Good Form

73 Ideas for a Healthier New York City U R B A N DESIGN F O R U M

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About Next New York

Good Form is a part of the Next New York series, an annual inquiry into a defining issue facing the city. Each year, through local dialogues, international exchanges, and interdisciplinary working groups, we work to catalyze new ideas for New York's built environment. Ideas that emerge inform programs, collaborations with city agencies, and pilot projects to inspire fresh thinking for the future of the city.

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INTRODUCTION New York City must equip every neighborhood with the tools for preventative care.

The pandemic made clear that the built environment plays a huge role in determining how equipped a community is for a crisis. Access to well-maintained parks and open spaces, quality and dignified housing, and community spaces that provide connections and real-time information can all influence how healthy and long you'll live.¹ These are the fundamentals to a healthy neighborhood – but not every community is on equal footing.

The global pandemic may be in the rearview mirror, but New York City continues to grapple with a crisis of health. Heart disease is still the number one killer citywide.² Chronic stress and anxiety have worsened post-pandemic.³ And the US Surgeon General recently highlighted the long-term impacts of loneliness, which rival smoking and obesity.⁴ But genetics play only a small role in determining health outcomes (about 10%). Where you live, your race, and your wealth overwhelmingly shape the health challenges you are likely to face in your lifetime.

The data on health disparities across New York City neighborhoods is illuminating and unsettling. The Department of Health and Mental Hygiene has reported higher death rates in historically underinvested neighborhoods, with Black New Yorkers experiencing the highest rates citywide. It reflects a chronic failure to care for the communities that shape the city's economic growth, character, and culture. It also reflects the failure of a health system that responds to rather than prevents health challenges. As we re-examine and reshape a city in the wake of COVID-19, it's critical that we leverage our built environment – and its design at city and block level – as an indispensable tool to fight health inequalities.

Unequal Footing

Despite growing research and advocacy on the connection between health and neighborhood planning, New York continues to grapple with the legacy of poor design decisions in our buildings, transportation corridors, and public spaces. Freeway projects implemented by Robert Moses fragmented Black and Latinx communities, resulting in higher rates of respiratory illnesses and noise pollution. It's no surprise that these same neighborhoods have also endured decades of historic underinvestment due to redlining and other racist planning policies.

The consequences of ongoing disinvestment caused by structural racism are evident today. While central neighborhoods benefit from a diverse economy, world-class parks, and improved streets, Black and Latinx communities are slower to see improvements in their neighborhoods. Typically, these districts have a 15% lower tree canopy cover, 8% fewer benches, and 11% less access to parks compared to the citywide average. Moreover, noise pollution levels are 9% louder, traffic volumes are 11% higher, and there is 11% less permeable surface per block in districts with a majority of Latinx residents.⁵

How We Worked

To address the inequitable health impacts stemming from the built environment, it is crucial to forge broader coalitions across health, development, and design. That's precisely what we set out to do with Good Form. In 2022, 30 Urban Design Forum Fellows came together, including architects, landscape architects, epidemiologists, transportation planners, trauma therapists, artists, community and economic development leaders, and physicians. Over six months, they engaged with over 20 stakeholders from diverse sectors to explore alternative models for healthier neighborhoods.

This collaborative effort resulted in a menu of options, case studies, and approaches aimed at improving transportation planning, developing transformative partnership models for public space maintenance, enhancing building codes and environmental



regulations, conducting participatory action research in design, and incentivizing healthier private development.

These strategies offer new possibilities for government agencies, community development leaders, public health practitioners, academics, and advocates to envision a design process that centers health from start to finish. While Fellows worked backward from specific health challenges — presented here as Fresh Air, Active Places, Safe Experiences, and Spaces for Healing — each proposal has the potential to contribute to prevention for multiple physical and mental health outcomes.

Call to Action: New Partnerships, Fearless Leaders

Our recommendations call for deeper investments in existing and new programs, and champion new models to empower marginalized voices in the design process. This platform is also a call to expand partnerships between health and design leaders to guide all future neighborhood planning. Good Form was an exercise to broaden an existing coalition of advocates in both fields. What we need right now are unconventional partnerships between insurance companies, health departments, hospitals, research institutions, philanthropy, design and development, and community-based organizations to end health inequity once and for all. We hope these ideas can inspire courageous leadership across the public and private sectors. It will take an incredible amount of fearlessness to address decades, if not centuries, of racial and economic inequality that shaped a canyon of health disparities. As urbanists, we must acknowledge the historical role design and development has played in harming communities, but also believe in its promise to shape healthier, thriving, and just neighborhoods. To achieve that, it'll take all hands on deck.

Guillermo Gomez Director of Programs

ACTIVE PLACES

BACKGROUND Heart disease is the number one killer in the United States, costing nearly \$240 billion each year in health services, medication, and premature death.⁶ Stress, poor access to healthy food, and physical inactivity all contribute to a higher risk of heart attack and stroke. However, the prevailing approach to addressing health issues, including heart disease and diabetes, often focuses on treatment rather than promoting overall health. This approach places the burden of care on individuals and their access to healthcare resources. In New York City, Black and immigrant communities are disproportionately affected by poor heart health. Neighborhoods with higher rates of chronic diseases have also experienced a history of neglect in terms of quality open spaces, well-maintained and safe streets, recreational facilities, and active transportation options.

