

REDESIGNING BOSTON'S GREEN NEW DEAL DASHBOARD

The City of Boston

Summer 2023



Mayor Michelle Wu



Innovation & Technology

coding it forward >

THE TEAM



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Agenda

- 1. Project Overview**
- 2. Research Methods + Insights**
- 3. Ideation + Prototyping Process**
- 4. Future Work**
- 5. Q&A**

Goal

*To improve the experience,
accessibility, and design of the
Green New Deal Dashboard*





CITY of BOSTON | Mayor Michelle Wu

INFORMATION AND SERVICES | PUBLIC NOTICES | FEEDBACK | TRANSLATE | 

GREEN NEW DEAL dashboard

HOME | DEPARTMENTS | MAYOR'S OFFICE | GREEN NEW DEAL DASHBOARD (BETA) | Last updated: 7/10/23

GREEN NEW DEAL DASHBOARD (BETA)

Learn more about Boston's Green New Deal key priorities and metrics.

Boston's Green New Deal (GND) is a vision for tackling the **climate crisis in Boston** – with policies that address **economic, social, and racial inequities**, while advancing health, livability, and justice throughout our neighborhoods for all Boston residents.

This GND Dashboard serves as a resource to track progress towards advancing Boston as the

PROVIDE FEEDBACK

This dashboard is in its beta version. It will continue to evolve as more data becomes available. We want your feedback – please tell us what other data you want to see.

FEEDBACK FORM

If you have additional feedback, have questions about the Green New Deal, or notice an error on the GND Dashboard, please email us at greennewdeal@boston.gov

Version 1 (Soft Launch)

....The Big Reveal!



The screenshot shows the official website of the City of Boston. At the top, there's a red navigation bar with a "MENU" icon, the text "CITY of BOSTON" and "Major Michelle Wu", and links for "INFORMATION AND SERVICES", "PUBLIC NOTICES", "FEEDBACK", and "TRANSLATE". A search icon is also present. Below the red bar is a dark blue header with a circular seal of the City of Boston and menu items: "WATCH A VIDEO", "PRIORITY AREAS", "KEY", "GND MAP", "GET INVOLVED", and "MORE INFO". A large banner image of a park with autumn foliage spans across the top. On the left side of the main content area, there's a breadcrumb trail "HOME > BOSTON'S GREEN NEW DEAL" and a status message "Not published yet!". The main title "BOSTON'S GREEN NEW DEAL" is prominently displayed in large, bold, black capital letters. Below it, a subtitle reads "Learn more about Boston's Green New Deal key priorities and metrics." A decorative wavy line follows. At the bottom, a section titled "WHAT IS THE GREEN NEW DEAL?" is underlined in black.

HOME > BOSTON'S GREEN NEW DEAL

Not published yet!

BOSTON'S GREEN NEW DEAL

Learn more about Boston's Green New Deal key priorities and metrics.

WHAT IS THE GREEN NEW DEAL?

USER RESEARCH

Questions, Methods, & Insights

RESEARCH QUESTIONS

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*Who is engaged with environmental justice in Boston and **what information do they need?***

*What **story** do organizations and residents understand from the initial website?*

*How can the site be **organized to boost understanding of and engagement** with GND initiatives?*

RESEARCH METHODS

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Ready to look at the website?
Let's switch screenshare...

boston.gov/gnd-dashboard

- **8 Usability Interviews**

Have 5 minutes
to help Boston?

