Healthy Materials Lab

YEAR TWO
2016-2017
REPORT
Acknowledgment

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The Healthy Materials Lab
Parsons School of Design
The New School
New York, NY

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Healthy Materials Lab is part of the Healthy Affordable Materials Project funded by a grant from The JPB Foundation
Healthy Materials Lab

The Healthy Materials Lab, housed at Parsons School of Design at The New School, is one of four partner organizations of the Healthy Affordable Materials Project. Funded by a grant from The JPB Foundation, the Healthy Affordable Materials Project seeks to improve the lives and health of residents living in affordable housing across the United States by reducing the use of toxics in the building product supply chain.

The Context of the Project

Low income families across the United States suffer disproportionately from exposures to toxic substances used in building products. These exposures result from chemicals that are released into the air and dust of homes and schools during routine occupancy and as part of maintenance and renovation projects. Low income communities are also impacted by greater exposure as a result of the geographical proximity of affordable housing to product manufacturing factories that emit toxic chemicals, dumps, incinerators, and recycling facilities that process discarded materials. Factory and construction workers are subject to the highest levels of toxic exposures, and children are particularly physiologically vulnerable and likely to be impacted by these toxics.

Many chemicals commonly used in building products also pose hazards to the natural environment. Because these highly toxic chemicals are long-lived and pervasive in the marketplace, they are difficult to control.

It is well established that toxic exposures can be lessened through the intentional reduction of toxic materials in building products. A deliberate campaign to change the chemical formulations of commonly used building products (e.g. paint, pressure-treated wood, and engineered wood), has led to the reduction of lead, arsenic, and formaldehyde use in the last twenty years. Today there are continuing efforts in reducing toxic exposure to widely recognized chemical hazards in building products through decreased percentages of VOCs, phthalates, and flame retardants. Despite these successes, there are still many toxics in the built environment that require attention. Further, successful toxic reduction has primarily occurred in high end products and often takes decades for this market impact to trickle down to more affordable products.

Affordable housing providers seeking to use less toxic building products face many obstacles. A fundamental obstacle is the lack of transparency of the chemical content of building products, making it difficult to make informed decisions about reducing potential toxic exposures. This lack of information is compounded by an array of “green certifications,” many of which rely upon incomplete and unverified information. Commercial developers are often able to navigate this web of certifications with support from additional sustainability staff or consultants; however, affordable housing project budgets are not able to support this extra support. Similarly, less toxic products are often introduced with a premium price which are beyond the budgets of affordable housing developments, including new and retrofit construction. As less toxic building products are introduced in the high-end residential and commercial building stream, older, less healthy building products are passed downstream to lower wealth communities.

This migration is an unintended consequence of green building standards and government incentives that encourage recycling and reuse of older products containing toxic chemicals. Recycling is also viewed as desirable for its financial or social benefits, but the passing on of hazards is not always a consideration.
These examples illustrate the complex problems presented to low wealth communities by the life cycle of exposures to toxic chemicals. They also demonstrate the need for both a comprehensive, integrated research program and the development of strategies to systematically reduce toxics in all building products as the most effective means of reducing these hazards in affordable housing communities. The Healthy Affordable Materials Project, a collaboration of the Healthy Building Network (HBN), the Healthy Materials Lab (HML), Health Product Declaration Collaborative (HPDC), and Green Science Policy Institute (GSPI), provides a systemic platform for change.

**Project Goal**

The best way to prevent exposures to toxics is the reduction or elimination of their use at the source. The Healthy Affordable Materials Project will reduce toxins for families living in low income and affordable housing by scaling the use of new transparency and disclosure tools such as the Health Product Declaration, making it easier for decision makers (designers, architects, developers) to avoid the most toxic chemicals present in the building materials commonly used in affordable housing. Increased transparency and disclosure will drive market change by incentivizing building product manufacturers to reduce the use of toxics in their products, as an alternative to disclosing negative information. This will result in an increased availability of healthier products to the affordable housing market. The project will advance the use of the Avoided Hazard Index (AHI), a new tool developed by HBN used to quantify the amount of toxic substances avoided by specifying and installing healthier alternatives. The project will target specific classes of chemicals of concerns that are used in building products despite a lack of proven health or safety benefits, such as flame retardants and antimicrobials.

**Parsons School of Design's Role**

Social justice is a core mission at Parsons School of Design, The New School. Parsons’ research labs adopt a theory of change that draws from a comprehensive, interdisciplinary approach and a range of expertise in strategic design, positioning the research within a social justice context. Working on a range of projects that address systematic change, Parsons brings an understanding of the intricacies of the global supply chain and the importance of communication design to drive change, a historic ability to develop and implement innovation in a range of business and management scenarios, and extensive expertise in the built environment. This project's goal of improving the lives of the most vulnerable communities through the transformation of building products provides an important opportunity to leverage our expertise and partnerships in support of this critical imperative.

The Healthy Material Lab (hereafter “HML”) was formed at Parsons at the launch of this grant, and is focused on four main research areas in support of the project for the Affordable Housing (hereafter “AH”) sector. HML is undertaking fundamental research into AH to record best practices in effect nationwide. To do so, HML is using a case study methodology to understand and document the better building products currently being specified. We are creating a new resource for transparency and awareness in the newly conceived Donghia healthier Materials Library at Parsons. The goal of the materials library is to create simple resources and tools to support healthier specification practices for the next generation of designers, and the AH sector at large. To increase awareness of the issues surrounding building product selection and drive change in product selection in the AH sector, HML is calling upon our communications expertise to translate complex concepts and data into accessible forms. Finally, we are working with a range of partners in the AH and health sectors to test product performance in real world conditions in order to demonstrate better building product selection and installation practices.

HML’s work on the activities and goals of the HAMP project is focused on scaling positive impact to replicate, adapt, broadly inform and transform current building practices in the AH sector within the three-year time frame of the grant. This year end report from HML is a summary of our activities over the last 12 months.
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PARTNERSHIPS
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PRESS
We are using a combination of approaches to inform our research methodology.

The Healthy Affordable Materials Project (HAMP) is a systems-based approach to reducing toxic chemical exposures from building materials and furnishings through the creation of actionable alternative design products. Our work integrates healthy building protocols, healthy products and green science with design research for affordable housing construction and retrofit in order to achieve scale and broad implementation across socio-economic communities within the US. Our broader goal is to align healthy materials with design research on innovative construction methodologies, durability, forward looking policy, behavior change, market forces, and aesthetics; and in so doing, influence the entire housing sector while reducing toxic chemical exposure throughout the supply chain.
HAMP Vision and Outcomes

Through the use of healthier building products and furnishings, the built environment contributes to the improved health of all people, especially lowest income communities.

Our goal is to increase the adoption of healthier building protocols and practices within the affordable housing sector, leading to measurable increase in building product specifications that reflect healthier choices. This change will result in reduced exposure throughout the system by decreasing or eliminating known harmful chemicals from building products widely used in the affordable housing industry.

LEGEND

ABOVE: HML's Theory of Change based on a modified version of the Ladder of Engagement framework.
WE ARE WORKING WITHIN THIS CONTEXT:

SUPPORTERS
Act on the issue (want to change the way they do things)

HOW ARE THEY BUILDING BETTER BUILDINGS?
- Collect specifications
- Work with Parsons Housing Lab on affordable public housing
- Develop procurement processes that include health criteria
- Advocate for integrated design teams that include health as part of the design process
- Advocate for resident participation throughout design process

GOAL: CREATE NEW PATHWAYS THAT ENABLE PEOPLE TO CHANGE PRACTICES

HOW DO WE CHANGE THE MARKET?
- Work with retailers
- Build consumer demand
- Clarify a compelling message for different audiences

WHAT ARE THE INGREDIENTS IN PRODUCTS?
- HPD and Translators

WHO ELSE IS BUILDING BETTER BUILDINGS AND INTERIORS?
- Case studies (HML)
- Demonstration projects: HML - BPE; HBN - Architect friends of HML

HOW DO WE DEVELOP NEW PRODUCTS?
- Identify gaps in market and opportunities to develop new products

FOCUSED WORK ON VULNERABLE POPULATIONS
- Early Childhood Development Spaces
- Affordable housing
- Tenants
- Community engagement

HOW DO WE EVALUATE INGREDIENTS FOR HEALTH CRITERIA?
- Translators needed to translate information into actionable results
- Phoebe, Quartz

COLLECT HEALTHIER BUILDING PRODUCTS
- The Healthy Materials Library
We identified a lack of awareness of the issue of toxics in the built environment as a fundamental barrier to change. This is a general problem and we launched our communications strategy to address this issue. Through the rollout of this strategy we discovered that the ladder of engagement could be adapted more generally to make systemic change.

In Year One we established a research foundation for our work. Through the documentation and evaluation of current best practices in the affordable housing sector – from funding and policy, to design and construction and finally in occupation, this work was and is documented in our five case studies. Current best practices in the material health field impact the work of “supporters” and advocates. To address other participants on the ladder and cultivate a greater understanding of the issues, we needed to expand our methodology to include:

1) Library and Resources
2) Education
3) Communication & Advocacy
COMMUNICATION STRATEGY

**Goal:** to convert participants from Observers to Advocates

- **Observer:** new participant who becomes aware of the issue
- **Supporter:** interested in the issue and eager to learn more
- **Advocate:** adopts healthier building protocols and implements in practice
The ladder of engagement is a framework that asks users to take steps towards achieving a larger goal. Developing the ladder of engagement helps us to predict how we can cultivate and move participants into the active role of being material health advocates and practitioners. To measure our impact and evaluate the outcomes of our ecosystem of initiatives, we are using three main metrics.

**Quantify the Number of Participants.**
We are measuring participation from affordable housing providers such as designers, architects, specifiers, developers, owners, and the community. We are also measuring our reach across faculty and students, governing entities in New York City, and our influence across manufacturers and trade associations.

**Quantify Financial Investment.** By measuring our impact and comparing the results of the Lab’s multi-pronged initiatives with our financial investments, we can better strategize around which approaches are most effective in moving participants up the ladder of engagement.

**Gauge Level of Engagement.** Through our use of analytics tools to measure website traffic, new social media follows, click through rates, resource downloads, page visitation statistics, content referrals and more, we aim to track the movement of participants from being unaware of issues to eventually becoming advocates.
LADDER OF ENGAGEMENT

Visualize building relationships with prospects and donors as a path, using every action that your audience takes as an opportunity to connect and move them up the ladder of engagement—from not knowing you to being your super fan.

<table>
<thead>
<tr>
<th>Unaware</th>
<th>Observers</th>
<th>Supporters</th>
<th>Advocates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who is this?</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Design professionals (architects, interior designers, specifiers, designers) who are interested in growing professionally and have an interest in healthy materials but have not heard of HML and its message</td>
<td>Design professionals who know who you are but have not yet taken action to learn more about or commit to using healthy materials</td>
<td>Design professionals who have taken action through HML to learn more about or pledge to use healthy materials</td>
<td>Design professionals who have actively committed to furthering the movement for healthy materials</td>
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<tr>
<td><strong>What are they looking for?</strong></td>
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<tr>
<td>Resources to make their job easier; help them meet budgets while producing healthier projects/work; help them stay informed of health side of sustainability; help them become more of a trusted expert</td>
<td>Content that meets their specific needs and will help them grow professionally</td>
<td>Resources to help them make better choices and make the case for healthy materials, opportunities to showcase their leadership/innovation, information on affordable materials (e.g., that will fit into their budgets)</td>
<td>Evidence that the movement for healthy materials is gaining traction, opportunities to actively encourage the growth of the movement</td>
</tr>
<tr>
<td><strong>What do you want them to think?</strong></td>
<td></td>
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<tr>
<td>About HML: Healthy Materials Lab is an accessible and thorough resource on healthy materials</td>
<td>About HML: Healthy Materials Lab will provide the specific resources I need in my professional niche</td>
<td>About HML: Healthy Materials Lab is a source of innovation that will drive a revolution in building materials</td>
<td>About HML: Healthy Materials Lab is an essential force in the growth of the movement for healthy materials</td>
</tr>
<tr>
<td>About healthy materials: The health value of building materials for interior environments deserves my attention</td>
<td>About healthy materials: Health is an important consideration when specifying building materials for interior environments</td>
<td>About healthy materials: Health is a critical issue that must inform the selection of building materials for interior environments</td>
<td>About healthy materials: We are just at the beginning of a movement to make the health effects of building materials a standard concern of all development</td>
</tr>
<tr>
<td><strong>What do we want them to do?</strong></td>
<td></td>
<td></td>
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<tr>
<td>Learn about Healthy Materials Lab and start paying attention to the movement for healthy building materials</td>
<td>Take action through HML to gain a higher level of understanding of healthy materials and the movement</td>
<td>Take action through Healthy Materials Lab as a go-to resource and an integral force in the movement for healthy materials</td>
<td>Engage with Healthy Materials Lab regularly and help to convert other design professionals to the movement for healthy materials</td>
</tr>
<tr>
<td>Learn about healthier building materials and what to consider in making healthier interior environments</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>What tactics can you use to get them there?</strong></td>
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<tr>
<td>Facebook advertising, media placements, placements in communications from The New School and it’s schools, institutes, centers, etc., trade and professional conference/event presence with presentation “in a box”, social shares, word of mouth, partnerships</td>
<td>Link to strategic landing page from social media content, increase prominance of data collection and resources on website, automated post-pledge/email signup welcome series, partnerships</td>
<td>Offer opportunities to showcase leadership (e.g., events, ability to contribute resources), email segmentation based on interest, produce articles or editorials for industry publications; offer a range of toolkits, offer coursework/certificate, always post new resources</td>
<td>Provide regular opportunities to contribute in some way, make a point to always post new resources and information as they appear (i.e., avoid lags between when resources appear and when HML lists them)</td>
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<tr>
<td><strong>How will you measure success?</strong></td>
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<tr>
<td>Increased website traffic, new social media followers, Facebook ad clickthroughs, media and New School placements (2 and reach), events (7 and reach)</td>
<td>Resources downloaded, resource page visitors, increased time on site, increased repeat visitors, eLearning and event registrations, pledges, email sign up, social media follows</td>
<td>Submission or referral of content for the resource library, third party articles and events that cite HML, social shares</td>
<td>Renewed partnerships, demonstration projects with partners in the field</td>
</tr>
</tbody>
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smart communications for nonprofits

Ladder of Engagement matrix: Big Duck
HEALTHY AFFORDABLE MATERIALS PROJECT WEBSITE

Through the use of healthier products and furnishings, the built environment contributes to the improved health of all people, especially lowest income communities. This initiative summarizes and links partners and Advisory Committee members in one online platform.