VISION New York City should use every measure to address health disparities, including the built environment. We envision an equity-focused planning approach to shape and maintain active places in our streets, open spaces, and transportation corridors. In order to encourage physical activity and improve metabolic health, the City should support the creation of health-targeted planning tools and partnerships to drive equitable public space design, programming, and stewardship. Ongoing and more inclusive community engagement formats could prioritize community needs, leverage resources and expertise from anchor institutions like hospitals, and cut red tape for community organizations.



ACTIVE PLACES

Create Health Improvement Districts (HID) that target funding to neighborhoods with high health disparities.

(03)

Neighborhoods experiencing legacies of racist planning policies and disinvestment are less-equipped to resource and maintain their public spaces, unlike well-heeled BIDs and conservancies in core districts. The city could explore alternative community development and public space management models that leverage existing neighborhood-based stakeholders and partnerships, like anchoring hospitals. Possible strategies include:

- Explore funding models similar to Business Improvement Districts (BIDs), congestion pricing, toll roads, City-run parking garages, paid parking, curb space fees, or even a Public Realm Improvement Fund that could invest in the maintenance and development of active public spaces.
- Organize a task force with the Department of City Planning (DCP), Department of Small Business Services (SBS), Economic Development Corporation (NYCEDC), Department of Parks & Recreation (DPR), and Department of Transportation (DOT) to explore formalized community development and public space maintenance models, similar to the Memphis Medical District Collaborative that leverages anchoring health institutions.

Partner with health institutions to fund programs that encourage more active lifestyles. Through a coordinated effort, networked doctors or health advisors could prescribe health prevention tools such as free transit passes, yoga or exercise classes, bike sharing memberships, bicycle purchases, gym memberships or sports leagues, or increased Health Bucks. Look to models like ParkRx America that work with hospital networks on integrating prescriptions for nature walks and outdoor activities.

(04) In neighborhoods without major anchor institutions, the HID model could rely on public dollars marshaled to smaller nonprofits, BIDs or community development corporations with a mission for health impact in housing and public space stewardship.

(01)

Case Study

Memphis Medical District Collaborative

The Memphis Medical District Collaborative is a community development corporation that leverages local anchor institutions and community stakeholders, that include University of Tennessee Health Science Center, Methodist Le Bonheur Healthcare, and St. Jude Children's Research Hospital. Through deep and long-term partnerships, MMDC is able to transform shared public spaces to promote physical activity and wellbeing through pedestrian safety, active mobility, public programming, and economic development.



Image Credit: Memphis Medical District Collaborative

ACTIVE PLACES

ACTIVE PLACES

Build ongoing neighborhood-led visioning processes to direct future investments in health infrastructure.

(07)

Neighborhood planning initiatives are often too piecemeal or invite community feedback on nearlycompleted designs. Further, low-income, Black, and immigrant neighborhoods may lack the resources or time to drive longer-term community visioning that helps guide agency planning. To strengthen planning processes, the City could:

> Increase capacity both in city agencies and at the grassroots level for ongoing participatory planning. New technical assistance programs in underinvested communities, channeled through community-based organizations, could ensure every neighborhood has the resources to lead their own visioning.

(06) Develop a visual menu of healthy design strategies related to neighborhood-specific health challenges during stakeholder engagement. These strategies could explore ways to address access to safe and accessible streets; quality open space; safe, accessible, and reliable transit, with non-car options; and access to free or affordable indoor recreational spaces. Each neighborhood could draw from frameworks such as Streetscapes for Wellness, Active Design Guidelines, DOT Street Design Guidelines, and others. Create an Equitable Capital Investment Tool that could guide distribution of capital dollars to the neighborhoods experiencing the highest burden of chronic disease. The City could expand the Department of City Planning's Equitable Development Data Explorer into a tool that supports transparency and accountability of capital budget spending and construction aligned to community needs.

Case Study

(05)

ParkRx America

Park Rx America educates healthcare providers about the health benefits of time spent in nature, and promotes the practice of offering nature prescriptions to patients. The physical activity associated with park visits can decrease risk from obesity, diabetes, and hypertension, along with other mental health benefits.

Good Form

ACTIVE PLACES

Allow flexible neighborhood planning to increase access and proximity to active places.

(10)

Outdated rules and bureaucratic barriers often inhibit the creation of health-oriented infrastructure. The opportunities to expand active places can be limitless if we can support neighborhood-based activation. The City could help cut through red tape and lower barriers through flexible planning strategies that include the following:

(08) Expand PlaNYC Schoolyards to Playgrounds program to unlock athletic and recreational facilities. The City could expand partnerships with public and private universities, private schools, stadiums and other sports venues to open up spaces during off hours and on weekends. Possible sites could include local institutions such as LIU, Pratt Institute, NYU, Columbia University, Fordham, St. John's University, and CUNY campuses.

(9) Encourage and work with anchor institutions, like hospitals or wellness centers, to activate adjacent streets and plazas for health and wellness programming. Reform zoning to allow for the flexibility of properties for healthier uses. This could include allowing gyms and indoor recreation in more zoning districts, or creating zoning incentives modeled off the FRESH (Food Retail Expansion to Support Health) Program with sliding scale or price ceiling membership rates, open space minimums and expanding plaza bonuses, or encouraging rooftop gardens.