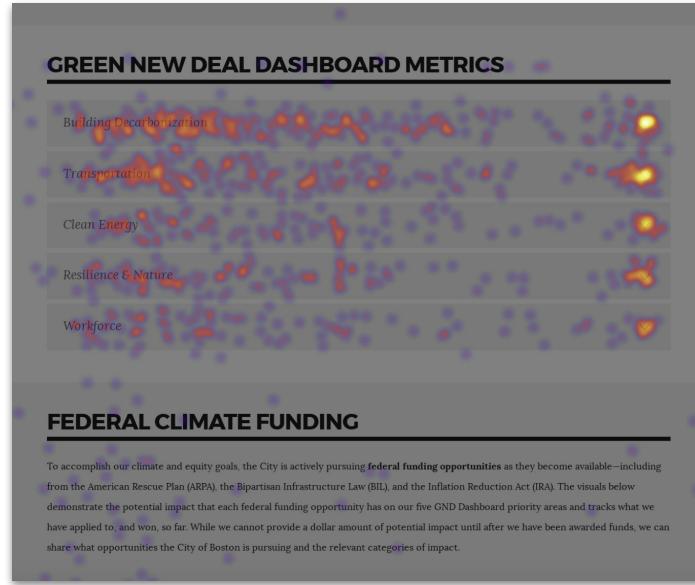
GIVE FEEDBACK ON A
BOSTON.GOV WEBSITE

CITY of BOSTON

- **9 Resident Interviews**

RESEARCH METHODS

The screenshot shows the homepage of the NYC Climate Dashboard. At the top, there's a navigation bar with links for 'Español', 'Select Language', 'Join Mailing List', and social media icons. Below the navigation is the logo for 'NEW YORK CITY COMPTROLLER BRAD LANDER' with a background image of city buildings. The main title 'NYC Climate Dashboard' is centered above a horizontal menu bar. The menu bar includes 'Overview' (which is underlined), 'Energy', 'Emissions', 'Climate Finance', 'Environmental Quality', and 'Resiliency'. Below the menu is a section titled 'About the Dashboard' which contains text about the climate crisis and the City's commitment to reducing greenhouse gas emissions by 80% by 2050. A circular graphic on the right side of this section features a globe icon and the text 'The City of New York has committed to reducing greenhouse gas emissions 80% BY 2050'. At the bottom of the page, a footer notes that the dashboard tracks progress towards meeting these goals.



- Secondary Research
- Web Analytics + Accessibility Testing

TESTS AND TEMPLATES



WEEK 1: JULY 17 - 21



WEEK 2: JULY 24 - 28



WEEK 3: JULY 31 - AUG 3



SO MUCH DATA!

DASHBOARD FEEDBACK FORM



INTERCEPT INTERVIEWS



CODMAN SQUARE EVENT



SCREENREADER TESTING TAKEAWAYS



INFORMAL FEEDBACK (slack/email/etc)



WEB ANALYTICS (SITEIMPROVE & GA)



