



FitCity8

PROMOTING PHYSICAL ACTIVITY

THROUGH DESIGN

TABLE OF CONTENTS

Introduction: The Systemic Turn in Active Design	3
Welcome	6
Health Keynote	8
Growing Active Design: Commissioners’ Panel	13
Active Design and Community Well-Being	20
Active Design and Private Sector Well-Being	32
Design Keynote	44
Closing Remarks	48
Resources	52
Credits & Citations	53

Cover
Credit: Francisca Sumar

INTRODUCTION:
THE SYSTEMIC
TURN IN
ACTIVE DESIGN

Turning points, transitions, crises: these terms, all with different connotations, describe moments of hazard and opportunity, the times when complex systems face tests that can reveal hidden vulnerabilities or strengths. Now is such a time for the Active Design movement, for the city where it has influenced public and private decisions, and for the wider international arenas where it is making its presence known.

At the eighth annual FitCity conference, held at New York’s Center for Architecture on June 24, 2013, specialists, activists, civic officials, and members of the public explored the achievements to date and the expanding knowledge base indicating where progress is needed and possible. The more gains there are to celebrate, the more clearly the next series of challenges come into view.

Active Design is yielding impressive outcomes. Just as the publication of the original *Active Design Guidelines* in 2010 created traction in the sphere of local policy and spread the core concepts in a tangible form for other communities to implement, the continuing publications in the *ADG* supplements extend its methods, analyses, and standards into realms where they are particularly appropriate: sidewalk design, affordable housing, safety promotion, and community-group activities. Efforts to remediate urban food deserts and rebalance people’s caloric input and output have made headway against the decades-long trend toward obesity, diabetes, cardiovascular disease, and all related maladies.

Most encouragingly, there has been a significant reversal in one critical population:

New York City’s children, whose obesity rates have fallen five-and-a-half percent since 2006. While adult rates of chronic disease have yet to show comparable progress, the change in this key variable implies that a rising generation is benefiting from the convergence of resources, design, and behavioral options.

Some of the current civic challenges highlight the interdependence of Active Design with other concerns, particularly environmental resilience and social equity. The City has had a little over a year to plan and rebuild much (though not yet all) of the built environment damaged by Superstorm Sandy, strengthening our ability to handle Sandy’s inevitable successors and the oceans’ inexorable rise. We have added the long-awaited Citi Bike system to our transit palette, witnessing that new option’s burgeoning success despite a media response often generating more heat than light. We have surprised veteran political observers with the landslide election of an energetic progressive.

The participants in FitCity 8, speaking several months before the election outcome was determined, found themselves at a turning point between a period with remarkable and readily measurable gains — including 750 acres of new parkland, 365 miles of bicycle lanes, declining injury rates in the streets, and imminent expansion of the transit network below them, as segments of the Second Avenue Line and the extended 7 line prepare to open between 2014 and 2016 — and a near future carrying all the uncertainties of any political transition. Certain signals, like StreetsPAC’s endorsement of winning

Yet Active Design, as so many of the FitCity 8 participants emphasize, is an essentially democratic idea. A coherent critique of its implementation to date would argue not that it is unsuitable for the whole city, but that its further extension throughout the whole city is an urgent priority.

mayoral candidate Bill de Blasio, imply that the built environment will see more harmony than discord in this transition. Yet it is also possible that momentum may be squandered, or gains even reversed, depending on decisions made amid tight financial constraints, political pressures, and climatic challenges.

There is common ground between the incoming administration's announced priorities and the outgoing one's achievements. At their core, the two share some goals, such as public health. To new officials, public health gains, including the creation of healthier built environments, represent ground for continuity, the strongest strain of progressivism that has been translated into policy: progressivism defined as an extension of benefits to the general populace and an optimistic willingness to use the tools of the public sector to advance the public interest. AIANY and the multiple civic agencies involved with Active Design have worked closely on the theoretical foundations and concrete details of these achievements, and *A Platform for the Future of the City* articulates the architectural community's commitment to working with New York City's public sector to prepare the City — the whole city, all five boroughs, all tax brackets, all components of its infrastructure — for what lies ahead.

The relation between social equity and Active Design could not be clearer. It is always the disadvantaged and underserved sectors of the population that suffer the most when built environments offer limited options: little available nutrition aside from commercial products

containing high levels of high-fructose corn syrup; transportation systems that leave too many people dependent on the most physically incapacitating or environmentally destructive of transport modes; and streetscapes, buildings, and public spaces more conducive to passivity or exhaustion than to vigorous life, rendered even more galling by the sight of amenities multiplying in neighborhoods catering to the privileged. There are complaints, substantive ones, about which parts of the City have received most of the current benefits of Active Design. Yet Active Design, as so many of the FitCity 8 participants emphasize, is an essentially democratic idea. A coherent critique of its implementation to date would argue not that it is unsuitable for the whole city, but that its further extension throughout the whole city is an urgent priority.

Some of the early gains of the Active Design movement have been the result of mostly common-sense measures. Stair prompts and street-space reclamation through paint, planters, and signage have brought quick results at relatively little expense. Inevitably, continuing progress depends on higher-cost, higher-reward interventions: not just a sign reminding people of the benefits of using stairs, but a building design that makes the stairs readily accessible; not just new lanes for bicycles, but broader training and incentives for motorists to expect cyclists, drive more safely around them, and collide with them less often, so that more of the population will find the lanes usable. Systemic transformations produce synergizing effects and positive feedback

loops. A citizen who has more access to healthy food or exercise facilities is an individual success story. A community that has democratically chosen to expand its transit options and engineer physical activity into its citizens' lives is something more. The difficulty of change rises as a function of complexity, and so does the reward.

Active Design in its fullest form recognizes that public health is more than the summation of the health status of individual citizens. On any scale, from the single building or street to the societal level, these design and planning practices both reflect and affect the condition of the populace viewed *as a public*, simultaneously individuated and connected. That condition responds to personal choices but also to the characteristics of public space and societal systems. Patterns of health and disease change not in a theoretical vacuum but within a complex

series of spaces, behaviors, beliefs, supply chains, transportation networks, and other variables. Past failures to analyze these processes systemically have done harm both to individual human bodies and to the body politic.

Some of those costs can be measured economically, as FitCity panelists continue to do with increasing precision and scope. Others evoke the perception, voiced with lighthearted eloquence in the Design Keynote by Peter Bohlin, FAIA, that the quality of life has subjective aspects that are beyond calculation. Political and economic conditions are transient. The cause-and-effect processes of nature operate on longer time scales. At the heart of Active Design lies an understanding that everything we build exists within Earth's systems and that our best constructions are the ones that maximize civilization's congruence with nature.

Jill N. Lerner, FAIA, 2013 President, AIA New York Chapter

Over the last eight years, the AIA New York Chapter has partnered with the NYC Department of Health and Mental Hygiene to organize FitCity conferences in New York City. They have brought together architects, planners, landscape architects, developers, policy makers, health professionals, community organizations, and others in an ongoing conversation about how the design of our communities, streets, and buildings impacts health issues.

As architects, we know that the spaces we design have an enormous impact on some of the most important issues facing our country, our nation, and our world: our energy consumption, the environment, the livability of communities, and the health of our citizens. We welcome the opportunity to collaborate with the NYC Department of Design and Construction, the NYC Department of Health and Mental Hygiene, and other city agencies on the *Active Design Guidelines*.

We should also consider exporting a FitCity exhibition or conference around the world. My firm, KPF, is designing supertall towers in Asia, and there are events for running up and down the stairs. We have a wonderful image of 100 people practicing tai chi on our plaza at Roppongi Hills in Tokyo. The way new urban buildings are being used for fitness and health globally is further evidence of Active Design.

Michael Bloomberg, former Mayor, via video
Obesity is a major contributor to many chronic

diseases such as diabetes, stroke, and heart disease, which is why we have made combating obesity and encouraging healthy eating and physical activity a priority in New York. Posting calorie counts and banning trans fats have made it easier to eat healthy. To help make daily physical activity easier, we have added more than 750 acres of parkland. We have also published *Active Design Guidelines* and created a Center for Active Design, which helps professionals share information about changing the built environment in order to make options for physical activity more readily available.

I am happy to report that since 2006, childhood obesity has fallen by five-and-a-half percent. More needs to be done, however, which is why I am glad you are here. This conference is an opportunity for designers and health professionals to exchange ideas and best practices and to come up with innovative solutions to help cities around the world promote healthy living and combat obesity.

Susan Kansagra, MD, Health Promotion and Disease Prevention Deputy Commissioner, NYC Department of Health and Mental Hygiene

A few years ago, we in public health thought the best way to improve health was to educate people on healthy eating and active living and to encourage lifestyle changes. Over the years, we have learned that one of the most effective ways to improve health is not just to encourage the individual to change, but to change the environment around the individual to support



Linda I. Gibbs, former Deputy Mayor for Health and Human Services
Credit: Julie Trébault

healthy choices. We are particularly proud of the *Active Design Guidelines* and the impact they have made on the New York City community. We have been working to implement the guidelines through a combination of activities that promote walking, bicycling, and stair use. If we are to build on these initiatives and achieve greater health gains, urban designers, building developers, community leaders, and residents must continue to work together to transform our environment as we are doing today. We will identify these future opportunities and challenges and set our sights on making New York City the fittest city in the world.

Linda I. Gibbs, former Deputy Mayor for Health and Human Services

Child obesity in New York City is down five-and-a-half percent. That is the exception. Everywhere else, adult obesity is going up, including, sadly, in New York City. We are starting to see the increasing rates slow, but the adult obesity rate in New York City is still increasing. This is an epidemic. If you look at the chart across the United States from the 1950s, you can start to see the little precursors of it, then it just explodes, and it is still going up. This obesity epidemic is perhaps the largest public health threat to our country and to the world. Sadly, as some of the behaviors that we have adopted here in the United States start to spread across the world, the obesity epidemic follows.

It takes a complete lifestyle transformation to change this trend. It is not just about what people consume in their daily diet, what exercise

they engage in, and how the built environment encourages or discourages physical activity. It is about internalizing all of those behaviors as a society. How many times have you walked through the park on a hot day and could not bring yourself to spend the money on a bottle of water? Now underneath a little tent, there is a trough and eight or ten water fountains and a Department of Environmental Protection staff person promoting “Water-on-the-Go.” Instead of offering more unhealthy drinks in the schools, we are giving kids more opportunities to fill their water bottles by putting more water jets in the schools. In school gardens, the focus is on helping kids reconnect to the source of their fruits and vegetables. We have launched the Gardens for Healthy Communities initiative, making more than nine acres of vacant city land available for community garden sites. NYCHA has also added five additional sites. We have our Green Carts initiative, and we have expanded Health Bucks, supplemental benefits that food-stamp recipients are afforded if they buy fresh fruits and vegetables. Farmers’ markets accepting Health Bucks found that they average more than twice as much in food-stamps sales, and more than seventy percent of the customer surveys said that Health Bucks was the thing that motivated them to purchase more fruits and vegetables. We have also trained 2,200 teachers in “Move to Improve,” so that students do not have to go out to the schoolyard for physical activity – they can get up and dance salsa in the course of a regular day.

Alex Ross, Director, World Health Organization Centre for Health Development, Kobe, Japan

I would like to congratulate all involved for the groundbreaking work that New York has conceived and implemented over the past many years to effectively design a new urban landscape that makes cities more liveable and more healthy. The *Active Design Guidelines* are an enormous contribution. Today, I would like to put into context the value that such Guidelines and related actions can have on global public health trends and issues.

Just two years ago, a landmark political event in global public health took place in this city at a Special Session of the UN General Assembly (UNGASS). For the second time in history, the General Assembly held a High Level Meeting of heads of state to discuss a health issue. The first was on HIV/AIDS in 2000, and the most recent was on Noncommunicable Diseases (NCD). Driving the UNGASS meeting on NCDs was the increasing awareness and concern by countries and cities about the very rapid increase in several chronic diseases, premature mortality, and the associated health care costs. Developing countries are also paying attention as the burden of NCDs is falling on younger adults. Rather than a seventy-year-old being ill, it is a forty-year-old person who is dying, which is a significant economic impact on their countries and families.

Globally, attention is no longer focused on infectious-diseases alone, but also on increasing prevalence of NCDs. Chronic diseases are one of the major causes of morbidity and mortality. NCDs

are complex, with many risk factors contributing, and several co-morbidities occurring. It is not just a matter of diet and diabetes. Tobacco use is also a major risk factor for diabetes, as well as for respiratory diseases, cancer, and stroke. By reducing one specific risk factor, you are actually having a systemic effect across multiple diseases.

Another example concerns hypertension, or high blood pressure. Worldwide, roughly thirty percent of adults who have high blood pressure do not know it, and in some countries it could be as high as fifty percent. Yet, the technology to monitor hypertension is simple, the medications are inexpensive, and diet and exercise can have a major impact. There are a lot of creative programs around the world that address this. In Japan, you will find free miniaturized blood-pressure cuffs (for use on the wrist), blood pressure machines in supermarkets, and in the gyms. High blood pressure is a direct avenue to a stroke, and strokes are among the major cause of early death and serious morbidity in many countries, particularly in countries in Asia. Mongolia has among the world's highest rates of hypertension. A lot of it has to do with use of salt in food, and salt reduction can have a large impact. Another issue is the rising prevalence of obesity. We have learned many lessons from reducing tobacco use in developing public information campaigns and public health prevention programs. We can apply some of these lessons in engaging the food industry. Some of the major food companies are interested in reformulating their foods, trying to reduce the salt, sugar and trans-fat content. It is also about sensitizing families and individuals to the risks and altering behaviors.