(11) Lower barriers for pop-ups and public space activations in underused sites such as faithbased spaces, universities, schools, empty retail spaces, libraries and other anchor institutions, parking lots, vacant lots, and under elevated bridges or other viaducts. City agencies, like DOT or SBS, could directly fund community-based organizations to support outreach in order to increase community participation in these programs or drive community stewardship. Case Study

Golden Age Park

The site of Golden Age Park, situated in the Westlake/MacArthur Park neighborhood of Los Angeles, had been vacant for almost 30 years. After extensive research conducted by a team from the UCLA Luskin School of Public Affairs, this underutilized space was transformed into a park suitable for people of all ages. A grant from the AARP Community Challenge was awarded to the Los Angeles Neighborhood Land Trust and the UCLA team to construct social seating areas, community gardens, shade sails, and exercise equipment.

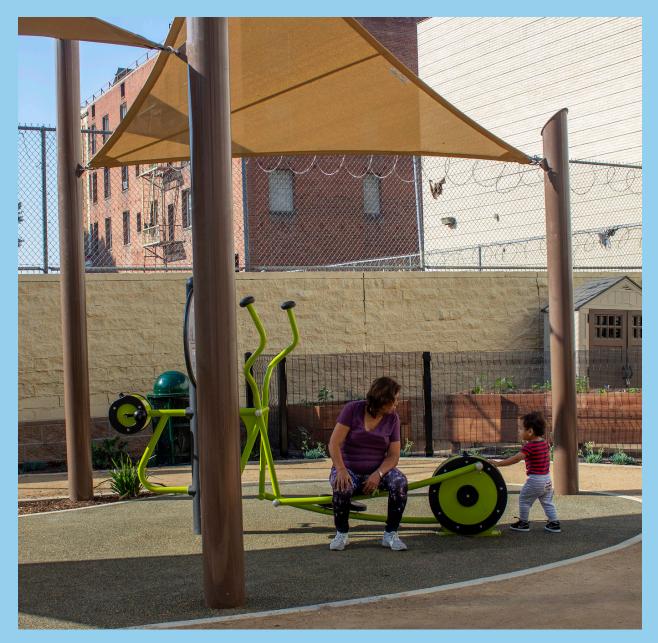


Image Credit: UCLA Luskin. Photo by Mary Braswell.

ACTIVE PLACES

(12)

Support a comprehensive health planning framework that connects neighborhoods to assets at a larger scale.

(14`

Neighborhoods with poor health outcomes and limited public spaces also may lack alternative options that encourage active mobility. Designing a network that connects neighborhoods to assets at a larger scale could introduce a range of benefits like active lifestyles, better air quality, or improved sense of safety. Approaches to drive a planning framework could include:

> Integrate greater access to active public spaces alongside networked active and green corridors, building on the NYC Streets Plan and a forthcoming comprehensive citywide greenway network plan. Areas to expand the network could include corridors like Broadway, Flatbush Ave, Atlantic Ave, Ocean Ave, 14th Street, 34th Ave, Utopia Parkway, Webster, East Tremont, Cross Bronx, and Hylan Blvd.

(13) Shape a Comprehensive Active Corridor Plan by coordinating a cross-agency planning effort led by the new Chief Public Realm Officer. Coordination between DCP, DPR, DOT, DOHMH, and EDC could ensure more holistic planning for commercial nodes, housing density, parks and other public amenities. Deeper capital coordination around an overarching plan could direct dollars to neighborhoods burdened with chronic diseases, and could overlap with a Health Improvement Districts (HID) model.

Seek partnerships in targeted neighborhoods and corridors with health insurance companies, hospitals, banks, cultural institutions, or community foundations to fund projects like benches, public exercise equipment, and other public space investments tied to health prevention. The City could look to funding opportunities like the AARP Community Challenge that focus on public health and wellness.

BACKGROUND This year, New York City experienced an unprecedented air quality crisis due to forest fires hundreds of miles away. Residents were recommended to limit travel, stay home, and close their windows, highlighting the global nature of climate and air quality concerns. At the local level, poor air quality can be linked to existing freight networks that rely on heavy-duty diesel transport, buildings that depend on fossil fuel for heat and cooking, peaker plants, and unhealthy materials that line the interiors of our homes. Poor air not only contributes to higher rates of respiratory and cardiovascular diseases, but symptoms are triggered during times of elevated poor outdoor air quality, especially in historically underinvested neighborhoods like the South Bronx and Northern Manhattan. Respiratory health disparities not only pose health risks to families in these neighborhoods but also lead to a significant economic burden, as evidenced by the \$660 million spent on hospitalizations in New York State in 2011.7

VISION The air quality crisis that blanketed New York City in June 2023 was a stark reminder of the critical need to address both indoor and outdoor air quality. It also highlighted a missed opportunity to activate existing assets to quickly communicate the exposures to the broader public, especially those most at risk. We envision an equitable framework that transforms the existing built environment to minimize health impacts on our most vulnerable New Yorkers. Improvements in air quality by just 10% could have significant impacts on millions of New Yorkers afflicted with respiratory diseases.⁸ Neighborhoods with the highest health disparities should be prioritized with investments in green infrastructure, decarbonized transportation options, and building retrofits. In addition to neighborhood improvements, deeper investments in educational campaigns and green jobs programs can bring attention to this growing health risk.



(15)

(16)

Expand air quality education through broader public engagement and workforce training.