COMPARATIVE ANALYSIS / dash best practices



BERDO



DEMOGRAPHIC DATA FROM INTERVIEWS

WHAT IS WORKING WELL

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1

User recognized the **effort and transparency**

2

User clearly found and understood the **priority areas**

3

Leaders see the dashboard as an **opportunity to plug-in**

OPPORTUNITIES FOR VERSION 2

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1

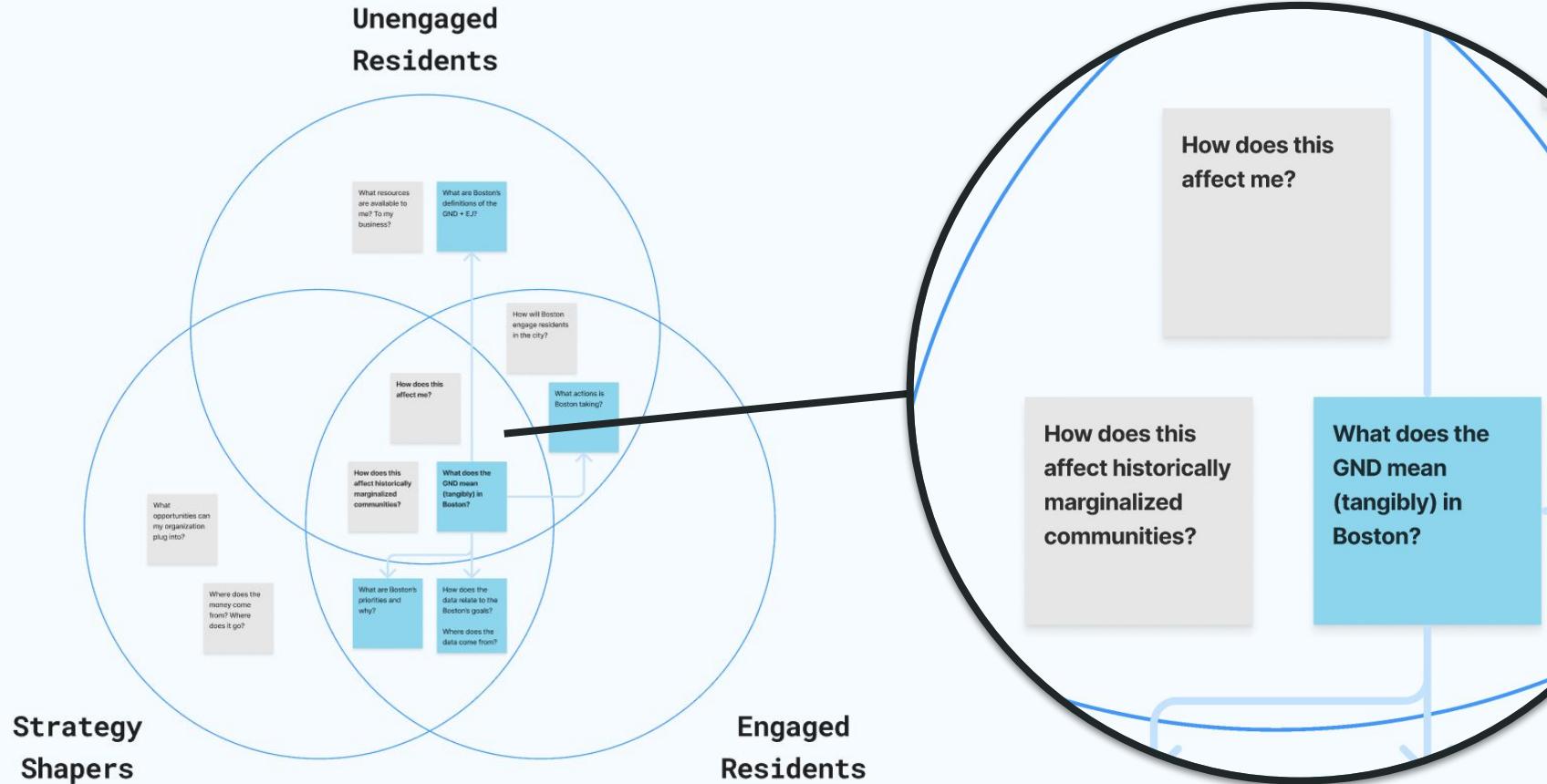
People new to the GND **struggle to conceptualize it**

2

People want to see their own lives and lived experiences in the data, and it **doesn't feel tangible enough yet**.

3

People recognize that there are **many layers/levels to understanding** the GND.



Insight 1:

Conceptualizing the GND



“I’ve heard of the AOC one. Sounds like a great plan but people don’t want it to go through.”

(Resident Interview Participant)

MAKING THE GND TANGIBLE

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PRIORITY AREAS

*Creating
storytelling devices*

MAKING THE GND TANGIBLE



PRIORITY AREAS

Building Decarbonization

Transportation

Clean Energy

The City is focused on **decarbonizing and electrifying new and existing buildings** to drastically reduce carbon emissions and promote healthy home and work environments.

We're committed to ensuring all residents have **easy and affordable access to an efficient, carbon-free transportation network**.

We must **purchase and generate renewable energy** so we can power our city on carbon-free electricity as soon as possible.