In Korea, you will find that much of the salt is still used in the home, so there is a lot of consumer education that has to take place there.

Another good example is from Singapore, where the Health Promotion Board worked with the ever-present food hawkers to get them to voluntarily reduce salt. In return, the Board issued a certificate for having done so that they could display on their stalls.

WHO manages a treaty, the Framework Convention on Tobacco Control (FCTC), which 176 countries have thus far ratified. The FCTC has certain obligations on marketing, smuggling, taxation, advertising, children, packaging, etc. Yet, tobacco use is on the rise in many parts of the world. The reality is that there are still a lot of lobbying efforts being done by tobacco companies. There is a need to share lessons on successful strategies, and I wish to commend the City for supporting WHO and others to reduce tobacco use in developing countries. New York City has done pioneering work in reducing use of tobacco. Australia has also done remarkable work, and there are many other examples. The WHO Kobe Centre (WKC) has also developed a Guide and Model Ordinance for Cities to promote smokefree environments. A key issue is enforcement of laws.

WHO issues a periodic global report on public health statistics and trends. In 2013, WHO released a new global report on road safety. Eighty-eight countries have reduced their road traffic deaths, but the global toll is still very high. A few countries have comprehensive laws that include drunk-driving laws, minimum age restrictions, road-safety

signs, and so forth. Half of all traffic deaths are not in the automobile; they are actually among pedestrians. If any of you have ever been to Hanoi or Bangkok, where there are scooters and bicycles and no safe lanes for them, you start to get a better understanding of the situation. In some countries in Africa, road safety is a major public health concern.

Following the UN High Level Meeting on NCDs, WHO has convened Member States to discuss, develop, and adopt a set of voluntary targets to guide actions by countries (and cities). In parallel, there are increasing lessons from countries on how to go about controlling or reducing NCDs, based on involving many sectors and agencies across government and in society. For example, in North Karelia, a province in Finland, they were able to reduce their coronary heart disease rates from nearly 700 to close to 100 per 100,000 people over about a thirty-year period. That is a remarkable change, and it came about from similar types of strategies to those that have been implemented in New York. They implemented several policies and incentives: legislated types of food contents, taxes and agricultural policy, and promoted physical exercise. These actions had a synergistic composite impact. In New York City, actions across multiple departments and disciplines have led to five-and-a-half percent reduction in childhood obesity. This is a huge achievement. We need to understand that it is not one intervention but a whole integrated package. There is also a need to ensure equity across population groups concerning goals for reducing negative public health indicators.

We need to think of a life-course approach – keeping someone healthy at the age of twenty, or affecting their habits at the age of ten, has a huge impact on what is going to happen to them in twenty, thirty, or forty years.

On the topic of aging, very soon, for the first time in history, the number of people over sixty-five will be greater than the number of children in the world under five. The phenomena of rapid aging is not just occurring in the U.S. It is a worldwide trend, with the greatest growth in developing countries and emerging economies. One million out of eight million people in New York are already in this aged cohort. The speed of population aging in also much faster in developing countries. For example, it took Japan 100 years to go from seven percent of the population to fourteen percent of the population over the age of sixty-five. It is taking Brazil and India twenty years. It will be even faster in some countries, so there is no time to lose.

This presents many opportunities and challenges for all affected communities. We need to think of a life-course approach – keeping someone healthy at the age of twenty, or affecting their habits at the age of ten, has a huge impact on what is going to happen to them in twenty, thirty, or forty years. Preventing NCDs is very much linked to healthy aging. Many of us are going to be part of this age cohort, and it has tremendous implications. Prevention is key. If you prevent someone from having diabetes, you are also preventing them from the morbidity of an amputation. WHO is advocating for non-institutionalization of the elderly, and this has implications for design of community-based health and social service delivery programs, urban planning, and various health and information technologies. Moreover, WHO advocates for focusing on the positive aspects and contributions of aging populations.

Social isolation is a huge issue in many countries, and if people cannot leave their apartments, their access to social and health services is hugely impacted. There are many ways to address this issue. One initiative managed by WHO is the Global Network of Age-Friendly Cities and Communities. Cities sign up promising to work on various programs to increase the age friendliness of their services and of city life overall. The New York Academy of Medicine is a WHO Collaborating Center for Age Friendly Cities, and they have developed many initiatives and ideas to advance age friendliness here in New York.

This brings us back to the megatrend of urbanization. Over fifty percent of the world's population live in cities today. This number is projected to increase to seventy percent by 2050. In China, people are building many cities every year. The vibrancy of the middle class is a major dynamic, which will have an impact on economies, expectations, food choices, consumerism, and where people are going to live and commute. The number of megacities with over ten million people is increasing rapidly. Environmental health issues are of concern, including air pollution, clean water and available sanitation. Many of these issues are transnational, such as air pollution and climate change. With greater globalization and urbanization come increasing inequities that diminish access to health, individuals' capacity to remain healthy and productive, and political and social stability.

At the WKC, we have been leading WHO's work on urbanization and health, in particular with a focus

Countries who have built capacity on Urban HEART (2008-11)



Credit: WHO

New York City has been a world leader in demonstrating the positive impact of policies and programs that simultaneously improve urban planning, the liveability of the city, and the health outcomes of its citizens. It has taken a great deal of effort and a willingness to work across sectoral lines to achieve results for everyone concerned.

on helping cities measure and respond to health inequities. One of the tools and approaches we have developed is the Urban Health Equity Assessment and Response Tool (Urban HEART). Using a broader determinants of health approach, Urban HEART contains a core set of indicators across sectors that cities can tailor to measure different health inequities and their contributing factors at the neighborhood level. Urban HEART allows cities to look across a spectrum of disciplines and districts to track what is going on in a neighborhood. This is a powerful tool to understand the links between health, unemployment, safe water, road traffic, literacy, and malnutrition. It then becomes useful for a mayor of a city to hold different departments accountable to reduce health inequities over time and to plan.

WKC has helped cities around the world conduct surveys on health inequity. Data generated can then document trends over time and help in planning/delivering interventions. This approach is applied to cities in Cambodia, Bolivia, and Kenya, as well as in New York City, Toronto, and Barcelona. Graphics illustrate changes in patterns over time and can be used as an accountability tool. WKC has assisted many countries build their capacity for Urban HEART, as depicted in “Countries who have built capacity on Urban HEART (2008-11).”

Liverpool was an interesting case because the city had high mortality rates, low life expectancy, a great deal of inequalities, and citizens who exercised infrequently. To reduce their high NCD rates, they focused on creating opportunities

for physical exercise. Over a period of two years, a coalition of city departments, local sports industries, and community groups designed and implemented a Liverpool Active City strategy relying on different sectors (environment, health, transport, and the workplace). Key requirements for progress included leadership, coordination, branding, and engaging sports clubs. They started to develop municipal leisure centers; they had a Walk for Health campaign; they created referral programs for exercise; they built municipal sports facilities; and they brought in the education sector. They also measured the impact of this effort over time: a large increase in the numbers of people more active in the city, greater awareness, and a lot of benefits for health.

To achieve the voluntary NCD targets by 2025 (endorsed by all WHO member states), cities and countries must address inequities. There are really two fundamental challenges: how best to measure inequities from a technical/political standpoint and how to craft interventions for the most vulnerable populations. More countries and cities are starting to move forward on this agenda, but from a development-history standpoint, this is new. We have to be realistic: it will vary from city to city; country to country.

New York City has been a world leader in demonstrating the positive impact of policies and programs that simultaneously improve urban planning, the liveability of the city, and the health outcomes of its citizens. It has taken a great deal of effort and a willingness to work across sectoral lines to achieve results for everyone concerned.

GROWING ACTIVE DESIGN: COMMISSIONERS’ PANEL

New York City is transitioning from an administration that embraced the Active Design and helped gestate many of the guidelines to a new administration that will hopefully uphold the same principles. Civic leaders involved with recent years’ achievements in the built environment present those successes not in a mirror of retrospection but as the groundwork for progress and expansion.

Rick Bell, FAIA, Executive Director, AIA New York Chapter

I would like to quote briefly from three Richards, starting with Richard Jackson. Richard, more than anybody else, started the FitCity effort here at the Center for Architecture. He was our first keynote speaker at FitCity 1, where he said we have to get out of our silos. We have to work together to understand not just the complexities of multivariate analysis, but also the real trend sectorial, interdisciplinary collaborations that lead to the understanding, research, and solutions to problems that could not otherwise be considered in their fullness. He says in the preface to this wonderful book *Making Healthy Places*, which he co-edited with Andy Dannenberg and Howie Frumkin, “The fact is... that health is determined by planning, architecture, transportation, housing, energy, and other disciplines at least as much as it is by medical care. It is our shared duty to work together to build communities that are safe, affordable, lively, and healthy.”

Some of you may remember the second of three Richards: back in 1942, when Richard Blaine said it does not take much to see that the

problems of a few individuals do not amount to a hill of beans in this crazy world, speaking about the individual, communicable, if you will, versus chronic problems of disease prevention. Lastly, the third of the Richards is, yes, Richard III, who said, “Urge the necessity and state of times / and be not peevish-fond in great designs.”

Thomas Farley, MD, MPH, former Commissioner, NYC Department of Health and Mental Hygiene

At each of the FitCity conferences, I have gone through a list of the health benefits of physical activity. I think it is worth going through it again because, while everybody recognizes that physical activity is important to health, I still think we under-recognize how wide-ranging and large the health benefits are. We all know that physical activity can help you avoid becoming obese, but it is also going to help prevent heart disease and stroke. It is going to help prevent diabetes, even if you do not lose any weight. It also reduces your risk of colon cancer. It probably decreases your risks of breast cancer, osteoarthritis, and osteoporosis – the sort of problems we all have as we get older.

Physical activity also diminishes your risk of depression. One of the major things we can do from a psychiatric standpoint is have everyone be more physically active. If people are physically active for two-and-a-half hours a week, they reduce their risk of premature mortality by twenty percent. To flip it the other way, you could see physical inactivity as one of the major risk factors for death in the United States and here in New York City. We estimate that

Overall, New Yorkers are three times as likely to meet the recommendations for physical activity as people in the U.S. as a whole, probably because of the design of the City. New York City has always promoted walking and other forms of active transportation more than other cities.

we have over 6,000 deaths per year that we can attribute to people being insufficiently physically active in New York City.

It is worth pointing out that here in New York City we are actually doing much better than people are in the U.S. as a whole, as far as physical activity and health go. Our life expectancy at birth is 2.2 years longer than in the rest of the United States, and it is rising faster than in the rest of the country. I do not know exactly why it is, but if I had to guess, I would name two factors: our smoking rates are lower and our physical activity levels are higher. Now, physical activity levels are higher here not because people exercise more. New Yorkers actually get less deliberate exercise than people in the rest of the U.S., but we get more physical activity through transportation. People who walk or bike to work get an average of sixty minutes more physical activity per day than people who drive to work, and people who take transit get an average of thirty minutes more. That amounts to a lot over the course of a week, a year, or a lifetime. Overall, New Yorkers are three times as likely to meet the recommendations for physical activity as people in the U.S. as a whole, probably because of the design of the City. New York City has always promoted walking and other forms of active transportation more than other cities.

David Burney, FAIA, former Commissioner, NYC Department of Design + Construction, and Chair of the Board, Center for Active Design

The City's Obesity Task Force came out with more than twenty-six recommendations. The only one, unfortunately, that received any media attention

was the sugary-drinks limit, but there are many others, equally important, that will be implemented. One of them was the creation of the Center for Active Design, which is intended to continue the work of changing the built environment to promote better health outcomes, beyond the Bloomberg administration. We will continue with training and with the publication of the Guidelines. There have been supplements already published: one on promoting safety and a new one on sidewalk design. The latter is a product of the NYC Department of City Planning, authored largely by Skye Duncan, and it is actually the definitive work on how to design successful sidewalks in every situation. It is an amazing document. We are coming out with another one shortly on affordable housing. There will also be another supplement on low density.

There is now a LEED point, for buildings that are seeking LEED certification under the U.S. Green Building Council, for implementing the Guidelines. Within the City itself, there is an executive order about to emerge any day now that requires city agencies to review built-environment projects for opportunities to implement the Guidelines, both in projects managed by the City and in RFPs that city agencies put out to private partners. These things will also live on beyond the Bloomberg administration.

The AIA has really taken up the cause. The design community has decided that it is going to be part of the solution. We were part of the problem, in the sense that we designed our built environment to encourage sedentary lifestyles. We made it too easy to do nothing. People are now looking at implementing Active Design into projects, both

buildings and transit-oriented developments, and for the large part, these things are common-sense and cost-neutral. We are not asking people to spend enormous amounts of money in order to achieve more mobile and more active lifestyles. Achieving a healthy lifestyle should be synergistic with so many of the other things that go into quality of life, such as biking, the idea of complete streets that has come out of the Department of Transportation, and the idea of life in the City being active.