(18)

Most New Yorkers are unaware of the health risks and long-term impacts of indoor and outdoor exposure to PM2.5 pollution. With a better understanding of air quality monitoring, residents, educators, and community groups could be empowered to drive behavioral changes during days with poor air quality or advocate for longterm neighborhood improvements. Programs to increase engagement could include the following:

> The Mayor's Office to Protect Tenants and Department of Health and Mental Hygiene (DOHMH) could create a "Know Your Air Rights" campaign. These types of programs could help residents understand the impacts of indoor air quality by focusing on behaviors like idling or masking during air quality alert days, and risks to other indoor risks like harmful paints, indoor heat, gas stoves, and mold.

NYC Emergency Management and the Mayor's Office of Climate and Environmental Justice could leverage technological assets, like digital screens in MTA stations, LinkNYC kiosks, and on subways to communicate live information during major health risk events, such as poor air quality or extreme heat.

(17) Invest in citizen science programs like Loisaida's ECOLIBRIUM program that enhance environmental and climate science literacy while also supporting neighborhood air quality monitoring. Shape a denser sensor network to bring attention to environmental justice issues with partnerships that install sensors in the right of way near charging sources, such as LinkNYC kiosks, bus shelters, lamp posts, or charging stations. The City could invest in a community design competition that invites collaborations with artists to help shape visual tools that better communicate live data when health exposures are high.

(19) Invest in at-home air quality test kits for lowincome New Yorkers, so that healthcare providers could write out prescriptions for short-term solutions like air purification to long-term solutions like air filtration and HVAC system upgrades.

20 Build robust green workforce training programs through partnerships that support apprenticeships like community electricians, HVAC technicians, electric vehicle charging stations installers, and tree maintenance service workers. As examples, look to Community Health Action of Staten Island's Arise Training Institute or BlocPower's Civilian Climate Corps.

Explore policies that enforce better indoor air quality standards.

According to the EPA, Americans spend approximately 90 percent of their time indoors. During the pandemic and recent outdoor air quality events, housing played a critical role in protecting New Yorkers. But some pollutants can be trapped or concentrated inside. Measures to improve indoor health could include:

- (21) Form an indoor health task force to explore policies that set minimum indoor air quality and ventilation standards in privately owned buildings, bolstering New York State's Warranty of Habitability Law (§ 235-b) or other building codes. Policies should also explore tenant protections to ensure that all building improvements meet new standards to mitigate risk of displacement.
- 22) Set high standards by the Department of Buildings that require indoor air quality improvements prior to weatherization or envelope upgrades so that conversions do not exacerbate indoor exposures.⁹

(23) Support healthier indoor environments in public schools by implementing more rigorous testing for harmful building materials, installing indoor air sensors, and bolstering long-term maintenance of air purification systems.¹⁰

(24) Expand New York City's Local Law 84 to include monitoring and benchmarking of indoor air quality in buildings of a specific size. Increased reporting of data could support broader policy reform.

Case Study

Loisaida's ECOLIBRIUM program

ECOLIBRIUM assembled a group of students and working professionals in the fields of data science, architecture, and engineering to improve public health and monitor environmental conditions on the Lower East Side. Their first phase seeks to raise public awareness on environmental health hazards through multimedia platforms, including a comprehensive hazard map and an interactive exhibition.

FRESHAIR

Drive deeper investments into building retrofits in all building types, especially small, mid-sized, and historic buildings.

Ending our reliance on fossil fuels also improves indoor air quality. Given the impacts of gas appliances on indoor health, our timeline for a green transition must be shortened. The City must double down on driving new building retrofits to install electric heat pumps and electric induction stoves in every building citywide. Strategies to help drive conversions could include:

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Create buy-back programs for old appliances, similar to programs like PSEG Long Island | Appliance Recycling Program.

- (26) Invest in a new round of NYSERDA's Clean Heat Challenge in NYCHA buildings with the highest asthma rates.
- 27 Invest in pilot programs for public housing and affordable housing, like WE ACT's Out of Gas program, that monitor indoor air quality before and after induction stove installations.¹¹
- (28) Leverage New York City talent, like start-ups at the Newlab, to explore low-cost green energy retrofits for low-income households, supported by an expanded NYC Accelerator program.

(29) Improve education for small landlords and building supers on harmful cleaning materials and building materials that emit volatile organic compounds (VOCs) or other chemicals that contaminate indoor air.

- 30 Develop a Community Green Navigators Network that could empower community-based organizations to support small businesses, small homeowners, low income or rent stabilized housing providers navigating the energy retrofit market. Improved community-based outreach could reduce barriers for information to better navigate City and State grant programs for decarbonization.
- (31) Convene a Healthy Buildings Task Force at the Department of Buildings, NYC Economic Development Corporation, and the Department of Health to explore incentives for using healthy building materials in new housing construction and building retrofits. Look to Harvard's 9 Foundations of a Healthy Building that focuses on the impacts of building design on physical and mental health.

Case Study

WE ACT's Out of Gas, In With Justice Pilot

The Out of Gas, In with Just Pilot compared air quality improvements between ten apartments with new induction stoves and ten with their existing gas stoves. Significant improvements were seen in apartments with new induction stoves. Gas stoves emit nitrogen oxides which not only drive climate change but also exacerbate respiratory illnesses and increase risks for developing asthma.



Image Credit: Green Energy Futures

Prioritize the design of more peopleoriented streets to incentivize alternative forms of mobility.

(34)

Although access and affordability to electric cars will improve in the coming years, New York City must support safer, sustainable forms of transport that rely less heavily on fossil fuels, while also ensuring healthier and more active travel. Strategies could include:

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Use automated enforcement in areas with reduced car traffic like dedicated bus lanes, bike lanes, loading zones, congestion pricing zones, and neighborhood slow zones.