STRATEGIC GOALS

Develop New Resources

Develop new or enhance existing science-based technical/expert tools and resources that assess and measure chemical hazards, exposures, and/or their associated health endpoints.

Increase Materials Transparency

Increase Materials Transparency and the engagement of users, manufacturers and ecosystem to create a thriving Community of Disclosure Practice. Make it easier – and affordable – to identify, prioritize, and act upon chemical hazards based upon data shared by growing adoption of the HPD Open Standard.

Facilitate Healthier Building Practices

Build capacity of Affordable Housing Practitioners to make consistent informed decisions related to healthier materials and drive scaled change in the materials market: create relevant educational resources and simple tools that facilitate and motivate engagement of affordable housing communities and networks in materials transformation.

Accelerate Transformation to Healthier Products in Affordable Housing

Accelerate the transformation to healthier baseline products used in affordable housing by concentrating efforts on products found in the dwelling unit, with flooring being the first of a number of potential categories.

HAMP PARTNERS

Healthy Materials Lab

The New School

PARSONS

hbn

HEALTHY BUILDING NETWORK

GREEN SCIENCE POLICY INSTITUTE

hpdc
The theory of change described in the original grant application relies upon the adoption of full transparency and the comprehensive and complete disclosure of building product contents in order to drive behavior change. It also depends on access to educational programs that share new knowledge to accurately document the contents of typical building products. A fully informed decision-maker will select alternatives to toxic materials when the information about product toxic contents is disclosed, when feasible alternative choices are presented, and when the information is reliable and accessible. How do decision makers access accurate information?

HML is using our broad and effective design expertise to demonstrate to key audiences how a reduction in toxic materials in building materials will improve the health of affordable housing residents, communities, and individuals who come into contact with materials at all stages of a product’s life cycle. We translate information into effectively designed and executed communications materials to empower decision makers to make informed choices. We are also developing new healthier product specification tools to support more accurate specification, and are providing healthier product samples to aid decision makers in selecting healthier affordable products.
1. THE DONGHIA healthier PHYSICAL MATERIALS LIBRARY

2. HEALTHY MATERIALS LAB WEBSITE

3. HEALTHY AFFORDABLE BUILDING PRODUCTS PAGE

4. THE HEALTHIER AFFORDABLE VIRTUAL MATERIALS LIBRARY

5. LUNCH + LEARNS

6. COLOR × HEALTH GUIDEBOOK
Parsons has historically maintained a Materials Library adjacent to Architecture, Interior Design, and Product Design studios. The library has provided materials samples and a connection to manufacturers. As a result of the grant from The JPB Foundation, HML is reconfiguring the library with an enhanced mission to create a range of new physical and digital material resources for students and faculty at The New School, the AH community, and the NYC design community. The library will become a critical resource for both the university as we educate future designers and specifiers, and for the industry at large which looks to Parsons as an innovator in the field of design.

To support these substantial changes underway, we have hired a director for the library with a deep knowledge of potential health implications of building products. Further, we are in the process of forming an advisory board to guide the library and inform the new mission.

In order to position the library at the forefront of the industry, we are researching precedents of national and international libraries and resource centers. Over the remainder of the grant, we will continue to collect and build lists of healthier products currently specified and installed in AH developments across the country.

As part of our work with the materials library, we are collecting and exhibiting physical samples of the healthiest materials currently available on the market. This materials collection necessarily involves outreach to product manufacturers. In this process, we advocate for increased transparency and manufacturer engagement via the Health Product Declaration tool as a recommendation for inclusion in our library. Based upon data shared by manufacturers, we aim to ease the process of identification, prioritization, and action on toxic chemical hazards, and we work with manufacturers to drive innovation through market demand.

Another important aspect of the library work is the documentation of best practices and product databases extracted from our ongoing case studies research. This involves the alignment of current certification and evaluation tools to increase their accessibility to the AH audience and the next generation of designers at Parsons.

Ultimately, the library will create new streamlined resources and tools for the AH sector to support healthier specification practices.

**HAMP GOALS**
- Facilitate Healthier Building Practices
- Accelerate the transformation to healthier practices in affordable housing

**METRICS**
Grow a user group to 1000 active visitors.

**MOST CRITICAL OUTCOMES**
Collect and provide healthier physical materials samples; create digital catalog for library highlighting healthier and affordable products

**LEVEL OF ENGAGEMENT**
Unaware to Supporter
WEBSITE STATISTICS

**USERS**
7,566

Our high number of users indicates the success of our initiatives in directing users to our website as a resource.

**PAGEVIEWS**
31,286

**PAGES PER SESSION**
2.6

**SESSIONS**
12,028

Our multi-pronged communication strategy has driven traffic to the website, leading to over 12,000 unique sessions per day.

**AVERAGE SESSION DURATION (MIN)**
2:40
What exactly does health mean to different people, and how do we make a website that is an effective tool for a diverse group of designers, affordable housing developers, housing residents, manufacturers, contractors, and useful to anyone looking to pursue material health initiatives?

The Healthy Materials Lab’s new website promotes transparency and advocates for an industry wide change in the material specification process. The goal is to situate human health considerations as central to the material specification. The new website collects and curates a library of resources including new content generated by HML and is the virtual counterpart to the Parsons Donghia Materials Library physical collection of materials. It composes resources into a simple transparent interface, increasing accessibility and facilitating the practical implementation of healthier building practices.

**HAMP GOALS**
- Facilitate Healthier Building Practices
- Accelerate the transformation to healthier practices in affordable housing

**MOST CRITICAL OUTCOMES**
Collect and provide healthier physical materials samples; create digital catalog for library highlighting healthier and affordable products

**LEVEL OF ENGAGEMENT**
Unaware to Supporter
## BUILDING PRODUCTS
### Flooring
- Prefer non-vinyl flooring products.
- When vinyl is used: Specify phthalate-free, avoid post-consumer recycled content.
- For rubber flooring: Avoid post-consumer recycled content (crumb rubber).
- For carpets: specify specifying products without stain-resistant treatments; specify backings that are vinyl-free and do not contain fly ash.

*General Spec Guidance* from our partners at Healthy Building Network and HomeFree.

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<th>SUB-CATEGORY</th>
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<td>Carpet</td>
<td>Shaw Contract Group</td>
<td>Meadow</td>
<td>HPD, EPD, C2C, NSF140 Gold, CRI Green Label Plus, Contributes to LEED credits</td>
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**MATERIAL COMPOSITION**
- Face: Type 6 Nylon 0-60% Backing: Calcium Carbonate 70-35%, Polyethylene Copolymer 10-20%, Polypropylene 9-15%, Aluminum Hydroxide 3-15%, Vinyl Acetate 5-12%, Hydrocarbon Resin 1-5%

*As reported by manufacturer and product HPD

**COLORS**
- Available in 8 standard colors

**AVAILABLE SIZING**
- 12' Roll

**PRODUCT DOCUMENTS**
- Techdata Meadow Shaw

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<th>Carpet Tile</th>
<th>Interface</th>
<th>SuperFlor</th>
<th>HPD, EPD, EPD</th>
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<td>Duperse Tile</td>
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<td>Carpet Tile</td>
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<td>Infinite Tile</td>
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<td>Daltile</td>
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<td>HPD, SDS, EPD</td>
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<td>Materia Project</td>
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<td>HPD, SDS, EPD</td>
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<td>Striation BBT</td>
<td>HPD, SDS, EPD</td>
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<td>CBC Flooring</td>
<td>Wels Sheet</td>
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<td>Resilient</td>
<td>Forbo Flooring Systems</td>
<td>Marmoleum Modular</td>
<td>HPD, SDS, EPD</td>
</tr>
<tr>
<td>Resilient</td>
<td>Nora</td>
<td>Noramet Tiles</td>
<td>HPD, SDS, EPD</td>
</tr>
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**Healthy Materials Lab at Parsons School of Design**
Making buildings better.

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**Keep in Touch!**
Join our mailing list and receive monthly updates from the Healthy Materials Lab.

email address + enter
Together with publications, references, guides, and case studies made available by HML, resources such as the list of ‘Healthy Affordable Building Products’ have the potential to better the quality of life – particularly for those most impacted by inexpensive building products.

For each of the product categories currently featured in the list – Flooring, Paint, Drywall, Insulation, Countertop (materials), and Cabinetry – HML introduces users to some basic, but crucial guidelines and specifications. The list helps designers/architects and developers narrow down their selection to the kind of products and materials they should be seeking while helping them understand more holistically, the ingredients, certifications, and disclosures specific to each product.

These broader guidelines are an excellent stepping stone for those who are designing and building and are instrumental in facilitating knowledge development when it comes to long-term healthier material choices, rather than one-off or one-time selection to meet certification goals on a project. These decisions have the potential to impact people who live in low-income and affordable housing projects who do not have the ability to choose these materials for themselves. The specifications and guidelines are followed by product listings, which not only describe typical data – such as size, color, and certifications – but critically include a breakdown of material and chemical components in each product.

**HAMP GOALS**
- Facilitate Healthier Building Practices
- Accelerate the transformation to healthier practices in affordable housing

**MOST CRITICAL OUTCOMES**
Provide practitioners with a trusted reference and resource for healthier building products.

**LEVEL OF ENGAGEMENT**
Observer to Advocate
Welcome to the HML Library, a database of products that make up the buildings, tools, and objects around us. Some of these products are available to view in person at the Donghia Materials Library at Parsons.

Browse material collections

Environmentally Friendly Building and Remodeling Materials

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut venenatis ligula sed justo vestibulum id dictum lectus pulvinar. Fusce congue, mauris sit amet imperdiet dignissim, sem lorem faucibus leo, id blandit urna tellus eget magna. Phasellus sit amet ultrices quam.

Affordable Flooring Materials
Healthy Insulation Materials
Eco-Friendly Affordable Textiles
Alternatives to Vinyl flooring
Recycled Wall Panels
Sustainable Cork Flooring
Green Roofing
No and Low-VOC paints

Healthy Materials Lab
at Parsons Schools of Design
Our research should be a resource for you.

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Working prototype of the Healthy Materials Library database
THE HEALTHY AFFORDABLE MATERIALS LIBRARY

As a complementary resource to our Healthy Affordable Building Products page, we are currently developing an educational resource that will catalogue a range of building products and provide new resources that take designers and students through new processes for selecting and specifying products. Some of these materials are available to view in person at the Donghia healthier Materials Library at Parsons School of Design. The expected launch date for this database is the end of 2017.

HAMP GOALS
• Increase Materials Transparency
• Facilitate Healthier Building Practices
• Accelerate the transformation to Healthier Practices in Affordable Housing

METRICS
100 visitors in January (with the launch)
1000+ active users reached

MOST CRITICAL OUTCOMES
Affordable housing developers and specifiers have access to a growing list of preferred and vetted materials.

LEVEL OF ENGAGEMENT
Observer to Advocate
The Donghia healthier Materials Library and the Healthy Materials Lab at Parsons instigated, in the Fall 2016 semester, a series of Lunch + Learns with a focus of introducing the healthiest materials and products available to designers throughout Parsons and The New School. The criteria for manufactures were that their products would be chlorinated-polymer free, have complete transparency and that the companies be open to a convivial discourse around material health. The ultimate goal of this partnership is to create a more robust material library. Offering extra curricular education to students and faculty through Lunch + Learns seemed an ideal opportunity to achieve this while allowing faculty and industry professionals CEU credits for attending.

Despite a demanding academic schedule the Lunch + Learns were keenly received amongst the students and faculty with an impressive response for each session. The manufacturers that presented in the first series were MechoSystems, Nora Systems Inc. and Forbo Flooring Systems. Each of these companies have been operating for decades and are dedicated to transparency, health and sustainability believing that these issues cannot be separated when discussing the products they develop. MechoSystems who create EcoVeil – PVC free, Greenguard and C2C certified shade cloth – gave a presentation on the performance and environmental profiles of the materials in their shade cloths. Nora Systems Inc. a leading manufacturer worldwide, presented their resilient rubber flooring and Forbo Flooring Systems presented Marmoleum, their natural linoleum which is biobased, highly durable, non-toxic, anti-microbial with easy maintenance. These products are associated with sustainability, durability, high quality and innovative design with solutions for virtually any type of application.