[LEARN MORE](#)

[LEARN MORE](#)

[LEARN MORE](#)

*Increasing
use of visuals*

Insight 2:

Seeing Ourselves in the Data



*For me, what's happening in my area?
What's accessible to me? What can I as a
person do? I want to see my community
changing.*

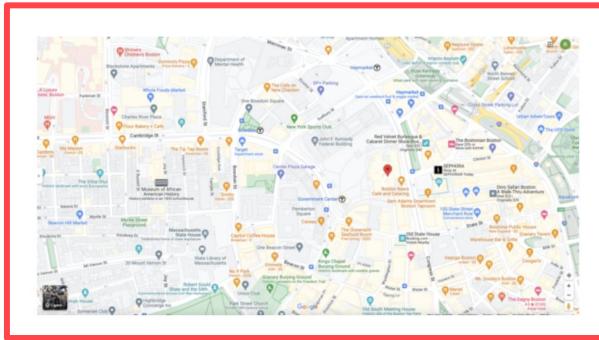
(Resident Interview Participant)

EMPHASIZING PLACE

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FIND A GREEN NEW DEAL PROJECT NEAR YOU



*Connecting GND
actions to daily life*

INCREASING INTERACTION



The screenshot shows a dark-themed website section. At the top, there's a navigation bar with categories like FUNDING, TRANSPORTATION, CLEAN ENERGY, RESILIENCE AND NATURE, and WORKFORCE. Below this, a large heading 'HOW YOU CAN HELP' is centered, with a red rectangular box highlighting the entire title. To the right of the title is a red arrow pointing towards the text 'Making calls to action more salient'. Below the title are four call-to-action cards, each with a small red box around its title and a red arrow pointing to the right. The first card says 'Want to contribute to this statistic and learn more?' and links to 'EXPLORE BOSTON'S RETROFIT RESOURCE HUB'. The second card says 'JOIN MASS SAVE' and links to 'Explore how you can take advantage of Mass Save incentives and programs'. The third card says 'READ ABOUT GND IN ACTION' and links to 'Mayor Wu signs city ordinance for historic green building code for new construction to significantly reduce carbon emissions...'. At the bottom of the screenshot, there's a section titled 'MORE INFORMATION' with a 'Additional Metrics' link and a 'Explore more data' button.

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HOW YOU CAN HELP

Want to contribute to this statistic and learn more?

EXPLORE BOSTON'S RETROFIT RESOURCE HUB

Review Boston's Retrofit Resource Hub to find out more about technical/financial resources for owners, tenants, and...

JOIN MASS SAVE

Explore how you can take advantage of Mass Save incentives and programs

READ ABOUT GND IN ACTION

Mayor Wu signs city ordinance for historic green building code for new construction to significantly reduce carbon emissions...

Making calls to action more salient

MORE INFORMATION

Additional Metrics
Explore more data

Insight 3:

Sharing Without Overwhelming



“I know enough to know that there's a lot I don't know.”

(Usability Interview Participant)

NEW NAVIGATION

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HOME > BOSTON'S GREEN NEW DEAL

Last updated: 8/18/23

BOSTON'S GREEN NEW DEAL

Learn more about Boston's Green New Deal key priorities and metrics.

[WATCH A VIDEO](#) [PRIORITY AREAS](#) [KEY METRICS](#) [GND MAP](#) [GET INVOLVED](#) [MORE INFO](#)

WHAT IS THE GREEN NEW DEAL?

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This GND Dashboard serves as a resource to track progress towards advancing Boston as the **greenest, most family-friendly city in the country**.

[JUMP TO THE DATA](#)

GREEN NEW DEAL DATA DASHBOARD

Dive into the metrics on each Green New Deal priority area.

[FUNDING](#) [BUILDING DECARBONIZATION](#) [TRANSPORTATION](#)
[CLEAN ENERGY](#) [RESILIENCE AND NATURE](#) [WORKFORCE](#)

WHAT'S THE GREEN NEW DEAL?

Curious to learn more about what Boston's Green New Deal actually is? Click below to learn about how the Green New Deal plays a role in your community.

