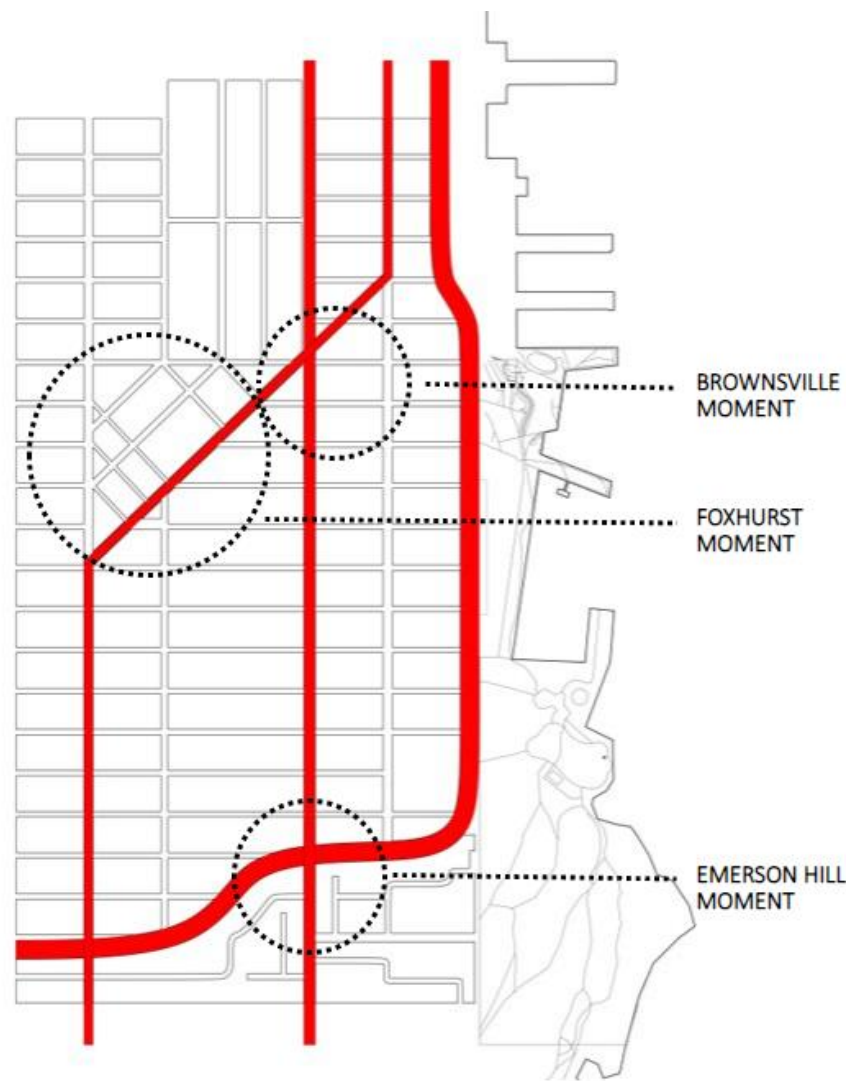
HARLEM, MANHATTAN



SUNNYSIDE, QUEENS



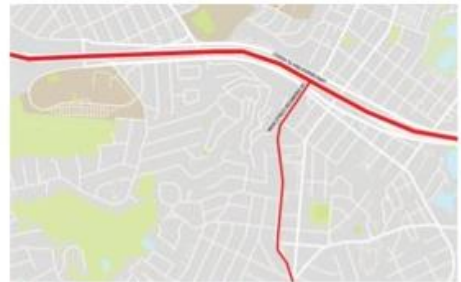
Streetscapes for Wellness: Construction Composition_City Grid