Each presentation offered an in depth history of the product and manufacturing process through the lens of recycling and material health. We opened these events and conversations around products and materials to a broad Parsons audience, as we believe all disciplines can learn from the vision of the companies and their approach to health and the built environment. The Spring 2017 series included manufacturers of packaging materials and textiles as we expanded the discussion beyond the built environment to a broader audience of designers, the current and future decision makers in the design industry.

**HAMP GOALS**
- Increase Materials Transparency
- Facilitate Healthier Building Practices

**METRICS**
- Maintain and double number of attendees in the next 3 months.
- 8 presentations
- 600 visitors impacted

**MOST CRITICAL OUTCOMES**
- Engage healthier product manufacturers with next generation of designers + architects; Develop partnerships with manufacturers and advocate for transparency.

**LEVEL OF ENGAGEMENT**
Observer to Supporter
Color x Health
Affordable Housing Starts with Healthier Spaces
FIRST STEP: USE HEALTHIER PAINTS
We have designed a color manual that engages educators, residents, maintenance staff, NYCHA personnel, developers and designers around choosing color palettes for early childhood learning and residential spaces. In effect, this manual serves as a way of grounding decisions around color and creating a methodology for those looking to apply and use color in their renovations.

This initiative indicates that small, incremental change, like choosing an alternate paint product, can lead to substantial change over time. The series of demonstration projects provide NYCHA with healthier paint and flooring options and color palettes for renovations of their childhood education centers and residential units.
Parsons is a hub for national and international research and has extensive experience and capacity to work between theory and practice, through collaborations with a broad range of industry partners. As a trusted university partner, we provide neutral territory to enable a wide representation of stakeholders to convene and address all of the complex issues associated with the building materials system. Our research is informing our colleagues in professional practice and our fellow faculty through public lectures and presentations and through our social media presence.

As the largest art and design school in North America, we are transforming the education of designers, and in so doing educating a new generation of design professionals who will carry their educational experience into their careers and transform industry. We are offering new studio classes, creating modules that can be incorporated into existing courses, and working with HAMP partners, such as HPDC, to develop curricular modules. With education as our platform, we are creating a greater understanding and awareness of the intersection of design and health.
Through these workshops conducted over the past 5 months, we can begin to see the breadth of impact that advocacy can have, assisting designers of all kinds with healthier strategies for assisting vulnerable populations.
In this course, we will discuss the relationship between building materials and the human body at different levels. We will explore how designers can engage the public and create healthier environments. This certification is the first step for this conversation. You will be introduced to human health and the effects of toxins on our bodies. New technologies, biomimicry, and building science will be discussed. Work is needed to make the world a better place for all of us.
This series of courses brings a consideration of human health to all aspects of design and building practices. The goal is to introduce students and practitioners to the necessary background information on basic construction materials, their chemical makeup and the relationship to human health, and focus on how designers and architects can specify better building materials.

The eLearning program is made up of four courses, courses 1 and 2 will provide an introduction to the topics to a general audience at an introductory level, with courses 3 and 4 catering to a more expanded audience specifically practitioners and those concerned with making a positive impact in product specification, installation and maintenance in the built environment. The program is intended to complement existing degree programs.

The four courses will cover the components required to design healthier interiors as outlined in the learning outcomes.

- Understand why material health is important and its relationship to the human body
- Understand the impact of life-cycle of materials
- Collect knowledge and ability to evaluate materials for specific health issues
- Understand pathways for exposure, during the use phase in interiors
- Analyze the various tools, certifications, standards, etc.
- Develop a methodology for material analysis
- Develop a system that could be adopted by other professionals to evaluate and specify materials

Each of the courses will have 3.5+ contact hours with an expected additional 1 hour of homework. The homework will comprise of reviewing quizzes, non-graded activities, discussion forums and recommended readings.

The four courses are:

**Course 1: Materials and Human Health.**
This course communicates the impact that building materials can have on human health, demonstrating the systemic intricacies that will challenge users to keep asking questions, while offering suggestions for how they can begin addressing these issues in their work.

**Course 2: Building Products and Chemistry.** This course introduces the student to the fundamentals of chemistry to create the foundation of why particular outcomes and health impacts are achieved. Introduces students to chemicals of concern and healthier alternatives that are being formulated by Green Chemists. Based on these findings, how can project health goals be outlined and informed decisions be made?

**Course 3: Healthier Materials Design & Specification.** This course helps designers navigate industry resources and certifications, finding and evaluating product options, and prioritizing resources for maximum impact. We will look at methods for targeting specific issues in a project, and generalized strategies that can apply more universally, highlighting potential benefits and consequences of different approaches.

**Course 4: Executing a Healthier Project.**
This course deals with the full process of creating healthier buildings, covering challenges encountered throughout design, construction, maintenance, and operation. Framed as a collection of lessons learned through professional experience to help professionals be more informed and make decisions with an overall awareness of the protocols for healthier design.
HAMP GOALS
• Increase Materials Transparency
• Facilitate Healthier Building Practices

METRICS
9 current faculty, 5 researchers, 4 administrators to create and launch new series at Parsons/The New School.
30 expert presenters to create content for courses 1 to 3, more for course 4

MOST CRITICAL OUTCOMES
Provide accessible education to students and practitioners on the connection between material ingredients and health. Equip participants with approaches and criticality to create impact in designing for the built environment.

LEVEL OF ENGAGEMENT
Unaware to Observer and Supporter

EDUCATION
THE SIX CLASSES

1. Highly Fluorinated
2. Antimicrobials
3. Flame Retardants
4. Bisphenols & Phthalates
5. Some Solvents
6. Certain Metals

01 HIGHLY FLUORINATED  02 ANTIMICROBIALS  03 FLAME RETARDANTS
04 BISPHENOLS & PHTHALATES  05 SOME SOLVENTS  06 CERTAIN METALS
SIX CLASSES

In collaboration with the Green Science Policy Institute, the Healthy Materials Lab worked to create short videos to introduce the Six Classes premise to audiences of architects and designers.

“Six Classes” is a strategy, developed by Arlene Blum and Green Science Policy Institute to teach people about the “many harmful substances found in everyday products” and those which should be avoided. “Instead of worrying about tens of thousands of untested chemicals... six classes presentations explain many of the bad actor chemicals in consumer products. In addition, the series will move us towards solutions by asking, ‘Do we need these chemicals?’ and when the answer is ‘Yes,’ we will explore safer green chemistry alternatives.”

We worked together to create slides with images that visually and quickly communicate potential health hazards of these classes of chemicals, everyday products where the chemicals are currently used, regrettable substitutions and alternative ways to think about the attributes that these chemicals provide.

We launched our Six Classes videos during one-hour webcasts on June 22, June 29 and July 6. Each webcast featured three short videos and live conversations with distinguished scientists and thought leaders including retired California State Senator Mark Leno, Ken Cook, Executive Director of EWG, Marty Mulvihill of Safer Made, Meredith Williams who leads the Safer Consumer Products work at the CA Dept of Toxic Substances, and Jen Jackson of the SF Department of the Environment.

HAMP GOALS
• Create New Resources
• Increase Materials Transparency
• Facilitate Healthier Building Practices

METRICS
In progress.

MOST CRITICAL OUTCOMES
Introduce the Six Classes strategy to architects and designers in a quick and visual format to better incorporate in professional practice.

LEVEL OF ENGAGEMENT
Observer to Supporter to Advocate

COLLABORATORS
Parsons and Healthy Materials Lab is a partner of Green Science Policy Institute (GSPI)

MFA ID students deciding on the 3-4 main drivers for the collaborative projects on designing a women’s health center in Brownsville, New York.
Parsons offers an extensive range of undergraduate, graduate and associated art and design degree programs that all approach materials culture in unique ways. Beginning with the School of Constructed Environments’ nine degree programs, HML is prototyping new syllabi and curriculum models to explore healthier materials. New studios are being offered that take on human health as a starting point. New modules are being created to specifically address health and materials in different contexts. We are leveraging the library as a resource point to expand materials knowledge across Parsons.
Sara Burns
"Connecting Through the Common Flush"

Harsaar Kaur Manchanda
"Connecting Through the Common Flush"

Maria José Acosta Carrizosa
"7 Minutes: The Art of Moving Through"
East Harlem is a neighborhood on the edge in many ways. It has one of the highest rates of asthma in the country, it has one of the strongest community identities, it has the most subsidized housing in all of NYC, and it is on the cusp of gentrification. Known as El Barrio or Spanish Harlem, it was once New York’s Little Italy. Historically it was home to European immigrants. In recent years, parts of East Harlem have been called “the most dangerous in New York City” and also “New York’s Next Hot Neighborhood.” On its borders are 96th street to the south (the Upper East Side, one of the wealthiest neighborhoods in all of the USA); the Harlem River to the east (which will fill the flood plain in the next 100 years); East 142nd Street to the north (The Bronx); and Fifth Avenue or Central Harlem to the west.

Working in this context Parson’s MFA Interior Design graduate students explored a wide-range of issues ranging from affordable housing to the possible links between habit and habitat in Spring 2017 as part of Professor Jonsara Ruth’s Thesis Lab titled “Materials & Health in Context.” Not only did students investigate and propose solutions to important, topical issues—like how design itself can often be affected by and perpetuate economic and social inequalities—they also collaborated across disciplines in response to real-world contexts.

Materials not only influence our physical health but also our way of being, our understanding and our perception of the world of things and places – politically, socially, economically, culturally, and behaviorally. Materials can both enhance and threaten quality of life. For designers, materials assist the translation of an idea into an experience – materials manifest and communicate ideas. Materials create atmosphere and influence the experience of inhabitation. The Thesis Seminar, “The Life of Materials: Culture, Technology and Environment,” aimed to give students a conceptual framework against which to construct their own investigations. Students studied topics such as “The Anthropocene,” “Space, Identity and Power,” “Urbanization and Decay,” and “The World Without Us.”

The materials that surround us are more and mean more than what meets the eye. As these theses demonstrated, materials manifest and communicate ideas. They create experience.

This is the kind of understanding that we need in our future designers. This is what will close the gap so that we may take steps towards reducing inequality and giving everyone better, healthier lives. Then and only then will materials no longer threaten the quality of life, but enhance it.
Mural located in Brownsville, New York
What is the healthiest legacy we can leave as designers? How can design help society to achieve health equity?

Studio 3 Fall 2016, titled Empowering Healthy Futures, was a charge by the City of New York’s Department of Health and Mental Hygiene and supported by the Healthy Materials Lab at Parsons. The students worked as a collaborative on the design of the new Neighborhood Action Center located in Brownsville, New York. These centers are part of an initiative by the City of New York to increase health directed, community-based programs in neighborhoods with disproportionate chronic disease and premature death. One of the primary health areas of concern in Brownsville is its high rates of infant mortality (in 2015 it ranked 4th in NYC). The studio focused specifically on the teen mother population. Students were charged with developing design proposals that promoted nurturing and restorative spaces with a specific focus on models for Women’s Health Suites.

The students studied the 2015 Health Report for Brownsville and visited and analyzed the neighborhood. They met with a leading ethnographer in race, urban life and poverty and child psychologists and clinicians working with at-risk babies and toddlers. All of this research informed their design explorations. Working in close collaboration with both experts and local community members, they came to the studio with a deep-seated belief that design can change lives and were committed to designing with the healthiest materials so that all aspects of design contributes positively to the communities it serves.

Research Process

For the first eight weeks of the semester, students developed individual proposals for Women’s Health Suites based on their respective research and unique design lenses. For the final eight weeks of the semester, students collaborated to generate four proposals on behalf of the entire class. Those four proposals took shape through the lens of culture, education and technology, materials and health, and trauma-informed design. Each student contributed their skills and vision to each proposal.

COLLABORATORS

NYC Department of Health and Mental Hygiene; Robin Guenther, principal at Perkins+Will; Dr. Anne Murphy, Director of the Center for Babies, Toddlers and Families & the Early Childhood Center and Clinical Director of The Rose F. Kennedy Children’s Evaluation and Rehabilitation Center; Dr. Miriam Steele, Professor of Psychology at The New School and Co-Director of Center for Attachment; Dr. Terry Williams, ethnographer in urban life and Professor of Sociology at The New School for Social Research; Yianice Hernandez, Director of Healthy Living by Design, Department of Health and Mental Hygiene; Josh Langham, Technical Assistance Manager, DOHMH; Napur Chaudhury, Director of Neighborhood Health for DOHMH; Alison Brown, City Planner, NYC Department of Design and Construction; East Harlem Neighborhood Action Center; community members T Bone VI, Morena, Juibe, Karl, Donovan, Lafond, Silva, Jose, and Camario
As part of the community we exist to heal the invisible wounds of past trauma and reduce the dose of ongoing adversity. We cultivate safe spaces that help us remember, understand, and reconnect. Reconnect to the self as victor, not victim, and reconnect to the resilience of the community at large.

The building in its current condition is a barrier to health care for the residents of Brownsville. It towers over the otherwise residential and park-lined street as a symbol of bureaucracy and power. A patient can't be treated if she is not willing to walk through the door. The introduction of plant life brings the building into harmony with its environment and offers a place of peace and safety that is always present and always visible to the neighborhood. At night, a warm glow emanates from the canopy, providing much-needed light on a poorly lit street and continuing its role as a beacon of safety.

This project examined the creation of environments for the most vulnerable members of our communities, infants and their teenage mothers. Our intention is seemingly simple, to understand how material choices can contribute to the creation of healthier environments.

Many of the building products commonly used in construction, especially affordably priced construction, contain chemicals that are linked to sickness and disease in humans. Exposure to these products can be through ingestion, inhalation, and absorption through the skin. The goal of this design is to remove the harmful chemicals found within the building and replace them with healthier materials.

