Understanding The Challenges Of Navigating Construction in NYC

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Research Goal

Understand how people's day-to-day lives are impacted by construction and how it varies based on the nature and frequency of the interruptions.

Gather insights into the pain points and challenges faced by New Yorkers and identify possible solutions to help inform future design decisions.

Research Questions

O1. How do people interact with and navigate around construction sites?

How does the construction and its surrounding environment influence people's behaviours and emotions?

What are people's primary needs while navigating around and interacting with construction sites in NYC?

Research Approach



Field Research and Site Observations

Observing New Yorkers "in the wild," noting first-hand impressions of their interactions.



Diary Study

See how someone's day is affected on a day-to-day basis and understand how they feel.



Co-Design and Participatory Workshop

Facilitate empathy and a collaborative understanding of the target audiences' needs.

Accessibility

There is a need for universally accessible signage to accommodate a wider and diverse audience.

The aim should be to design for all to ensure we can cater to diverse audiences and their unique challenges.

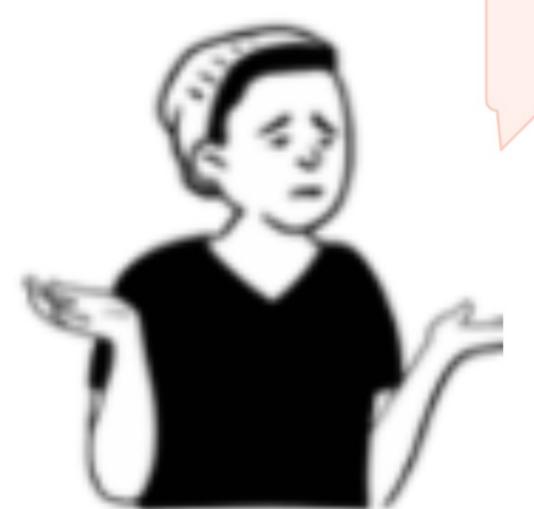
Accessibility ____

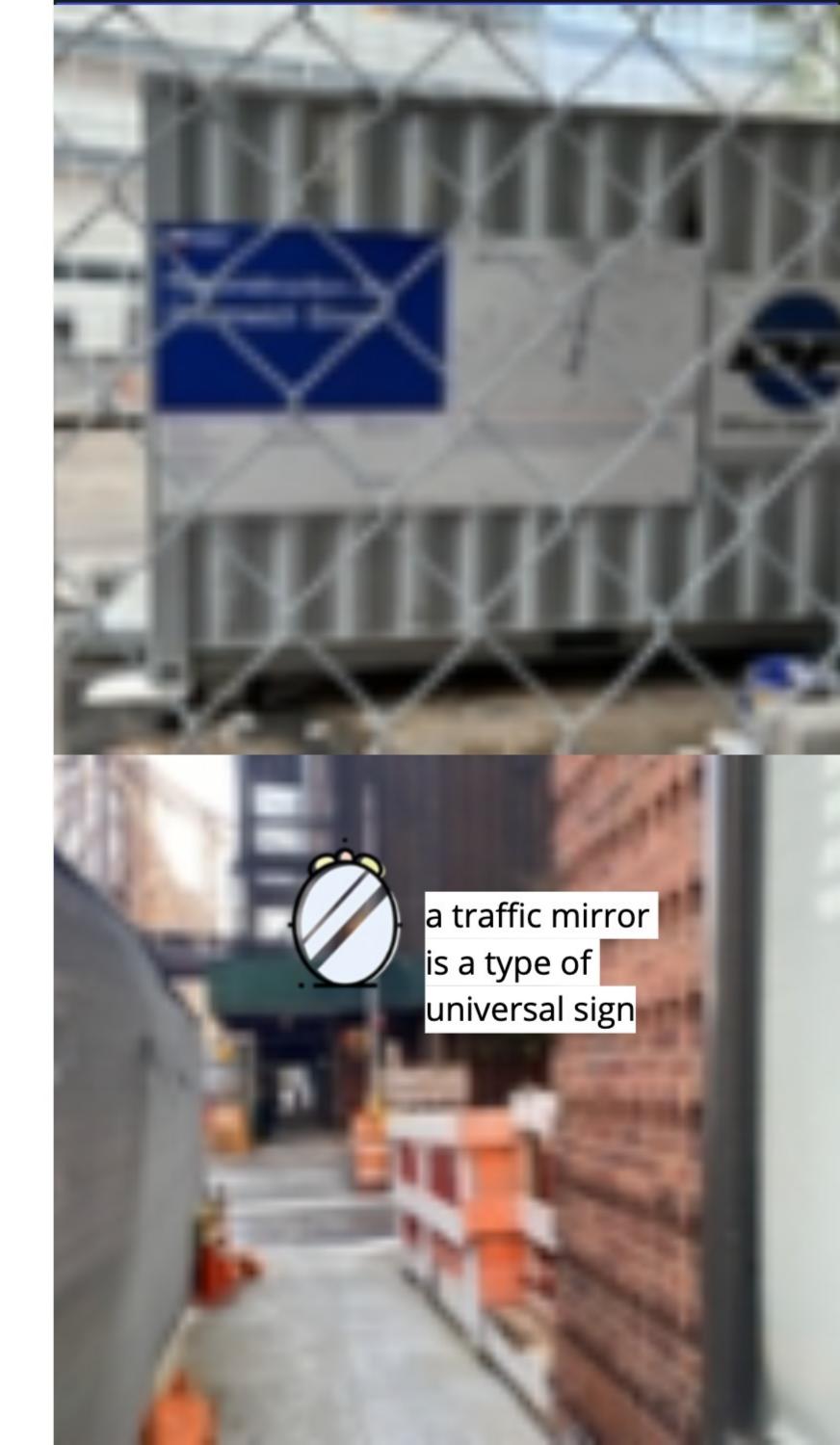
Universally Accessible Signage: The absence of effective signage systems, lack of clear directions, and inconvenient and possibly dangerous alternate routes could lead to serious repercussions and make people feel unsafe.