[LEARN ABOUT GND](#)

MAKE THIS WEBSITE BETTER

This dashboard is always improving. It will continue to evolve as more data becomes available. We want your feedback – please tell us how you experience it.

[FEEDBACK FORM](#)

FUNDING

To accomplish our climate and equity goals, the City is actively pursuing federal funding opportunities as they become available—including

Page 1

Page 2

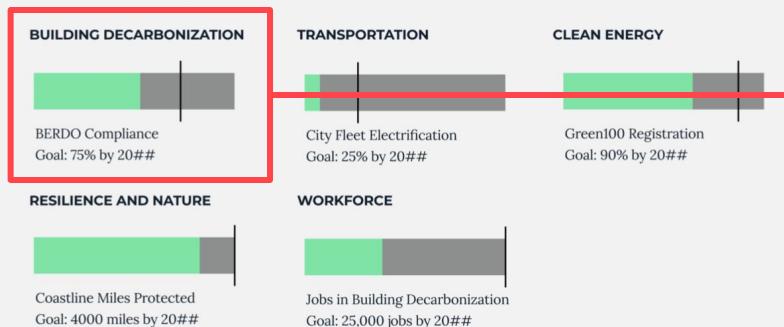
CREATING “BITES”



WHAT ARE WE MEASURING?

How to use this visual: Hover over the graph to reveal more details. If you're on a mobile device, hold your finger on the graph. Press the icon in the bottom bar of the graph that looks like an arrow coming out of a box to share the graph on social media or copy its URL. Press the icon in the bottom bar that looks like a double-pointed arrow to view the graph full-screen.

KEY METRICS



Creating quick data snapshots on the main page

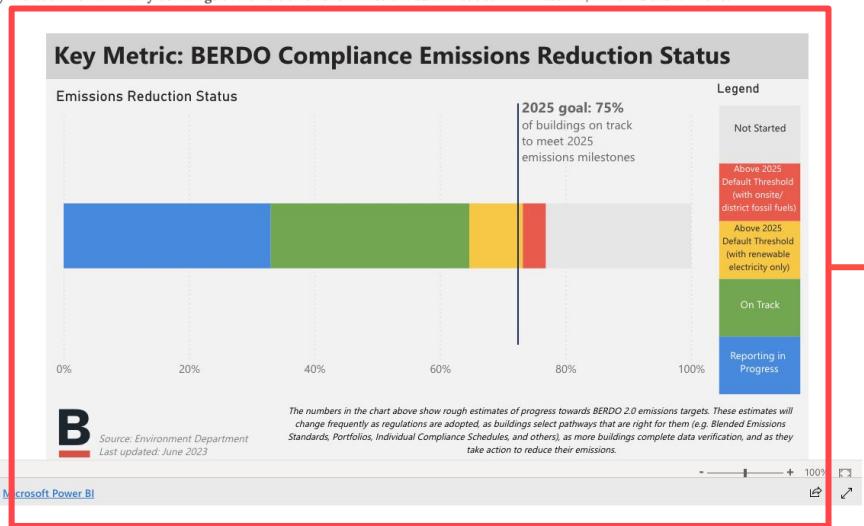
CREATING “BITES”



BUILDING DECARBONIZATION

Boston's Building Emissions Reduction and Disclosure Ordinance (BERDO) sets requirements for large buildings to reduce their greenhouse gas emissions, with all buildings achieving net-zero emissions by 2050. This includes commercial, industrial, and large multifamily residential buildings.

A key indicator is how many buildings are on track to their first emission reduction milestone, which is set for 2025.



... and for each priority area

Accessibility Design Interventions

READABLE TEXT



Renew Boston Trust is a City initiative to **make our municipal buildings more energy efficient and resilient**. The program focuses on energy conservation measures, such as heat pump and chiller installations, that guarantee annual energy savings and emissions reductions. This dashboard reflects Phase 1 and 2 progress - Phase 3 data will be added when it becomes available.