By providing access to natural light, introducing texture for visitors to interact with, and including interior details that bring people joy, this environment seeks to provide a happy and uplifting experience. The materials selected in this design are less toxic product alternatives, chosen with the intention of creating a healthier environment for all users of the space.
WAYFINDING WELLNESS
Chengcheng Shi, Fiona Gibson and Giorgia Farabegoli

New York City’s Department of Health and Mental Hygiene has struggled (by its own admission) to successfully connect with some of the region’s more vulnerable communities. In light of this, how can government agency succeed in supporting those of the greatest need, while being mindful of the fact that such presence is not always trusted?

In order for the DOHMH to find success in their endeavours to mitigate health concerns – particularly with regard to teenage pregnancy and staggering infant mortality rates – the primary objective must be that of re-establishing a dynamic of trust and refuge between city agency and the residents they aim to support.

By creating an environment which all age groups across a neighborhood learn to associate positively with communal support and refuge, the youngest members of Brownsville can grow up knowing their local Health Action Center is a place for guidance and care.

As that child becomes a teenager – and at greater risk of unintentional pregnancy and drug use due to increased stress associated with the emotional turbulence that adolescence brings – the Health Action Center would have become a learned place of refuge in which to seek help, guidance and medical treatment.

BROWNSVILLE HEALTH HUB
Sarah Burns, Katrin Renner and Joel Rice

This is a design proposal. It a representation of how a community can take public health concerns into its own hands.

We propose that by giving community service back to the community through a building and through expression, a more balanced healthcare system can evolve.

It would take a much larger document than this to convey the entire scope of the current state of community health and well-being in Brownsville but, with the many voices that have contributed thus far, a design proposition has emerged.

It begins with the family.
The School of Constructed Environments’ Design Workshop Studio transformed the entry sequence of the Children’s Museum of the Arts in TriBeCa, NYC. Students incorporated ethnographic field research alongside physical site surveys to identify the needs of users, and establish shared goals and expectations between the client and design build team. Dr. Sharon Sutton, a preeminent scholar and architectural educator, led this initiative with an ethnographic workshop for graduate students and the clients, complementing the efforts and energies of studio faculty, Nick Brinen and Mark Gardner.

Dr. Sutton’s longstanding focus on children and learning is perfectly coupled with the participation of Parsons Healthy Materials Lab, whose inclusion at the project’s earliest stages enabled child-friendly material thinking as part of concept development, rather than latter stage specification.

**HAMP GOALS**
- Facilitate Healthier Building Practices

**METRICS**
- $1 million+ in materials.
- 60+ students and faculty will change building practices.

**MOST CRITICAL OUTCOMES**
- Changed Workshop specification practices to be healthier, affordable and incorporated earlier in the design process.

**LEVEL OF ENGAGEMENT**
- Observer to Supporter to Advocate

**COLLABORATORS**
- Children’s Museum of the Arts
- Dr. Sharon Sutton
WORKSHOPS FOR HEALTHIER DESIGN STRATEGIES
FALL 2016 / SPRING 2017

ARCHITECTURE
Graduate Studio IV: Design Workshop
A design-build studio that will be redesigning and renovating areas of the Children’s Museum of the Arts in lower Manhattan.
M.Arch Environmental Technology II
Students examine the effects indoor air quality can have on the body, evaluate a product’s chemical contents for their impact on health.

LIGHTING DESIGN
MFA LD+ID – Allied Design Studio
Examination of the overall health affects from common building products, using case studies to examine the challenges of healthy design in practice.

INTERIOR DESIGN
MFA ID: Thesis Studio
Life cycle assessment of the health impacts on every individual affected through a product’s manufacturing, use, transport, and disposal.
BFA Interior Design Studio V
Undergraduate interior design studio focused on sensory learning in early childhood environments, examining the vulnerabilities of children.

FASHION DESIGN
Care+Wear Studio
A community-based fashion studio that is redesigning the hospital gowns for clinics in the Bronx, seeking fabrics safer for patients with immune deficiencies.

INTERDISCIPLINARY
Graduate Seminar – Earth Elements
A interdisciplinary graduate design seminar examining the relationships between your body, the materials you use, and the environments you live in.
Donghia Healthier Materials Library
Guidance for library staff on the most useful resources and evaluation tools currently offered in the building industry.

PRODUCT DESIGN
BFA Product Design Studio III
Undergraduate product design studio that will be prototyping equipment for early childhood centers, and examining the effects of materials on the body.
WORKSHOPS FOR HEALTHIER DESIGN STRATEGIES AT PARSONS

Through these workshops conducted over a period of five months, we can begin to see the breadth of impact that advocacy can have, assisting designers of all kinds with healthier strategies for assisting vulnerable populations.

The intended audiences include all forms of designers who can impact the health quality of our environments. With this project we have looked to reach designers at all levels, from the seasoned veterans who can act as role-models, to the ambitious newcomers eager to make a change. Students can begin integrating these principles early in their careers, and can research design strategies in the freedom of academic settings. Faculty can disseminate this knowledge across a greater body of students, and pursue extended research with the support of academic institutions. Professionals can directly apply these strategies in practice, influencing markets and industry standards, and advocating for the populations at risk.

HAMP GOALS
• Facilitate Healthier Building Practices

METRICS
200+ designers reached
129 students reached
18 faculty

LEVEL OF ENGAGEMENT
Observer to Supporter to Advocate

MOST CRITICAL OUTCOMES
Equip designers of all kinds with healthier strategies for assisting vulnerable populations. Increase breadth of impact for advocacy efforts.
## WORKSHOPS FOR HEALTHIER DESIGN STRATEGIES: AUDIENCE AND ENGAGEMENT

### Target Audiences

The intended audiences include all forms of designers who can impact the health quality of our environments. As designers, we influence public opinion and aesthetics, we drive market demand with specifications, and we inspire actions, emotions, and societal shifts in values. With this project we have looked to reach designers at all levels, from the seasoned veterans who can act as role-models, to the ambitious newcomers eager to make a change.

### Levels of Engagement

The levels of engagement range from simply being exposed to the subject and cognizant of the issues, to seeking more involvement, taking action, implementing strategies, and educating others. The resources we develop in this toolkit will assist designers in all stages, with particular attention to helping designers transcend from awareness or interest to action and implementation.

<table>
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<th>Students:</th>
<th>Faculty:</th>
<th>Professionals:</th>
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<td>Can begin integrating these principles early in their careers, and can research design strategies in the freedom of academic settings.</td>
<td>Can disseminate this knowledge across a greater body of students, and pursue extended research with the support of academic institutions.</td>
<td>Can directly apply these strategies in practice, influencing markets and industry standards, and advocating for the populations at risk.</td>
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1. **Aware**
   - View resources and information
   - Understand issues and implications

2. **Interested**
   - Attend seminars and workshops
   - Seek additional information

3. **Acting**
   - Apply strategies to design
   - Pursue healthier alternatives

4. **Implementing**
   - Carry out healthier design in their work
   - Elevate standards for best practices

5. **Advocating**
   - Training others with healthier strategies
   - Promoting industry-wide change
WORKSHOPS FOR HEALTHIER DESIGN STRATEGIES: ADVOCATING FOR VULNERABLE POPULATIONS

Populations Served:

The primary focus of these workshops has been design advocacy for the most vulnerable populations. A population's vulnerability may depend on a variety of factors, including biological predispositions, age, gender, environmental exposures, socioeconomic status, or race. Based on these factors and the local demographics of New York City, we have targeted designers who serve the following users:

- **Infants and Children:**
  - behaviors prone to exposure
  - developmental disruption at this stage can have lifelong consequences

- **Pregnant Women:**
  - transfer through placenta and breast milk
  - average baby is born with 217 toxic chemicals in their body

- **Affordable Housing Residents:**
  - exposures through low quality materials
  - less access to healthcare and information
  - additional hazards in maintenance

- **Senior Citizens:**
  - more time in indoor environments
  - weakened immune systems
  - limited access to information

- **Preexisting Health Conditions:**
  - weakened immune systems
  - may have behaviors prone to exposure
  - more time in indoor environments
HML brings a range of expertise to the project through the impactful use of a range of communications tools, including communications design and data visualization that support the translation of technical and scientific data into tools that influence decision makers in the AH industry. Drawing from industry consultants and in-house expertise, we are able to develop tactics and strategies to advance the mission of the project and accelerate change.

We worked with Big Duck to develop a communications plan to drive awareness, create demand, and drive change via new tools and resources. The plan identifies key HML platforms and their characteristics. Our planning enables us to connect all of our digital activities and funnel users through specific actions. The pathways enable us to convert participants to higher levels of engagement and expand our network – increasing our potential influence.
14 STRATEGIC COMMUNICATIONS PLAN
15 WEBSITE DEVELOPMENT
16 FACEBOOK CAMPAIGN
17 INSTAGRAM
18 TWITTER
19 HML NEWSLETTER
20 HAMP NEWSLETTER
21 ON-CAMPUS COMMUNICATIONS
14 STRATEGIC COMMUNICATIONS PLAN

We worked with Big Duck to develop a communications plan to drive awareness, create demand, and drive change via new tools and resources. The plan identifies key HML platforms and their characteristics. Our planning enables us to connect all of our digital activities and funnel users through specific actions. The pathways enable us to convert participants to higher levels of engagement and expand our network – increasing our potential influence.

By creating multi-pronged strategies that target different transition points in the ladder of engagement, our goal is to increase our reach and transform practices at multiple scales across a wider audience.

HAMP GOALS
- Increase Materials Transparency
- Accelerate the transformation to Healthier Practices in Affordable Housing

METRICS
6300+ observers.
Detailed metrics in progress.

MOST CRITICAL OUTCOMES
Build engagement through building awareness of the importance of material health. Create Observers, Supporters and Advocates.

LEVEL OF ENGAGEMENT
Unaware to Advocate
The Healthy Material Lab's website brings together the systemic issues that affect healthier design practices. On the left, we see the network of interconnections among critical topic areas, the populations we serve, and research we conduct, and on the right is an example of how these connections are applied to the design of healthier affordable housing projects.
The Healthy Materials Lab’s new website promotes transparency and advocates for an industry wide change in the material specification process. The goal of the website is to situate human health considerations as central to material specification. The new website collects and curates a library of resources, including new content generated by HML, and is the virtual counterpart to the Parsons Donghia Materials Library physical collection of materials. By consolidating these resources into a simple online interface, the site increases accessibility and facilitates the practical implementation of healthier building practices.

The Why Healthy Materials Page is a first experience to introduce the materials health – when a user moves to the Healthy Affordable Building Products Page we can track this path and obtain metrics to determine and fine tune our digital presence and continue to evaluate and update our resources. We also have a clearer measure of conversion to advocate.

We forefront easy navigation and search functions to enable users to access concise information and navigate to their specific needs. The simple text is complemented by intuitive graphics, first person narratives and stories, and suggestions for related content throughout. The interconnections created between subjects emphasize the systemic nature of complex topics and allow users to easily access information.

As the site grows and evolves, we will develop additional tools and add more useful information. Our goal is to decrease Bounce Rate and create a website conversion funnel.
As designers, we shape places for living. Why make risky choices?

Chemicals built into our environment get inside of...

healthymaterialslab.org

HOME IS WHERE THE TRICLOSAN IS.

HOME IS WHERE THE CHLORINATED TRIS IS.

HOME IS WHERE THE PERFLUOROOCANTIC ACID IS.

HOME IS WHERE THE METHYLBENZETHIONIUM CHLORIDE IS.
FACEBOOK CAMPAIGN

As a part of our strategy developed with Big Duck, we developed a consumer-facing Facebook campaign that aimed to raise awareness about toxins in everyday building materials and household products and how they can have harmful impacts on our health. Through this initiative, we developed two kinds of visual language to specifically target 1) professionals, by showing how design decisions can have potentially harmful impacts; and 2) millennials, by showing how everyday activities and the products we have in our homes can have harmful impacts on our health.

We plan to run the campaign in two phases in order to better understand and target our main demographic. In Phase 1, we tested different audiences and the effectiveness of our visual communication materials.

The campaign lasted 24 days, from April 18th to May 26th. During this period we had twelve 4-day campaigns testing two different visual and communication approaches. Our average click-through rate (CTR) for the campaign was 1.62%, which is above industry average.

From our Phase 1 results, we found that the demographic with the highest post engagement based on gender matched with our initial target audience. However, the campaign had a high reach with a younger demographic than expected (18–24 years old) with no significant dropoff or difference between the 25–34, 35–44 and 45–54 age ranges.

In Phase 2, we aim to target our stronger audience and focus more on moving people in this demographic from being observers to being supporters of material ingredient transparency.

HAMP GOALS
• Increase Materials Transparency
• Accelerate Transformation to Healthier Products in Affordable Housing

METRICS
369,369 reach
472,726 impressions
5,994 link clicks

MOST CRITICAL OUTCOMES
Build awareness and urgency around the importance of material ingredient transparency in designers and consumers. Drive traffic to our website as a measure of impact and to introduce the website as a resource.

LEVEL OF ENGAGEMENT
Unaware to Supporter
PHASE ONE FACEBOOK CAMPAIGN RESULTS

**IMPRESSIONS**

472,726

**POST ENGAGEMENT**

6,941

**LINK CLICKS**

5,994
FACEBOOK BENCHMARKS

CLICK-THROUGH RATE (CTR)
0.80%
The higher the CTR, the more successful our campaign is. This benchmark is set based on an average taken from the CTR of the Education and Healthcare industries (0.73% And 0.83%).