One of the things we would like to see with Active Design is not that everybody has to go to the gym, but that in part of your daily life, and part of your routine going about your business, you are becoming more active and less sedentary. One thing we are doing in conjunction with the Department of Transportation is the Safe Routes to School program, which started out as a safety issue. It is done by narrowing down pedestrian crossings and changing signals and so on. It has encouraged more kids to walk to school rather than to be driven there, so there is a synergy between safety and health.

If you think about the history of universal design and sustainable design, these were all ideas that were fresh to built environment design and planning when they started out, and eventually became incorporated into code and regulations and implemented routinely in the built environment. I think Active Design will follow the same path. We are already beginning to see it incorporated in zoning and in the building code, and I think eventually it will be fully incorporated, just as other elements have been.

Amanda M. Burden, Hon. AIA, FAICP, former Commissioner NYC Department of City Planning

We have been designing the City in a holistic way that reinforces the notion of the 'healthy city.' We have focused on what we call complete neighborhoods: neighborhoods where everything is within a walking distance – shops, open space, jobs, and homes. This is important because walking is the most enjoyable, cheapest, healthiest, and most user-friendly mode of transportation.

What is unique about *Active Design: Shaping the Sidewalk Experience* is that it looks at the sidewalk in a multidimensional way. It talks about the sidewalk having four walls: not only the ground plane, but also the tree edge, the canopy, and, most importantly, the street wall. Design principles follow Holly Whyte's mantra of 'no blank walls,' and they go further by adhering to Jan Gehl's standards, which make us understand that we need to design not for the speed of a vehicle but for the three-miles-an-hour speed of the pedestrian. Therefore, in order to always have something interesting to walk next to, you need to make sure your streetwall has multiple uses on every block and that you pay attention to architectural detail. This ensures that the walker's experience is both rewarding and dynamic.

I always say that there are five important things about a city: that it be safe, sustainable, affordable, equitable, and fun. A healthy city is a dynamic, competitive city. A healthy city is a greener city. A healthy city has greater quality of life in every way, from sidewalk cafés to fabulous Citi Bikes that we now have every few blocks. A whole new



Commissioners' Panel
Credit: Julie Trébault

lifestyle has been created throughout the City, where the sidewalk, the streets and the sense of 'neighborhood' are at the center of people's lives. This transformation is likely to transcend administrations, but the bottom line is that it is up to the FitCity community, which has embraced Active Design so passionately and so fiercely, to make sure that it is around for a long time.

It was only a week after Janette Sadik-Khan was appointed that we happened to go to Copenhagen where she met Jan Gehl. I remember that she had her chief traffic engineer with her, and when she asked him to get down on his knees to measure the width of a bike lane, I thought I had gone to heaven. This mindset was a complete transformation, and I am not sure it would have happened so fast if we had not taken that trip. I believe traveling should be mandatory for commissioners. You learn from other cities around the world what is working and what is not. You will find new ideas that could work in New York that you might have never thought of, and there might be things that you had previously believed would never work that are flourishing elsewhere.

Veronica White, former Commissioner, NYC Department of Parks and Recreation

I started an anti-poverty effort called the Center for Economic Opportunity, a big public-private partnership at City Hall. Commissioner Farley and I set up the Office of the Food Coordinator. You would not know it, but New York City serves more meals than anyone else in the country, except for the Department of Defense. Among our hospitals, schools, and corrections facilities, the number of

meals served is enormous, and there were really no standards before our initiatives. The Office of the Food Coordinator is a good example of commissioners across a dozen agencies working with the Health Department to set up something sustainable. There are guidelines now in place throughout the City.

The City invested over five billion dollars in parks over the last ten years, and it is tremendous to see improvements that people did not really think about before. Simple things, such as adding field lights so people can play later into the night, replacing asphalt with turf, and keeping playgrounds open after the schools close, are affordable concepts that can be implemented in cities around the country. There are also visionary projects, such as turning Fresh Kills into a beautiful park where you can now go kayaking. We do not need to talk about the High Line, but there are other parks that people do not hear about as much, like the High Bridge. David Burnery's team is now bringing the High Bridge back to life after four decades. People could not walk across the river before, but they will be able to next year at this time.

I have full faith that the next administration will build on what we have done. The recreation centers need to be rebuilt – not just McCarren Park, which was closed for decades and is reopening with a \$68 million investment – but other recreation centers like the new Gertrude Ederle Center on 59th Street in Manhattan, which we just reopened last week. The new administration will want to build on what we have done, and I think that is great because New Yorkers are demanding it.

[We are also trying to make the environment more usable for more people by accommodating a wider range of abilities and ages. This requires working with the various city agencies and elements under their jurisdictions.](#)

We recently looked at our numbers and recognized that the eighteen-to-twenty-four-year-old set was missing from our recreation centers, so we lowered the fee to two dollars a month for them. The parks are used twelve months a year, so we are building more playgrounds that attract adults and young adults. We are trying to find different avenues to entice people to go out and to work out. You do not have to run a marathon; you do not have to be in perfect shape. You can do our Walk NYC program, which gives tours through parks to convince people that there is something for everyone and for all ages.

Victor Calise, Commissioner, NYC Mayor's Office for People with Disabilities

I am a person with a disability that stays fit by embracing an active lifestyle.

Prior to being appointed Mayor's Office for People with Disabilities (MOPD) commissioner, I worked with the Parks Department. Our team did a lot of great things to make parks and recreational facilities accessible. Now people with disabilities can better experience the varied environments within the City: parks, wet lands, woodlands, meadows, lakes, ponds, beaches, playgrounds, stadia, marinas, sports facilities, gardens, malls, squares, and other public spaces. People who use wheelchairs can now experience the surf by means of matts that create an accessible route over the sand. Accessible trails allow one with a disability to experience nature in a way that was not possible before. Children with disabilities can now play with their friends in playgrounds. Athletes

with disabilities have access to basketball courts, pools, ice rinks, and other types of facilities used for adaptable sports, as well as programs such as Shape Up New York classes.

People with disabilities look at the international sign of accessibility as a means of freedom, not as a symbol that represents a sedentary lifestyle. We are trying to change that negative perception. We are also trying to make the environment more usable for more people by accommodating a wider range of abilities and ages. This requires working with the various city agencies and elements under their jurisdictions. For example, the Department of Transportation controls and regulates traffic and builds and maintains streets and sidewalks, in addition to many other elements of transportation. MOPD works with this agency to provide better pedestrian access. Some people with visual disabilities may think, "What I thought was a safe street to cross actually is not." We are working with DOT on different ways to provide cues to people who are blind or have diminished sight so that they will be able to navigate the City safely.

We use the Inclusive Design Guidelines that Rob Piccolo put together and now look at the City holistically, as a potentially inclusive environment that can be more usable. It is a way to enhance the quality of life for everyone by accommodating people's changing needs and preferences. Active Design and Inclusive Design are compatible. For example, stairs should not be eliminated or replaced by a ramp. Stairs are usable by many people, even those with very limited abilities,

and it is one of those ubiquitous architectural components that can be used to increase activity.

Everyone at this panel, as they grow older, will experience diminished abilities. It is important to stay active and to have access to an environment that allows one to stay fit. Our office continues to be part of this conversation in everything that we do.

Margaret Newman, FAIA, former Chief of Staff, NYC Department of Transportation

I am happy to be here, but it is not under the happiest circumstance. My commissioner sprained her ankle over the weekend – and I want to point out, not in New York City, and not on our streets. She was being active elsewhere.

Those of you who live in New York have certainly seen changes in the streets over the last six years, which had not been changed in fifty years. We redesigned them so that they are safer and to incorporate this terrific bike share program. It did not appear overnight; it actually has been years in the making, and in order to put the bike share program in place, we created over 350 miles of bike lanes over the last six years.

The first thing to understand about the program is it is an amazing public/private partnership, and there is no city funding involved. We are reliant on two partners: Citibank, who put in many millions of dollars to build the program, and the bike share company, which runs the business. There was an RFP issued, and it was a for-profit model. At some point they will hopefully make a profit on it because the city then stands to benefit. In order to expand the system, we

have plans that include rolling it out into all five boroughs, but it is dependent on finding the funding for those additional rollouts.

Summer Streets is going to be in its sixth year this summer, and there is demand for that to move out into the outer boroughs as well. I hope the next mayor will be able to address that. Along with our plaza program, which is an application-based program, neighborhoods around the city can look at their underutilized roadway space and propose plaza areas that we can evaluate and continue to expand. We have added thirteen acres of plaza space, and we are introducing a wayfinding program. All of the bike share stations have maps, and the wayfinding program will expand that. Our projects continue. At Times Square, it has been my great privilege to work with the DDC and a number of other city agencies. There will be a ribbon cutting by the end of this year.

We have been working with a group of sight-impaired New Yorkers called Pedestrians for Accessible and Safe Streets (PASS), which has raised an interesting point. When ramps were put in, they were originally intended for people who were in wheelchairs and unable to cross streets otherwise. If you took away those ramps now, it is not really the people in wheelchairs who would be upset, it is everyone else: people with tricycles, people with strollers, people who rely on that accessible curve. The point has been raised similarly with sight-impaired people that very soon we are going to have a very large population of people who are sight-impaired just because they are aging.

ACTIVE DESIGN
AND COMMUNITY
WELL-BEING

Community renovation and restoration projects can apply Active Design principles on all scales, from small site-specific installations to ambitious reimaginations of entire districts. When the traditional aims of safety, economic opportunity, and aesthetic uplift are integrated with attention to citizens’ physical vigor and social well-being, informed by an expanding body of research, these projects become more than snapshot success stories: they weave the features of a neighborhood into the broader tapestry of a healthy city.

Moderator: Sean I. Robin, MCP, former Built Environment and Healthy Housing Director, NYC Department of Health and Mental Hygiene

Why should we design for community well-being? Why is that something that those who work in the design field or related fields like community development should be worried about? To suggest an answer: what happens when we do not design for community well-being? I think we know what that looks like because it is not what we have historically done as a society. Jane Jacobs and a group of people around her realized that it would not be a good idea to put a thruway across this neighborhood where we are meeting today; a thruway going through Greenwich Village would not promote community well-being. That would be a decision that would make sense from a point of view of transportation efficiencies, if your goal was to get automobile users from point A to point B as quickly as possible, but that would not be a good

planning decision to promote well-being in a neighborhood like Greenwich Village. Unfortunately, that was the decision made in other parts of the City. I think we have the environmental movement, among others, to thank for helping us understand concepts like negative externalities. When you only design for efficiency, if you only design for industry, commerce, and production, you can end up with some people that are not the healthiest they can be, and you can end up with some communities that are suffering. I have seen maps of this city that show occurrences of asthma hospitalizations, and they tend to cluster around the thruways.

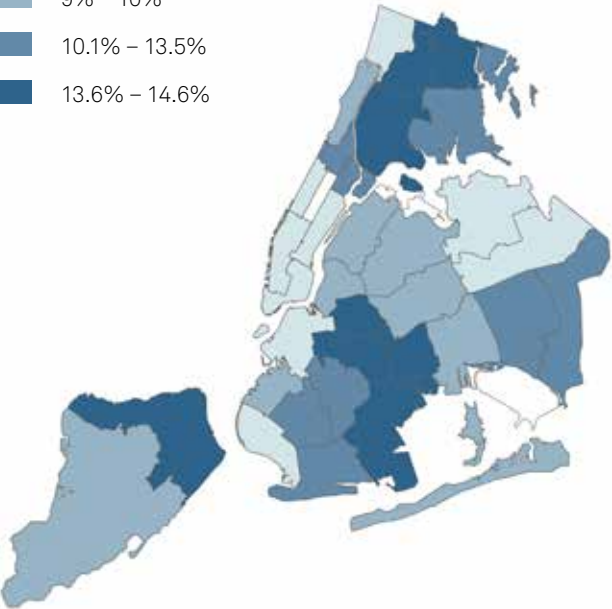
Mel King, a professor of urban planning in Boston, wrote, “The main purpose...behind so much of our struggle past, future and present is to create ‘community.’ By that we mean the human context in which people can live and feel nurtured, sustained, involved, and stimulated. Community is the continual process of getting to know people, caring and sharing responsibility for the physical and spiritual condition of the living space.

“‘Community’ is important for establishing a common bondedness, for creating a sense of identity, for maintaining and creating cultural continuity, and for giving social expression to oneself as part of a larger whole. ‘Community’ promotes development beyond the immediate family, toward involvement in ever-widening breadths of community, city, state, nation, world, universe. ‘Community’ is the base from which people can begin to understand what else is going on in the world.”