JACKSON HEIGHTS, QUEENS



FOXHURST, BRONX



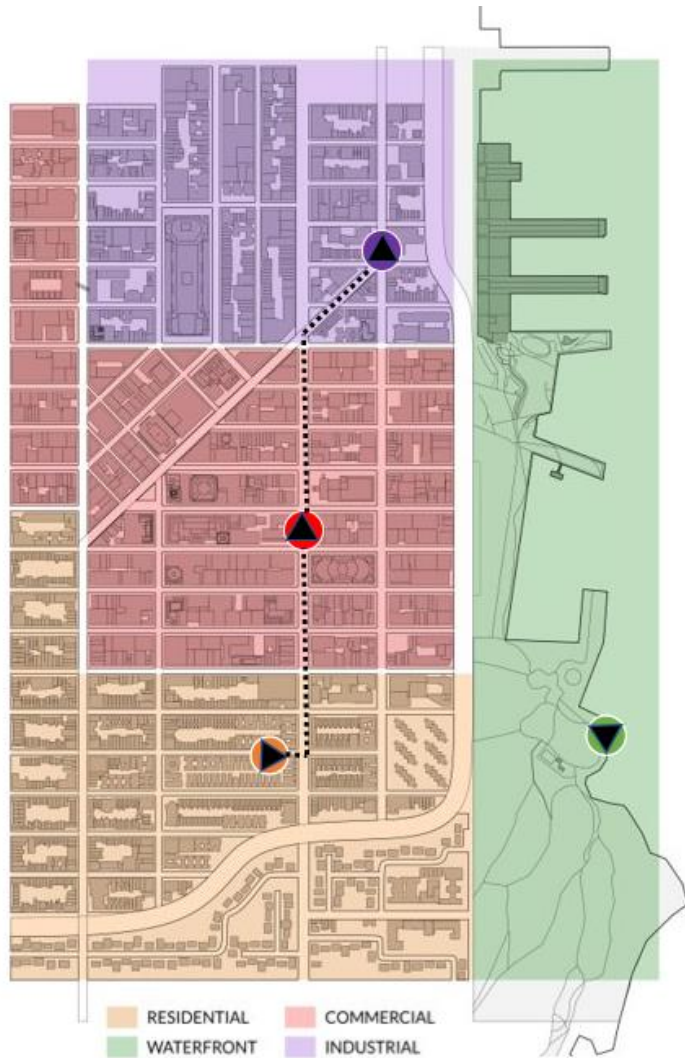
EMERSON HILL, STATEN ISLAND



BROWNSVILLE, BROOKLYN



Streetscapes for Wellness: Construction Composition_Stitching



EMERSON HILL, STATEN ISLAND



HARLEM, MANHATTAN



LOWER EAST SIDE, MANHATTAN



BROADWAY, BROOKLYN



MEATPACKING DISTRICT, MANHATTAN



FLUSHING CREEK, QUEEN



FLATIRON DISTRICT, MANHATTAN



BARRETTO POINT PARK, BRONX



JAMAICA BAY, QUEENS



Streetscapes for Wellness: Parts of the City

Scene	Reference	Agency	Visuals	Notes of Essentials
Waterfront	Jamaica Bay, Freshkills	DEP, Parks, FEMA	River with open fields, little development, scattered aggregates	Space for bikers, pedestrian, nature and animals Seatings amenities Remediation efforts with land/water/nature
Industrial	Old Williamsburg, Old Meat Packing District, Flushing Creek	NYC EDC, MTA, DoT, Port Authority (?)	Ferry, highway, underway, manufacture	Clear underway, old industrial building, under way case study and how to make it safer, waterfront + old buildings + adapted reuse, typical manufacture vs upsidings, traffics, curb cuts for truck loading, loft apartment for adaptive reuse, underway is typically parking so it have opportunities to be activated
Residential	NYCHA from LES, Row houses from Harlem	NYCHA, HPD, DDC	NYCHA, low-rise row houses, block party, institutions (ex: schools)	Street lamp, NYCHA building, town house, typical one family, fire hydrant - cool streets, deli, intersection of streets
Commercial/High Density Residential	14th Street	SBS, local BIDS, MTA, DoB, Property Owner, Contracted Franchises	Mid-high rise, public transit	Traffic signs, street cart, kiosk + digital tracker, subway station/bus stop, median for rethinking roads, skyscraper background, scaffolding, public plaza/privately owned public space,

Commercial/High Urban Density



Key Takeaways

Case study: rethinking roads – street median
Components: traffic sign, street cart, kiosk + digital tracker, subway/bus stop, scaffolding, public plaza/privately owned public space
Consideration: formatting storefronts to be visually appealing to pedestrian

Residential



Key Takeaways

Case study: open streets (ex: block party), cool streets (ex: operating fire hydrant)
Components: NYCHA, rowhouses, one-family house, bodega, fire hydrant, street lamps
Consideration: formatting view for street intersection of mix use

Streetscapes for Wellness: Parts of the City

Waterfront



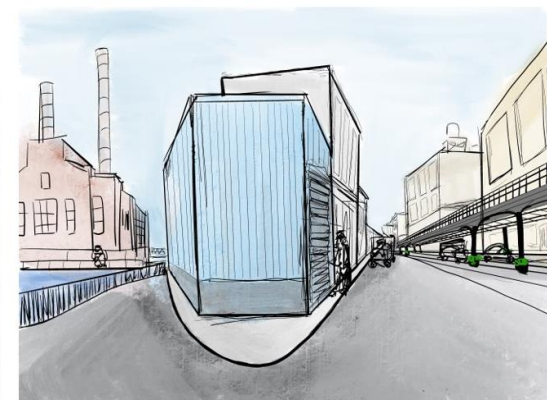
Key Takeaways

Case study: parks/plazas

Components: Space for bikers/pedestrian/nature/animals, seatings amenities, remediation efforts with land/water/nature