In the following visual, you can filter the map using the Neighborhood select option on the left. Click on the box to select and filter to see Renew Boston Trust projects in your neighborhood.



Making text accessible to screen readers and Google Translate

IMPROVED NAVIGATION



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BUILDING DECARBONIZATION

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Key Metric: BERDO Compliance Emissions Reduction Status

The numbers in the chart above show rough estimates of progress towards BERDO 2.0 emissions targets. These estimates will change frequently as regulations are adopted, as buildings select pathways that are right for them (e.g. Blended).

Source: Environment

Microsoft Power BI

HOW YOU CAN HELP

Want to contribute to this statistic and learn more?

EXPLORE BOSTON'S RETROFIT RESOURCE HUB
Review Boston's Retrofit Resource Hub to find out more about technical/financial resources for owners, tenants, and...

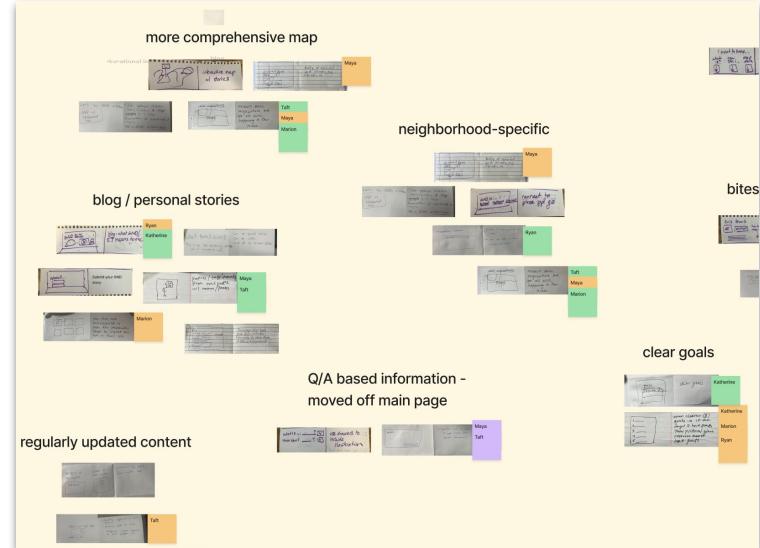
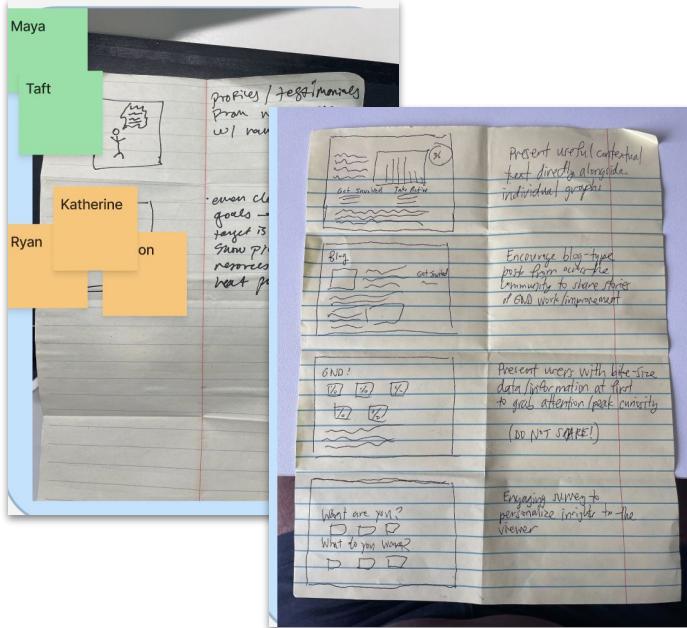
JOIN MASS SAVE
Explore how you can take advantage of Mass Save incentives and programs

READ ABOUT GND IN ACTION
Mayor Wu signs city ordinance for historic green building code for new construction to significantly reduce carbon emissions...