COST-PER-CLICK (CPC)
$1.00
The lower the CPC, the more cost-effective our campaign is. This benchmark is set below the average CPC for Education ($1.06).

OVERALL RESULTS

CLICK-THROUGH RATE (CTR)
1.58%
Our Facebook campaign was extremely successful at engaging our audience. Our CTR was even higher than the average across different industries, which is 0.90%.

COST-PER-CLICK (CPC)
$0.34
Our Facebook campaign was very cost-effective, demonstrating how successful our copywriting and visual language were in reaching our audience.

BEST PERFORMING CAMPAIGNS

CLICK-THROUGH RATE (CTR)
2.37%
509 Link Clicks
21,446 Reach
Drawing – Millennials 02B

CLICK-THROUGH RATE (CTR)
2.33%
589 Link Clicks
25,322 Reach
Drawing – Millennials 02A

PHASE ONE FACEBOOK CAMPAIGN ANALYSIS

The first phase of the campaign started with a budget for every 1,000 impressions. We then changed it for CPC – cost per click. In both cases the demographics and reach results were similar.

The results of the first phase informed our strategy and helped us refine our target audience. After the completion of the first phase of the campaign, we promoted a video for the launch event of the six classes and six other promotions.

Campaign audience age demographics

Campaign audience gender demographics
We are using Instagram as a part of our larger communications strategy to strengthen industry partnerships, cross-promote content and reach a wider online audience. Through initiatives such as Material Mondays, we use our imagery and visual language to share information about healthier material alternatives in a way that is engaging for designers and millennials alike.

Our initiatives and strategic approach resulted in an increase in followers from approximately 400 in September 2016 to 1,929 as of June 2017. We hosted an Instagram takeover with Architizer from May 7–9, 2017, which greatly increased our reach to professional designers. Architizer has 1 million Instagram followers and 2 million Facebook followers, representing a large new potential audience for our work.

We plan to continue using Instagram as an effective tool to develop HML’s communication strategy, broaden our reach and support our theory of change. As one of our key learnings, we found that Instagram is a great platform for building a network of independent designers who are pushing the boundaries on using healthier materials in new ways.

---

**HAMP GOALS**

- Increase Materials Transparency
- Facilitate Healthier Building Practices
- Accelerate the transformation to Healthier Practices in Affordable Housing

**METRICS**

1,929 followers (as of July 2017)

---

**MOST CRITICAL OUTCOMES**

Increase supporters and broaden awareness of healthier materials among a design audience. Disseminate resources and knowledge of healthier materials in a visually engaging way.

---

**LEVEL OF ENGAGEMENT**

Unaware to Supporter to Advocate
ARCHITIZER TAKEOVER
May 7–9 2017

INSTAGRAM FOLLOWERS GAINED
600
Our cross-collaboration with Architizer led us to gain over 600 new followers and expand our audience.

MATERIALDRIVEN TAKEOVER
June 27–29 2017

INSTAGRAM FOLLOWERS GAINED
129
Our collaboration with MaterialDriven led us to gain 129 new followers and expand our audience.
INSTAGRAM FOLLOWER DEMOGRAPHICS

Through our Instagram activity, we determined that the majority of our audience are women ages 25–34 living in New York. They are most active during work hours.

POSTS WITH THE MOST IMPRESSIONS

An impression is when a post reaches a user’s feed. One person can have multiple impressions from the same content. In the past year, these posts have received the highest number of impressions.
Contamination of marine and terrestrial ecosystems by microplastics is putting individual organisms at risk.

Plastic Pollutants Pervade Water and Land | The Scientist Magazine®
Contamination of marine and terrestrial ecosystems by microplastics is putting individual organisms at risk.

the-scientist.com

Country

<table>
<thead>
<tr>
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<th>% of audience</th>
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<tr>
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<td>4%</td>
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<tr>
<td>Canada</td>
<td>3%</td>
</tr>
<tr>
<td>Australia</td>
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<tr>
<td>Italy</td>
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<tr>
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<td>Turkey</td>
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Gender

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<tr>
<td></td>
<td>45%</td>
<td>55%</td>
</tr>
</tbody>
</table>
We are using Twitter as a platform to disseminate information and news related to toxicity, material and environmental health, and better industry practices. This engagement aims to support our current initiatives.

In analyzing our followers, we found that 55% of them are female, with the majority of them living in the United States. The top interests for our followers are business news and general info, followed by technology and design. These interests as well as our slow and steady growth in followers compared to other media platforms indicate that our engagement with Twitter users requires a different approach than our other strategic initiatives.
NEWSLETTER BENCHMARKS

OPEN RATE

24%

The higher the open rate, the more effective our newsletters are. This benchmark is set based on Architecture and Construction, Education and Training, and Non-Profit email open rates identified by MailChimp (24.98%, 22%, 24.98%).

CLICK-THROUGH RATE (CTR)

2.76%

The higher the click-through rate, the more effective our newsletters are in driving traffic to the website and other initiatives/events.

RESULTS

OPEN RATE

45.5%

The open rate for HML's newsletter is extremely high, which is a good measure of success. It indicates that the people on our mailing list are extremely engaged in the Lab and its communications.

CLICK-THROUGH RATE (CTR)

2.17%

The click-through rate for the newsletter is below our benchmark. However, this may indicate that our audience is using our emails mainly as an information source rather than a pathway to the website.
The goal of Healthy Materials Lab’s newsletter is to keep subscribers informed about new resources, the Lab’s current initiatives, and ways that readers can participate and advocate for better material ingredient transparency. This information is authored, published and disseminated twice a month to our main mailing lists and partners, along with email communications about our events, exhibitions and external partnerships.

In comparison with the industry average, the HML newsletter has a very high open rate. While the clickthrough rate is lower than the industry average, the newsletter continues to help direct traffic to targeted areas of the new website such as the Resources page and build awareness of HML both within and outside of the Parsons and New School community.
NEWSLETTER BENCHMARKS

OPEN RATE

24%

The higher the open rate, the more effective our newsletters are. This benchmark is set based on Architecture and Construction, Education and Training, and Non-Profit email open rates identified by MailChimp (24.98%, 22%, 24.98%).

CLICK-THROUGH RATE (CTR)

2.76%

The higher the click-through rate, the more effective our newsletters are in driving traffic to the website and other initiatives/events.

RESULTS

OPEN RATE

47.3%

The open rate for HAMP’s newsletter is extremely high, which is a good measure of success. It indicates that the people on our mailing list are extremely engaged in the Lab and its communications.

CLICK-THROUGH RATE (CTR)

0.70%

The click-through rate for the newsletter is below our benchmark. However, this may indicate that our audience is using our emails mainly as an information source rather than a pathway to our partners’ websites.

COLOR X HEALTH PDF DOWNLOADS

348

The HAMP Newsletter was extremely successful in directing users to download our Color x Health guidebook.

SUBSCRIBERS REACHED

3,178
We launched the first issue of the Healthy Affordable Materials Project Newsletter in May 2017 as a way to keep existing subscribers up-to-date on the many initiatives spearheaded by the Healthy Building Network (HBN), Healthy Materials Lab (HML), Green Science Policy Institute (GSPI) and Health Product Declaration Collaborative (HPDC) that aim to transform practices and reduce the use of toxic materials in building products.

This newsletter was forwarded to our partners to disseminate to their mailing lists. Based on our MailChimp analytics, the newsletter helped to drive traffic (348 downloads) to HML’s recently published Color x Health guidebook.
**ROLE MODELS:**

A Contest

$1000 CASH PRIZE

for Inventive Healthier Material Use in a Model, Prototype or Artwork

Up to 5 prizes will be awarded to students who demonstrate innovation through the use of healthier materials any time during the Spring 2017 semester.

Final submissions are due May 15, 2017. Award recipients will be announced by June 1, 2017.

Contest sponsored by Healthy Materials Lab and the Making Center at Parsons.

For more tips and official guidelines visit: healthymaterialslab.org

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**LUNCH + LEARN WITH FORBO FLOORING!**

DONGHIA GALLERY
25 & 337TH STREET 3RD FLOOR
WEDNESDAY NOVEMBER 9TH
12:00 PM - 2:00 PM

CONTACT US AT: MAILTO:FORBO@NEWSCHOOL.EDU

---

**LUNCH + LEARN WITH CARPETCYCLE!**

DONGHIA GALLERY
25 & 337TH STREET 3RD FLOOR
WEDNESDAY FEBRUARY 22ND
11:00 AM - 12:00 PM

CONTACT US AT: MAILTO:CARPETCYCLE@NEWSCHOOL.EDU

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**LUNCH & LEARN**

**SUMMER EDITION**

JUNE 22
2-3PM

ONLINE PREMIERE

**SIX CLASSES VIDEOS**

Webcasts Premiering Four Minute Videos On Six Chemical Classes of Concern.

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**WE ARE HIRING!**

ARE YOU PASSIONATE ABOUT MATERIALS AND HEALTHIER FUTURES?

JOIN THE STAFF AT THE DONGHIA HEALTHIER MATERIALS LIBRARY AND LEARN ABOUT WHAT MAKES A MATERIAL GREAT... AND GHASTLY! LOOKING FOR DEDICATED STUDENTS TO PUT MATERIAL HEALTH UNDER THE MICROSCOPE!

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**WE ARE HIRING!**
The goal of our on-campus communications strategy is to engage with the next generation of designers, change-makers, and thought leaders in the industry. We use compelling visual communication as a way to draw attention to events and initiatives which emphasize how material health does not have to come at the expense of exception design and visual aesthetic. With an audience of over 10,000 undergraduate and graduate students currently enrolled at The New School, of which 6,000 attend Parsons School of Design, we see this as an important audience to target as part of our communications strategy.

HAMP GOALS
• Facilitate Healthier Building Practices
• Accelerate the transformation to Healthier Practices in Affordable Housing

METRICS
10,000 students at The New School
6,000 students at Parsons reached

MOST CRITICAL OUTCOMES
Build awareness of resources, events and issues within the Parsons and The New School community

LEVEL OF ENGAGEMENT
Unaware to Advocate
HML is using demonstration projects as a tool to test material properties and installation in a variety of high-use areas. We are prototyping new materials use at The New School (TNS) to demonstrate how the institution can adopt healthier affordable material practices while also allowing us an opportunity to explore potential future uses of those products in the affordable housing sector. Taking this local knowledge we are also proposing to test installation and performance of new affordable products at the New York City Housing Construction Agency (NYCA) and other affordable housing locations in NYC as well as in Warren, Ohio. Specification and installation of healthier, affordable interior products situates human health as a core criteria influencing decisions from the persons in charge of specifying. In addition, we are also conducting more experimental demonstrations in an exhibition format to highlight healthier materials currently used in affordable housing. In this context we look to surprise and inspire existing design students and provoke current designers to rethink their practices.
Material Bodies Exhibit

Organs were suspended within cutouts of the displays, forcing viewers to peer in and get a close up look. From this position, they were then better situated to pause and read the material-health advisory messages.

$1000 cash prize for Inventive Healthier Material Use in a Model, Prototype or Artwork

Up to 5 prizes will be awarded to students who demonstrate innovation through the use of healthier materials any time during the Spring 2017 semester.

Final submissions are due May 15, 2017.

Awards will be announced by June 1, 2017.

Contest sponsored by Healthy Materials Lab and the Making Center at Parsons.

For more tips and official guidelines visit: healthymaterialslab.org

3 Quick Tips

- Use mechanical joinery or fasteners instead of glues or adhesives
- Use natural, salvaged, recycled or bio-based materials
- Avoid materials containing potential toxics, including VOCs, flame retardants, and synthetic surface treatments

Jack Dinning

24 PARSONS SHIRT-LESS EVENT

26 HELEN WALTON EARLY CHILDHOOD EDUCATION CENTER

27 ARCHITECTURAL FIRM PARTNERSHIPS

28 AFFORDABLE HOUSING DEVELOPER PARTNERSHIPS

25 ROOM TO DAYDREAM INSTALLATION
During the time of the exhibit, the building was undergoing facade renovations that required scaffolding along the gallery's window displays. Rather than seeing this as an obstruction, we used the scaffolding as a catalyst to frame views and create dynamic and intimate scenes. As pedestrians passed by, shifting perspectives came in and out of focus, momentarily situating viewers in precise moments in space. This interaction grounded the advisory messages with a physical presence, giving them an unobserved reality akin to the bodily effects of materials.

With the gallery situated at the busy corner of 5th Ave and 13th Street, passing pedestrian traffic was our primary audience, and it was these shifting perspectives that informed the dynamic composition of the scene.

**Material Bodies Exhibit**

**Select Compositions**

Organs were suspended within cutouts of the displays, forcing viewers to peer in and get a close up look. From this position, they were then better situated to pause and read the material-health advisory messages.

Heavy metals such as lead, cadmium, and mercury can be found in building products such as paint pigments and electrical insulation. Exposure to heavy metal can result in neurological and cardiovascular disease, neurological disorders, and other serious consequences. Products that have been treated with flame retardant chemicals posing health and environmental hazards that are persistent and bioaccumulative and can disrupt hormone function. To avoid unnecessary exposure to toxins look for natural or recycled blanket and batt insulation.
22 MATERIAL BODIES EXHIBITION

In this gallery installation at the Kellen Gallery, sculptures of human organs were created from building materials that commonly contain toxics known to affect such organs. This intimate yet invisible relationship is often lost in discussions of materials sciences, and we felt it was important to give the relationships a physical presence in order to embody such connections.