Consideration: natural vs artificial

Industrial



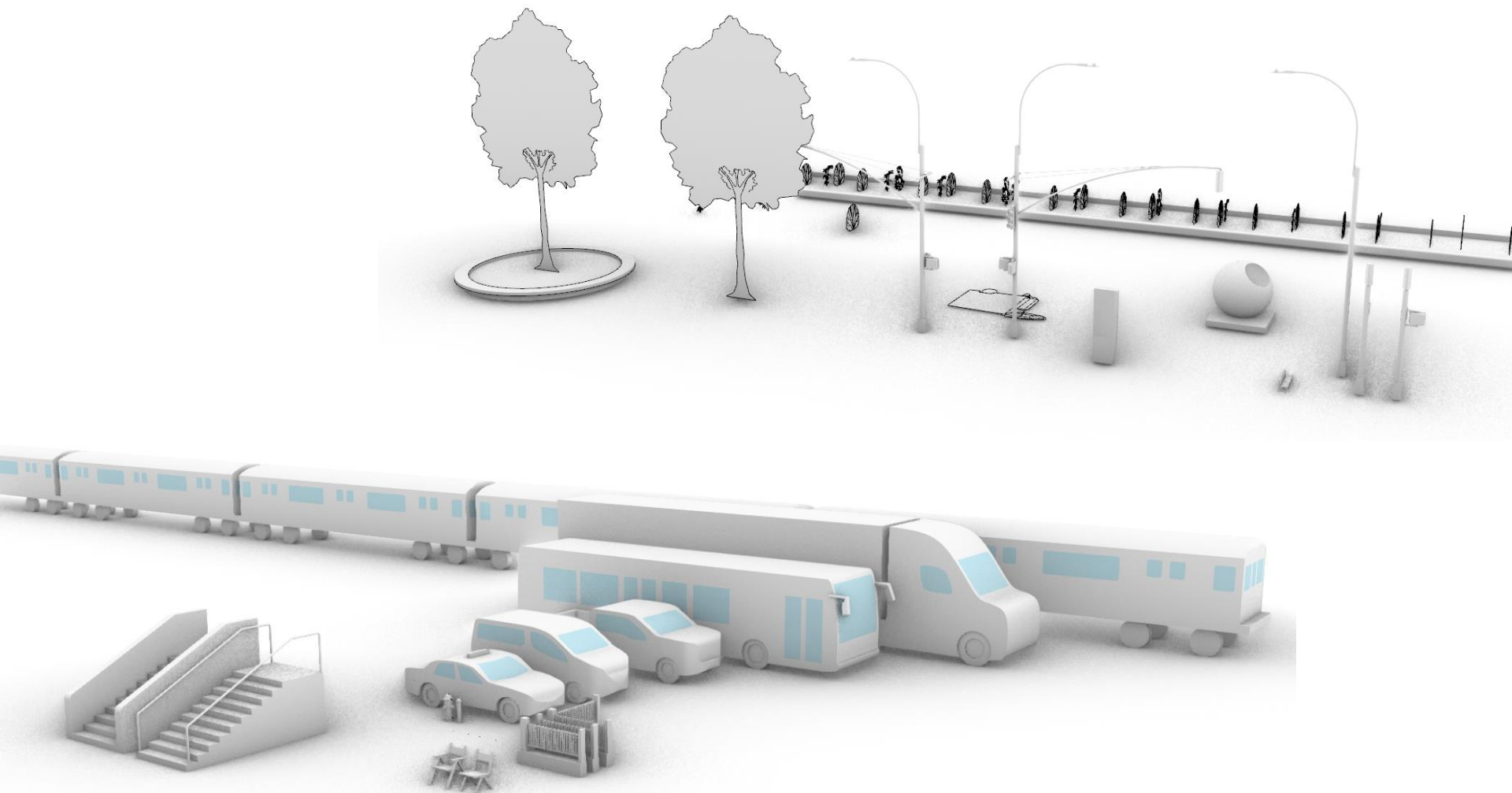
Key Takeaways

Case study: underway: existing parking to underway programs – how to make it safer

Components: waterfront + old buildings + adaptive reuse (loft apt, gallery, storefront)