Prevalence of Diabetes and Obesity among Adults Aged 18 Years or Older in New York City by Neighborhood

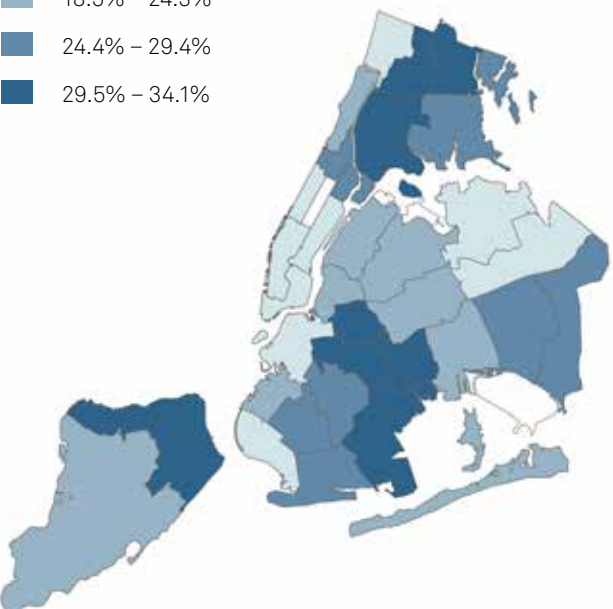
% Adult Residents with Diabetes

- 4.1% – 8.9%
- 9% – 10%
- 10.1% – 13.5%
- 13.6% – 14.6%

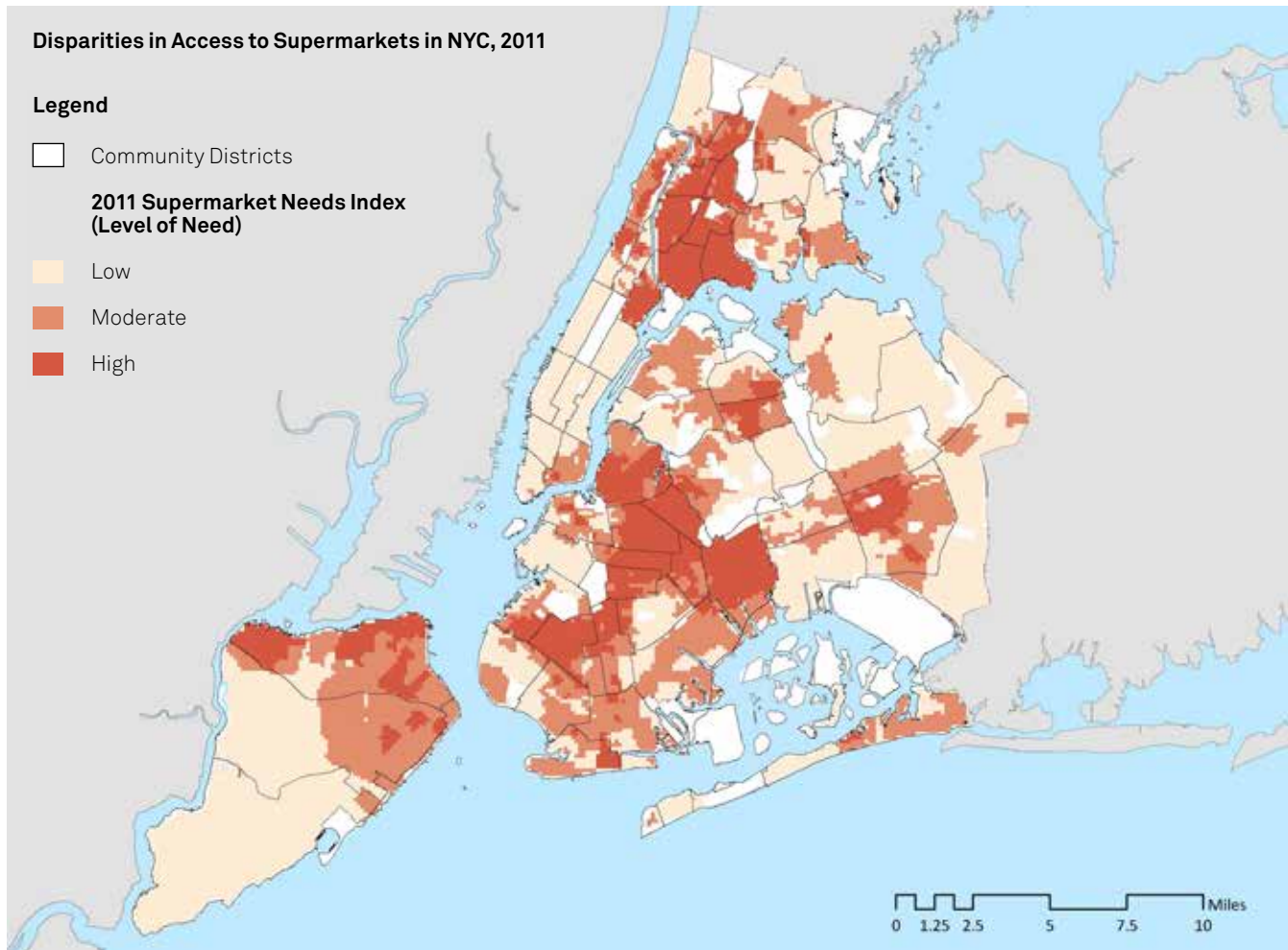


% Adult Residents with Obesity

- 9.8% – 18.4%
- 18.5% – 24.3%
- 24.4% – 29.4%
- 29.5% – 34.1%



Disparities in Diabetes
and Obesity by New York
City Neighborhood
Credit: NYC Department of
Health and Mental Hygiene



Credit: NYC Department of City Planning

The obesity and diabetes situation is not uniform across the City; areas that have high levels of poverty experience the highest levels of obesity and diabetes. The disparities that we see in these diseases are reflected in the environments of unhealthy food and decreased access to safe places for regular physical activity.

This morning, Alex Ross gave an example of how our global population is beginning to age in place, and one of the risk factors was social isolation. The opposite of social isolation is, in fact, a sense of community.

Karen K. Lee, MD, MHSc, FRCP, former Built Environment and Healthy Housing Senior Advisor, NYC Department of Health and Mental Hygiene

The top five preventable causes of death are tobacco, followed by obesity, high blood pressure, high blood sugar, and physical inactivity. Four are the result of too much energy in, in the form of unhealthy, high-caloric foods and beverages, and too little energy out, in the form of daily living, including exercise and active transportation. Here in New York City, about sixty percent of adults and forty percent of children are overweight or obese. The obesity and diabetes situation is not uniform across the City; areas that have high levels of poverty experience the highest levels of obesity and diabetes. The disparities that we see in these diseases are reflected in the environments of unhealthy food and decreased access to safe places for regular physical activity.

Over the last two years, the NYC Health Department has been working with community members to identify strengths in their communities that they can build upon and the challenges on which they can make improvements in order to promote active living and healthy eating. We then work with them to find opportunities for implementation of needed

changes, as well as to give inputs into policy and system change processes. One of the ways we do that is through community engagement workshops with staff at Affordable Housing, with local youth groups, with many of the groups here presenting on the panel, and with community members. The demonstration projects include things like stairwell and water-fountain redesign at some of our high schools, installation and music projects piped into stairwells, murals around bus shelters to improve the public realm in Staten Island, renovation projects in affordable housing buildings that include physical activity-promoting features, and creation of gardens that increase access and exposure to healthy foods and beverages as well as opportunities for physical activity. There is going to be yet another guide coming out in July; Sarah Wolf has worked very hard on this with the Health Department, and we have worked alongside other agencies and community-sector groups.

We need to look at potentially incentivizing financing mechanisms for affordable housing, and we have been working with the Department of Housing Development and Preservation on integrating physical activity-promoting and healthy design. We have a program called Play Streets, single blocks of streets closed to cars on a daily to weekly basis, many of which are run by community groups who apply for a permit from DOT. There have been suggestions that perhaps we could also be creating Play Streets for seniors and adults.

In recent years, I have done some work with Canadian cities and communities. In February



Bronx River Greenway
Credit: New York
State Department of
Transportation

2013, there was a workshop in Winnipeg, where a combination of planning, health, and community-sector professionals came together to look at the redevelopment of a high-needs area in the inner city. I think it is an area that is ripe for growth.

There was an era in which we thought everything that could be mechanized, everything that utilized things outside of the natural world, was a good thing. Inadvertently, we designed things that actually were not so good after all, designing walking or fresh air out of our lives. We need to learn from that and deal with problems as they arise.

David Shuffler, Executive Director, Youth Ministries for Peace and Justice

We are located in two neighborhoods: Bronx River and Soundview. Our defined catchment area has been coined a “toxic triangle” because of the high rates of obesity and asthma, all challenges that are attributed to the highway and transportation network in our neighborhood. On the top of this triangle, you will see the nation’s worst highway, the Cross Bronx Expressway. The Bruckner Expressway is on the bottom. The Bronx River Parkway cuts through the triangle. Then the Sheridan Expressway is on the far end, where we have an exciting campaign looking at redevelopment to create more access to the river. The Bruckner Expressway separates the Hunts Point community from the Bronx River community. These highways, unfortunately, have become the boundaries of particular neighborhoods and divided communities that were once linked to each other.

The projects I will talk about today were developed by several stakeholders – Youth Ministries, The Point Community Development Corporation (which is at Hunts Point), the Pratt Center, the Parks Department, the Bronx River Alliance, and city, state, and federal officials. In 1993, the City released the Greenway Plans for New York City. We took this plan and started looking at how we could implement some of these principles into our neighborhood. There has been increased investment in Brooklyn and Manhattan, but Queens, the Bronx, and Staten Island have not had the most success in terms of expanding greenways. Today, however, I have an exciting project to talk about. Looking at the Bronx River, we saw opportunities for park space and for increased access to the river. The Bronx River Greenway runs eight miles in the Bronx; it connects Westchester County to Hunts Point. About \$140 million of aid has gone into the development of this project.

Concrete Plant Park in the early 1900s was an active cement plant along the Bronx River. In the 1980s, 1990s, and early 2000s, a lot of this site was abandoned. It was deemed a brownfield site and a neighborhood eyesore. Youth Ministries for Peace and Justice was working with a lot of people in the neighborhood to do something with this site: drawing, brainstorming, bringing in street theater, talking about Paulo Freire and Jane Jacobs. How do you bring in the arts with Active Design and planning? We fought back against “the Truck Monster.” Now the park is a waterfront promenade with 7.3 acres of park space, a reading circle, and

canoe launches. We left the cement stacks in the park because it costs a lot to take them down, and they are also symbolic. Now that they are painted, the park becomes an iconic place.

Starlight Park in the early 1900s was an amusement park, a coliseum, and then a Con Edison-owned manufacturing gas plant. We worked hard to get the soil cleaned up and improve the park, which opened up this past April. The Bronx River Greenway is mostly complete. The remaining unfinished portion is Starlight Park Phase Two. This project has been a long fight, about twelve-plus years. Once Starlight Park is complete, it will

be twenty-four acres of open space, a really active place. Phase Two will allow more access. Ideally, the proposal will build some bridges over the river, allowing people who live on that street to be able to get into the park, and connecting the Bronx River Greenway and the transportation network. This is a particularly interesting site because Amtrak and the New York State Department of Transportation are in a legal tussle about indemnification, access, and cleanup issues.

The greatest thing that we do along the river is canoeing. You do not find that anywhere else in New York City: canoeing on the Bronx River.

Bronx River Greenway
Credit: New York
State Department of
Transportation



Faced with these obstacles, Bedford Stuyvesant Restoration Corporation works to improve the quality of life in Central Brooklyn by fostering economic self-sufficiency, enhancing family stability and growth, promoting the arts and culture, and transforming neighborhoods into safe, vibrant places to live, work, and visit.

**Tracey Capers, Executive Vice President,
Bedford Stuyvesant Restoration Corporation**

Introduction

Central Brooklyn neighborhoods struggle with high poverty and unemployment, low educational attainment, and significant disparities in health outcomes. Nearly one in three adults in these neighborhoods is obese, more than forty percent get no physical activity, and nearly three in ten do not see a doctor. If that is not bad enough, we are also faced with the highest incidences of poverty in the City. In Bed-Stuy, the median income is only \$31,000 and forty-two percent of the neighborhood's population makes less than \$25,000. Roughly eleven percent of the population is unemployed and forty-six percent rely on public assistance. Community District 16 (Brownsville and Ocean Hill), in particular, has one of the lowest graduation rates in the City at only thirty-four percent. These are pretty daunting statistics.

Faced with these obstacles, Bedford Stuyvesant Restoration Corporation works to improve the quality of life in Central Brooklyn by fostering economic self-sufficiency, enhancing family stability and growth, promoting the arts and culture, and transforming neighborhoods into safe, vibrant places to live, work, and visit. The first community-development corporation in the country, Restoration was established in 1967 by Robert F. Kennedy and Jacob Javits. We serve some 50,000 people annually through programs spanning workforce and asset building, social supports, education, health, and the arts. Notably, we have been the borough lead for

the Partnership for a Healthier New York City since March 2012, coordinating borough-wide efforts to improve access to healthy foods and physical activity, while discouraging the consumption of tobacco and alcohol. Complementing these efforts, Restoration is also the convener for the W. K. Kellogg Foundation-funded NYC Food and Fitness Partnership, whose sole focus is to improve healthy eating and physical activity focusing on four Central Brooklyn neighborhoods: Bedford Stuyvesant, Bushwick, Brownsville, and East New York.