Charge for all on-street parking for non-residents and limit the quantity of spaces available. Parking fees could be used to fund projects that can improve air quality or have other health benefits, such as maintenance of street trees, Fair Fares subsidies, or Citi Bike memberships for lowincome residents. Drive new street tree planting during routine sidewalk or street upgrades through better coordination led by the new Chief Public Realm Officer between the Department of Transportation (DOT), Department of Environmental Protection (DEP), Department of Design and Construction (DDC) and Department of Parks (DPR).

Case Study

London's Ultra Low Emission Zone First introduced in 2019, The Ultra Low Emission Zone program deals out fines for the use of diesel powered vehicles in most parts of Greater London. Starting in 2023, the zone will expand across all of London's boroughs. The program has been successful in decreasing harmful pollution emissions by 26% within these zones as well as reducing overall traffic flows within the zones.

(35)

Accelerate a clean, green industrial sector citywide.

Industrial and manufacturing jobs support low-barrier work, especially in a growing green manufacturing sector. Yet historically, industrial zones have produced poor air quality, stormwater runoff, and congestion from dirty diesel trucks. Small freight delivery vehicles contribute to the greatest TRAP (traffic-related air pollution). To date, outer boroughs have seen the lowest investments in charging infrastructure for electric vehicles.¹² Built environment investments and regulations to equitably accelerate this transition could include:

Study siting and feasibility of charging infrastructure for electric refrigerated trucks near food hubs, such as supermarkets, loading zones in commercial corridors, plazas activated by farmers markets, and future microdistribution hubs. Electric Transport Refrigeration Units (eTRUs) could dramatically cut emissions and noise on the street, especially in areas with high asthma rates.

36 Prioritize the creation of additional microdistribution centers, where goods can be consolidated into bicycle trailers, in environmental justice communities. This would reduce last-mile truck delivery and related emissions, building on the City's Streets Plan and "New" New York Panel recommendations. (37) Accelerate the creation of low emission zones, similar to London's ULEZ initiative, which encourages the most polluting heavy diesel vehicles to become cleaner.

(38) Support a green and clean industrial sector through business accelerators, incentives and grants for energy retrofits, and expansion and maintenance of green infrastructure surrounding industrial business zones through nonprofit or business partners.

(39) Work with New York City Fire Department (FDNY) to set standards for delivery e-bike charging rooms built with fire rated construction in buildings like NYCHA, to incentivize modes for sustainable transportation.

BACKGROUND Our public spaces should support safety for all New Yorkers. Yet some safety measures may isolate the most vulnerable. With two thirds of unhoused New Yorkers having some form of mental health needs, growing social stigma surrounding street homelessness and public substance use often leads to exclusion rather than providing care.¹³ While universal design has helped public spaces feel more welcoming and accessible, these standards often overlook mental health and neurodivergence. Homogenous public spaces can therefore unwittingly neglect users who diverge from social or cultural norms, including individuals who experience poor mental health. **VISION** Public spaces should welcome and provide benefits for all New Yorkers, rather than distress or criminalize people. We envision a planning process that shifts the design and management of public spaces from Shamescapes to Safescapes. New York City should aim to reshape parks, plazas, and open spaces that challenge stigma and provide access to dignified care. By foregrounding the values of the neurodiversity movement in neighborhood planning, public spaces can foster greater empathy and dignity for everyone, especially those at the margins.¹⁴ The City could create guidelines for public space design and management informed by evidence-based research, incorporate inclusive design for a range of mental health experiences, and build a social fabric of mental health support through programs and partnerships.



Establish a design framework for all public spaces to center mental health and neurodiverse individuals.

(42)

Physical accessibility and mobility inclusion has been central to the design process of our parks, plazas, and other public spaces today. Comparably, designing for mental health is a fairly nascent field of design advocacy. New York City must develop new approaches that include non-physical health issues. Strategies to advance this could include:

(40)

Shape a Mental Health in Public Space Task Force & Listening Tour, led by the Chief Public Realm Officer and NYC Department of Health and Mental Hygiene (DOHMH), mental health nonprofits, and neurodiversity advocates to source design feedback from New Yorkers who have experienced mental health challenges in the public realm or stigma first-hand.

(41) Develop a citywide Mental Health in Public Space plan that builds off of DOHMH's Care, Community, Action: A Mental Health Plan for New York City. The City could target equitable distribution of short-term and long-term neighborhood public space programming and capital investments in neighborhoods with high overdose rates and poor youth mental health. The City could leverage mental health research or the Independent Budget Office (IBO) to outline the economic and health risks and benefits of investing in public space. Develop new design guidelines and a toolkit that outlines how public space design could support inclusivity, fight stigma, and support wellness for city agencies like Department of Parks & Recreation (DPR), Department of Transportation (DOT), or community development organizations, Business Improvement Districts (BIDs) and other community-based organizations. These ideas could build off of programs like the NYC's Active Design Guidelines and Streetscapes for Wellness, or Toronto Bentway's Safe in Public Spaces initiative.

Case Study

The Bentway's Safe in Public Space initiative

The Safe in Public Space initiative at The Bentway, a new site under Toronto's Gardiner Expressway, sought to broaden the definition of public safety to address new public health challenges. The Bentway Conservancy led creative public space projects, a public space fellowship, and community consultations to develop best practices to support universal design, accessibility, and inclusive spaces.