Consideration: curb, traffic, truck off-loading

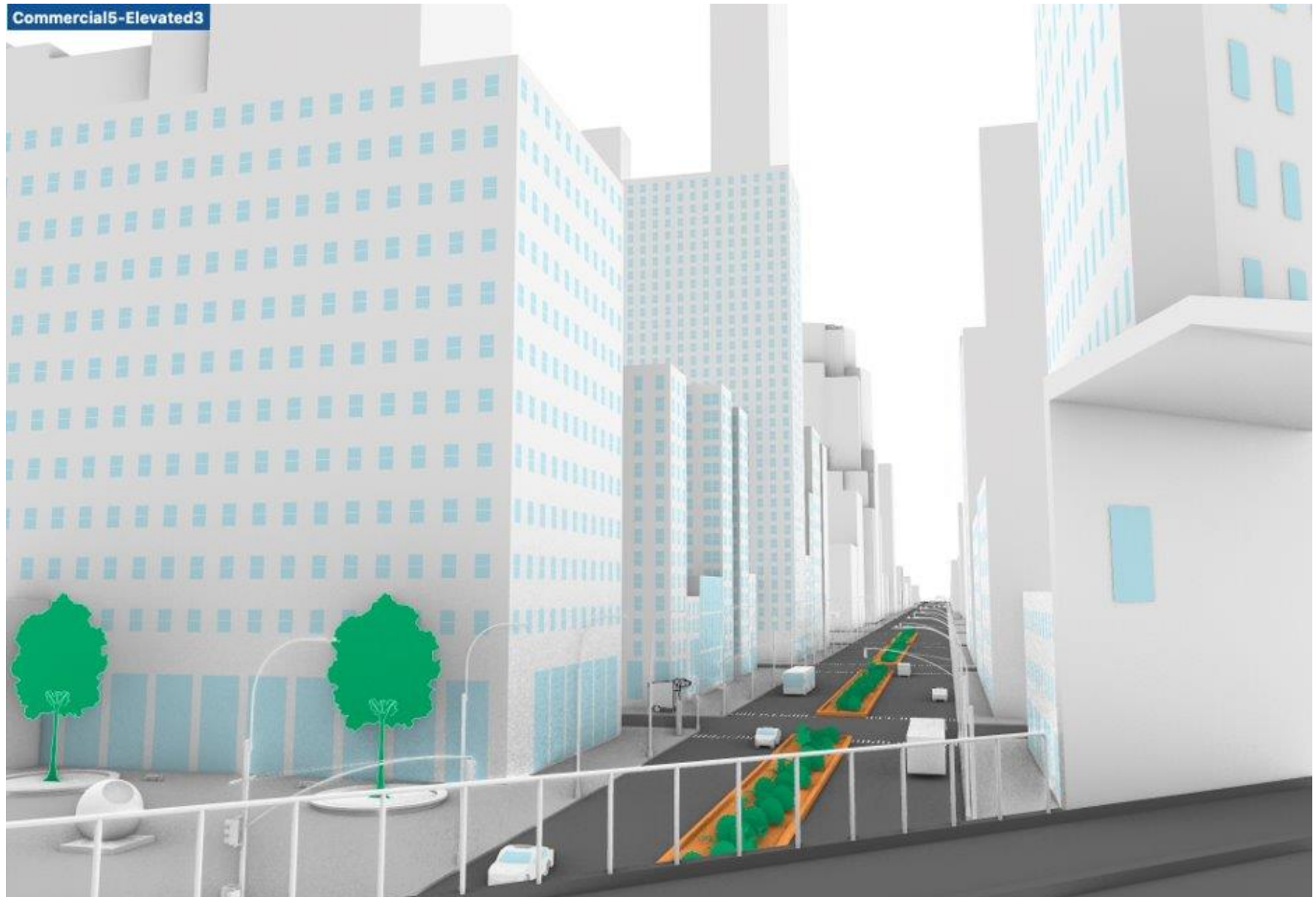
Streetscapes for Wellness: Crafting Components of City



Streetscapes for Wellness: Crafting Views - Residential



Streetscapes for Wellness: Crafting Views - Commercial



Streetscapes for Wellness: Crafting Views - Industrial



Streetscapes for Wellness: Crafting Views - Waterfront





Previous!