Here are two examples of projects, one large scale and one small scale, which Restoration spearheaded to encourage active living and support the health of families:

Corridor Revitalization

As part of efforts to transform the physical development of our community, Restoration undertook to transform Fulton Street, the main commercial artery in Bedford Stuyvesant, to create a safer, more attractive, more vibrant environment where business would locate, stay, and thrive. We renovated Restoration Plaza, where we are headquartered – a 300,000-square foot commercial, cultural, and community complex, formerly an abandoned milk bottling plant – and worked with DOT and EDC on a mile-long streetscape improvement project. We took down a wall and created a new plaza perfect for outdoor seating and events, with lots of green space for public use. Directly across the street from Restoration Plaza, we helped create the new Marcy Plaza. Previously, Marcy Avenue was a busy four-lane thoroughfare

at the intersection of Fulton Avenue. We worked with the City to reduce it from four lanes to two, utilizing the extra space to create a public plaza with benches and a beautiful mosaic at its center. We expanded the sidewalks, bringing in 144 new trees, new lighting, and new street hardware, including planters, benches, trash receptacles, information kiosks, and bike racks. We have launched a weekly farmers' market, outdoor exercise programming, and a summer arts series that included music and theatrical performances from jazz to Shakespeare. We believe the renovations have been a catalyst for new businesses that have recently come to Fulton Street. All in all, these efforts took about seven years and cost some \$20 million.

Active Design

On a smaller scale, Restoration engaged in Active Design projects to promote active living in its Youth Arts Academy Building, which provides multi-disciplinary arts instruction to hundreds of youth and artists annually. Restoration selected a local artist, True, to design a staircase that would encourage people to take the steps instead of the elevator. He created a multi-medium inspirational mural with piped-in music highlighting the cultural icons, both living and deceased, who grew up in Bedford-Stuyvesant and made great contributions to the arts. Artists highlighted include Lena Horne, Max Roach, Eubie Blake, Stephanie Mills, and Ben Vereen. The staircase is an inspiration to our students, reminding them of what can be accomplished through hard work and perseverance.

These projects illustrate how funding, combined with creative planning, can make something powerful happen, whether it is a small project or a big project. In our experience, projects typically take a lot longer than initially anticipated. Moreover, successful projects tailor designs and programming to the community and speak to its innate assets and needs.

Elizabeth J. Garland, MD, MS, Associate Professor, Departments of Preventive Medicine and Pediatrics, Icahn School of Medicine at Mount Sinai

For a building to be accredited with the LEED Innovation Credit "Design for Health through Increased Physical Activity," you need twenty of twenty-nine possible features. The project at Arbor House has twenty-one of the twenty-nine credits, including accessible, prominent, well-lit stairwells. On-site community gyms, both indoors and outdoors, are only accessible to the tenants. Point-of-decision prompts are highlighted in the lobbies, the exercise rooms, and the elevators to try to entice people towards a healthier lifestyle.

The South Bronx has one of the highest rates of asthma in New York City. I approached Blue Sea Development Company, which was building the Eltona, and said, "This is what we call a natural experiment. We have people coming from decrepit housing moving into beautiful housing that is LEED-certified at the platinum level. Could we interview the tenants before they move in, then track them and see what happens?" We tracked about forty people prospectively for eighteen

months and found decreased asthma symptoms: less nighttime symptoms, less wheezing, less need for rescue medications, and fewer doctor and emergency room visits. It was a positive change, both clinically and statistically.

We did some health education with the tenants on green cleaning and how to reduce asthma triggers in the home. When we evaluated them after eighteen months, we found that the tenants did things that we suggested, such as, using baking soda and water instead of Ajax to clean their bathrooms and putting dust-mite mattress covers on their beds. Blue Sea donated a big basket of green cleaning products to each tenant. We educated them on how to shop for them in the stores, and a lot of them reported replenishing those when they ran out.

The current study is at Arbor House, a building in the Bronx that was just LEED-certified with the addition of Active Design elements. We had the unique capability of looking at whether it improved the physical activity, weight, and body measurements of the tenants and whether the rooftop garden and access to fruits and vegetables changed their intake. We are looking at daily, weekly, and monthly consumption, physical activity to and from school and work, at school and work, and at leisure time, as well as height and weight to determine body-mass index, which is not the greatest indicator of health. We are also measuring waist and hip circumference to find that ratio. About six months after they move in, we are going to have some focus groups, because we are not sure we are going to be able to detect the behavior changes. It is very hard to detect behavior

change. We are going to talk to people who live there: did the signs help them? Did it increase their inclination to take the stairs? The elevators close extra slowly, and it is aggravating, but that is the point. It is an incentive to take the stairs.

I did a study a couple of years ago on the impact of Community Supported Agriculture, and people who buy into that lead a healthier lifestyle on all parameters, not just intake of fruits and vegetables. We know this is just a small pilot project, but we are really trying to find some evidence and to put something into the literature.

Joan Blumenfeld, FAIA, Interior Design Director, Perkins+Will

Perkins+Will subscribes to a research database, so I typed in “obesity and activity,” filtered it to peer-reviewed articles and books published between 2010 and 2013, and came up with 33,000 entries. This has become a real issue. People are starting to believe that the physical built environment we spend our time in can affect our health. There is a panoply of things that go into a discussion about the built environment and how it can be healthier. I am going to focus on three key ones: toxic materials and improving air quality, access to daylight, and increased physical activity.

Most people in the community spend the majority of their time indoors, either at work or at school. One study at the *Harvard Business Review* shows increased productivity and decreased health costs at workplaces that focus on wellness, partially through how they design them and partially through changing behaviors. An open-



Arbor House Aerial View
Credit: Bernstein Associates

Thinking about how we change behaviors in addition to how we design spaces is all part of a package that goes into designing healthier interiors.

source website that Perkins+Will developed called Transparency (<http://transparency.perkinswill.com>) lists the toxic substances in materials that are used in buildings and gives alternate substances that we can use. The first thing we as designers should be looking at is our specifications and how to scrub them of these substances.

We can improve people's health through access to daylight and views. The three major places in which people spend time are schools, work, and health-care facilities. Since my firm designs those kinds of buildings, we have been looking carefully at them. There is research showing that in each one of these building types there are improved outcomes with increased access to daylight. Healing happens faster, workers report greater satisfaction, and there has been some research loosely linking productivity to it as well. There also is an environmental and financial cost to artificial lighting, and increasing daylight in a space is more sustainable and economical for that reason. In education, there has been research showing that children's circadian rhythms get disrupted if they do not have access to daylight, so they actually do have better learning outcomes when they are in a day-lit classroom for most of the day.

There has been a lot of talk lately about encouraging physical activity. Some recent research links the very small incremental physical things that we do every day to better health outcomes. A great article in the *Times* showed that people who fidget actually burn more calories, and it turns out that there are people who can

eat a lot and not gain weight for that reason. One way to encourage people to move is by improving stairwells or adding communicating stairs so that they are more attractive than using elevators. Letting people have access to fitness facilities could mean anything from a beautiful fitness center to a room where there is just a mat on the floor and a mirror so people can do yoga or stretch.

If you are going to collaborate, you have to get up and walk to someplace to meet because now fewer people have offices. Getting up and walking even just a few times every hour is a side benefit of working more collaboratively. On a related note, there has been discussion in the academic community about the value of intermediate spaces in schools. Learning happens outside the classroom through informal discussions and collaborative work, and again, that encourages students to get up and walk, not just sit in the same classroom all the time. Designing a school environment that has those spaces in between is something we can focus on as designers.

We have discussed stairs, but their location and visibility is also important. If stairs are located in front of the elevators, you encounter them first, and it is easier to make a decision to walk. The way-finding also needs to be on or near the stairs; this is an important thing to think about because if people had to walk back to that elevator to see where to go, they would never bother to turn around and walk back to the stairs. Thinking about how we change behaviors in addition to how we design spaces is all part of a package that goes into designing healthier interiors.

Wellness strategies for interior environments



Credit: Perkins+Will

**ACTIVE DESIGN
AND PRIVATE SECTOR
WELL-BEING**

Active Design could never have scaled up or gained momentum if it were strictly a top-down governmental mandate. After originating in partnerships among the public, private, academic, and not-for-profit sectors, these concepts offer considerable benefits to firms that respect workers and tenants enough to invest in their quality of life. Employers are learning that fitter, happier workers are more productive. Residential developers can leverage investment in design details to make housing both affordable and desirable. Even the world capital of motorist culture is discovering the appeal of dense, diverse neighborhoods, and transforming its transit system accordingly

Moderator: Joanna Frank, former Active Design Director, NYC Department of Design + Construction, and Executive Director, Center for Active Design

Because the Center for Active Design is an independent nonprofit, we are able to work with other cities and facilitate the sharing of knowledge and best practices across the world. We have been working with London; we were there earlier in the year. We brought our representatives from Brazil, who are putting on the Olympics and a couple of other minor sporting occasions you may have heard of. We are hoping to have a FitCities/ FitWorld conference there next year. We are talking about answering what Commissioner Farley asked: How do we institutionalize and embed Active Design into culture? How do we transition Active Design from the public sector, and how do we have this be community-driven,

business-driven, and economically driven? How do we look at expanding the audience and the range of Active Design?

Donna Walcavage, FASLA, LEED AP, Principal, Stantec

When I moved to New York City, which I had wanted to do since I was six and first saw scenes of the City on television, it was because New York’s streets are alive with people. Frank O’Hara, whom I consider the poet of New York City (sorry, Walt Whitman fans), when asked about Cambridge, said “It’s not hot enough, it’s not crowded enough, it doesn’t have enough asphalt, and you can see over [the] buildings too easily.” This is a classic homage to New York City’s density, which is what makes it so great: eight million people, eight million stories, on foot, in your personal space, not in their cars.

When I was six, the rest of the country was going in the opposite direction: to the suburbs, to their private space capsules. It was an easy life; you picked up your groceries and put them into the car, and you went home. As other speakers have pointed out, it really turned out to be very unhealthy. It is thrilling to see the whole resurgence of a desire for life in the city, where density breeds collaboration, healthy competition, creativity, and – as the Commissioner pointed out – a longer life.

In the mid-nineties, I was happy to be able to work on two projects that changed transportation, which I consider one of the most critical parts of physical infrastructure. One was the change from the elevated West Side Highway to Route 9A, or West Street, a boulevard that has a bikeway and



**Pike and Allen Streets
Center Malls – Before
Credit: Donna Walcavage**



**Pike and Allen Streets
Center Malls – After
Credit: Donna Walcavage**

pedestrian facilities up and down the west side of Manhattan. The other was the East River Bikeway and Esplanade Master Plan. In those days, people said, “Nobody rides bikes in New York City; what are you people doing?” The then-mayor’s office refused to allow us to remove a single parking space from under the East River Drive, which would have made the bikeway and walkway much more generous. A decade later, there have been amazing changes, most of them since 2007.

I was fortunate to be part of a project on the Lower East Side for Pike and Allen Streets, which connect the East River to the Lower East Side community. This project took a street that had a center mall, three lanes of traffic in each direction, and a bikeway between a traffic lane and a parking lane. I temporarily removed two of the lanes of traffic to make it a continuous bikeway. The project that I worked on made the temporary condition permanent. It is currently in the first phase. DOT collected some statistics during the temporary condition: there has been a fifty percent increase in bike ridership, a twenty percent decrease in vehicular volumes, and a thirty-five percent decrease in pedestrian, cycle, and passenger injuries.

There was a very strong community advocacy group that worked to build support for the project. Still, there are a lot of concerns from retail owners on the street that this is going to kill their business. I do not have statistics from that project, but DOT did some research on the Eighth and Ninth Avenue bikeways, and they are up to a forty-three percent increase in retail sales, versus a single-digit

percentage increase citywide, where the bike lanes were put in from 23rd Street to 34th Street. In the plaza in DUMBO, there was a 172 percent increase in retail sales. That is also part of the development of DUMBO, but the borough-wide increase at that point was in the low double digits. Faith Consolo, probably the leading retail real estate consultant in the City, always says, “feet on the street bring more sales in the stores.”

Young creative people move to New York City. They want to be in this kind of environment, and they bring businesses and economic development to the City because creative industries chase people, not the other way around. In order to remain economically competitive, New York has to continue this kind of activity.

William Roschen, FAIA, former President, Los Angeles City Planning Commission

I am from Los Angeles, and no one ever wants to emulate L.A., so my expectations are very low today. I would like to frame my remarks around three pieces of the big picture. Number one, there is clearly a new move back towards cities. This is international, and I think it is a transformative time. Second, this is the second wave of health. One hundred-and-some years ago we looked at health around zoning and planning to make sure we stayed alive, and now we are doing the same thing again with a new set of problems. Third, these transformative times are very much alive in Los Angeles.

L.A. is the car capital of the world. Southern California sells more Porsches than any other area of the world. We are not proud of that, but I think

Sunset Triangle Plaza
1st Street Recapture Plaza
in Los Angeles
Credit: Streets 4 People,
a program initiated by
Los Angeles City Planning
Commission
former President Bill
Roschen in partnership
with the Los Angeles
County Department of
Public Health



We started to look at what we could do to make a really different city. Health and equity are a big part of this culture change. Every project and plan in the city will now become subject to issues around health.

it says something. The secret is, within the next fifteen years, we will have 113 new train stations in the City of Los Angeles, and we have already paid for them. This is a game changer.