Reducing the number of clicks to access data

*These ideas and design
interventions didn't arrive
in a day...*

WORKING ITERATIVELY

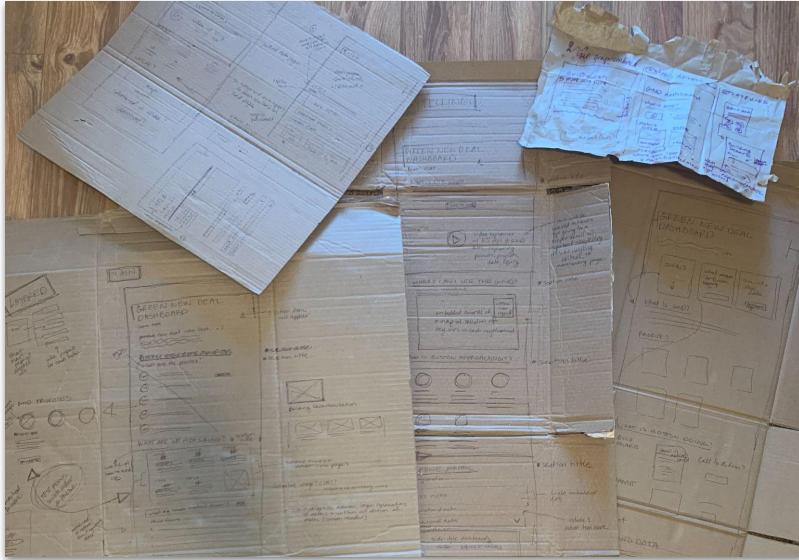


SKETCH IDEATION

→ KEY CONCEPTS

WORKING ITERATIVELY

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WIREFRAMES



LAYER CONCEPT - MAIN

CITY OF BOSTON | Mayor Michelle Wu | INFORMATION AND SERVICES | PUBLIC NOTICES | FEEDBACK | TRANSLATE

LAYER CONCEPT MAIN

HOME | GREEN PROJECTS | GREEN NEW DEAL DASHBOARD BETA | Last updated: 7/18/23

GREEN NEW DEAL DASHBOARD (BETA)

This GND Dashboard serves as a resource to track progress towards advancing Boston as the greenest, most family-friendly city in the country.

GND INTRO | KEY METRICS | VISIT THE DASHBOARDS | RESOURCES | FUNDING

WHAT IS THE GREEN NEW DEAL?

Boston's Green New Deal (GND) is a vision for tackling the climate crisis in Boston — with policies that address economic, social, and racial inequities, while advancing health, livability, and justice throughout our neighborhoods for all Boston residents.

WHAT ARE BOSTON'S GND PRIORITIES?

- BUILDING DECARBONIZATION**: The City is focused on decarbonizing and electrifying new and existing buildings to eliminate carbon emissions and promote healthy home and work environments.
- TRANSPORTATION**: We're committed to ensuring all residents have easy and affordable access to an efficient, carbon-free transportation network.
- CLEAN ENERGY**: We must purchase and generate renewable energy so we can power our city on carbon-free electricity as soon as possible.

FIGMA PROTOTYPES

THREE PROTOTYPES

STORYTELLING LAYERED USER JOURNEY

STORY CONCEPT - MAIN

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[OUR INTRO](#) [BUILDING DECARBONIZATION](#) [TRANSITION](#)
[CLEAN ENERGY](#) [NATURE & RESILIENCE](#) [WORKFORCE](#) [FUNDING](#)

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[JUMP TO THE DATA](#)

WHAT DOES THE GREEN NEW DEAL MEAN FOR BOSTON COMMUNITIES?

WHERE CAN I SEE THE GREEN NEW DEAL?

WHAT ARE BOSTON'S GND PRIORITIES?