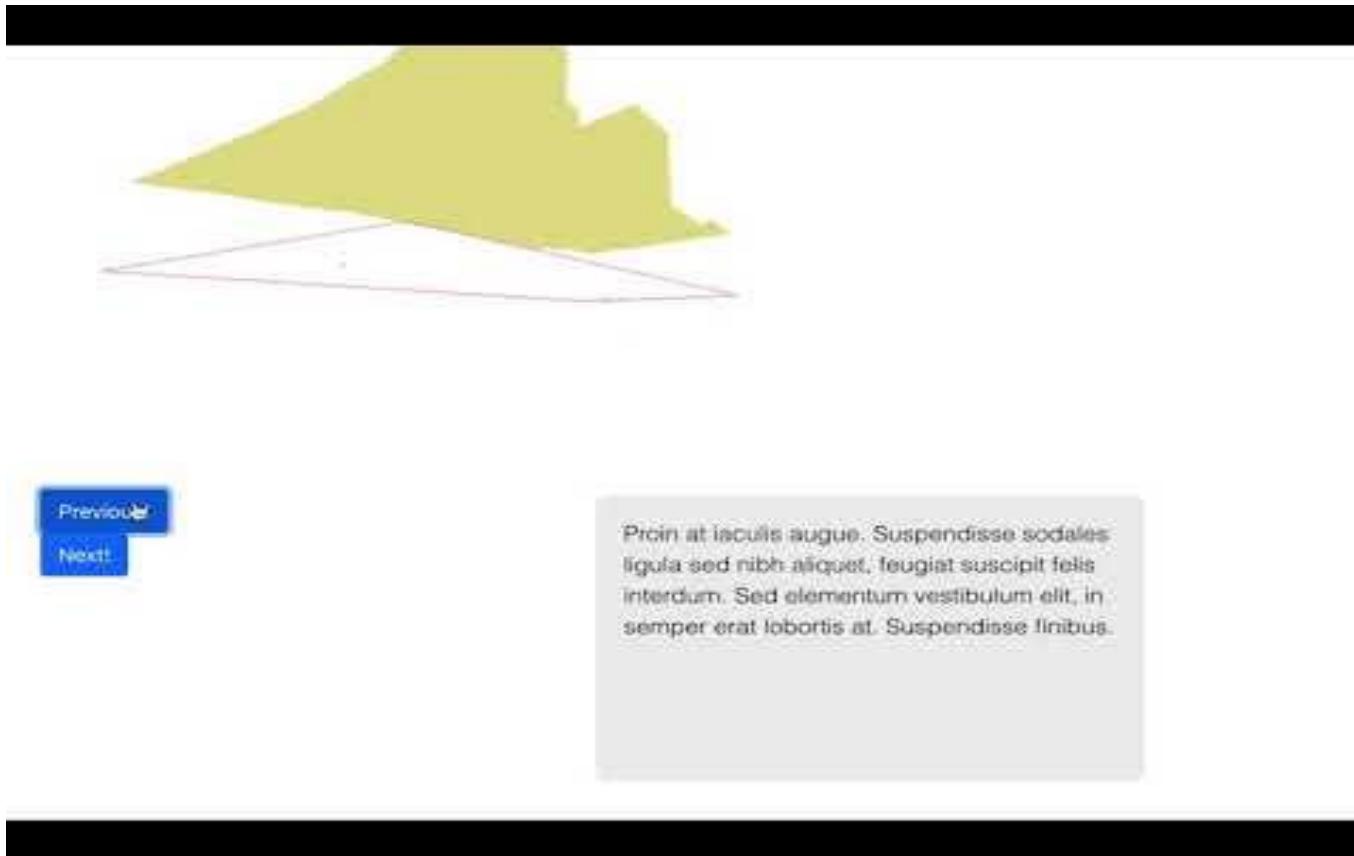
Next!

Lorem ipsum
adipiscing
lacinia laoreet
convallis
laoreet quis
eros.

Previous!

Next!

Proin at iaculis augue. Suspendisse sodales
ligula sed nibh aliquet, feugiat suscipit felis
interdum. Sed elementum vestibulum elit, in
semper erat lobortis at. Suspendisse finibus.

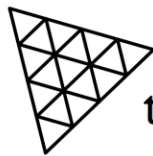


Streetscape for Wellness: Front-End Development

```
if ((!inReverse && posNumber > 0) || (inReverse && posNumber < camPositions.length - 1)) {  
  // console.log('animationTime! ' + animationTime);  
  if (!inReverse && posNumber > 0) {  
    // going forward  
    oldPositions = camPositions[posNumber - 1];  
    newPositions = camPositions[posNumber];  
  } else if (posNumber < camPositions.length - 1) {  
    oldPositions = camPositions[posNumber + 1];  
    newPositions = camPositions[posNumber];  
  } else {  
    oldPositions = { x: 0, y: 0, z: 0 };  
    newPositions = { x: 1, y: 1, z: 1 };  
  }  
  if (currentAnimProgress > 1) {  
    currentAnimProgress = 1;  
  }  
  const x = THREE.MathUtils.lerp(oldPositions.x, newPositions.x, currentAnimProgress);  
  const y = THREE.MathUtils.lerp(oldPositions.y, newPositions.y, currentAnimProgress);  
  const z = THREE.MathUtils.lerp(oldPositions.z, newPositions.z, currentAnimProgress);  
  // console.log('x: ' + x + ' y: ' + y + ' z: ' + z);  
}
```