We have a very different political system than New York. We have a weak-mayor system, and New York has a strong-mayor system. We have fifteen different council districts, which is like having fifteen different mayors, so for a long time L.A. has been more about politics than planning and policy. I am an architect, and I am only the second architect to be president of the L.A. City Planning Commission in ninety years. That gives you an idea of the priorities of the city of Los Angeles and, I think, the opportunity of transformation we are facing right now. (The first president was Paul Revere Williams, an African-American architect of great repute. They never say that he was president of a planning commission; they only talk about his architecture.)

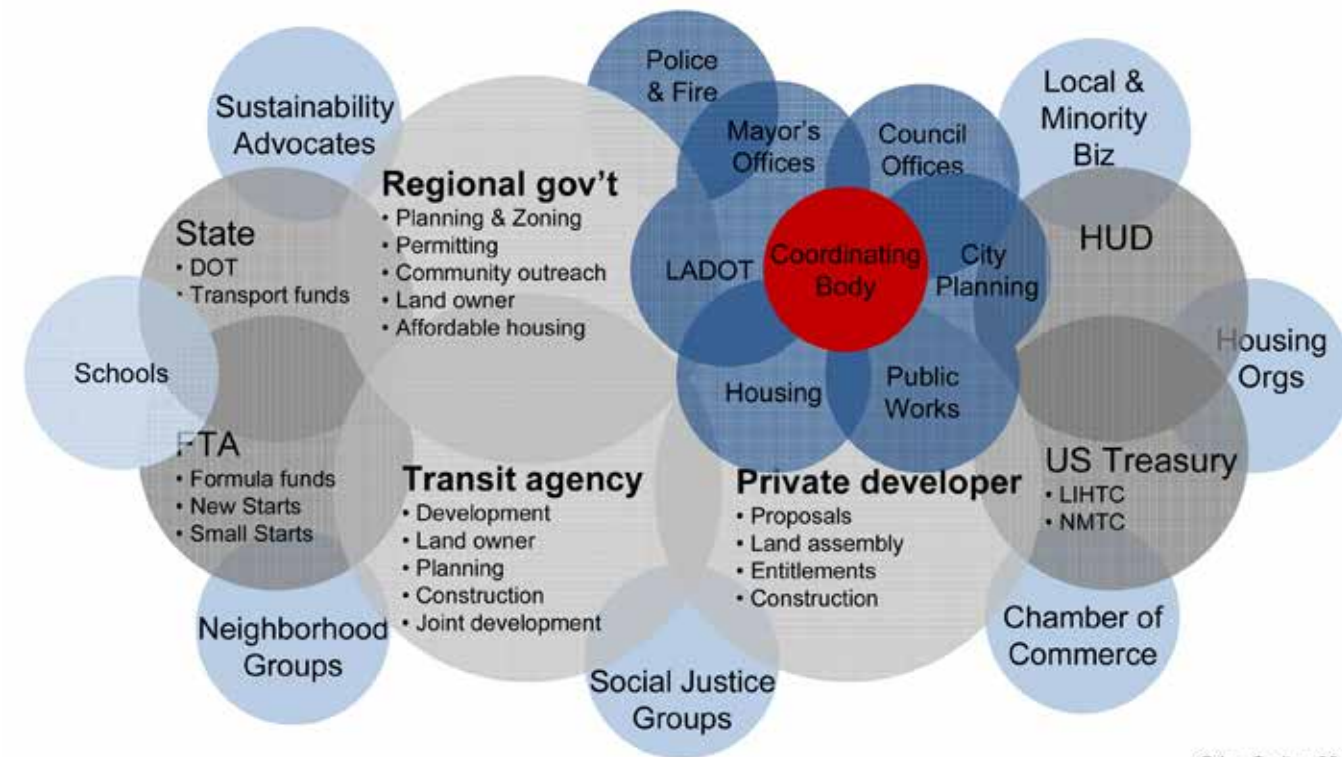
The L.A. City Planning Commission has focused on urban design, an architectural volunteer program, and guidelines. The excitement then led the Commission to do policy. In the City Charter of Los Angeles there are two groups that can do policy: the City Council and the City Planning Commission. We started to look at what we could do to make a really different city. Health and equity are a big part of this culture change. Every project and plan in the city will now become subject to issues around health. We are still trying to define what the full scope of that might be, but we all know that it includes everything from building design to mental health, the safety not just of our neighborhoods but also mental health

around our buildings. We were able to get \$1.5 million from the Centers for Disease Control and put it into a five-year program. We think we will be the first large city in the country to actually initiate a health element. We are only six months in, but I am very excited about it.

Several years ago, my commission took on the issue of nutrition, and we were approached by the community of Southeast L.A. to look at the issues of food deserts and fast food. We found that we could not put limits on fast food consumption by solely exposing the nutrition issues; we had to do it through urban design. We determined that there could only be so many fast-food operations within a certain distance of each other. We were trying to get rid of parking lots in the front. We were trying to make those boulevards more walkable and ultimately trying to limit the drive-throughs. All of those decisions were based on sustainability and urban design principles, not health. With our new health element, we think that this will become even easier. How do we look hard at our neighborhoods and describe them for what they are? We are hopeful the idea of evidence-based design gives us that opportunity.

Two years ago, Michael LoGrande, the Director of Planning from Los Angeles, and I came here and met with Janette Sadik-Khan and Amanda Burden, and we asked about the recapture program. They gave us specifications, contracts, the whole bit. We went back to L.A. and initiated the first Pedestrian Coordinator position in the history of the city under the Department of Transportation. We did our first project, a four-month-long project, for \$30,000,

City's Vision + City's Action must be coordinated with other TOD Players and Realize an Equity Agenda



Credit: former Los Angeles Mayor Antonio Villaraigosa's Transit Corridors Cabinet White Paper, authored by Robert Cervero and Ian Carlton of UC Berkeley

© Ian Carlton 2012

When the sustainable movement first started, it was very hard to get developers interested in it. All of a sudden, building the greenest building became a badge of honor. I think that we are going to get to the same place with health issues.

which in L.A. is absolutely phenomenal. The ambition is to do thirty or forty of these projects a year, all over the city.

Downtown L.A. is sixty percent streets and parking lots. The rest of the city comes close to fifty percent. It is amazing to think of those spaces as resources worth recapturing. With our 113 new train stations, we are looking hard at something that I call ‘transit-enhanced neighborhoods.’ We have rolled out this program through the Mayor’s office, which put together a Transit Corridors Cabinet.

We have wonderful, beautiful neighborhoods, but our streets are awful. They are not walkable. They do not have the kind of neighborhood-supporting services that we want, and in the end, they are not safe. We are thinking of ways of connecting all of these stations together and also linking them to our bus system – the third largest in the country – by looking closely at the ideas of equity and participation. For us, the five E’s are environment, equity, engagement, economy, and enhanced neighborhoods.

We have fifty-one miles of the L.A. River. When you fall in our river, you get dusty. We are hoping to create a natural environment. The river is along the east side of the city. It touches South and Southeast Los Angeles, and Boyle Heights, areas that can be transformed with a new face. I know you will never believe it, but L.A. is working very hard on health.

When the sustainable movement first started, it was very hard to get developers interested in it. All of a sudden, building the greenest building became a badge of honor. I think that we are going to get to the same place with health issues.

Sue Schmidt, Senior Principal, Well-Being Design, Healthways, Inc.

Healthways is the largest global independent provider of well-being improvement solutions. Our mission is simple: we are focused on creating a healthier world one person at a time, and we do that by the science of behavior change. “Well-being” is often used interchangeably with “wellness,” but I think wellness speaks to a one-dimensional approach, and well-being is broader than just physical health. There are components of one’s emotional, social, and financial health, and the health of the community – not only the overall community where you live but also your place in the community – that affect your well-being.

So often the conversation focuses on individuals’ access to health care or genetics. Studies show that the single biggest indicator of an individual’s well-being is behavior, and we can impact behavior. In the case of the built environment, if you design for the behavior that you want to impact instead of the result of the behavior, you can make a difference.

Healthways has a twenty-five-year partnership with the Gallup Organization. As part of that partnership, Healthways and Gallup have created a one-of-a-kind measure, the Gallup-Healthways Well-Being Index. The Gallup-Healthways Well-Being Index is a survey tool that measures well-being on a global basis down to the community level. This data can be taken down to a zip-code level that will give you a snapshot into what is going on in each of your communities. It looks at multiple dimensions to arrive at a well-being score for a community, for a

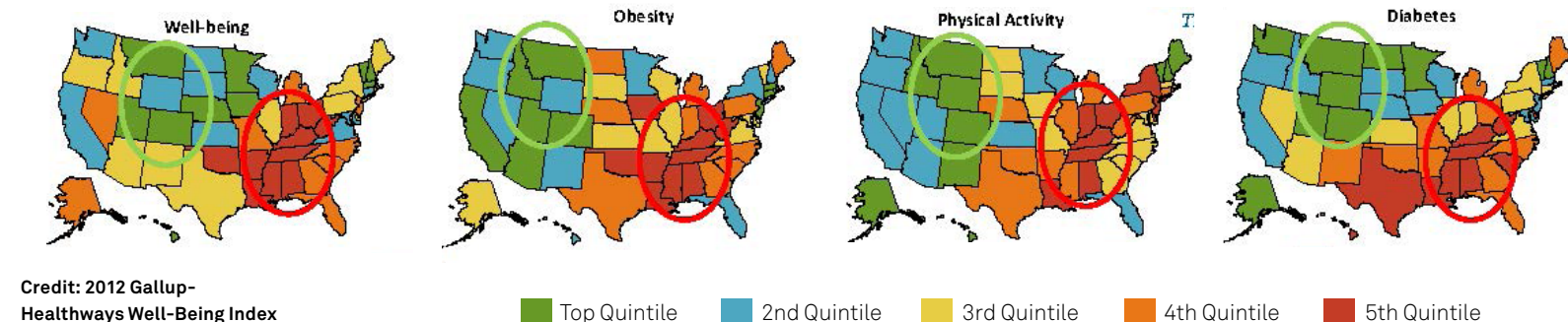
state, and for a nation. Components of the Gallup-Healthways Well-Being Index include life evaluation as well as a snapshot of an individual’s emotional health, which is increasingly shown to be as big an influence on health, particularly obesity. Of course, the Gallup-Healthways Well-Being Index also looks at physical health, chronic conditions, obesity, pain, and healthy behaviors. Further, the Gallup-Healthways Well-Being Index provides an evaluation of work environment, asking questions such as, “Do you get to do what you do best every day? Do you get to use your strengths at work? What kind of relationship do you have with your supervisor? Do they treat you as a trusted partner, or do they treat you as a boss? Do you have the tools that you need to do your job? Do you have a best friend at work?”

A snapshot of data from the Well-Being Index aligns nicely with data from other obesity and diabetes maps, such as those from the CDC. The

green areas are states with the highest well-being. I am from Tennessee; we are a red state. In most restaurants, at least in the Nashville area, macaroni and cheese appears on the vegetable menu. What does that tell you about the work that we have to do?

In 2011 and 2012, looking at Gallup-Healthways Well-Being Index data for the city of New York, there has been a little improvement, but there is still work to do along the lines of emotional health. One area potentially affecting emotional health in New York is commute time. Think of the stress one feels stuck in traffic or on a crowded subway. Additionally, studies show that people who have a sixty-minute commute or longer are thirty-six percent more likely to be obese. From an Active Design perspective, all those factors can have a direct impact on physical and emotional health. Healthways research has found that the relation of commute time to incidence of obesity and overall well-being is just a snapshot

Well-Being, Obesity, Physical Activity and Diabetes



of an individual’s well-being score. This relation also affects performance, absences per month, motivation, and the number of ER visits over the course of a year.

As an example for one Healthways client, year-over-year improvement in healthy behaviors translated to thousands of dollars in health-care savings as a result of the well-being improvement changes they made. Well-being improvement benefits social connections too. Statistics show that if I am overweight, thirty percent of my friends are probably overweight, my friends’ friends are overweight, and it goes from there. By using the *Active Design Guidelines* to make changes to the physical environment, along with a program of well-being improvement solutions, we can make a difference and improve the health of the population.

Les Bluestone, President, Blue Sea Development Co.

I am a developer, contractor, property manager, and owner in New York City. Actually, I was here for FitCity 5 a few years back and presented this project when it was still on the drawing board, so it is nice to say that it is done. Arbor House is a building in the Bronx comprised of 124 low-income apartments built on land purchased from the New York City Housing Authority (NYCHA). In New York, we stopped growing land a while ago, so we now try to find it where we can. The building has received LEED, NGBS, and Energy Star ratings and accolades from all sorts of groups, but I think the Healthy High Rise designation from the American Cancer Society is one that we are also very proud of.

All these ratings predominantly cover one area relating to health: indoor air quality. As you

have heard here, well-being, health, and physical fitness form one holistic organism. Low and zero VOC materials and a lobby with a living wall address indoor air quality. The use of the *Active Design Guidelines* helps to address obesity and physical fitness. In making a building compliant with Active Design, location can be a great asset. We purchased land on the corner of the NYCHA campus, and if you look across the street, you will see ball fields and basketball courts, which make our job that much easier. Obviously, if you are trying to site a project and you have these kinds of opportunities, grab them.