PRIORITY AREA	DESCRIPTION
BUILDING DECARBONIZATION	The City is focused on decarbonizing and electrifying new and existing buildings to ensure they are energy efficient, promote healthy home and work environments.
TRANSPORTATION	We're committed to making all residents have easy and affordable access to active transportation options like walking, cycling, and public transit.
CLEAN ENERGY	You must purchase and generate renewable energy from the electricity or natural gas grid.
RESILIENCE AND NATURE	The City is focused on protecting and restoring our natural resources to ensure we have a healthy environment for our communities.
WORKFORCE	We're committed to creating all industries have fair and affordable access to training and education opportunities to provide healthy home and work environments.

[DASHBOARD](#) [DASHBOARD](#) [DASHBOARD](#)

WHAT IS BEING MEASURED?

Each priority area of the Boston Green New Deal is guided by a key metric:

Metric	Building Decarbonization	Transportation	Clean Energy
BUILDING DECARBONIZATION	BER-0 Compliance Goal: 75%	Green Spaces Goal: 75%	Latent Spaces Goal: 75%
RESILIENCE AND NATURE	Green Spaces Goal: 75%	Green Spaces Goal: 75%	Latent Spaces Goal: 75%
WORKFORCE	Green Spaces Goal: 75%	Green Spaces Goal: 75%	Latent Spaces Goal: 75%

LAYER CONCEPT - MAIN

GREEN NEW DEAL DASHBOARD (BETA)

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[OUR INTRO](#) [KEY METRICS](#) [VISIT THE DASHBOARDS](#) [RESOURCES](#) [FUNDING](#)

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JOURNEY CONCEPT - MAIN

GREEN NEW DEAL

This page serves as a resource to track progress towards advancing Boston as the greenest, most family-friendly city in the country.

[HOME](#) [PRIORITIES](#) [GREEN NEW DEAL IN ACTION](#) [VISIT THE DASHBOARD](#)

WHAT DO YOU WANT TO KNOW?

- I care about the Green New Deal in Boston.
- I want to know how the Green New Deal affects my community.
- I'm interested in the data and metrics of the Green New Deal.

WHAT IS THE GREEN NEW DEAL?

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[DASHBOARD](#) [DASHBOARD](#) [DASHBOARD](#)

WHAT IS BEING MEASURED?

The dashboard is in beta version. It is currently in order to demonstrate the metrics and data points that you can track. Please let us know what other data you would like to see.

If you have additional feedback, have questions about the Green New Deal, or would like to provide input on the Green New Deal, please email it to greennewdeal@boston.gov.

WHAT IS BOSTON DOING?

Category	Description
Building Decarbonization	Join Manscapes, an energy and cost saving program!

[SEE A GND PROJECT](#) [SIGN UP](#)

[LEARN MORE ABOUT MANSCAVES](#) [LEARN MORE ABOUT MANSCAVES](#) [LEARN MORE ABOUT MANSCAVES](#)

FUTURE WORK



FUTURE WORK AND IMPROVEMENTS

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1

Continue researching with users on clear language for the site (taglines, headers, etc)

2

Include more opportunities for organizations to get involved (funding, storytelling, etc)

3

Consider more storytelling initiatives that will make the GND tangible: a blog, tours, videos with organization leaders, etc



OUR GRATITUDE

We could not have done it without your support

MAYOR'S OFFICE

- Mayor Michelle Wu
- Tiffany Chu
- Oliver Sellers-Garcia
- Katherine Diaz
- Emma Tavolieri
- Jessicah Pierre
- Kat Eshel
- Christopher Osgood
- Mike Firestone
- Tali Robbins

CITY OF BOSTON

- Alison Brizius
- Trinh Nguyen
- Jascha Franklin-Hodge
- Katherine England

DoIT

- Santiago Garces
- Kerry Jordan
- Julia Gutierrez
- Stefanie Costa Leabo
- James Duffy
- Stephanie Cariello
- Micah Levine

CODING IT FORWARD

- Rachel Dodell
- Ariana Soto
- Yuyang Zhong

Thank you to all research participants throughout the process, including usability sessions, intercept interviews, and prototyping interviews.

Thank you!

We welcome your questions, comments, and feedback.