React



three.js



Redux

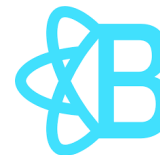


ESLint

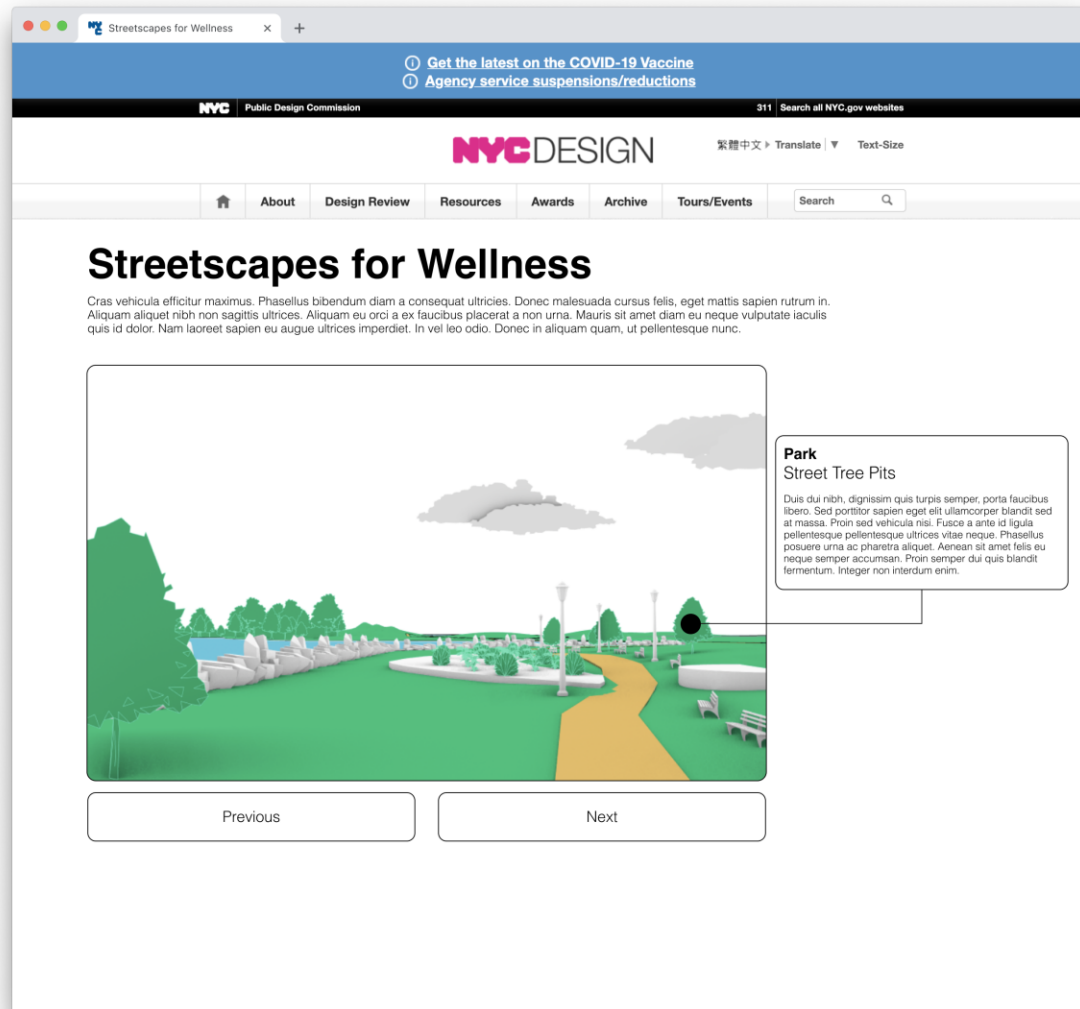


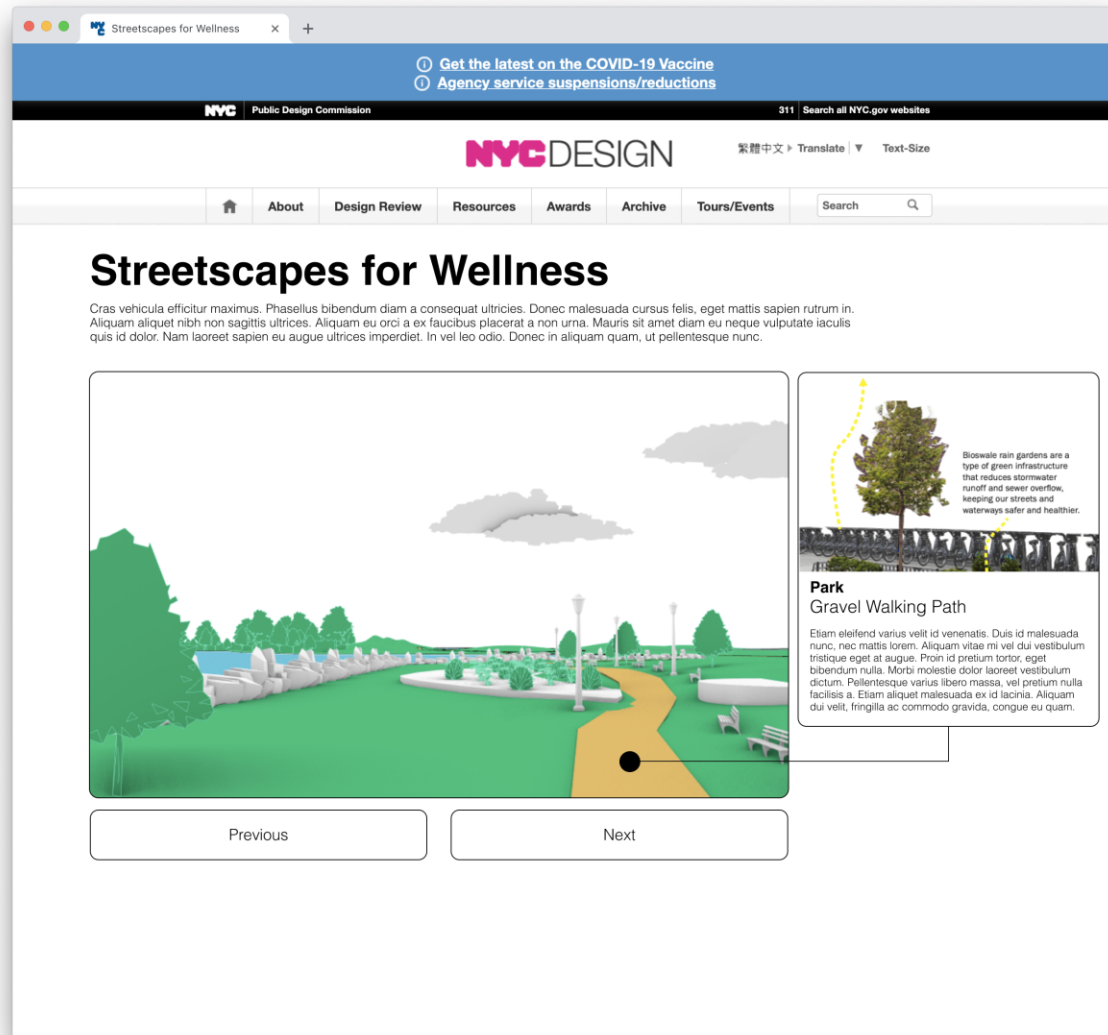
Bootstrap

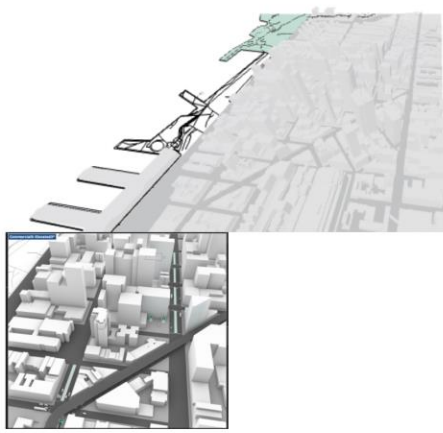
React Three Fiber



Prettier







MODE

flipped and negative LookAt

CURRENTLY DISPLAYED:

{ "x":666.25,"y":2370.21,"z":4105.55,"lookAt":{"x":-440.49,"y":-5970.2;

FROM RHINO:

{"viewName":"residential view","lensLength":44.73,"x":440.49,"y":5970.21,"z":4105.55,"lookAt":{"x":440.49,"y":5970.21,"z":4105.55}}

Previous!

Next!