We came to Active Design a little late on Arbor House. The drawings were already underway, yet it was not too late to make some changes to them. Initially, the entrance to the building was located in the same place we had been placing it for thirty-some-odd years. The city agencies were typically concerned about security and wanted the elevators to be visible from the street, especially in some of the higher crime areas that we build in. But when we got into Active Design, we learned that you are supposed to hide the elevator. Fortunately, we were on a corner, so we reconfigured the entrance off of the other street. You can still find the elevator, but it is not staring you in the face as you enter, and the stairs are the first thing you see.

In New York City, as in probably most municipalities, there is a community-space requirement. Typically, what most developers do is fill it full of chairs and tables, maybe a TV and a small kitchenette, but we needed something else for Active Design. We took most of this area and turned

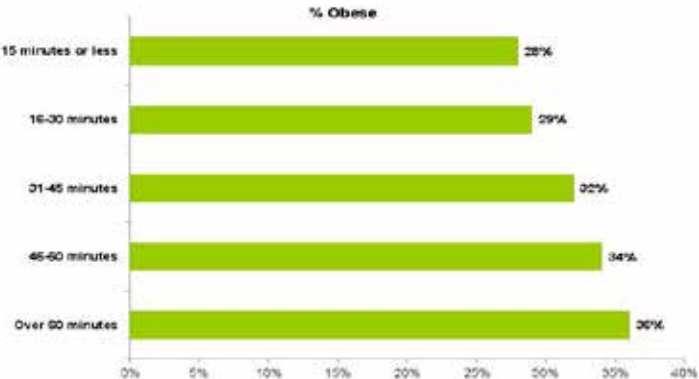
it into a fitness center. One of the most important things in creating an Active Design fitness center is that you want to combine adults’ and children’s activities in the same space if possible. That way, children can learn from and emulate their parents, and parents can keep an eye on their kids. One way we accomplish this is by having a climbing wall and bikes in the room with all the other equipment. A stationary bicycle is probably not the most thrilling thing for kids, but someone had the brilliant idea of making a video game out of riding the bike, so now the kids come down and compete against others in races, inside the room and around the country, while they are pedaling away. For those who want to do their riding outside, a secure bicycle storage room is now part of the NYC code. You can stick a bicycle storage room between the boiler and the compactor, or you can make it a pleasant place to go and thereby encourage the use of bicycles.

Community garden space is often tough to provide on most New York City sites because of sun/shadow issues and because, in spite of our great public transportation system, we still have pretty onerous parking requirements that often use available open space. For low-income urban populations that typically do not have cars, it does not make a whole lot of sense.

Stairwells are historically a scary place for most people, who do not usually go in them unless they have to. We changed the typical solid steel stairwell doors to fully glazed fire-rated doors. They are very expensive, but as far as I am concerned, it is the first thing to do if you really want people to use the stairs. Stair

Credit: 2012 Gallup-Healthways Well-Being Index

Commute Time and Well-Being



width is also a big thing; if you have straight-run stairs, getting the extra eight or so inches in the width of the stair makes a huge difference in one's perception about the space. We also improved lighting throughout to brighten things up. We now have music in our stairs, which we took out of the purposely-slowed-down elevator, so it becomes a less-appealing way of moving around the building. Adding natural daylight to a stairwell is usually tough to do because stairwells are often relegated to tight and less desirable locations, and when you have wall area to place a window, you usually want to create an additional bedroom there. Stair prompts are the easiest, least expensive way to encourage stair use. It has been proven to be effective, and everyone should be doing that, if nothing else.

The building also emphasizes visuals at the street and sidewalk level. Window security guards are normally found on most buildings in urban areas where we work. We try our best to design every building to look attractive, and when we are all done building it, we slap a set of bars on it and turn it into a prison! We began working a number of years ago with NYC artist Béatrice Coron and asked her to work with children in the surrounding NYCHA housing projects to create a design for both the window guards and the perimeter fencing. Béatrice held workshops with the kids, used their designs, put them into a fence design as well as the stairwell artwork, and created her own design for the building's window guards.

Arbor House
Credit: Bernstein
Associates

This neighborhood has very little access to produce, so we put the greenhouse on top of the building with the idea of growing food for the community. When we wanted to put the greenhouse on the roof, it was not in compliance with the Building Code and the Zoning Resolution, so we had to meet with City Planning, and they approved it. Then we went to the Building Department, and they approved it. Our fire stairs were a little different than what the Fire Department likes, but we got the right person at the Building Department. If someone says no, you go back and you find the person that says yes. They are out there.

The incremental costs went up a little over our estimates a few years ago, but I think we will do it next time and do it a little better. It is still under two percent for the entire project, and we think it makes a big difference. If you are a developer, you can set yourself aside from all the other marketing out there. Affordable housing is good social policy, but we are also dealing with a vulnerable population, and if we spend the money upfront, I think most people know that the things that push people over the edge tend to be medical problems.

Since our population tends to be low- and moderate-income, I think our motivation includes personal pride. We started building green buildings ten to fifteen years ago, and it is nice at the end of the day when you can move someone into a home that has features that people spending millions on their homes do not have. This is for a population that can afford it the least but needs it the most.



DESIGN KEYNOTE

**Peter Q. Bohlin, FAIA, Principal,
Bohlin Cywinski Jackson**

I am speaking for all of us in our practice, in multiple places. Today I was in some meetings here in New York, tomorrow I will be in our office in San Francisco, and tomorrow night I will be in our Seattle office. I am not bragging about that, but the truth is, the variety of what we do as architects is a pleasure: that you have such a range of people and places and how you make things in those places. For instance, China is a different kind of world, and you really have to adapt yourself. You get at the nuances of each circumstance, and that is very subjective. It has to do with clients and with your own feelings.

We believe as a practice that we should think about enabling people: primarily how we move, how we touch things, how we see things, how we feel the air and the sun, how we feel the chill, how we listen to the frogs, which is a great pleasure to me. A lot of this has to do with how we make things, and how these things tell us about themselves. It has to do with what wood, metal or concrete tells us. How stone is so heavy. How wood can tell you about its life as a tree. With all these things, you get to choose what is important and what is not, but you can begin to understand all of that within our modern world, which is now less concerned with those qualities.

We have worked for Pixar, and we are working for Jack Dorsey of Square now, and he is concerned about how to make human things, and how people connect. Technology can separate us from others, as we all know, because you can just

put yourself in a little place and be almost content while having very little interaction. That is a great, interesting challenge to our culture and will be in the future as well.

Ever since the beginning of our practice, we have been thinking about how one reveals places, how you go from here to there. The retirement house in Connecticut for my mom and dad is fairly modest. It is 1,800 square feet, which is not tiny, but is not a big pig of a building. You approach it through a dark evergreen forest, and the building is positioned just where the deciduous forest starts. That is where the brightness is, and you are drawn toward the brightness as you approach it. Purposely, you cannot drive up to the house: now we are back to your subject. We could have included a driveway, and many people would have, but you park back in the forest and walk. You cannot line right up on the building either, because just to the right is a large pine tree. Therefore, you have to swerve through the forest, and you see certain aspects of the building. It is a trip.

How you get from here to there is the subject of my entire speech. If you are designing a stair, you are getting from here to there. If you are making a bridge, you are getting from here to there. If you are making a path, you are getting from here to there. If you walk from one room to another, you are getting from here to there. I have not delved into that issue for today because it would be a three-hour talk; how you make thresholds between rooms.

When we were in school, the conventional wisdom was that your buildings would face south



**Apple Store, Fifth Avenue,
New York**
Credit: Nic Lehoux

Seattle’s City Hall is built on sloping ground. City Hall is open to the view out across Puget Sound. It has to draw people through it on stairs that start at the lower street and go to the next street up, which is about a seventy-foot climb.

because of the sun. Well, you might find out that you do want the sun, but the view to the north is really the best, because it is lit. Because that forest, with the leaves in the wind, is constantly shimmering, and if you look south you would be blinded. It is an interesting challenge to accommodate our concerns about sustainability with those kinds of issues. But here, you are looking north into a sunlit forest, and the sun is behind you, so you can imagine it goes up here, it goes down, it goes around. You find you are in that magic place, walking through the forest. That is all about your subject.

A house in Park City, Utah, was for a couple. The wife had cancer and was told she should swim every day. At the first meeting, I thought, “This is really important, and it shouldn’t be just a swimming pool.” It had to be indoors so she could swim in the winter, but it had to be a great pleasure for her as well. She swims underwater with goggles. The end of the pool is clear, so she can look out at the forest, and there is a little silver stainless disk on the bottom so she can tell when she gets to the end and should turn. It is a forced perspective: the columns are not evenly spaced. They get closer and closer together in the pool. The pool is a constant width for swimming, but the columns tighten up as you progress toward the view. Therefore, it looks probably fifty percent longer than it really is, which is about seventy feet.

Seattle’s City Hall is built on sloping ground. City Hall is open to the view out across Puget Sound. It has to draw people through it on stairs

that start at the lower street and go to the next street up, which is about a seventy-foot climb. Kathryn Gustafson, our landscape architect, felt these stairs should not be steeper than those at Versailles, which are fairly gentle. Your challenges are your opportunities: this meant the stair ran into the face of the building and kept going about a quarter of the way into the building. Water runs down a trough at the side of the stair, a waterfall, so as you move up, you are hearing a stream that starts inside the building.

I was a spelunker starting in high school, because we had a great cave up in Connecticut on the school grounds. You learn a great deal from spelunking as an architect about moving through places, because caves are more random than most manmade places. I would get to a place and look fifty feet into the distance between a ceiling and a floor, and there would be stalactites and stalagmites and water, glistening and reflecting. Your buildings can do that in various ways. The urban world can do these things, and you want to do it in a way that is not too directed.

For the Apple store in Soho, the great challenge was how to make an effective multi-story space for retail, draw people up, and not use an elevator. So we titillated with a great glass stair. We pushed the technology pretty hard, and people feel they are levitating. The Apple stairs are all designed differently from an engineering point of view. For example, in L.A. we had to think about earthquakes, so we hung the structure and stabilized it. We knew if we sat it on the ground or on the floor, it would probably crack. We have

been doing many Apples – I think over 50 – and the prototypes for many of the other stores. Fifth Avenue was an interesting challenge: we did the cube with very large sheets of glass. When I was in school, the vision was to do it all with nothing; that was the whole thought about Modernism. We have not been able to do that yet, but someday we will. You can compare the new cube and the old cube: the new one is done in a more minimalist way, and whether that is for the good, I am not going to say.

We did the first circular stair, working in Tokyo and Osaka about the same time, and it is the first time we had pushed glass technology to achieve this. The obvious position in the cube was to put the elevator in the middle, although in most of the Apple stores you will note the elevators are not at the primary position because you want people to use the stair. The stair at the West 14th Street Apple store is the first stair that touches three stories. Since then, the engineering has continued to get more refined. The fittings in the first cube were all visible on the outside. Now they are embedded in the middle of the glass because there is always a plastic layer in the middle like safety glass. It is much more minimalist; you are making magic. We have been doing some cylinders, particularly in China. In Shanghai, we used Chinese glass, and our engineers were frightened of what they were able to do. Now they have done curved glass in bigger sheets than the Europeans or anyone else.

At Uniqlo in Shanghai, we had to move people up through a number of floors. We were dealing with an existing building for a project that had to be complete in six months. We cut a glass shard of a space up through it, and we had escalators as well. We ran stairs up through the space and then brought in some riggers from Kentucky to do mannequins that float up and down and other mannequins that go around the round end of the building. Again, this is all about people. It is getting from here to there, and it is enticing to the people coming in from the subway.

In a large corporate building in Utah where people use stairs and bridges to reach conference rooms on the higher floors, or in high rise housing under construction in Bellevue, Washington with a swimming pool over your head, or in the new Civic Center in Newport Beach, California, where we and landscape architect Peter Walker have done a pedestrian bridge over an expressway that cuts through a park, there is a kind of magic. It is all about people moving through places: through the park, across the bridge, through the building and up the stairs. I do not think they feel that we have done it to them. It is all part of the world, and I think that what I’ve talked about, whether it is a house for my mom and dad, or a client with a swimming pool, or Apple, Pixar, or some of our other projects, they all are about activating people and drawing them from one place to another, discovering as they move through it. What better thing is there to do in architecture than that?

CLOSING REMARKS

David Burney, FAIA, former Commissioner, NYC Department of Design + Construction

Peter demonstrated that the normally quotidian business of human movement, whether it is swimming or walking, really has poetry in it. That is a real inspiration for all the designers in the room. Alex was full of depressing statistics to begin with – the global crisis of health and aging was somewhat overwhelming – but I am very happy to say that he finished on a very positive note. The success stories that he showed us in Finland and in my hometown, Liverpool, were encouraging, and the WHO goals (particularly the ten percent reduction in physical inactivity) are goals we should all be working toward.