During the time of the exhibit, the building was undergoing facade renovations that required scaffolding along the gallery’s window displays. Rather than seeing this as an obstruction, we used the scaffolding as a catalyst to frame views and create dynamic and intimate scenes. As pedestrians passed by, shifting perspectives came in and out of focus, momentarily situating viewers in precise moments in space. This interaction grounded the advisory messages with a physical presence, giving them an unobserved reality akin to the bodily effects of materials.

HAMP GOALS
• Increase Materials Transparency

METRICS
Visible to 3600+ pedestrians/hr over a 2-week period during the winter holidays (NYC Department of Transit’s pedestrian count, 2016)

MOST CRITICAL OUTCOMES
Make connections between the body and material health through the exhibit. Engage pedestrians and bring them from being unaware of toxics in building materials to becoming observers.

LEVEL OF ENGAGEMENT
Unaware to Observer
Biodegradation

Different Scale Option

VASEO

a biodegradable vase

Materials

Water + Agar-Agar Powder (from Red Algae)

Decorative Element Options

Decays with Flower Life Cycle Analysis

Around Two Weeks algae gas silicone refrigerator biodegradation Vaseouser agar powder boil plant decorative elements molder maker fossil fuelelectricity soil nutrition flower shop water rotomolding casting dehydration (oven bake)

Jacob Olmedo, BFA Fashion Design

Lifan Deng, BFA Product Design

Gwyneth Ong, Irene Lu, Terrence Zhou, Chloe Edwards, AAS Fashion Marketing

Isabella Caterina, BFA Fashion Design

Sara Burns, MFA Interior Design

Samantha Bennett, MFA Interior Design
ROLE MODELS

Healthy Materials Lab partnered with the Making Center at Parsons to sponsor the Role Models Contest, an opportunity for New School students to take a closer look at the materials that make their projects and challenge themselves to design with health in mind. Participants were asked to propose and use healthier model-making materials in their Spring 2017 projects. Out of 41 great submissions, we awarded 5 prizes of $1000 to the following:

• Jacob Olmedo, who exhibited true environmental activism in his project on growable clothes. Not only did Jacob show great experimentation, but he also demonstrated the necessity and feasibility of fundamental change in the design world.
• Sara Burns, who re-imagined affordable housing in her scaled model of a NYCHA (New York City Housing Authority) apartment. Her project re-thought how a family might use their space using healthier materials and make it their own, turning it into a real home. The model itself was constructed of healthier building materials.
• Isabella Caterina, who created garments for those suffering from Parkinson’s. The project showed a deep level of empathy and a great depth of research, addressing both physical and mental health.
• Lifan Deng, who created Agar Agar vases in which the vase and its flowers would decay at the same rate. This project on biodegradability and zero-waste truly showcased innovation and an acute awareness of environmental health.
• A team of designers, Gwyneth Ong, Irene Lu, Terrence Zhou, Chloe Edwards’ project focuses on hospital gowns. They researched the challenges with current gowns, explored a variety of textiles in its proposed alternate, and met usability with aesthetics, providing immediate impact.

Finally, the runner-up of the Role Models Contest is Samantha Bennett, whose Mycelium stool project considered aesthetics in a novel way when it comes to ecovative innovation. She coated it in mineral paint, combining two healthier products. She presented her project off the drawing board, providing a real stool for the jury to examine.

Across the board, students demonstrated a clear understanding that designs are never made in a vacuum—that they in fact have extensive and inescapable impacts. We are proud to know that these students are the future of design, and we’re excited to see how their ideas and practices evolve.

HAMP GOALS
• Demonstrations of Better Practice
• Increase Materials’ Transparency

METRICS
41 submissions
5 winners, 1 honorable mention

MOST CRITICAL OUTCOMES
Build awareness of resources and tools for students and faculty. Demonstrate the application of healthier materials in addressing systemic change.

LEVEL OF ENGAGEMENT
Observer to Supporter to Advocate

COLLABORATORS
The Making Center at Parsons School of Design

JURY
Andy Bernheimer
David Leven
Daniel Michalik
Will McHale
Laura Sansone
Jonsara Ruth
Alison Mears
New School students, faculty, and staff were invited to make their own college t-shirt between August 29th and September 1st in the main lobby of the Sheila Johnson Design Center. Participants were able to pick from an assortment of second hand t-shirts and rebrand them with our school’s logo, a Parsons “P”, HML’s logo, or a playful variety of woodblock dots (a subtle reference to the HML logo). We relied on personal exchanges with participants to uncover and explore the complex issues that brought about Parsons Shirt-LESS.

So, we decided to host an event with underlying themes of material reuse, waste reduction, and healthier printing materials. We found the same underlying principles are the basis for Wearable Collections, a textile recycler for the NYC area. So we collaborated with them to gather 200 t-shirts in every color and every size to offer to students coming back to school in late August. We harvested additional colors and sizes from the Salvation Army and Goodwill. During the week, The New School’s Marketing and Communications office enthusiastically donated 80 additional shirts with The New School proudly printed in gold.

Creativity and conversation were vibrant over the course of the four day event as more than 200 people gave second hand t-shirts a new life. The event brought together New School faculty, Executives, members of the Board of Governors, and a diverse mix of students from Parsons; Mannes School of Music; Eugene Lang College for Liberal Arts; New School for Public Engagement; Milano School of International Affairs, Management, and Urban Policy; Continuing Education, and more. We were inspired by the variety of perspectives and experiments tested represented by participants, and are excited to continue the conversations initiated within our community and beyond.
Many interior spaces are constructed with products that contain chemicals and pigments linked to neurological disorders, lower IQ and hyperactivity in children. In the pursuit of true well-being from the inside out, The Room to Daydream is carefully calibrated to facilitate inward exploration while eliminating avoidable toxics. Reflecting on Arianna Huffington and Thrive Global’s mission of enhancing well-being and preventing burnout, aligned with the HML dedication to promoting the prioritization of human health across all aspects of building practices, the project team envisioned a space for daydreaming built exclusively with healthy materials. The sequence of the installation gradually leads the visitor to enjoy a restful 20-minute nap, an interval which has been proven to improve mood, alertness and motor skills.

Wool was chosen as the primary material for its natural properties of sound reduction and air purification, along with its resistance to bacteria, mites, and mold. All surfaces in the room were covered in flokati wool rugs — including the bed, as wool also naturally regulates body temperature. Gentle ambient light was programmed to subtly “breathe” in a restful eight-second fade cycle. The blue spectrum most disruptive to the body’s circadian rhythm is eliminated, and the warm color temperature is softened by the cool tones of the ceiling, which was treated with a mineral-based, non-VOC emitting paint. After each guest uses the space, all surfaces are sterilized with a UV wand to ensure a pure, rejuvenating experience for the next visitor.

Donated Materials:
- Paint, EcoDomus (zero VOC, mineral based), by RomaBio
- Flokati (100% wool wall and floor coverings), by Coco-Mat
- Pillows, by Coco-Mat
- Wool Sheer Curtains, by Donghia
- Daybed, Bench, and Blankets, from Design Within Reach
Children’s Vulnerabilities

Children’s behaviors and consumption rates often put them in greater contact with toxic substances. They also have difficulty processing these chemicals due to immature metabolisms, increasing both their frequency for exposure and the severity of its impact.
In this project with LTL Architects, children's health was a critical factor in the materials selection process. Through identifying the conditions that affected children most in this region, we were able to create a metric for assessing the potential impact of any given product, and could prioritize design decisions without relying on generic industry standards.

**Children's Vulnerabilities and Materials of Concern.** With an understanding of the factors that made children vulnerable to exposure, we then identified the categories of building materials that would be most important to address. This allowed us to focus attention to the products that would have the greatest impact, rather than spreading resources less efficiently across all types of materials.

**Scorecards for Health Assessments and Accessibility Comparisons.** Creating material scorecards allowed us to compare product options based on our own health criteria, as well as factors like costs and local availability, which would make the selections more accessible to lower income communities, and would be instrumental to getting these healthier choices from our specifications into the building.

**Integrated Design Guides for Project Implementation.** This series of guides was disseminated among each branch of the project team, generating awareness and cultivating a unified spirit that would be essential to creating lasting and meaningful impacts.

**Projected Reach and Impact of Health Strategies.** An additional component of the building’s program was an early childhood professional training center. Through this organization, we looked to disseminate strategies that professionals could use in the design and construction of their own facilities. With 5,000 professionals trained here annually, we could potentially then reach an additional 32,000 children.
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<th>Review</th>
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<td><strong>Certifications + Benchmarks</strong></td>
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As part of HML’s strategy, we are developing partnerships with architectural firms to create more material health advocates within the industry. The focus of our collaborations is on affordable housing and projects that impact children in poverty. A key component of these partnerships is consideration for design, construction, as well as occupation.

**HAMP GOALS**
- Facilitate Healthier Building Practices
- Accelerate the transformation to Healthier Practices in Affordable Housing

**METRICS**
Grow architects committed to change. To date AH focused arch firm-newest new 100% affordable 90 units, Bronx. First to adopt better materials use. RFP 250 units.

**MOST CRITICAL OUTCOMES**
Architects change their practice to incorporate healthier material review and choices. Built projects provide proof of concept to the profession. New Manuals support change for all team members including residents.

**LEVEL OF ENGAGEMENT**
Unaware to Supporter to Advocate

**COLLABORATORS**
- Bernheimer Architecture AH, NYCHA
- LTL Architects Early Childhood Education/Walton Foundation
- LevenBetts Architects AH, NYCHA
- Rogers Partners Architects
- BriggsKnowles Architects
- Ennead Architects
- Henning Larsen Architects

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**DEMONSTRATION & INNOVATION**
Healthy Materials Lab worked with Anasa Scott, part-time faculty at Parsons, and Sustainability Advisor for the West Harlem Housing Group; The New School; and WHGA to improve the ongoing sustainability of West Harlem housing by specifying key interior products (paint, flooring) alternatives that are affordable and healthier—thereby removing potential sources of potentially harmful chemicals. In this 8-unit renovation, they are exploring the use of specified materials as a demonstration of better practices. By introducing healthier building materials and products to project contractors, as well as tenants, we are committed to changing development practice to include healthier materials in construction. These partnerships with affordable housing developers are key components of our strategy in creating a coalition of Material Health advocates.

**HAMP GOALS**
- Facilitate Healthier Building Practices
- Accelerate the transformation to Healthier Practices in Affordable Housing

**METRICS**
WHGA has developed over $300 million low to moderate income housing totaling 1,640 units, 900 units are self-managed.

**MOST CRITICAL OUTCOMES**
AH developers commit to changing development practice to include healthier materials in construction ongoing.
Proof of concept: WHGA to change its renovation guidelines.

**LEVEL OF ENGAGEMENT**
Unaware to Supporter to Advocate
The Parsons Healthy Materials Lab is using a case study methodology to ground its research in year 1 and 2 of the grant. We have been researching the process of development of five different affordable housing developers. This research records systems, processes and decision-making that contribute to the building of new affordable housing developments across the United States. The research team investigates particular developments that incorporate healthier building products and developers that have a stated mission to advocate for and transform standard building practices within the Affordable Housing industry.

The case studies approach is based on a systems thinking methodology that investigates the quantitative and qualitative factors that determine key decision-making factors in the Affordable Housing sector. The reports examine and identify the important decision making relationships that exist within these systems to specifically identify how, why and when building product decisions are made.
29 Foundation Communities Case Study
Austin, TX
SCHEDULED FOR COMPLETION JUNE 2017

30 Carmel Place Case Study
New York City, NY
SCHEDULED FOR COMPLETION JUNE 2017

31 Trumbull Neighborhood Partnership
Warren, OH
SCHEDULED FOR COMPLETION JUNE 2017

32 The Rose Case Study
Minneapolis, MN
Innovative Practices for Healthier Homes
COMPLETED YEAR 1

33 First Community Housing Case Study
San Jose, CA
Innovative Practices for Healthier Homes
COMPLETED YEAR 1
Foundation Communities is a 25-year-old nonprofit affordable housing developer based in Austin, TX. Their properties are primarily located in Austin, along with three properties in the Dallas/Fort Worth Area. Their portfolio includes 15 properties and they are currently working on the development of three new properties in 2015-2016 alone. Their mission is to provide affordable, healthy, attractive homes and free on-site support services for thousands of families, as well as veterans, seniors, and individuals with disabilities. They integrate an innovative model to empower residents and neighbors to achieve educational success, financial stability, and healthier lifestyles.

Green building strategies have been a baseline approach for Foundation Communities development. They have pursued the Enterprise Green Communities certification since its inception in 2003, and continue to exceed LEED Platinum criteria.

Foundation Communities has been aligned with Austin's S.M.A.R.T. Housing™ Initiative, a municipal program, launched in 2000, that incentivizes the construction of quality affordable housing. One of the program's requirements is to meet a minimum threshold under the Austin Energy Green Building, which was one of the first municipal green building programs in the country. Foundation Communities have now adapted these guidelines for all projects. They are also exploring new certifications, including the Living Building Challenge to support their commitment to using healthier materials in their developments and intend to submit Lakeline Station (construction to begin in 2016) as a pilot project for the certification. Green initiatives are integrated into post occupancy outreach including maintenance and resident education with a focus on energy efficiency practices, on-site recycling, and community gardening. In 2014, Foundation Communities doubled their solar capacity 433 kilowatts, making them the largest private solar owner in Austin. Their dedication to health, financial stability and green education encourages residents to conserve energy and use homemade cleaning products to maintain indoor air quality safe. Furthermore, their on-site Learning Centers offer after-school and summer school curriculum for children to learn green habits.