Image Credit: wyliepoon

Invest in data collection on the impacts of parks and open spaces on residents' mental health.

(45)

Research has shown that interventions like greening vacant lots, expansion of greenspace, and other public space improvements have been seen to improve mood and support harm reduction. But the city has limited local data on the impacts of design on mental health. With improved data, the City could develop an equitybased approach for design and capital spending to neighborhoods most in need. This could take shape through the following approaches:

Fund post-occupancy evaluation of parks and open space to focus on the usage and emotional and psychological effects of parkgoers, through long-term studies or performed in real time.
Smartphone-based evaluation tools could be explored, like the Urban Mind app.^{15 16} The City could also support research to study the mental health benefits of street tree planting.

 Pilot public space interventions that center neurodivergent residents, and invest in a participatory action research study led by community partners and mental health nonprofits. This research can guide accessible and inclusive urban design and planning assessment tools to support improved safety and wellness in public space. Expand the Parks Inspection Program (PIP) process to include park conditions that cause physiological stressors that impact mental health, including heat, noise, and air pollution, in park inspections.

(46) Create a mechanism through the existing PIP Plus that invites thoughtful and holistic responses to quality of experience issues observed during property inspections, such as park visitors experiencing homelessness or substance use. These data should inform both capital investments as well as deeper engagement with local community based organizations and social service providers.

43

Support community-driven public space interventions that center neighborhood mental health needs.

(49)

Oftentimes, top-down, homogenous projects can disregard community-specific needs and challenges. The City could explore tools and more direct funding for neighborhood led projects that could include the following:

(47)

Led by the new Office of Engagement, create an open-source digital toolkit or menu that can be shared citywide amongst community boards and community-based organizations to guide more inclusive neighborhood-based public space investments.

48 Led by DOHMH and DOT, the City could partner with philanthropic organizations, insurance companies, and anchor institutions to fund community design projects in every borough. With sufficient resources for technical assistance, community organizations or BIDs could envision public space pilots that support mental health, such as new urban furniture that supports socialization and relaxation, lighting alternatives that are soothing and mood stabilizing, or biophilic street pop-up spaces that reduce anxiety and filter noise.

Incentivize anchor institutions or missiondriven housing developers to create different types of collaboratively designed public space projects similar to Bon Secours Health System's community development projects.

Case Study

The Urban Mind app

The Urban Mind app is a tool used to inform future urban planning and social policy aimed at improving design & health. The app prompts users to describe their lifestyle and wellbeing in regards to their built environment. Three times a day for two weeks, it collects users' written responses and an optional photograph or video of their surroundings to draw conclusions about the effect of the urban landscape on their mental health.

SAFE EXPERIENCES

Launch a parks and public space initiative oriented around social services.

(52)

(53)

For New Yorkers experiencing psychological distress in the public realm, access to services for holistic care can be challenging. Approaches could consider activating existing neighborhood physical assets to support social programming that addresses anxiety, stress, harm reduction and overdose prevention. Strategies could include the following:

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Pilot and study the redesign of public bathrooms to connect health services and resources as a way of supporting social cohesion and health prevention.

51) Activate streets surrounding and within public parks for programming dedicated to increasing mental health literacy and stigma reduction. The City could expand the fleet of NYC Health + Hospitals' Street Health Outreach & Wellness programs mobile units and partner with community-based organizations to ensure targeted outreach. Develop a partnership between DPR, DOHMH and nonprofit organizations that embeds mental health service providers in city parks to develop training and outreach strategies for parks staff. Build upon existing models like the Mental Health Response Pilot at Fort Greene Park. The City could build on DOHMH's resources for guiding credible messengers for outreach from the community (such as family, friends, clergy, and coaches) to prevent self-harm.

With DOHMH and the Department of Small Business Services (SBS), provide Business Improvements Districts with public space strategies and approaches to support harm reduction, fight stigma, and connect New Yorkers to mental health services, similar to Times Square Alliance's Recharge Station. Case Study

Times Square Recharge Station

A collaboration between Fountain House, Project for Public Spaces, Times Square Alliance and other community partners, the Recharge Station was built as a space where New Yorkers experiencing homelessness, mental health needs, and substance use issues could seek services without stigma. Fountain House's Community First initiative focuses on building trusting relationships and meeting people "where they're at." The first step starts with helping them meet their immediate needs before connecting them with a wider network of housing and health services.



Image Credit: Courtney D. Garvin for Fountain House

SPACES FOR HEALING

BACKGROUND The pandemic has left a lasting imprint on all New Yorkers, with loss and disconnection deeply ingrained in the city's collective memory. Traumatic events like these – both collective and individual – can have long-term impacts on a person's physical and mental health. For instance, people who experience childhood trauma are more likely to experience loneliness in adulthood. In turn, social disconnection increases risks of hypertension, depression and anxiety, cardiovascular disease, and diabetes.¹⁷ For veterans, asylum seekers, survivors of gun violence, and other New Yorkers that have experienced trauma, environments can often be triggering or re-traumatizing. Harsh lighting, loud noises, or the condition and quality of public spaces have major implications on New Yorkers' perceptions of safety and stress levels.

VISION New York City must prioritize healing and belonging by implementing a comprehensive transformation of the public realm design process. Drawing inspiration from American psychiatrist Judith Herman's influential work Trauma and Recovery, a new design framework could prioritize principles of trauma-informed care: safety, choice, and community. To ensure mental health is at the forefront of every planning process, the City should appoint a dedicated advocate for New Yorkers with diverse mental health needs. Equitable allocation of resources in programming and community public space stewardship can play a crucial role in reshaping existing civic spaces to foster social cohesion and unlock the broader health benefits that accompany it.