On the Commissioners’ panel, we talked about the role of government leadership, regulatory reform, and health inequities. We also discussed the need to share best practices globally among cities, and the idea that healthy cities are also livable cities. As Sean said in the great session on “Active Design and Community Well-being,” this is the first time we have had an anchored community portion. I thought that was extremely interesting. In David Schuffler’s toxic triangle, the conversion of that cement factory to a riverfront park was inspiring. Brooklyn, not to be outdone, came in with Tracey Capers and her public space along Fulton. What was particularly interesting was all the programming that came in after the changes in the built environment. You make those changes, you enable activity, and people occupy the space.

We talk a lot at these sessions about evaluation and follow-up and evidence-based design – what

works and what does not. I thought Elizabeth Garland was quite inspirational with the Mt. Sinai studies, and I hope she is able to do more and feed that information back into our best practices. Joan Blumenfeld reminded us that we spend probably more time indoors than outdoors, and that health in the built environment really begins indoors with air quality, daylight, and movement.

Going on to “Active Design in the Private Sector,” Donna Walcavage gave us great examples of plaza projects with benefits in terms of safety, health, and economics – the huge increases in retail activity that benefit the private sector from improvements in public space. Bill Roschen from L.A. talked about the “weak mayor” governance system – not that the mayor is weak, but that, however strong your mayor is in L.A., he does not control those thirty-five counties, and that makes his life more challenging. It was inspirational that Angelenos were able to come up with those urban design guidelines, the thirty-five meetings in all the counties, and the 113 new train stations. I think everybody understands that L.A. was probably one of the toughest challenges in any city, and we congratulate you for everything you have done.

I was happy to hear the talk by Sue Schmidt from Healthways, with the ideas of behavior change and well-being, and the usefulness of data in targeting improvements in health (I would take issue with one idea: you did give New York a hard time on the emotional-health chart. Neurosis and angst are necessary components to living in New York, and we see it as a good thing, so we have to revisit that one). Les Bluestone always sets an

It is not necessarily
about the individual
projects, it is that there
has been a kind of
paradigm change about
the thinking of urban
designers, recognizing
their responsibility
to be part of the
solution and not part
of the problem.

example for all the low-income housing developers to follow. Even in the business of low-income housing, where the budgets are so tight and the regulations so rigid, he is able to do inspirational things: the indoor air quality, the staircases, the fitness room, the active recreation outdoors, and that amazing hydroponic farm on the roof.

Of course, we ended up with Peter’s inspirational discussion. Back in the old days, before the invention of the elevator, the staircase used to be the big event in the building, and then it got pushed to the back of the room and into the dark, never to be seen again. Work like Peter’s shows how it can be brought out again and can be a thing of poetry and sculpture and beauty.

This is FitCity 8. Linda Gibbs talked about the twenty-six initiatives that came out of the Obesity Task Force, of which the Center for Active Design is one. There will be a FitCity 9, as well as a FitCities conference at Global One in São Paulo in April 2014, with the World Cup presenting a huge opportunity to discuss the relationship between sports and youth

exercise. I am sure the Center for Active Design will continue to promote the guidelines, do training, and help organize other FitCities. The AIA has totally embraced Active Design, and Rick Bell has been personally involved in that leadership. I want to thank the Department of Health and Mental Hygiene in particular, Karen Lee, especially, and Rick for organizing this event today.

I am reminded again of something Alex Ross has said: it is not necessarily about the individual projects, it is that there has been a kind of paradigm change about the thinking of urban designers, recognizing their responsibility to be part of the solution and not part of the problem. When I was out in Denver the other day, the prime example I noticed is the drive-in pharmacy – when you have made yourself so ill you drive to get the medicine that you need, that maybe you would not have needed so much of if you would been able to walk to the pharmacy. As Dick Jackson said in Denver, we have to stop thinking about medicine and start thinking about health.

**FITCITY 8
SPEAKERS
DO THE
NUMBERS...**

- Sources:
- 1 former Mayor Michael Bloomberg, video message to FitCity 8
 - 2 Margaret Newman, FAIA
 - 3 Susan Kansagra, MD, MBA
 - 4 Hon. Linda L. Gibbs
 - 5 Alex Ross
 - 6 Sue Schmidt
 - 7 Thomas Farley, MD, MPH
 - 8 Tracey Capers
 - 9 Joan Blumenfeld, FAIA
 - 10 Donna Walcavage, FASLA, LEED AP
 - 11 William Roschen, FAIA

Acres of new parkland:
750¹

Change in childhood obesity in NYC, 2006-2013:
-5.5%¹

Miles of new bicycle lanes:
350²

Stair prompts distributed: over
30,000
in over 1,000 elevator buildings³

Downloads of the *Active Design Guidelines*: over
10,000
worldwide³

Water jets placed in NYC schools, as an alternative to soda machines:
825⁴

Slots in summer camps that have adopted city nutrition standards:
165,000⁴

Miles traveled on Citibikes between May 27 launch and FC8 (June 24): over
700,000⁴

Equivalent times circling the Earth:
28⁴

Nations that have reduced road-traffic deaths:
88⁵

Proportion of global health care expenditures due to chronic diseases:
40%
or more⁵

Reduction of coronary heart disease rates in North Karelia, Finland, over 30 years of nutritional policy: from 500-700 to approximately
100⁵

Expected year when global population over 65 years old surpasses those under five:
2014⁵

Years it took Japanese population over 65 to go from 7% to 14%:
100⁵

Years it is taking in Brazil and India:
20⁵

Cars being bought in China per day:
2,500⁵

Megacities (population over 10,000,000) on Earth in 1970:
two⁵

Megacities expected in 2025:
37⁵

Greater likelihood of obesity among workers with at least a 60-minute commute:
+36%⁶

Deaths per year in NYC that can be attributed to insufficient physical activity:
6,000⁷

Years an average New Yorker's life expectancy exceeds an average American's:
2.2⁷

Minutes more physical activity per day for an average pedestrian or cycling commuter, compared with an average driving commuter:
60⁷

Proportion of New Yorkers meeting definition of "inactive":
21%⁷

Proportion of Americans meeting definition of "inactive":
51%⁷

Proportion of adults in Bedford-Stuyvesant meeting definition of "inactive": over
40%⁸

Proportion of adults in Bedford-Stuyvesant with obesity: nearly
one in three⁸

Proportion of adults in Bedford-Stuyvesant who don't see a doctor: nearly
30%⁸

Number of peer-reviewed articles or books on obesity and activity in research database, 2010-2013:
33,000⁹

Change in retail sales along Manhattan's Eighth and Ninth Avenues between 23rd and 34th Streets when bike lanes were installed: up to
+49%,
compared with a single-digit percentage increase citywide during same period¹⁰

Change in retail sales in DUMBO, Brooklyn, with conversion of parking lot and public right-of-way to plaza:
+172%,
compared with 20% borough-wide increase during same period¹⁰

New train stations being constructed in Los Angeles during next 15 years:
113¹¹

Number of community plans providing specific neighborhood-level details within Los Angeles City General Plan:
35¹¹

RESOURCES

American Institute of Architects,
New York Chapter (AIANY)
<http://www.aiany.org>

AIANY/DOHMH FitCity
publications
http://aiany.aiany.org/index.php?section=advocacy_pub

Active Design Guidelines
<http://www.nyc.gov/adg>

New York City Department of
Buildings (DOB)
<http://www.nyc.gov/html/dob>

New York City Department of
City Planning (DCP)
<http://www.nyc.gov/dcp>

New York City Department of
Citywide Administrative
Services (DCAS)
<http://www.nyc.gov/html/dcas>

New York City Department of
Design + Construction (DDC)
<http://www.nyc.gov/ddc>

New York City Department of
Health and Mental Hygiene
(DOHMH)
<http://www.nyc.gov/health>

New York City Department of
Parks and Recreation (DPR)
<http://www.nycgovparks.org>

New York City Department of
Transportation (DOT)
<http://www.nyc.gov/dot>

New York City Mayor's Office
for People with Disabilities
(MOPD)
<http://www.nyc.gov/html/mopd>

New York City School
Construction Authority (SCA)
<http://www.nyc.gov/html/sca/>

PlaNYC 2030
<http://www.nyc.gov/html/planyc2030>

Designing Healthy Communities
<http://designinghealthycommunities.org>

Active Living Research, Robert
Wood Johnson Foundation
<http://www.activelivingresearch.org>

Childhood Obesity program,
Robert Wood Johnson
Foundation
<http://www.rwjf.org/childhoodobesity>

Citibike
<http://www.citibikenyc.com>

Alta Bicycle Share
<http://www.altabicycleshare.com>

World Health Organization
<http://www.who.int>

U.S. Centers for Disease Control
and Prevention
<http://www.cdc.gov>

Youth Ministries for Peace and
Justice
<http://www.ympj.org>

Bedford Stuyvesant Restoration
<http://www.restorationplaza.org>

Prof. Elizabeth Garland, Mt.
Sinai School of Medicine
<http://www.mountsinai.org/profiles/elizabeth-j-garland>

Perkins+Will
<http://www.perkinswill.com>

Transparency database,
Perkins+Will
<http://transparency.perkinswill.com>

Center for Active Design
<http://centerforactivedesign.org>

Stantec
<http://www.stantec.com>

City of Los Angeles Department
of City Planning
<http://cityplanning.lacity.org>

Healthways
<http://www.healthways.com>

Gallup-Healthways Solutions
<http://www.healthways.com/solution/default.aspx?id=1125>

Bohlin Cywinski Jackson
<http://www.bcj.com>

CREDITS
& CITATIONS

FitCity 8 Report prepared by:
American Institute of
Architects, New York Chapter

Rick Bell, FAIA, Executive
Director, AIA New York Chapter

Julie Trébault, M.S., M.A.,
Director of Public Programs

Camila Schaulsohn,
Communications Director

William B. Millard, PhD,
Independent Editorial
Consultant

Emma Pattiz, Policy Coordinator

Acknowledgements
NYC Department of Health and
Mental Hygiene

Thomas Farley, MD, MPH,
former Commissioner,
NYC Department of Health and
Mental Hygiene

Karen K. Lee, MD, MHSc, FRCPC,
former Built Environment
and Healthy Housing Senior
Advisor, NYC Department of
Health and Mental Hygiene

Sean I. Robin, MCP,
former Built Environment and
Healthy Housing Director,
NYC Department of Health
and Mental Hygiene

Kristina Capron, M.A.,
Community and Housing
Engagement Coordinator

Speakers, June 24, 2013

Jill N. Lerner, FAIA, 2013
President, AIA New York
Chapter

Hon. Michael R. Bloomberg,
former Mayor, City of New York
(via video)

Susan Kansagra, MD, MBA,
Health Promotion and
Disease Prevention Deputy
Commissioner,
NYC Department of Health
and Mental Hygiene

Hon. Linda I. Gibbs, former
Deputy Mayor for Health
and Human Services

Sean I. Robin, MCP,
former Built Environment and
Healthy Housing Director,
NYC Department of Health
and Mental Hygiene

Karen K. Lee, MD, MHSc, FRCPC,
former Built Environment
and Healthy Housing Senior
Advisor, NYC Department of
Health and Mental Hygiene

Alex Ross, Director, World Health
Organization Centre for Health
Development, Kobe, Japan

Rick Bell, FAIA, Executive
Director, AIA New York Chapter

Thomas Farley, MD, MPH,
former Commissioner,
NYC Department of Health
and Mental Hygiene

David J. Burney, FAIA,
former Commissioner,
NYC Department of
Design + Construction, and
Chair of the Board,
Center for Active Design

Amanda Burden, FAICP,
former Commissioner,
NYC Department of
City Planning

Veronica M. White,
former Commissioner,
NYC Department of Parks
and Recreation

Victor Calise, Commissioner,
NYC Mayor's Office for People
with Disabilities

Margaret Newman, FAIA, former
Chief of Staff, NYC Department
of Transportation

Sarah Wolf, MPH, RD, Built
Environment and Healthy
Housing Deputy Director,
NYC Department of Health
and Mental Hygiene

David Shuffler, Jr., Executive
Director, Youth Ministries for
Peace and Justice

Tracey Capers, Executive Vice
President, Bedford Stuyvesant
Restoration Corporation

Elizabeth J. Garland, MD,
MS, Associate Professor,
Departments of Preventive
Medicine and Pediatrics,
Icahn School of Medicine
at Mount Sinai

Joan Blumenfeld, FAIA, LEED
ID+C, Interior Design Director,
Perkins+Will

Joanna Frank, former Active
Design Director, NYC
Department of Design +
Construction, and Executive
Director,
Center for Active Design

Donna Walcavage, FASLA, LEED
AP, Principal, Stantec

William Roschen, FAIA, former
President, Los Angeles City
Planning Commission

Sue Schmidt, CPM, Senior
Principal, Well-Being Design
Healthways, Inc.

Les Bluestone, President,
Blue Sea Development Co.

Robyne Kassen, Assoc. AIA, and
Sarah Gluck, Urban Movement
Design

Skye Duncan, MsAUD,
Senior Urban Designer,
NYC Department of
City Planning

Peter Q. Bohlin, FAIA, Principal,
Bohlin Cywinski Jackson

AIA New York | Center for Architecture
536 LaGuardia Place
New York, NY 10012
www.aiany.org