Furthermore, **cultural** and **educational** differences must be considered to ensure the information is accessible to a diverse audience.

"Felt concerned for other people walking past traffic cones"

"Due to the lack of a clear indication, I walked on the cyclist road"





Accessibility ____

Aim to Design for All: It's imperative to cater to the diverse needs and challenges of people navigating construction sites around the city.

Acknowledging that people have **unique needs**, **strengths**, **and limitations** is the first step towards accounting for accessibility and inclusion.



https://cardsforhumanity.idean.com/

Ease of access to information

New Yorkers want consistent updates and easy-to-access communication regarding street construction.

New Yorkers wish to visualize the completion of the construction project and its resulting impact.

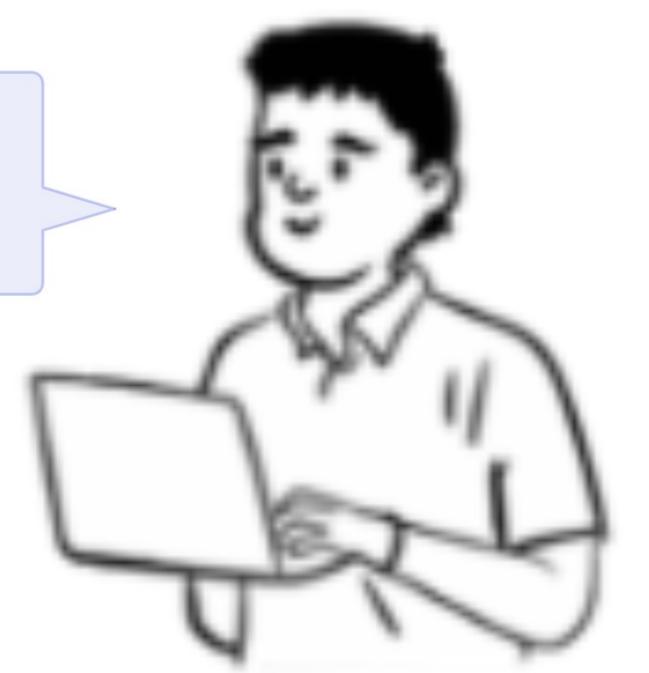
Ease of access to information

Consistent and Accessible Communication: The lack of progress and updates on construction sites causes people to feel annoyed and results in a loss of faith in city endeavours.

New Yorkers want to access information about the construction site through channels such as **websites**, **flyers**, **and social media** with multilanguage support.

> "They said it'll come off last year. But now we dont know when it will end"

"Tried to gather information about what was going on by asking the construction workers on site, but the workers said they didn't know much about it either."