Healthy Affordable Materials Project focus their study of Foundation Communities on three sites: M Station (opened 2011), Capital Studios (opened in 2014) and Lakeline Station (opening 2016).
Carmel Place is a mixed-income, micro unit housing development in the Kips Bay neighborhood of New York City, owned by Monadnock Development and the Lower East Side People’s Mutual Housing Association. This project is an example of an innovative approach to Affordable Housing in a myriad of ways – it is the first multi-family building in Manhattan developed using modular construction; the only housing development in New York to have secured a zoning override which allows construction of new apartments under 400 sf; the first micro-unit development in New York City and distinguishes itself even further by being 100% micro units. The 55-unit development is 40% affordable, with eight of those twenty-two apartments made available to formerly homeless veterans. The remaining fourteen units were available within the city’s affordable housing lottery system and garnered an astonishing 60,000 applications. The construction of the units adhered to green guidelines to achieve LEED silver status and the Enterprise Green Communities checklist (2011).

The Carmel Place development was a result of a study conducted in 2007 during Mayor Bloomberg’s administration which showed a projected 9.1 million New York City residents in 2030 (note: by 2015 we had already reached the projections of 8.5 million for 2020). The Citizens Housing Planning Council (CHPC) – A research and education organization whose goal is to advance public policies to support NYC’s housing and neighborhoods – inspired by the projected spike in population in PlaNYC, created a research initiative – Making Room. This study focused on examining the current living situations in NYC households. The study revealed that 33% of New York City’s housing units are occupied by single people living alone with the statistics rising to an surprising 46% in Manhattan. The study also identified solutions as to how the city’s housing stock could accommodate both the change in habitation for singles in New York City, and also address the potential increase in population. In a response to this research in July of 2012, NYC Housing Preservation and Development launched adAPT NYC, a pilot program to develop a new model of housing to adapt to the city’s changing demographics. The Request For Proposal, that resulted form this study was downloaded 1,600 times and had a record 33 submittals.

While the focus of other case studies conducted by HML has been on developments which have made healthier building material choices a priority, the driver for our study of Carmel Place was the innovative response to the large number of New Yorkers living alone and the potential to signal a new typology of affordable housing for New York City. The case study also presented an opportunity to examine the building materials that were used in this project and compare them to those used in other developments which actively pursued the inclusion of healthier building materials.
Once a thriving center of innovation in industry and progressive labor conditions, Warren, Ohio is now a rapidly shrinking city. Warren's Garden District was once the home of its wealthiest residents, but is now an area facing multiple challenges, among them abandonment, unemployment and drug-related crime. There has been a combination of tactics to respond to the local conditions including the demolition of numerous houses in the area. This case study serves to document the current practices in demolishing and renovating existing housing stock. The age and original materials of these houses present health challenges from lead and asbestos in both the buildings and the surrounding soil. We will document the history of the air and soil pollution in the area, note the current practices of abatement and remediation, and make further suggestions for the future. Finally, this case study will include recommendations of building material choices that are affordable and accessible enough to become a new standard of building as the renovations and repairs continue in this underserved community.
The Rose is a mixed-income housing project in Minneapolis developed by Aeon and Hope Community. Investigating this project offers an introduction to understanding the processes and challenges of designing and building affordable, sustainable housing. It is particularly interesting to explore such a development and connect with key stakeholders of the project as all parties have demonstrated an intention to prove that sustainable, net-zero-ready, healthier housing development can be built affordably. Such a common motivation between stakeholders in the housing development industry is timely and offers a momentum to work together towards tools, mechanisms, and propositions to make the process more transparent, practical, affordable, and replicable, and thus, more easily accessible to other housing developers. The transparency and commitment to share information on promising practices from the developers, architects, contractor and consultants demonstrates a real desire to work together for positive change, moving beyond competition towards collaboration in the affordable housing sector. Our hope is that this report is a resource for the organizations involved in the building of The Rose and an aid to widely disseminate and replicate better building practices.

Dissecting the challenges of specific moments, key decisions, and negotiations brings to light the road to innovation for the creation of more sustainable, healthier buildings. The network of complex relations, partnerships and decision-making processes existing between National and State policy, Developer, Architect, Contractor, Manufacturer and local communities is an important characteristic of the project. This development would not have been as successful without the dedication and perseverance from members of the design team and the leadership of Aeon and Hope Community.

Examining The Rose as a pilot project also enables an understanding of the current benchmarks for sustainable and affordable developments. In understanding the guidelines of the two certifications the development subscribed to, the Living Building Challenge (LBC) and Enterprise Green Communities Certification (EGCC) allows for a critical analysis of the implementability and replicability of their requirements in relation to human health and affordability. LBC is a philosophy and tool for the construction industry that is defining the current highest measures of sustainability. The LBC criteria is based on seven different petals: Site, Water, Energy, Materials, Beauty, Equity and Health. Each petal requires its own individual certification, and each petal certification must be achieved in the development in order to gain full certification. The EGCC is encouraged for Multifamily and Single Family new construction and rehabilitation projects requesting Minnesota Housing financing. EGCC has created a standard that is based on health, energy efficiency, and environmental responsibility, and encompasses the design, construction, and operation of a development. The EGCC method is based on a point system and promotes an integrated design throughout the entire lifecycle of the development.

This case study uses a particular lens on the specification and procurement process of the interior building products of the development in order to uncover the relationship between affordability and the challenges of purchasing less toxic construction products. This study is part of the Healthy Affordable Materials Project that seeks to improve the lives and health of residents living in affordable housing by reducing the use of hazardous materials in the building supply chain. The long-term vision for the Healthy Affordable Materials Project includes firstly to understand best practices in the building industry; secondly, to create tools that aid the decision-making process around product specification for all stakeholders designing, constructing and occupying homes; and thirdly, to bring transparency in the building supply chain through the introductions of mechanisms for declaring product ingredients. The success of The Rose as seen in the sharing of resources and information is a first step that supports the Healthy Materials Lab’s initiative.

This research was carried out from May to November 2015, and includes excerpts from interviews carried out with numerous stakeholders who participated in this development. MSR Design and their documentation of the process and Aeon’s expertise in affordable housing development were key resources to this research. The Rose opened in October 2015 and a post-occupancy survey and analysis has been set up to be completed and ongoing in the coming years.

Video on The Rose:
https://www.youtube.com/watch?v=M1sz-wCWv2A
First Community Housing (FCH) is an award-winning, nonprofit, Public Benefit Housing Development Corporation, located in San Jose, California. Since 1986, FCH has created housing for more than 3,200 low-income residents in 19 affordable rental housing developments (in over 1,380 units) throughout the San Francisco Bay region. The low-income populations served include families, senior citizens, and the formerly homeless, as well as special needs populations such as the chronically ill, the developmentally disabled, and consumers of mental health services.

“There is a need for everyone to have a place in the community”, explains Geoffrey Morgan, FCH President and CEO. This inclusive vision is further complemented by designing each development specifically to enhance and harmonize within its unique neighborhood and to be accessible by residents in particular need of supportive housing. The mission of FCH is to provide quality and healthy environments. Dedication to this mission is apparent throughout the design, construction and leasing stages.

FCH engages an integrated design process in their approach from the earliest stages of a project. Members from the distinct design teams, alongside the building management team and contractor, are involved in the design and procurement process to ensure collaborative and thoughtful development. From the time of land acquisition, FCH engages with city officials and their partners, including architects, general contractors, and sustainability advisors to ensure the designs promote sustainability and health for the builders, residents and staff. Specific consideration is given to choosing less toxic products that will be recyclable in a healthy way. Long-term partnerships have been developed over the years. For example FCH has worked with OJK Architects for over 21 years on many of their projects. These partners are exemplary in what Morgan describes as the ‘informed decision makers who break down the silos between housing and healthcare’ (Morgan, FCH, 2015).

Over the last few decades, FCH has been developing a baseline approach for building healthier, more sustainable buildings. They now have a long standing product list they specify from for each project. This facilitates the procurement process along with reducing cost of research and risks of testing new materials in their properties. FCH also continues to learn from their design successes or drawbacks through long-term, active, post-occupancy work. Their in-house management leaders, the Sustainable Facilities Manager and the Sustainable Site Manager, train the building managers to incorporate healthy products in their practice as well as running workshops with residents on how to use affordable and healthier products in their households. This ongoing relationship enables a feedback loop to ascertain what materials or spaces are working better than others, and informs future projects. It also ensures that buildings work efficiently, ultimately saving FCH in repair and energy costs down the line.

There are few market rate developers building to LEED standards in Santa Clara County, but FCH has been dedicated to building healthier buildings for decades. FCH is not a certification seeking organization, but has followed green practices ‘before green was cool’ (Morgan, FCH, 2015). Their holistic approach and belief that ‘housing is healthcare’ brings the developers outside the standard remits by providing other services that encourage residents to be mobile and engaged within their city. For example, each resident living in any FCH property receives a free EcoPass which allows unlimited use of the network of VTA Bus, Light Rail and Express Bus service throughout San Jose, ensuring residents have convenient access to the city. Many of the properties are built in locations with proximity to transportation hubs in mind.

At a time when there is increasing understanding that housing can be integrated with other services such as healthcare, transit, and education, FCH has for a long time understood this integrated design approach. For example, a 2016 study conducted by Center for Outcomes Research & Education (CORE), with support from Enterprise Community Partners, focused on access to healthcare and explored how “we live in a profoundly interconnected world. In the emerging era of accountable care, health care systems and affordable housing providers may want to mutually consider the potential benefits of stronger cross-sector collaboration.” (Saul, Amanda et al., 2016) FCH demonstrates their commitment to bettering lives through integrating their housing with the services described above. Their vision that “housing is healthcare” extends to materials selection, and their dedication to making access to health, as well as healthier living environments, has positively affected their residents.

The Healthy Affordable Materials Project case study focuses on the process undertaken for three FCH developments, all of which are at different design or development stages: Mountain View Studios (opened June 2014), Japantown (opened December 2015) and Orchard Gardens (construction began 2016). These developments were chosen as they, together, demonstrate FCH’s innovative process, the various types of housing and services provided, and a spectrum of materiality and interior products installed.

Video on First Community Housing: https://www.youtube.com/watch?v=0iTrSBASkJ8
HML is working with government agencies and other organizations to change their specification processes and establish industry guidelines for material health. By working on both large-scale policy shifts and applied demonstrations, HML aims to create systemic, long-term changes in practices that will affect the entire building materials chain.
The HML team’s contribution to the collaborative project involves assisting with the identification and specification of healthier products, including the specification of better paint products for the renovation of the child care centers. Instead of employing a typically-used higher-VOC interior paint for this project, the team selected a variety of low- or no-VOC paints that would minimize the introduction of unnecessary chemicals into children’s classrooms. The Lab is also involved in comprehensive research about the application of color and light theories and their impacts on early childhood learning and is incorporating this research in the choice of paint palettes in order to support the educational mission of the center. The installation of these healthier paint products will have a direct and positive effect on children’s health and the quality of interior spaces.

In HML’s approach to community engagement and outreach, the impetus is to engage people through discussions about color, light, and health at the project site and beyond; and to transform the way renovations are seen at all of NYCHA operated buildings and into the future. For the first site visit to the children’s center, the HML team brought large color palettes to enable the colors to come to life in the Center. This approach allowed the faculty and administrator team, to visualize the colors in the space and help them to make an informed color palette selection. The ultimate goal of the project is twofold. First, to demonstrate that small changes in material choices can have a profound impact on human health, and second, to reveal the overall positive effect of color and light on mental, physical and emotional health. Design has the potential to inspire learning and foster a commitment to healthier building practice.

The project was made possible with the help of Sherwin Williams paints who donated their Sherwin Williams ProMar 200 Zero VOC Interior Latex paint for the project and NYCHA who organized the paint crew and oversaw the painting. Upcoming, we hope to work on two other NYCHA child care centers using other paint products with a range of paint choices. The partnership between the Healthy Materials Lab (HML) and New York City Housing Authority (NYCHA) is an example how small, incremental change, like choosing an alternate paint product, can lead to substantial change over time. This demonstration provides NYCHA with healthier paint options and paint palettes for all of their renovations, not only the childhood education centers but also all of the apartments they maintain.
As a business leader I am concerned about the health of our world - my employees, customers, communities, and the global environment. I am committed to reducing the use of chemicals that pose harm to human health and the environment.

I commit to ask my suppliers about the presence of the following chemicals of concern in the products that we produce, specify or purchase:

- Antimicrobials
- PVC often known as vinyl
- Flame retardant chemicals
- Fluorinated stain treatments
- VOCs including formaldehyde

sustainablefurnishings.org
On October 21st, the Sustainable Furnishings Council (SFC) celebrated their 10th anniversary, an event that hosted over 500 members and friends of the SFC and marked 10 years of efforts to help furniture companies “reduce their environmental footprint” and consumers furnish their homes with healthier materials. To mark a decade of diligence, the SFC announced its partnership with Healthy Materials Lab, the Center for Environmental Health, and the American Sustainable Business Council to launch a new environmental health initiative: “What’s it made of?” The new initiative encourages the elimination of hazardous substances often found in residential furniture by asking manufacturers to inquire about the properties in the materials they use and the products that they make.

Recognizing the correlation between design and health, Healthy Materials Lab is proud to join forces with like-minded organizations to further the cause.