MODE

flipped and negative LookAt

CURRENTLY DISPLAYED:

{ "x":2893.02,"y":631.28,"z":7.58,"lookAt":{"x":-2892.82,"y":-691.15,"z":-8.68}}

FROM RHINO:

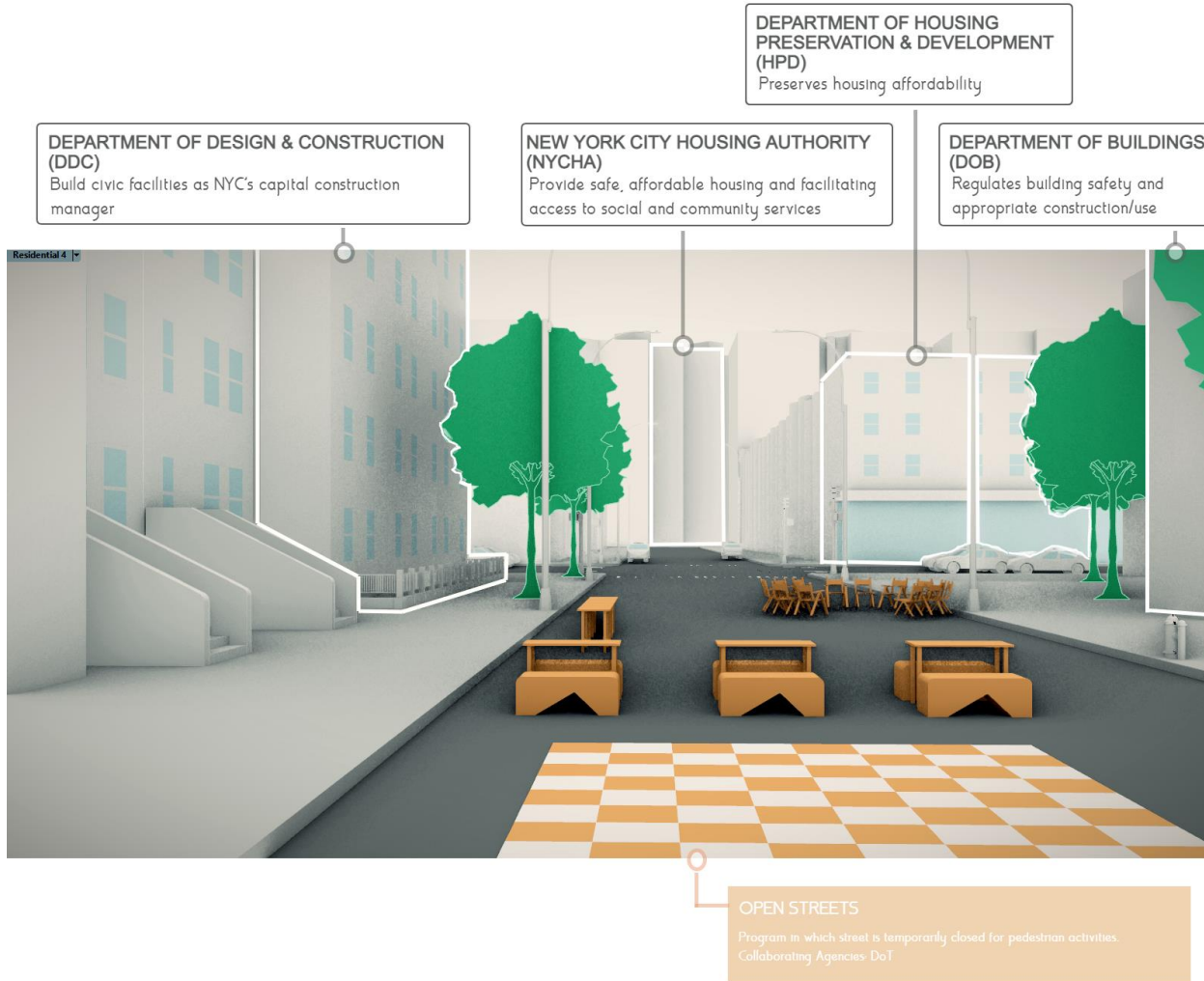
{"viewName":"park","lensLength":30,"x":2892.82,"y":691.15,"z":8.68,"lookAt":{"x":2893.02,"y":631.28,"z":7.58}}

Previous!

Next!

Proin at iaculis augue. Suspendisse sed nibh aliquet, feugiat suscipi interdum. Sed elementum vestibulum semper erat lobortis at. Suspendisse

Next Steps



- ❖ Update model views from feedback
- ❖ Turning views into illustrations and annotating
- ❖ Turning views and city model into interactive piece