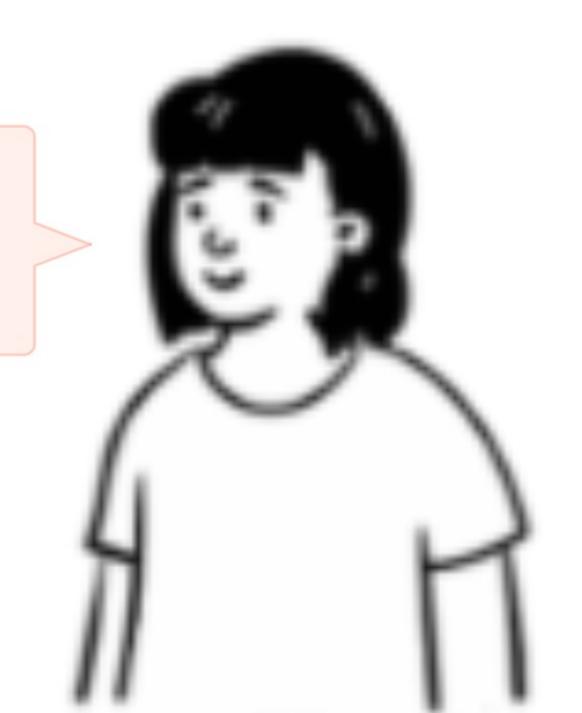
Ease of access to information

Visualize the Future: New Yorkers want to know what the construction would look like once completed, the duration of construction, why it's being done, which areas are affected, and when construction is going on.

Providing New Yorkers with **up-to-date** and **transparent** information could drastically increase their trust in construction sites and stakeholders involved.

"Seeing a rendering of how the completed project would look would be great!"

"I think there is a reason for [the construction]...I'd like to learn more about why, what's happening, and what the future of that site is like."



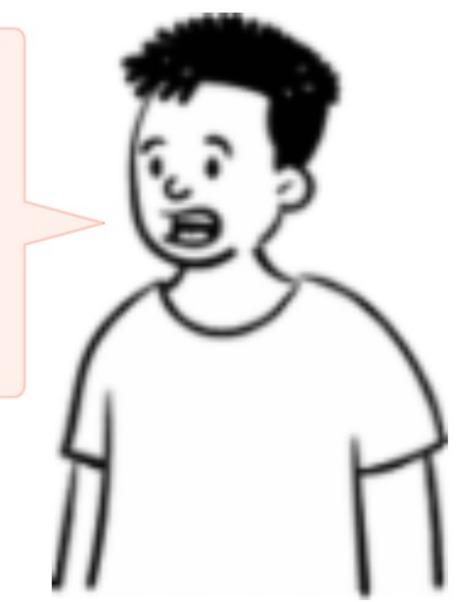
Offering additional support

Providing Care

People want to feel compensated for the inconveniences and challenges caused by construction.

Residents and other New Yorkers affected by construction would appreciate additional help and resources and will help them feel like their voices and concerns are heard.

"It's an inconvenience because people find it hard to locate the centre and drive past the entrance most times as they fail to notice the driveway, and have to take a circle around the block and come back."



Recommendation

Leverage existing apps or other digital platforms to provide easily access to updated information.

Ensure all resources and artifacts follow universal design principles.

Establish a communication platform to make people feel acknowledged and understood.

Leverage existing apps or other digital platforms to provide updated information.

New Yorkers prefer information that is concise, updated, comes from a trusted source and from a mode of communication that they already use or check often, such as **social media**, **a website**, **or a flyer**.

Key Considerations:



Who is updating the information?



Can the information be personalized to people's needs?



Can it be easily integrated into existing digital infrastructure?

Ensure all resources and artifacts follow universal design principles.

Ensuring that all the resources and opportunities provided are accessible by a diverse audience is key to ensuring that navigating and interacting with construction remains a pleasant experience for everyone.





The 7 Principles

The 7 Principles of Universal Design were developed in 1997 by a working group of architects, product designers, engineers and environmental design researchers, led by the late Ronald Mace in the North Carolina State University. The purpose of the Princi...

Some possibilities include:



Having a tool to translate fundamental information into various languages and accents.



Incorporating features to accommodate people with diverse limitations.



Ensuring signages are placed at easily accessible areas and match peoples mental models.

Establish a communication platform to make people feel acknowledged.

Residents, commuters, pedestrians and visitors should all have the opportunity to raise concerns regarding their interactions with construction around the city.

To make people feel acknowledged and understood it would be effective to provide New Yorkers with a **digital tool where people can:**



Raise concerns and clarify queries



Provide suggestions and solutions



Request additional help and assistance

Conclusion and Next Steps

Providing up-to-date information about construction, designing with accessibility practices in mind, and facilitating open communications will improve New Yorkers' experiences with construction sites.

Continued research should be conducted regularly to stay informed about New Yorkers need, and to inform future decisions in terms of construction and/or communication design.

Our Team + Appendix

Please feel free to contact us at the following email addresses if you have any questions or comments:

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Observational Fieldwork

Diary Study Data:

Participant 1

Participant 2

Participant 3

Participant 4

Diary Study Template

Diary Study Research Plan

Accessibility Co-Design Workshop