The organizations, leaders in the call for environmental health consciousness in the furniture industry, have worked together to create a pledge for designers and manufacturers to avoid chemicals of concern. Those that signed pledged to ask “What’s it made of?”, declaring their preference for products free from five key hazardous chemicals: flame retardants, PVC, fluorinated stain treatments, antimicrobials, and VOCs including formaldehyde. The focus on these five chemicals was based on research about the chemicals’ impact on human health and their prevalence in the furniture industry.
Supply Chain Questionnaire

Thank you for completing this supply chain questionnaire about the products you supply.

Our company has signed ‘The Pledge to ASK “What’s it made of?”’
https://sustainablefurnishings.org/content/whats-it-made-initiative

As a next step I am committed to determining the presence or absence of the following chemicals of concern in the products that you provide to us: Flame Retardants, Fluorinated Stain/Water Resistant Treatments, Antimicrobials, Formaldehyde and Polyvinyl Chloride (PVC). Our goal is to improve the health of our customers, employees, communities and the global environment by reducing the use of chemicals that pose harm to human health and the environment.

We wish to improve our supply chain with your help, and we thank you in advance for your partnership in this endeavor.

Please respond to this questionnaire within 30 days of receipt, and let me know when you have completed it. If you have any questions about the survey, please contact Susan Ingle at susan@sustainablefurnishings.org or (252) 368-1098.

* Required

**Email address** *

Your email

**Name of Person Completing Questionnaire** *

Your answer

**Title of Person Completing Questionnaire** *

Your answer

**Company or Organization** *

Your answer

**Phone number**

Your answer

Next

Never submit passwords through Google Forms.
The “What’s it made of?” Initiative was launched with a free webinar hosted by Sustainable Furnishings Council that took place on March 16, 2017.

At the launch the Initiative consists of a simple Pledge to ASK, and an online tool to support signatories to the pledge in seeking assurance that their suppliers are fully disclosing information on production inputs. The partners plan to expand their efforts with seminars and training sessions within the industry and with consumer outreach. The first of these events will be a panel discussion over lunch at High Point Market, exploring “What’s it made of?” sponsored by UL and featuring leading SFC members.

Coming together for this Initiative, SFC, ASBC, CEH, HML, GCI and others are building upon efforts they have been making individually. As a group and individually, the organizations are focused on raising awareness, educating, and providing guidance to consumers as well as within industry. The partnering organizations offer a range of resources useful for consumers as well as for furnishings professionals.
Healthy Materials Lab works with multiple branches of the NYC government to address issues affecting the health of the city’s most vulnerable communities. As one of our collaborations, we worked with the Department of Health and Mental Hygiene (DOHMH) and graduate students in the MFA Interior Design program at Parsons School of Design on designing nurturing and restorative spaces with a specific focus on models for Women’s Health Suites in the Brownsville community. It is the DOHMH’s intention that these spaces provide access to comprehensive women’s health and baby-friendly care, which would help address infant mortality. It is also possible to include space for supportive group work (e.g., parenting support and coaching, smoking cessation), and exercise studios and equipment. It is the goal of these spaces to support healthy birth outcomes by reducing stress and providing a physical space for women to breastfeed, rest, exercise, and connect with each other. These structural supports are often missing in communities with poor birth outcomes and high infant mortality rates.

City programming in these spaces would also provide women with information and resources they need to stay healthy before, during, and after pregnancy, and offer them the support their young infants need. Some of the DOHMH’s key initiatives to support infants and healthy mothers include breastfeeding and safe sleep education, cribs for families that cannot afford them, home visitation during pregnancy and early childhood, and promotion of women’s health, including increasing access to contraception to help plan pregnancies.
Jonsara Ruth, founding member of Healthy Materials Lab, and Alison Mears, Director, joined the advisory group of the Community Outreach and Engagement Core of The Mount Sinai Transdisciplinary Center on Early Environmental Exposures at the Icahn School of Medicine at Mount Sinai hospital in NY.

Actively engaged in clinical outreach, educational initiatives, and policy-making, the mission of the Community Outreach and Engagement Core is to “foster communication and collaboration among environmental health scientists and stakeholders (community based organizations, clinicians, advocacy groups, policymakers) on the role of environmental exposures in children’s health, and strategies to build healthier environments, particularly in East Harlem and the South Bronx.” Mt. Sinai, Healthy Materials Lab at Parsons School of Design, CUNY Law’s Center for Urban Environmental Reform, WE ACT and Children’s Environmental Literacy Foundation are just a few of the impactful organizations that are part of the core. Their outreach can be as straightforward and fundamental as providing opportunities for individuals to learn about the various health concerns they and their family face, but more often the board members push the envelope. They aim high and, together, their aims are within reach.
Luz Guell, Project Coordinator at Mt. Sinai’s Community Outreach and Engagement Core (COEC), and Maida Galvez, Co-Director of COEC, have teamed up with Jazmine Dejesus, President of the community group that manages resident interactions at George Washington Carver Houses, to make this mission a reality. The project’s goal is to make a hub for the community to interact, learn, and feel comfortable in – in other words, to make home feel more like home.

The room that they’ve chosen to develop is one in which they themselves have had their many meetings for Carver Houses—including discussing how to build programs and strategize outreach for the community. It measures about 1200 square feet and is comprised of offices, storage rooms, bathrooms, etc. all for the use of the residents and to host any community initiatives. The first step in the renovation was a thorough cleaning of the space, which has now been completed.

The next step was actually painting the area, which took place in two phases. First, Publicolor, a nonprofit that works with youth in the community to paint public spaces, gave Carver Housing’s new resident hub a clean base coat of paint. A team of high school students who’ve participated in paint training programs led by Publicolor worked their magic on April 12th and 13th. By the end of that Thursday the 13th, the space was fresh and ready for the next step—color.

That’s where Parsons, The New School stepped in. During the last week of April, Parsons School of Design students, under the guidance of Parsons faculty Helen Quinn and Gina Gregorio, came in to design murals for the space. They employed colored paints, color theory, patterning, and geometry to create feature walls. Both Publicolor and the Parsons students used healthier materials, particularly in the paint that they have chosen, to keep both design and health in mind. The result was a clean, light, colorful space for the community to gather in. Led by Luz and Maida, the hospital’s outreach program will use the hub for activities and initiatives designed for residents and community members.

The key takeaway of this project is how much is built on the altruistic collaboration of a multitude of programs and people—from The New School and Mt. Sinai, to Publicolor and Benjamin Moore Paints, who donated the paint. Most important is what lies behind that successful collaboration: the remarkable commitment of designers beyond the actual design process.

### Collaborators
- Mt. Sinai Community Outreach and Engagement Core (COEC)
- Publicolor
- Benjamin Moore Paints
- Helen Quinn
- Gina Gregorio
The following partners have donated products to the lab for demonstration projects.

**MANUFACTURER**

- **FORBO**
  Resilient flooring

- **BENJAMIN MOORE**
  Paint

- **SHERWIN-WILLIAMS**
  Paint

- **ECOVATIVE**
  Biomaterials

- **CARPETCYCLE**
  Material recycling

- **COCO-MAT**
  Bedding products

- **DESIGN WITHIN REACH**
  Furniture

- **ROMA PAINTS**
  Paint
We are working within the university to change construction practices.
CONFERENCES AND OTHER EVENTS

ATTENDED

ZERO WASTE FOOD CONFERENCE
April 2017

ECOLOGY OF CARE CONGRESS, INVITED PARTICIPANTS, JONSARA AND ALISON, COPENHAGEN
November 2016

MOUNT SINAI’S STAKEHOLDER ADVISORY BOARD MEETING
February 2016
CONFERENCES AND OTHER EVENTS

PARTICIPATED

CARVER HOUSES PAINTING INSTALLATION WITH PUBLIC COLOR AND MT. SINAI, NYC
April 2017

BFA FASHION, PARSONS, CARE+WEAR STUDIO. GUEST ADVISORS, JACK AND ABIGAIL
April 2017

SFC WEBINAR. PRESENT PART OF THE “WHAT’S IT MADE OF?” SFC INITIATIVE WITH CEH, AMERICAN SUSTAINABLE BUSINESS COUNCIL AND GCI GENERAL CONTRACTORS. SPEAKERS, ALISON AND JACK
March 2017

VERGENYC 2017 CONFERENCE. GUEST SPEAKER, JONSARA RUTH
February 2017

SCHOOL OF CONSTRUCTED ENVIRONMENTS, PARSONS. EARTH SYSTEMS AND ELEMENTS GRADUATE SEMINAR. GUEST PRESENTER, JACK DINNING
February 2017

“SCHOOLS AS AGENTS OF CHANGE.” PAPER PRESENTED AT OPEN DESIGN FOR E-VERY-THING, CUMULUS HONG KONG 2016. GUEST SPEAKERS, ALISON MEARS AND CRISTINA HANDAL
November 2017

SCHOOL OF CONSTRUCTED ENVIRONMENTS, PARSONS. FULL-TIME FACULTY MEETING. GUEST SPEAKER, JONSARA RUTH
October 2016

SFC 10TH ANNIVERSARY EVENT, LAUNCH OF “WHAT’S IT MADE OF?” INITIATIVE WITH FURNITURE MANUFACTURERS. GUEST SPEAKER, JONSARA RUTH
October 2016

PRESENTATION TO TNS DESIGN AND CONSTRUCTION INCLUDING MAINTENANCE AND PROCUREMENT REGARDING PROTOCOL CHANGES. GUEST SPEAKERS, ALISON AND JONSARA
October 2016

TISHMAN ENVIRONMENT AND DESIGN CENTER. THE NEW SCHOOL. GUEST SPEAKER, ABIGAIL CALHOUN
October 2016

PAINTING MURPHY. EARLY CHILDHOOD EDUCATION CENTER. NYCHA
September 2016

EXHIBITION OPENING. DONGHIA HEALTHIER MATERIALS LIBRARY. PARSONS
September 2016

MFA INTERIOR DESIGN. PARSONS. MATERIALS & PERFORMANCE. GUEST SPEAKER. JONSARA RUTH
September 2016

NYC OFFICE OF THE MAYOR PROCUREMENT GROUP. GUEST SPEAKER. JONSARA RUTH
September 2016

SCHOOL OF CONSTRUCTED ENVIRONMENTS CONVOCATION. GUEST SPEAKER. JONSARA RUTH
September 2016

PARSONS SHIRT-LESS EVENT. EVENT ORGANIZERS, HEALTHY MATERIALS LAB
August 2016

ENNEAD ARCHITECTS. GUEST SPEAKERS, ALISON AND JONSARA
August 2016

SCHOOL OF DESIGN STRATEGIES ORIENTATION. PARSONS. GUEST SPEAKERS, LARISSA AND GAMAR
August 2016

SYMPOSIUM. FUTURE PLANING. ATTENDEES. ALISON. JONSARA AND AMANDA
July 2016

PRESENTATION ON BETTER PRODUCT SELECTION. WEST HARLEM GROUP. GUEST SPEAKERS, ALISON AND THANOS
June 2016

LTL ARCHITECTS. GUEST SPEAKER. JACK DINNING
June 2016

NYC DEPARTMENT OF HEALTH INTEGRATED PEST MANAGEMENT. GUEST SPEAKER. ALISON MEARS
May 2016

PRESENTATION TO NEW SCHOOL FACILITIES. GUEST SPEAKERS, ALISON AND JONSARA
May 2016
PRESS

INTERIORS+SOURCE
“Healthy Materials Lab”
June 2017

WWD
Nodell, Andrew
“Rihanna Partners With Donna Karan, The New School’s Parsons School of Design”
May 5th 2017

HELLO GIGGLES
Todorovska, Martina
“Rihanna’s helping fashion students, and Haiti, in a major way”
June 11th 2017

REFINERY 29
Peoples, Landon
“Rihanna Is Teaming Up With Fashion Students For Charity, Because Rihanna”
May 5th 2017

FASHION NETWORK
Jensen, Emily
“Rihanna will collaborate with design students on a charity collection”
May 9th 2017

STUFF FLY PEOPLE LIKE
Williams, Gabriel
“Work, Work, Work: Rihanna Teams with Parsons and Donna Karan for Design of Merchandise Collection in Haiti”
May 5th 2017

SPORTSWEAR INTERNATIONAL
Hunstig, Maria
“Rihanna, Donna Karan and Parsons School of Design unite to support creative talent in Haiti”
May 9th 2017

ENTERTAINMENT TONIGHT CANADA
Mahjouri, Shakiel
“Rihanna Teams Up For New Merchandise Collection Benefiting Haiti”
May 5th 2017
THE NEW SCHOOL PRESS
“Rihanna Teams With The New School’s Parsons School Of Design, Donna Karan’s Urban Zen, And Haitian Artisans To Design A Collection Benefitting Haiti And The Singer’s Clara Lionel Foundation”
May 5th 2017

THE NEW SCHOOL
“Parsons Installations Featured at Arianna Huffington’s Thrive Global Pop-Up Shop”
November 29th 2016

RE:D MAGAZINE
Penny, Daniel
“Centered on Making”
May 2017

PR NEWSWIRE
“Arianna Huffington Launches Thrive Global to End the Escalating Stress and Burnout Epidemic with Sustainable, Science-Based Solutions”
November 30th 2016

MATERIALDRIVEN
“A ‘Room to Daydream’ crafted with Healthy Materials and Powerful Tactility”
December 19th 2016

METROPOLIS MAGAZINE
“Slow Matter”
September 2016