SPACES FOR HEALING

Create elevated design guidelines for civic spaces that are grounded in principles of compassion and care.

(56)

Although there is growing attention to the impact of public space design on wellness, direct design guidance on the impacts of lighting, architecture, or streetscape design on mental health is limited. The City could ground new approaches in three principles: spaces should feel safe and welcoming; spaces should allow New Yorkers to express themselves and their experiences openly and freely without stigma; and spaces should support connections to others. In order to develop and encourage these principles, approaches could include the following:

- (54) Appoint a champion or champions in city government that can deepen connections across agencies, with a focus on centering care and healing into the design civic spaces in neighborhoods with a history of trauma or underinvestment.
- **55)** Convene the Public Design Commission (PDC), Department of City Planning (DCP), Department of Housing Preservation and Development (HPD), Department of Health and Mental Hygiene (DOHMH), and supportive housing architects and developers to study trauma-informed design for residential projects. Look to existing studies led by Shopworks Architecture's Architectural Principles in the Service of Trauma-informed Design.

Under the leadership of the Chief Public Realm Officer, build on NYC's Active Design Guidelines and Streetscapes for Wellness to develop a manual that roots trauma-informed care principles of safety, choice, and community for new design and programming at the Department of Parks & Recreation (DPR) and Department of Transportation (DOT).

Case Study

Shopworks Architecture's Trauma-informed Design

Denver-based Shopworks Architecture has developed a framework for trauma-informed design of buildings to help regulate the body and support therapeutic approaches. Developed with scholars and practitioners in the fields of architecture, sociology, engineering, and non-profit service, as well as residents and organizations, these principles have guided the design of shelters and supportive housing.

SPACES FOR HEALING

Foster tactical public realm projects in underutilized sites that could support both respite and social connections.

New Yorkers facing stress, anxiety, or re-traumatization in public spaces often lack the choice to relocate based on their preferred level of social, physical, and sensory engagement. Designing flexible and distinctive options for users can ensure public space is inclusive to all. Tools and approaches to expand these types of spaces to every neighborhood could include:

- (57) Lower barriers and increase funding for community-led public space interventions tied to addressing mental health challenges in neighborhoods experiencing historic disinvestment. Community-led projects could include alternative uses for curb space, expansion of Open Streets programming, vacant lots, and activation of underutilized city properties. Build on projects like the Design Trust's Under the Elevated initiative, Project Eats, or El Jardin del Paraiso that can support greater connectivity in the urban fabric as well as quiet spaces for respite.
- (58) Provide outreach funding to community partners to help increase community-led public space programming and planning, modeled by DOT's BQE Corridor Vision Community Partners program.
- (59) DOT and DPR could launch a toolkit for low-cost community-led social seating in the right of way. Benches around street trees, for example, could encourage greater connections and environmental stewardship. Neighborhood anchors (like libraries and schools), Business Improvement Districts, and property owners could look to previous projects such as WIP Collaborative's Restorative Ground DOT Street Seat for micro- and tactical public space activation.

60 Support faith-based development of underutilized land into affordable homes and community facilities. Programs led by faith-based organizations could support neighborhood social cohesion through programming and provide social services.

(61) Invest in Caring Kiosks in neighborhoods with high rates of stress, depression, and substance use to increase access, proximity, and visibility to integral health services. These can range from permanent to pop-up kiosks with partners like DOHMH, Business Improvement Districts and other community-based organizations, and NYC Health + Hospitals' Street Health Outreach & Wellness programs mobile units. The City could pilot projects modeled off Times Square Alliance's Recharging Stations or invest in permanent park infrastructure like the Deliveristas Hub that retrofits underutilized or vacant newsstands.

SPACES FOR HEALING

Case Study

Restorative Ground

Designed by WIP Collaborative and activated through the Department of Transportation's street seat program, this tactical streetscape installation was guided by principles of immersion and mental health inclusivity. The project sought to make recreational space that met distinct neurological needs. The project was supported by a collaboration between Urban Design Forum, Hudson Square Properties, and Hudson Square BID.

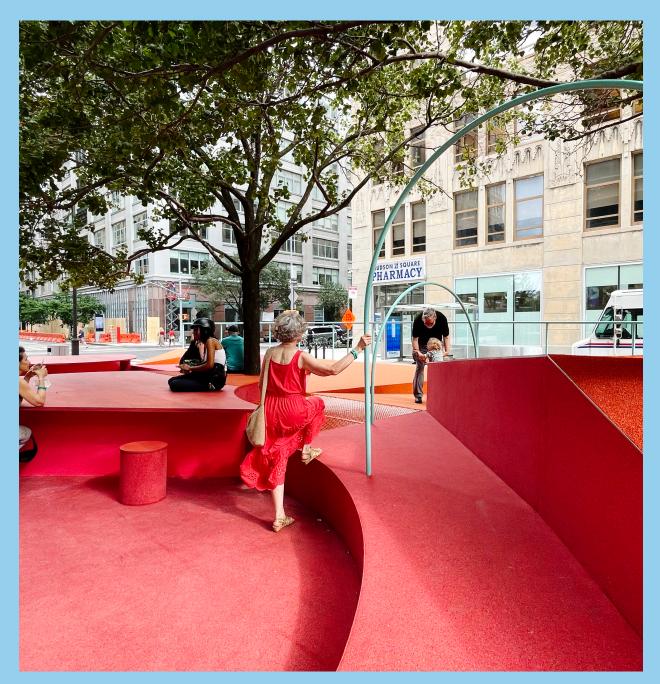


Image Credit: WIP Collaborative and Hudson Square Properties.

SPACES FOR HEALING

Launch a transportation initiative grounded in biophilic art and design.

Public health research increasingly shows the long-term negative impacts of city noise on heart and brain health.¹⁸ Conversely, data increasingly shows the benefits nature has on overall health.¹⁹ To mitigate the negative impacts of traffic related noise and other sensory impacts, like harsh lighting, the City should explore new biophilic urban design investments in our transportation network. Multiple strategies to improve areas around transportation corridors could include the following:

(62) In partnership with neurodiversity advocates

and other groups raising awareness of sound sensitivity, the City could launch a design competition to explore short-term and long-term design interventions that mitigate noise through green space and blue space, such as fountains, water features, or greater vegetation. Small scale interventions could model after Transport for London's Underground in Bloom competition.

63) Leverage advertising, experiential marketing, and corporate partnerships to drive biophilic art and design competitions and pilots across indoor and outdoor transit stations.

64) Develop a community stewardship program that provides license agreements to CBOs to maintain gardens on Metropolitan Transportation Authority (MTA), New York City Transit, and New York City and New York State DOT properties or lots beneath elevated tracks, building on past initiatives like Under the Elevated.

(65) Develop more rigorous design review of new Metropolitan Transportation Authority (MTA) stations in order to prioritize natural light or mood stabilizing light, nature or natural analogues in stations, and principles of biophilic design. Model after The Metro Tunnel Project in Melbourne, which uses biophilic design principles to create an enjoyable and engaging experience for commuters.

(66) Fund and expand MTA Arts & Design commissions at stations in neighborhoods with the highest rates of depression and anxiety, through partnerships with community arts and health organizations.

(67) Partner with research institutions to study transitrelated noise impacts on health to guide future design improvements and interventions.

(68) Invite creative community installations that visualize sound monitoring near major transportation corridors to support citizen science.

Case Study

Transport for London greening Initiatives

The small-scale greening interventions as part of Transport for London's Underground in Bloom competition showcases the talents of green-thumbed agency staff across different city stations. In 2015, London Underground (LU) launched its first ever pop-up garden at Barbican Tube station. The garden was created in partnership with the Friends of City Gardens and stewarded by neighborhood volunteers.

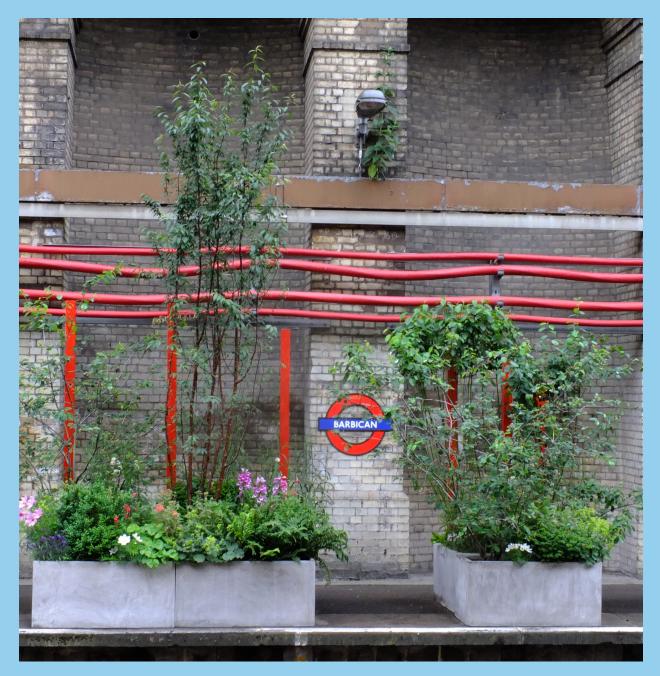


Image Credit: B on Flickr

SPACES FOR HEALING

Invest in social programs that support stronger community cohesion and healing.

According to the US Surgeon General, investing in social infrastructure, like libraries and parks, can significantly support social connections and lower the odds of depression in people that have experienced historic trauma.²⁰ Arts and other cultural programming could serve as a vehicle for helping New Yorkers process the experiences of trauma or loneliness. Programs to advance this could include the following:

- (69) Invest in programs led by local arts or faith-based organizations that have community ties and convening space, as a way of strengthening community cohesion to fight loneliness.
- (70) Invest in intergenerational walking groups, building off of DPR's Walk to the Park initiative.
- 71) Expand Public Artists in Residence (PAIR) program, especially in agencies that interface with communities experiencing high rates of chronic disease. The City can build on previous art activation models and partnerships like DOT and DOH's "Concrete Connection" mural in the South Bronx.

(72) Through the DPR's Community Parks Initiative and DOHMH, drive new funding to support local artists-in-residence that lead programming dedicated to healing and wellness at existing parks facilities.

(73) With DOT, partner with community organizations to organize temporary events focused on community healing to reclaim public spaces, like plazas and streets. Providing micro-grants and permit technical assistance can support smaller activations by grassroots organizations in the most vulnerable neighborhoods.

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